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August 1998

US Army Corps
of Engineers
Waterways Experiment
Station

Final Report: RCRA Facility Investigation Phase II Groundwater Release Assessment, SWMU 06/09 Demolition Area, and Phase III Release Characterization, SWMU 07/09 Old Rifle Range, Naval Surface Warfare Center Crane, Indiana

Volume II: Appendixes A through K

by William L. Murphy, Roy Wade

WES

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Prepared for Department of the Navy

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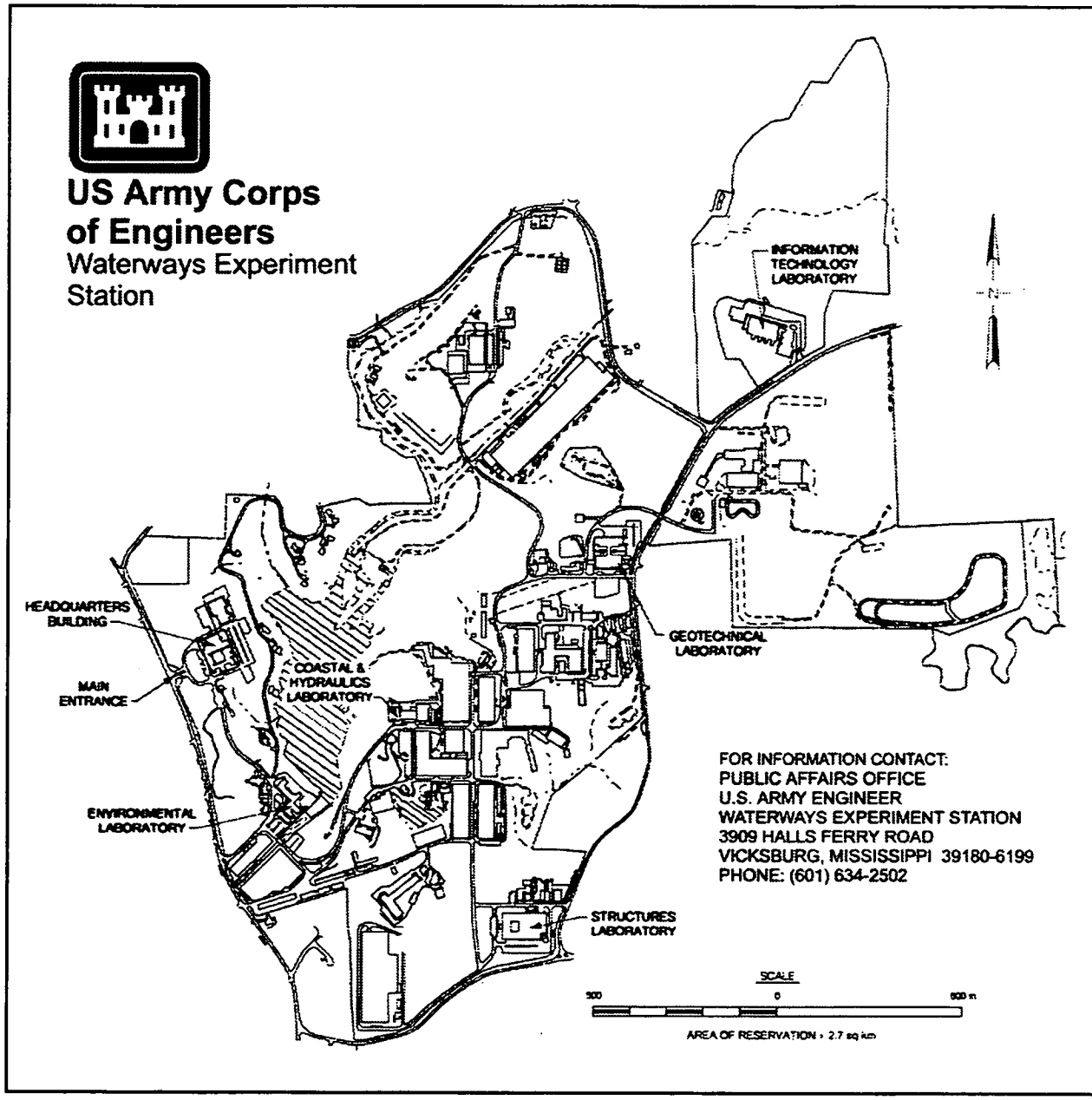

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Appendix A
Copy of Confirmation Work Report of April, 1982 for Demolition Area/Old Rifle Range

IN5 170 023 498

HYDROGEOLOGIC INVESTIGATION OF WASTE DISPOSAL SITES AT THE NAVAL WEAPONS SUPPORT CENTER, CRANE, INDIANA

by

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Prepared for
Naval Weapons Support Center
Crane, Indiana

April 1982

Summary

The Naval Weapons Support Center (NWSC) identified areas on its installation where contaminated materials have been buried and determined that a groundwater monitoring network at each area was required to identify any subsurface contamination which might have resulted from these disposal areas. The NWSC requested the Waterways Experiment Station (WES) to install a groundwater monitoring system around each identified disposal site. A total of 13 groundwater monitoring networks; 83 monitoring wells; were installed in 11 sites throughout the NWSC. Each site contained from 5 to 15 monitoring wells with the number of wells dependent on the area of each site, the number of groundwater flow patterns encountered, or the number of disposal areas per site.

The WES conducted a soil sampling and drilling program to define the hydrogeologic characteristics and to locate and install the monitoring wells at each site. The sampling and drilling program identified two sites where the water table was encountered in the unconsolidated overburden and in the remaining sites, the water table was encountered in fractures in sedimentary rocks at depths of less than 10 ft to a maximum depth of 121 ft. The direction of groundwater flow varied, but generally conformed with the surface flow at each site. Overburden thickness at the sites ranges from less than 1 ft to more than 40 ft with soil types of predominantly clay, silt, and sand. The rock underlying the overburden consists of sandstone, shale, limestone, and interbedded coal seams of Pennsylvanian and Mississippian age.

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PREFACE

This study was performed by personnel of the Geotechnical Laboratory (GL) of the U. S. Army Engineer Waterways Experiment Station. Funding for this study was authorized by Military Interdepartmental Purchase Request (MIPR) Number N00164-IMP-04575 dated 6 June 1981 and amended 22 October 1981.

The field work was conducted during the period 17 August 1981 to 1 December 1981. Soil testing and data reduction were performed from January 1982 to April 1982 and report preparation was accomplished during this same period. The drilling was performed by the Exploration Group (EG), Engineering Geology and Rock Mechanics Division (EGRMD), GL, under the supervision of Mr. Joseph B. Dunbar, Engineering Geology Applications Group (EGAG) of the EGRMD. The physical soil tests were performed by the Soil Testing Facility, GL. Messrs. Jerald D. Broughton and Dale L. Barefoot, EGAG, assisted in data compilation and analysis. Mr. Dunbar prepared the report.

The study was conducted under the direct supervision of Mr. John H. Shamburger, Chief, EGAG, and Mr. Mark A. Vispi, Chief, EG, and under the general supervision of Dr. Don C. Banks, Chief, EGRMD, and Drs. William F. Marcuson III and Paul F. Hadala, Chief and Assistant Chief, GL, respectively.

Special acknowledgment is extended to Mrs. Cathy Andrews and Mr. Eric Foster of the Naval Weapons Support Center for their assistance during the study.

Commander and Director of WES during the conduct of the study was COL Tilford C. Creel, CE. The Technical Director was Mr. F. R. Brown.

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CONTENTS

	Page
PREFACE	2
List of Figures and Tables	5
PART I: INTRODUCTION	7
Background	7
Purpose and Scope	7
PART II: ENVIRONMENTAL SETTING	8
Geographical Location	8
Climate	8
Topography	8
Soils	10
Geology	10
Surface Water	14
Groundwater	14
PART III: DATA COLLECTION	16
Field Exploration	16
Physical Test and Cation Exchange Capacity	30
PART IV: DISPOSAL SITES	32
Mustard Gas Burial Grounds	32
Dye Burial Grounds	36
Ammunition Burning Grounds	40
McComish Gorge	43
Old Burning Pit	47
Demolition Area	52
Old Rifle Range	60
Highway 58 Dump Site A	64
Highway 58 Dump Site B	67
Pest Control Area	71
Rockeye Site	74
PART V: CONCLUSIONS	80
BIBLIOGRAPHY	86
APPENDIX A: FIELD BORING LOGS	A1
APPENDIX B: GRAPHIC FIELD LOGS	B1

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PART I: INTRODUCTION

Background

The Naval Weapons Support Center (NWSC) has located areas on its premises that might contain buried hazardous waste. These hazardous waste areas resulted from landfill dumping operations and the production and disposal of military ordnance. The NWSC determined these waste sites required a groundwater monitoring network to help ascertain any subsurface contamination problems which might result from these areas.

Purpose and Scope

The purpose of this investigation was to define the hydrogeological characteristics of each buried waste site and design and install groundwater monitoring networks around these buried waste sites which would conform with state and Federal requirements.

This study was performed at 11 predesignated areas on the NWSC where subsurface contaminations were suspected. Activities during the study included field exploration, soil sampling, well installation, and physical soil testing. Chemical analysis of soil and water samples was conducted by the NWSC and are not presented in this report.

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PART II: ENVIRONMENTAL SETTING

Geographic Location

The NWSC is located in southwestern Indiana in the northern half of Martin County and extends into portions of Greene, Daviess, and Lawrence Counties. It is situated approximately 75 miles southwest of Indianapolis and approximately 45 miles southwest of Bloomington, the nearest metropolitan area. The NWSC covers more than 60,000 acres or an area roughly ten miles by ten miles. Figure 1 shows the NWSC and surrounding area which is predominantly rural.

Climate

The NWSC is located in a warm temperate climate zone. In general, summers are warm and humid while winters are mild with cold periods of short duration. Temperature ranges from an average maximum July temperature of 89°F to an average minimum January temperature of 26°F. Precipitation is nearly evenly distributed throughout the year with maximum precipitation occurring during spring and early summer. The NWSC averages 44 inches of precipitation yearly with 42 inches of rain and 15 inches of snow. Average humidity ranges from 40 to 90 percent in summer and 60 to 90 percent in winter.

Topography

Surface relief at the NWSC consists of gently rolling hills and steep sided ridges which are dissected by numerous well-defined drainageways. Elevations at the NWSC are higher in the east and decline towards the west. The highest elevation occurs in the extreme eastern portion with an elevation of 860 feet (ft) mean sea level (MSL) while the lowest elevation of 491 ft MSL occurs in the southwestern portion of the installation.

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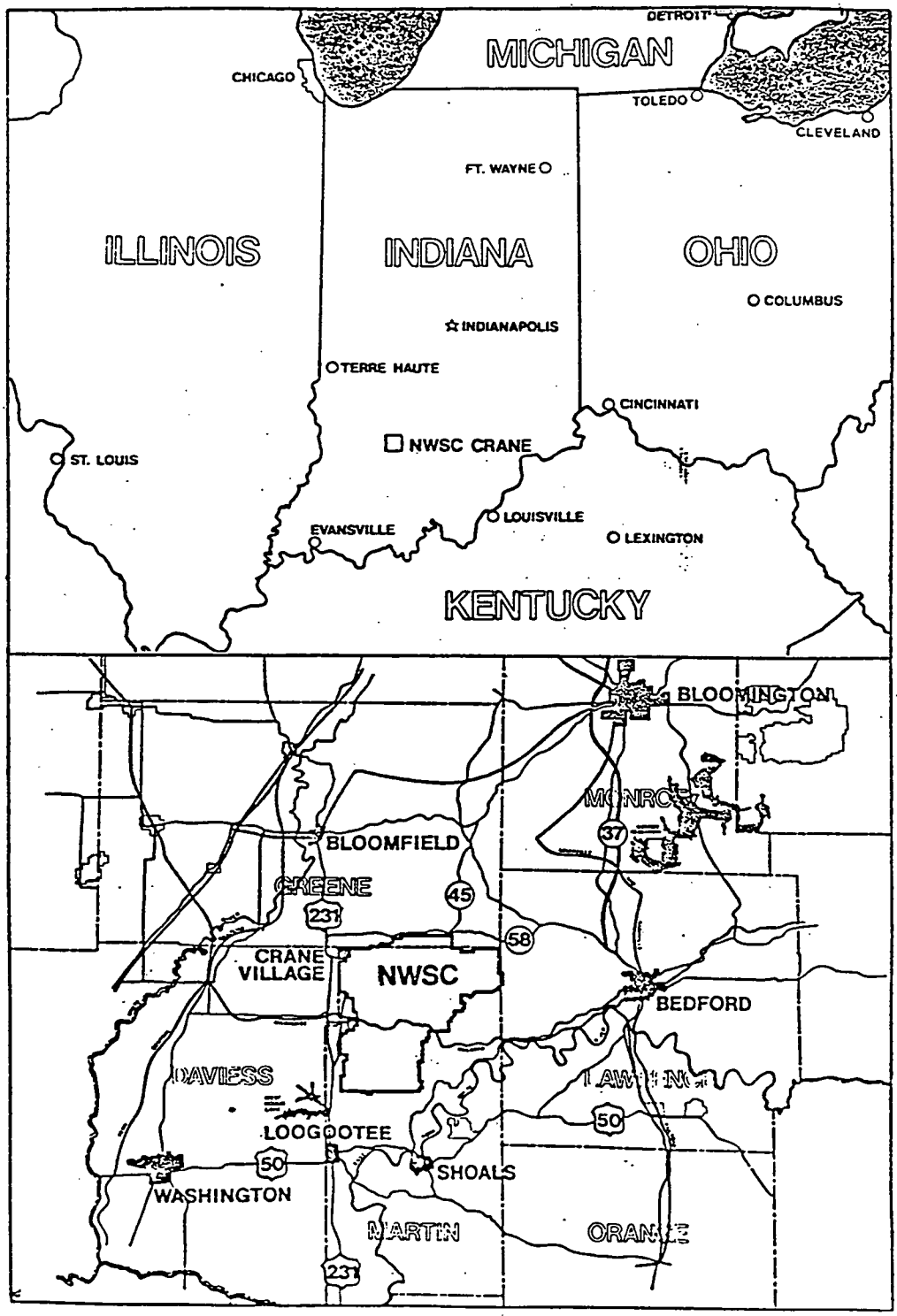

(From Naval Facilities Engineering Command)

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Figure 1. Naval Weapons Support Center and Vicinity

Soils

The United States Department of Agriculture identifies three-fourths of Martin County which contains the major portion of the NWSC as belonging to the Zanesville and Muskingum soil series. These series are identified as a dark brown organic silt loam at the surface, underlain by 48 inches of mottled tan, grey, and yellow clay with varying percentages of sand and silt. Occasionally, a clay hardpan occurs between 25 and 32 inches below surface. WES borings encountered soil thickness at the NWSC from less than 1 ft to an excess of 40 ft. These borings identified a surficial organic layer underlain by clay, silt, or sand.

Geology

The NWSC lies in a region of Indiana which was not covered by Pleistocene glacial deposits. The surface deposits are divided into two types; unconsolidated deposits of Recent and Pleistocene age and residual soils formed from the underlying rock. Recent and Pleistocene deposits occur in the many small floodplains throughout the NWSC and are composed of alluvial, colluvial, and paludal silt, sand, and gravel; and lacustrine clay, silt, and sand. Residual soils at the NWSC were derived from the underlying sedimentary rocks of the lower Pennsylvanian Raccoon Creek Group and the upper Mississippian Stephensport and the West Baden Groups. These soils are clay, silt, and sand. Lower Pennsylvanian rock at the NWSC consists of shale, sandstone, and coal beds while upper Mississippian rock consists of limestone, shale, and sandstone. Since the NWSC lies on the eastern edge of the Illinois Structural Basin, the Pennsylvanian and Mississippian sedimentary rocks dip west-southwest between 30 and 35 ft per mile into the basin. Table 1 presents the stratigraphic column of units underlying the NWSC and Figure 2 shows the distribution of these units on the installation.

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COLUMNAR SECTION SHOWING BEDROCK UNITS

TIME UNIT: PERIOD	TIME UNIT: EPOCH	MAP UNIT	THICKNESS (FEET)	LITHOLOGY	ROCK UNIT *: SIGNIFICANT MEMBER	ROCK UNIT *: FORMATION		ROCK UNIT *: GROUP
PENNSYLVANIAN	CONEMAUGHIAN	P_5	175+		MEROM Ss.	MATTOON Fm.	MATTOON Fm. (FORMATIONS MAPPED IN ILLINOIS)	MCLEANSBORO
		P_4	150 to 200		LIVINGSTON Ls. SHOAL CREEK Ls.	BOND Fm.	BOND Fm.	
		P_3 WF	200 to 350		WEST FRANKLIN Ls.	*PATOKA Fm.* SHELBURN Fm.	MODESTO Fm.	
	ALLEGHENIAN	V P_2	300 to 400		DANVILLE COAL (VII) SPRINGFIELD COAL (V) SURVANT COAL (IV)	DUGGER Fm. PETERSBURG Fm. LINTON Fm.		CARBONDALE
	POTTSVILLIAN	B P_1	250 to 500		SEELYVILLE COAL (III) BUFFALOVILLE COAL LOWER BLOCK COAL	STAUNTON Fm. BRAZIL Fm. MANSFIELD Fm.		*RACCOON CREEK*

* ROCK-UNIT NAMES FOR PENNYSLVANIAN ROCKS IN INDIANA FOLLOW THE USAGE PROPOSED BY WIER (IN PREPARATION). STRATIGRAPHY OF MIDDLE AND UPPER PENNSYLVANIAN ROCKS IN SOUTHWESTERN INDIANA. NEW NAMES ARE SHOWN IN ITALICS AND ARE TENTATIVE UNTIL FORMAL PRESENTATION.
(After Grey, Wayne, and Wier)

Table 1. Stratigraphy of Naval Weapons Support Center
(Continued)

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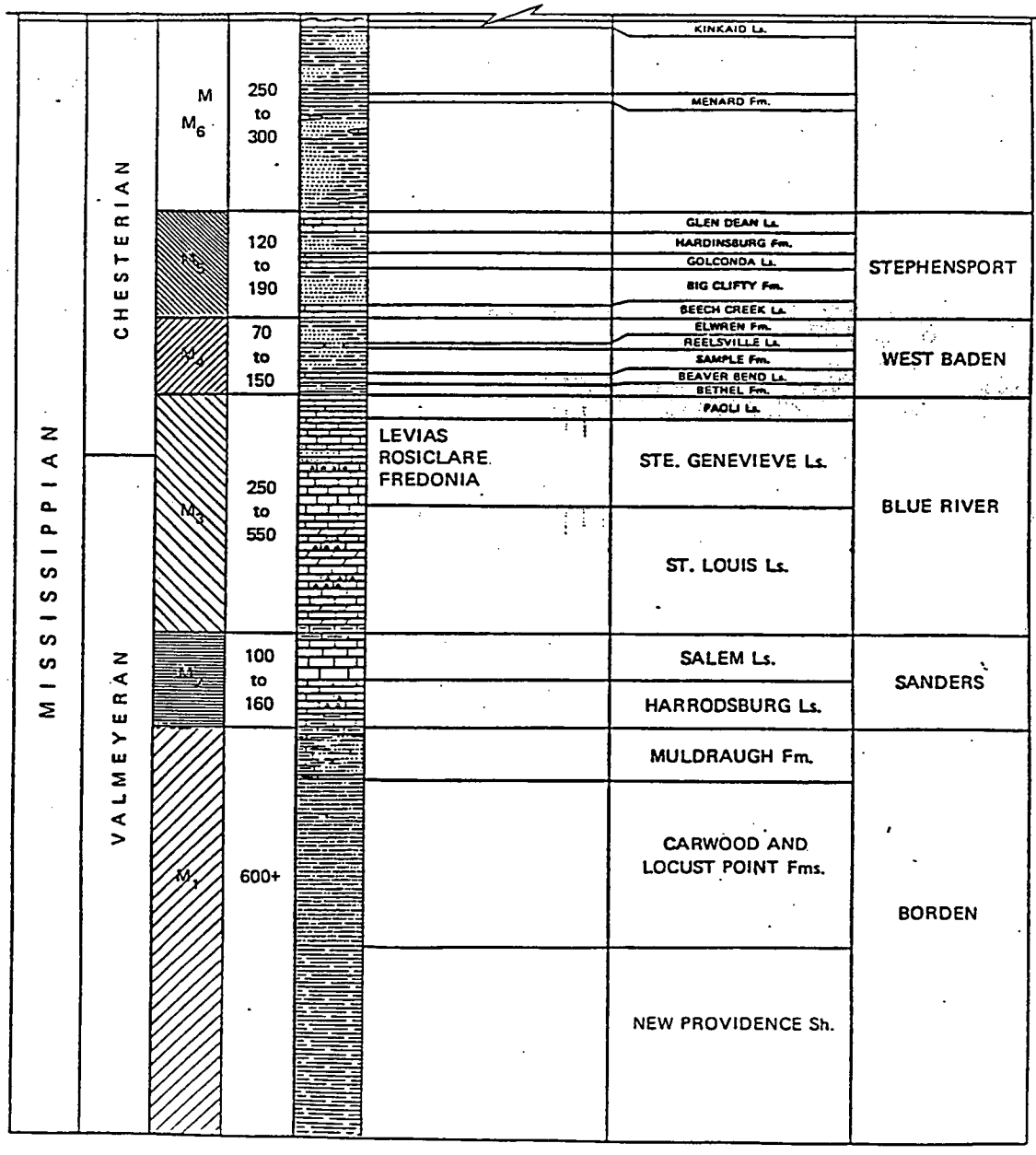
COLUMNAR SECTION SHOWING BEDROCK UNITS (CONT.)



* ROCK-UNIT NAMES FOR PENNSYLVANIAN ROCKS IN INDIANA FOLLOW THE USAGE PROPOSED BY WIER (IN PREPARATION), STRATIGRAPHY OF MIDDLE AND UPPER PENNSYLVANIAN ROCKS IN SOUTHWESTERN INDIANA. NEW NAMES ARE SHOWN IN ITALICS AND ARE TENTATIVE UNTIL FORMAL PRESENTATION.

Table 1 (Concluded)

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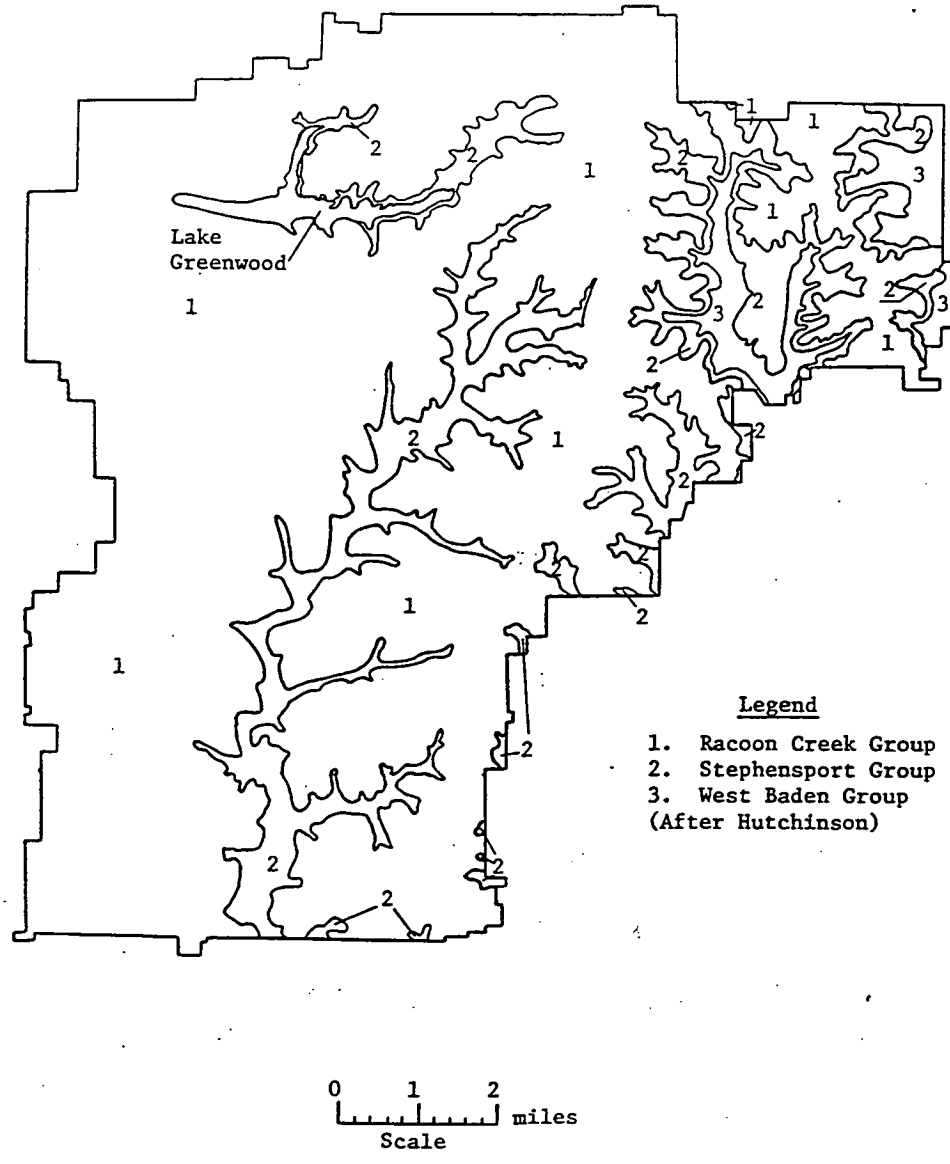

Figure 2. Distribution of Geological Groups at the NWSC.

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Surface Water

The surface drainage at the NWSC has formed a dense dendritic pattern throughout the installation that flows in a general southerly or southwesterly direction. Seven creeks in five drainage basins carry surface water off the installation where it eventually drains into the East Fork of the White River. Figure 3 shows the basins and drainages of the NWSC. Drainage Basin IV consists of Boggs and Turkey Creeks which are the primary drainageways for the installation and drain the majority of the area. The north and northwest section (Basin I) is drained by Furst Creek, the eastern portion (Basin III) is drained by the Sulphur Creek Complex, the extreme eastern portion (Basin II) is drained by Indiana Creek, and the southwestern section (Basin V) is drained by Seed Tick Creek. Also located within the installation are several small ponds and Lake Greenwood, an 800 acre spring-fed lake in the northwestern portion of the installation.

Groundwater

Detailed groundwater information at the NWSC is lacking since potable water is derived primarily from Lake Greenwood. Regionally, groundwater flow is expected to conform with the westward dipping bedrock with a gradient approaching the dip while locally, groundwater flow is likely to parallel the surface drainage on the installation. Wells installed by WES for the groundwater monitoring network generally showed groundwater flow agreed with local drainage. Seasonal fluctuations in the water table are expected to be slight since precipitation is well distributed throughout the year.

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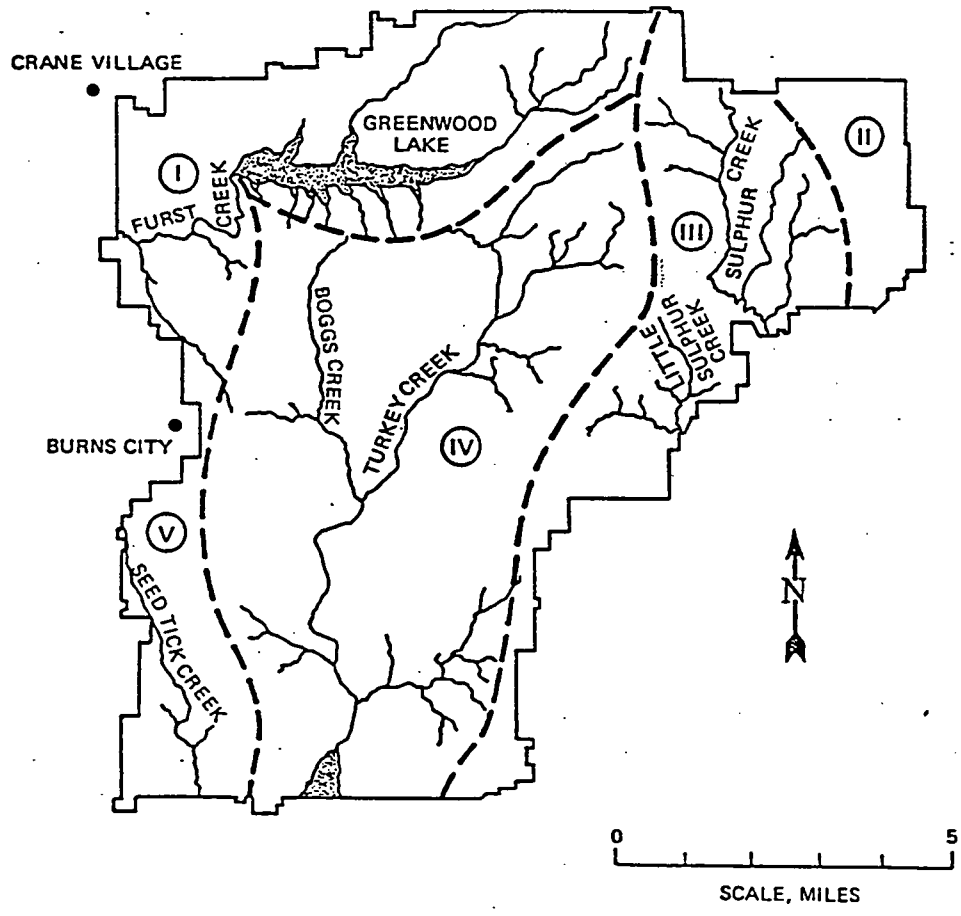

Figure 3. Surface Drainage at the NWSC.

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PART III: DATA COLLECTION

Field Exploration

The WES began installation of a groundwater monitoring system around each buried waste site in August 1981 and concluded work in December 1981. Thirteen groundwater monitoring networks (containing a total of 83 monitoring wells) were installed at 11 sites on the NWSC. Figure 4 identifies and locates the disposal sites on the NWSC. The installation of each network involved a soil sampling and drilling program to help define the hydrogeological characteristics at each site. The NWSC was responsible for the sampling and chemical analysis of water samples from each monitoring site, with the WES assisting the NWSC in obtaining water samples from the Demolition Area, the Old Rifle Range, the Ammunition Burning Grounds, and the Dye Burial Grounds. The NWSC initiated, prepared, and monitored all safety aspects of the drilling and sampling operations. Necessary support equipment, facilities, and personnel were also provided by the NWSC.

Field procedure

The installation of a monitoring network around each site was conducted in two phases. Phase one was concerned with determining depth to groundwater and the direction of groundwater flow by installing three monitoring wells around each disposal area. Well locations were based on the site topography and estimated water table gradient, and wells were located 25 to 75 ft from the site perimeter. When installed, the wells formed an approximate equilateral triangle around each area with one well up gradient and the remaining two wells down gradient of each disposal site. Water level measurements were recorded daily for seven days and weekly thereafter following each well installation (water levels were measured with an M-scope, a device similar to a volt-ohm meter). The NWSC surveyed all well locations and riser pipe elevations prior to implementation of the second phase. Groundwater elevations from the three initial wells were used to determine the direction of flow and the plane of the water table for each disposal site.

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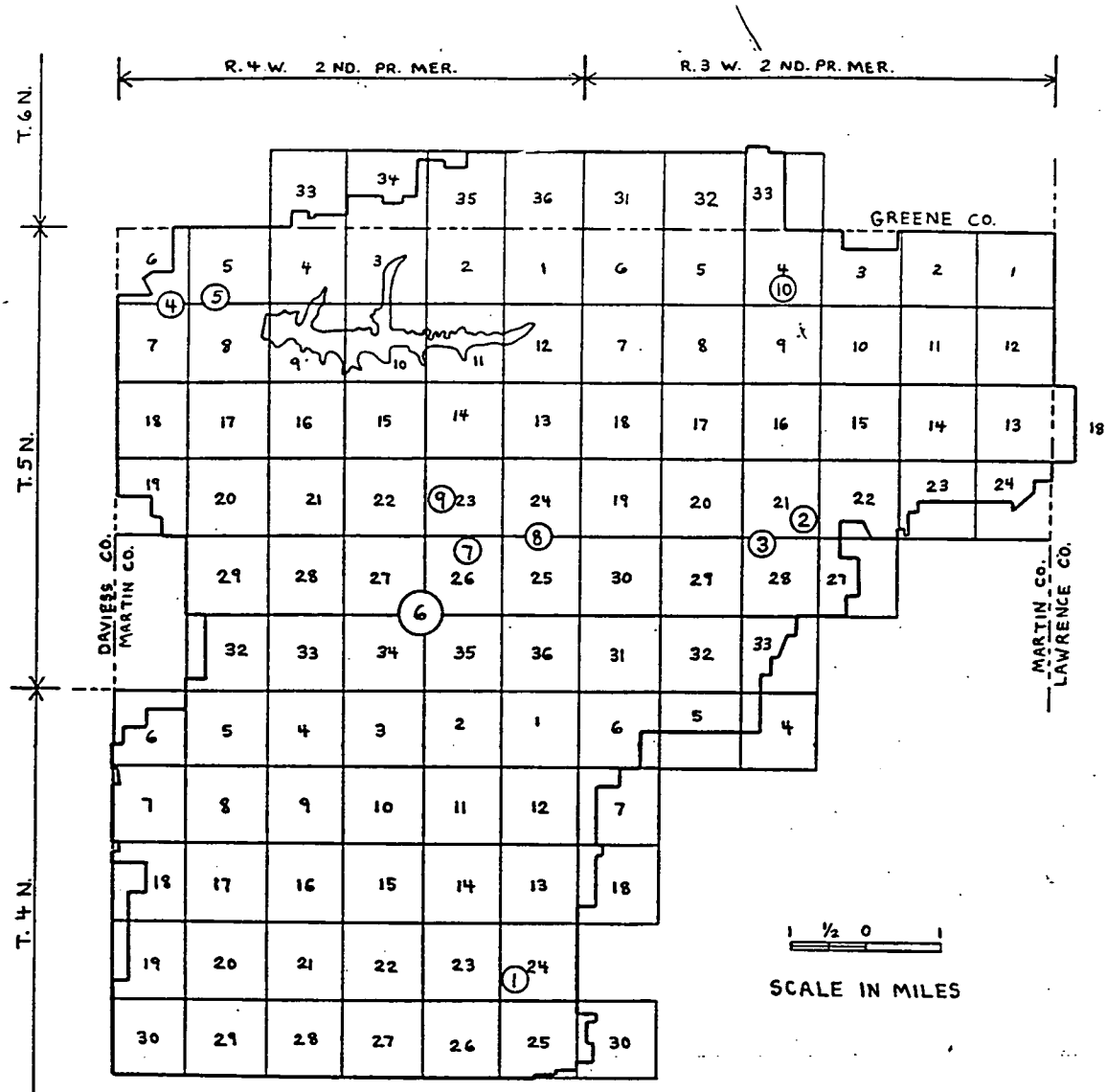

Site Number	Site Name
1	Mustard Gas Burial Grounds
2	Dye Burial Grounds
3	Ammunition Burning Grounds
4	McComish Gorge
5	Old Burning Pit
6	Demolition Area and Old Rifle Range (included under Site 6 but separate area)
7	Highway 58 Dump Site A
8	Highway 58 Dump Site B
9	Pest Control Area
10	Rockeye Site

Figure 4. Location of Groundwater Monitoring Systems

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Phase two consisted of installing a sufficient number of wells to obtain a minimum of three monitoring wells along the down gradient perimeter of each disposal site. These wells were located 25 to 75 ft from the site perimeter and equally spaced along the down gradient length to insure optimum subsurface coverage. Additional monitoring wells were installed where more than one direction of flow was encountered or where the down gradient perimeter was large. Prior to drilling the down gradient wells, a surveyed ground elevation was obtained where possible, if not, an estimate of the ground elevation was made to predict the depth where groundwater would be encountered. If the water table was as predicted, the remaining down gradient wells were installed. If the water table was not at the predicted depth, the completed well was given time to stabilize and the new three point problems solved with the next well located accordingly.

Soil sampling procedure

Undisturbed and disturbed soil samples were obtained using two truck-mounted Failing 1500 drilling rigs. An undisturbed soil sample is defined as a sample of minimal disturbance suitable for laboratory testing. The primary method used in obtaining undisturbed soil samples was with a 3-inch (in.) -diameter (diam), fixed piston sampler or Hvorslev sampler (Figure 5). A 3-in. Shelby tube, mounted to the sampler head, was pushed with hydraulic pressure into the stratum being sampled. The sampler was retrieved from its position and the tube removed from the sampler head. Approximately 3 inches of the soil sample was removed from the bottom of the tube for field classification and then sealed into a jar and labeled. Field classification consisted of identifying soil type, color, consistency, water content, and any other visible physical characteristics. Packers were inserted in each end of the sample tube and the sample tube labeled for storage at the NWSC for later shipment to WES for physical testing.

Additional undisturbed sampling methods were employed using a Pitcher sampler (Figure 6) or Dennison barrel. Both sample techniques use an inner sample tube and outer barrel with bit which is drilled into the sample interval. These methods were primarily used with hard soils or weathered rock and very coarse soils where the Hvorslev sampler was not effective.

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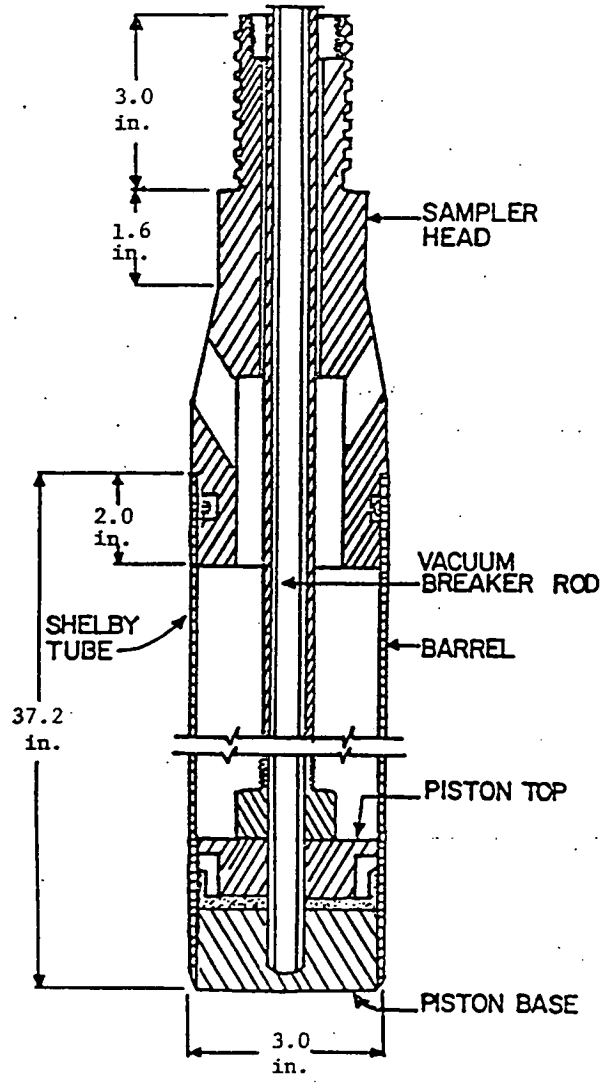

Figure 5. Sketch of Hvorslev Sampler or 3-in. Fixed Piston Sampler

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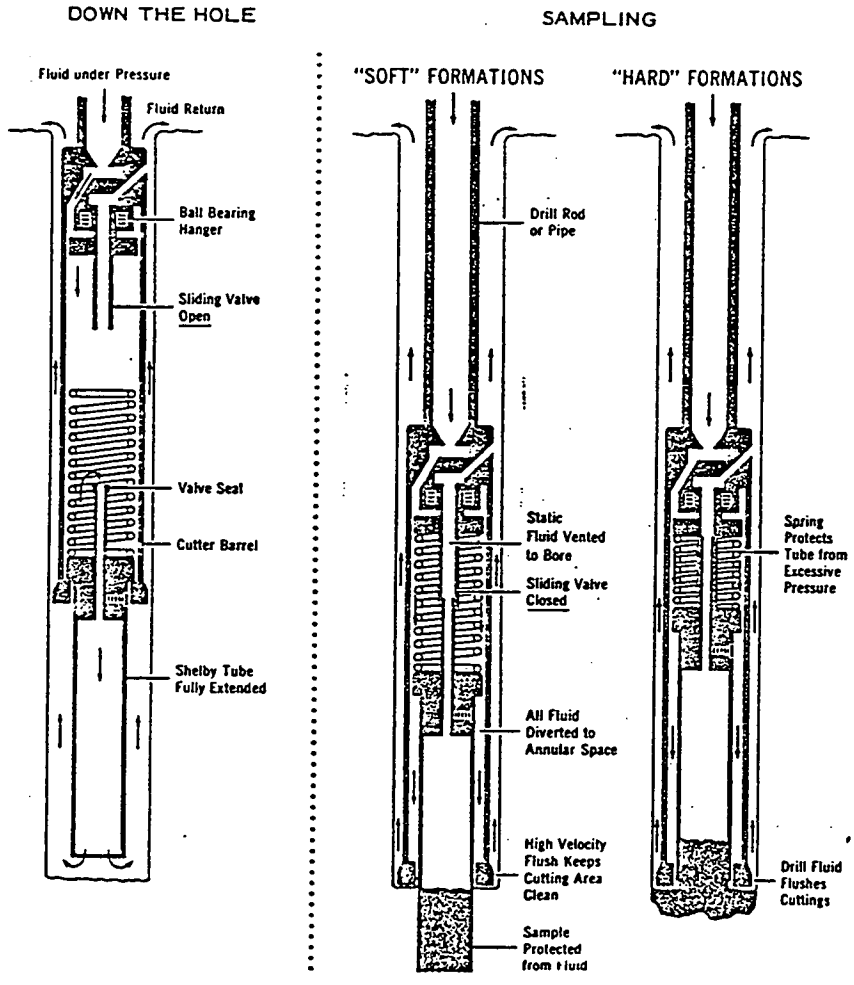

Figure 6. Sketch and Operation of Pitcher Sampler.

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Disturbed soil samples were obtained with a split-spoon sampler (Figure 7). A disturbed soil sample contains all the constituents of a particular stratum, but the original structure has been altered. The split-spoon sampler was pushed with hydraulic pressure into the same interval where the Hvorslev sampler failed to obtain a sample. This sample loss generally occurred in very moist or wet sands. The split-spoon sampler was retrieved from its position, disassembled, and the sample removed from the barrel portion where it was classified, sealed into a jar, and labeled for later shipment to WES for laboratory testing.

Additional disturbed soil samples were requested by the NWSC from the Dye Burial Grounds and an ash pile at the Ammunition Burning Grounds. These soil samples were obtained with a folding auger and composite jar samples were made for every 5 ft of material sampled. The NWSC required these samples to conduct chemical analysis on the soil and ash from these areas.

Sampling frequency

The sampling program called for 3-in. fixed piston undisturbed soil samples to be taken at 5-ft intervals - 0, 5, 10 ... ft - until either the water table or rock was encountered. If water was encountered in the overburden, two additional soil samples were taken at 5-ft and 10-ft below the depth where water was first encountered. If bedrock was encountered, boring advance was changed to rock drilling.

Boring advance between sample intervals was made with either a hollow stem auger or folding-solid auger. The hollow stem auger is a combination casing and auger which is used in soils where the boring will collapse when not supported. The folding or solid auger was used primarily in boring advance where soil borings tended to remain open. The hollow stem auger was used only at McComish Gorge and the Old Burning Pit where soils were predominantly coarser-grained.

Drilling

Drilling was initiated where rock was encountered. Rock drilling at the NWSC was done either with a 5-5/8-in. rock bit or 4-in. inside diameter (I.D.) x 5½-in. outside diameter (O.D.) core barrel with diamond bit (Figure 8). At least one boring per site was drilled with the core barrel

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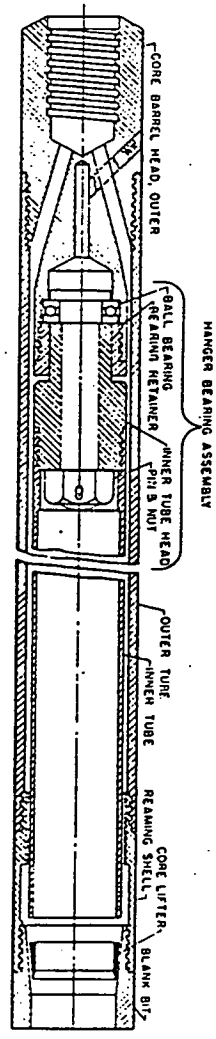

Figure 8. Sketch of 4-in. I.D. x 5-1/2-in. O.D. Core Barrel.

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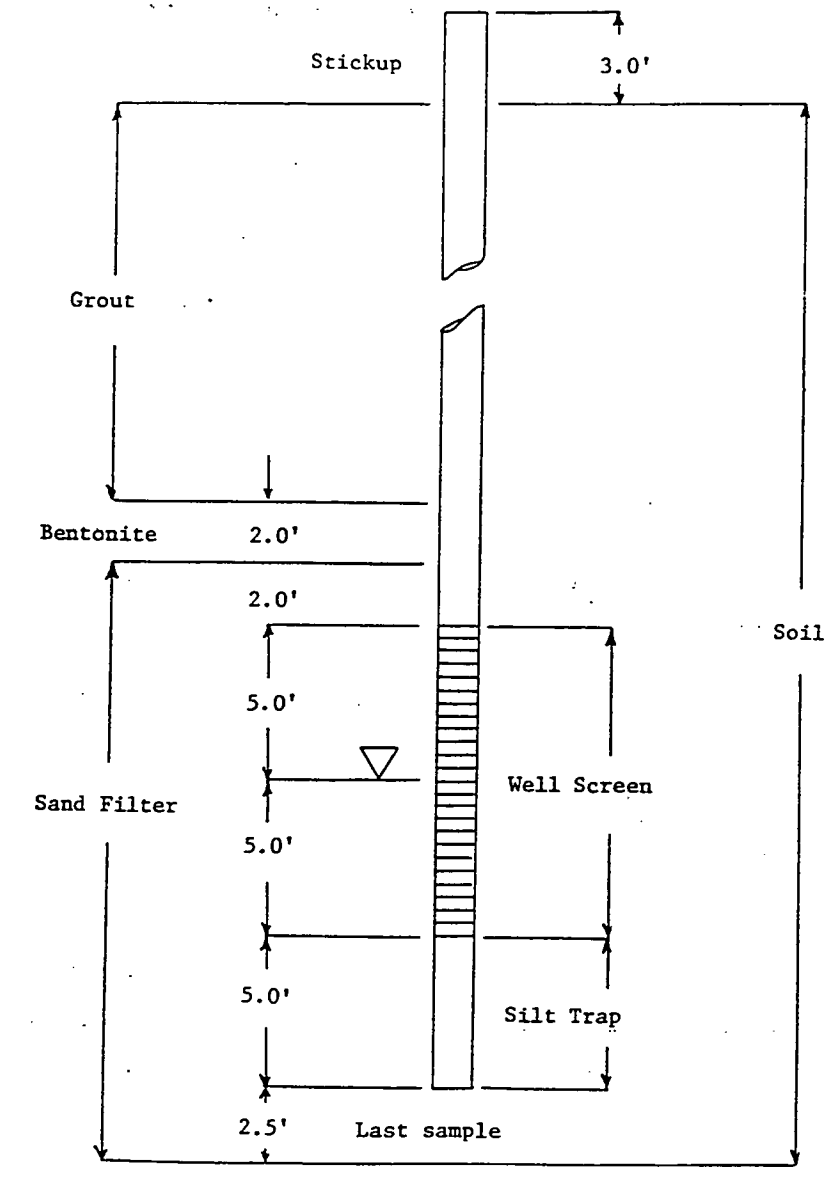

▽ Water depth at time of drilling

Figure 9. Monitoring Well When Saturated Zone Equals or Exceeds 12.5 ft.

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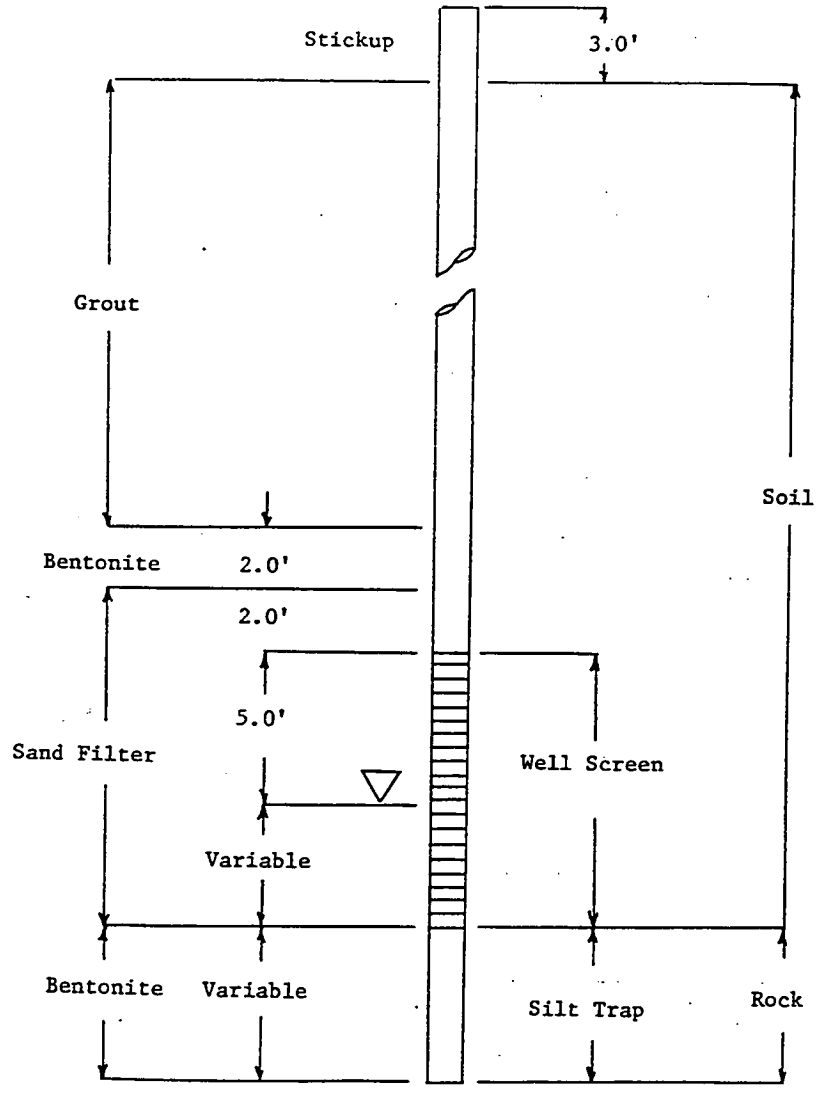

▽ Water depth at time of drilling

Figure 11. Monitoring Well When Saturated Zone is Less Than 12.5 ft Thick and Overlies Rock.

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to provide detailed lithologic information and the remaining borings were drilled with a rock bit. Boring advance was ended when the boring was 10 ft below the water table.

Air was used as a medium during rock drilling. A 650 cubic feet per minute air compressor furnished the necessary pressure to remove cuttings from the boring and lubricate the rock bit. During the coring operation it was occasionally necessary for water to be used as a drilling medium instead of air. This occurred when the boring was too deep for cuttings to be efficiently removed by air or the water table prevented the cuttings from reaching the surface. The preferred medium was air because water could mask the water table.

Samples from core borings were not saved, but detailed lithological logs and photographs were made from rock samples. Lithological classification from rock bit borings was made on drill cuttings which identified type, color, grain-size, water content, and drilling resistance of the material. Appendix A contains the field boring logs and Appendix B graphically summarizes the information from the field boring logs.

Well installation

Well installation for each boring was dependent on the site geology. If the water table was encountered in the overburden, one of three situations could occur which was easily determined during the soil sampling operation by pushing two undisturbed soil samples below the depth where water was encountered. Where the saturated zone was found to equal or exceed 12.5 ft, well installation would correspond to Figure 9 and where the saturated zone was less than 12.5 ft, well installation would correspond to Figure 10. The third type of overburden well installation is illustrated in Figure 11 and occurs where the saturated zone is less than 12.5 ft and overlies rock. Figure 12 illustrates installation where the water table is in rock which represents the majority of wells installed at the NWSC.

A well string was made from 2-in. schedule 40 PVC pipe after the depth of the monitoring well was determined. All well strings consisted of a bottom capped silt trap, a slotted section of PVC screen (preconstructed 10-ft

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sections with slot width opening of 0.020 in.) and a solid riser pipe extending 3 ft above ground surface. All joints were sealed with PVC cement to prevent leakage and a small vent was sawed into the riser pipe cap to allow equalization of pressure. In shallow borings the well string was lowered as a complete unit while in deeper borings it was necessary to glue the well string in sections when lowering to the desired depth. If the hollow stem auger was used in boring advance (McComish Gorge and Old Burning Pit), the well string was lowered through the hollow stem auger and the hollow stem auger removed.

Well completion was dependent on the applicable geological condition in Figures 9 through 12. If the saturated zone was less than 12.5 ft and was underlain by soil (Figure 10) or bedrock (Figure 11), a bentonite seal was placed around the silt trap to prevent possible contamination of the underlying material from the water table. If the saturated zone was greater than 12.5 ft (Figure 9) or the water table was found in bedrock (Figure 12), a washed filter sand was placed around the silt trap. In all constructions, the annulus between the well screen and boring wall was filled with a washed filter sand (laboratory test results on the filter sand are contained in Appendix E) to a level approximately 2 ft above the top of the screen, followed by approximately 2 ft of bentonite. The remaining annulus was grouted using a water, cement, and bentonite mixture. The bentonite was added to the grout to prevent shrinking and cracking during the curing process. Surface depressions caused by settling of the grout mixtures were later filled with a similar mixture.

In certain locations additional protection to the well was supplied by a 3-in.-diam, steel pipe with screw cap. All wells in the Demolition Area and the Old Rifle Range were fitted with protector pipes. Those locations where the possibility of damage might result from snow removal or high vehicle trafficked areas were also fitted with protector pipes. These protector pipes were cemented 2 ft below ground surface, vented in the cap, and contained a drain hole at the base. The drain hole prevented trapped water from freezing during the colder months and possible damage to the inner PVC riser pipe. Each monitoring well was labeled and Appendix C contains diagrams of all wells installed. Appendix D contains the water level measurements on all monitoring wells installed.

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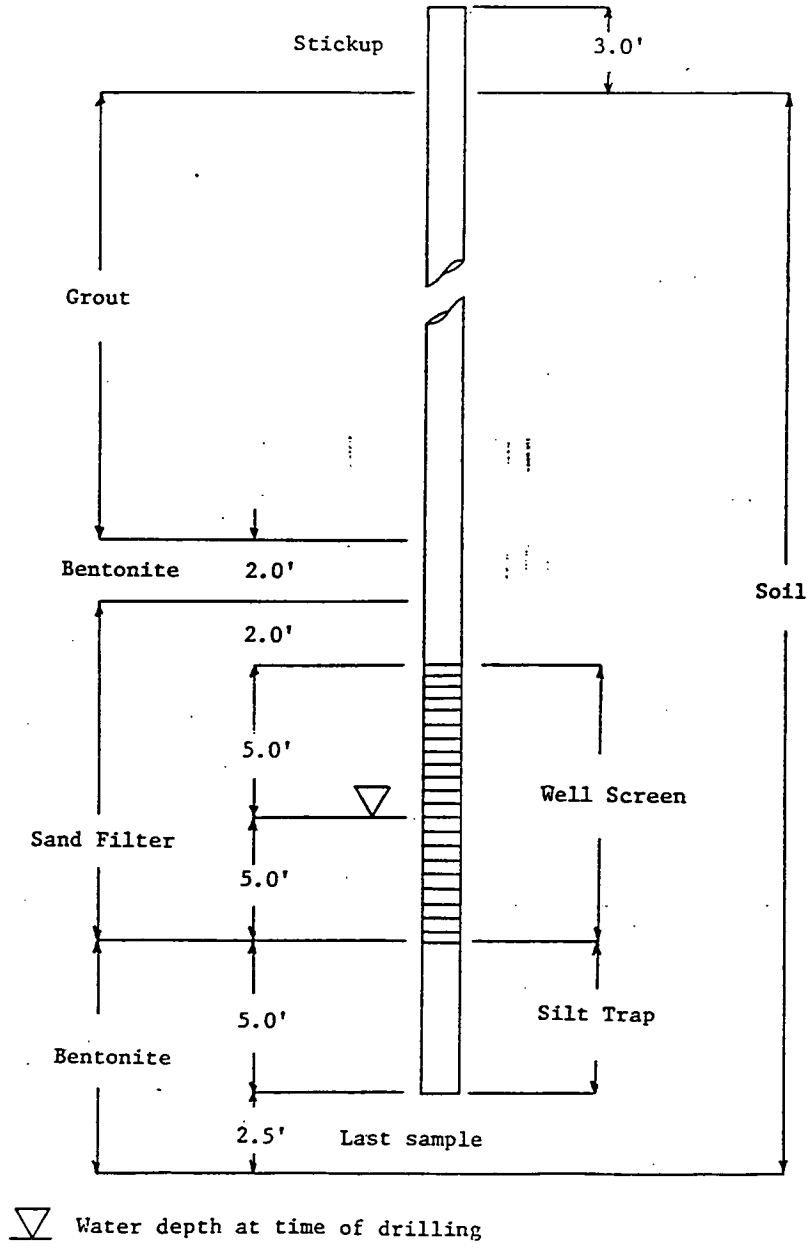

Figure 10. Monitoring Well When Saturated Zone is Less Than 12.5 ft Thick and Overlies Dry Soil.

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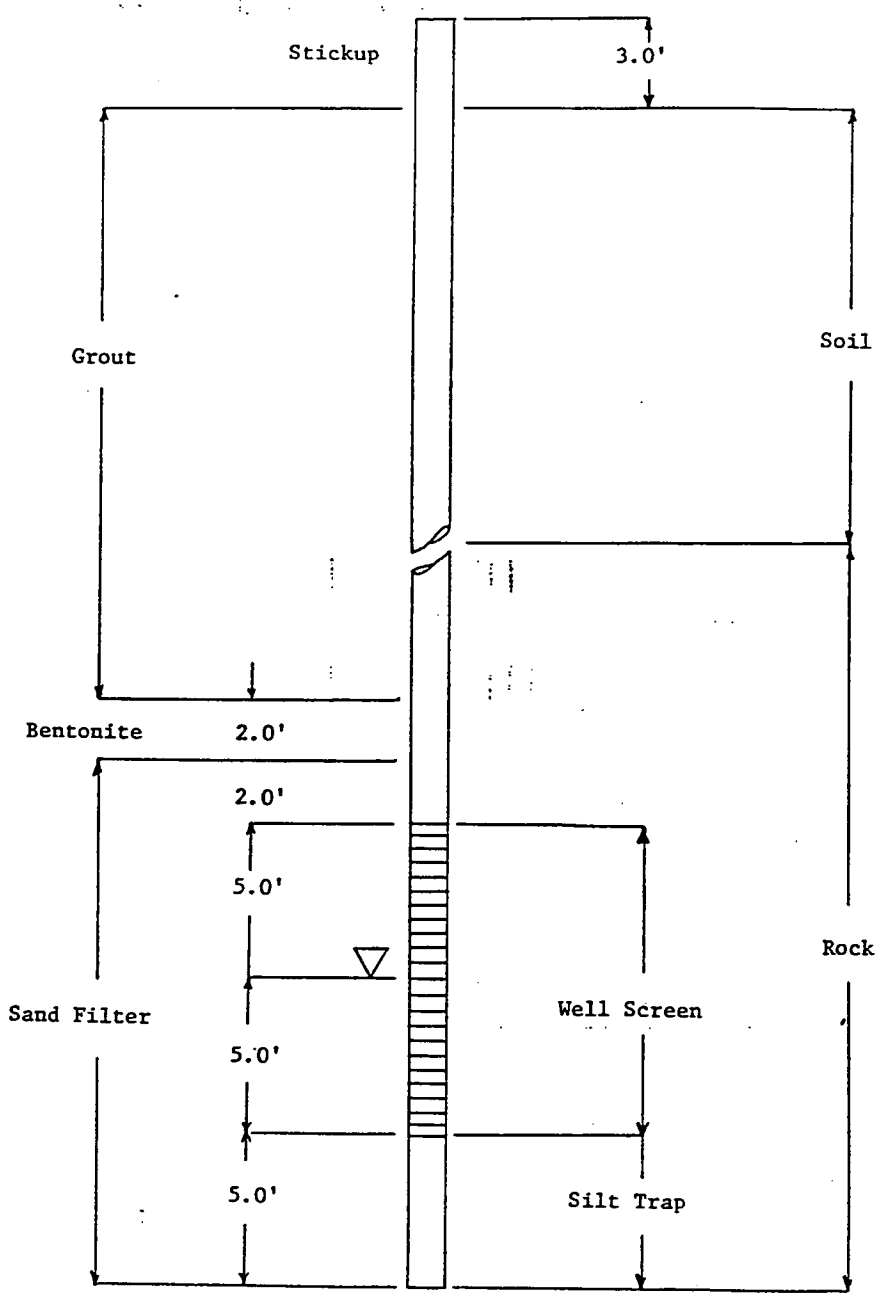


▽ Water depth at time of drilling

Figure 12. Monitoring Well with Water Table in Rock.

WORKING DRAFT

Physical Test and Cation Exchange Capacity

Physical test

Standard soil test procedures as specified by Engineering Manual 1110-2-1906 "Laboratory Soil Testing" were followed during testing. Classification tests (Atterberg limits and grain size distribution of soils), water content, and density tests were performed on all tube samples. Classification tests and water content were performed on all jar samples where no tube samples existed. Permeability tests were performed on selected samples from each site. Detailed testing procedures are presented in Appendix E with laboratory soil test data.

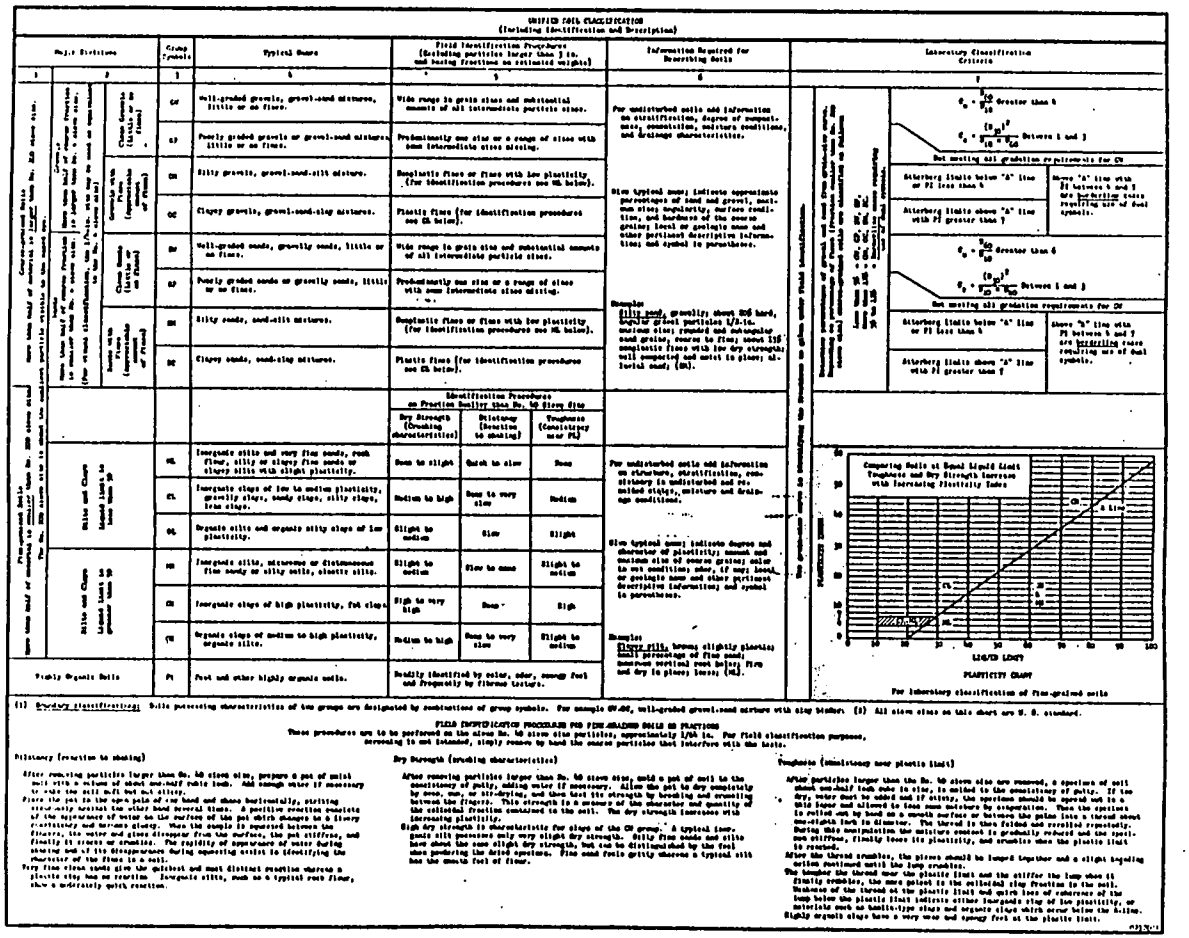
Classification of soils was made according to the Unified Soil Classification System (USCS) which depends on the grain size distribution and Atterberg limits. Grain size distribution was determined with standard sieves and the Atterberg limits (liquid and plastic limits) were determined with standard devices. The liquid and plastic limits are the water contents at the boundaries between the semiliquid and plastic state and the plastic and semisolid state, respectively. Figure 13 shows the USCS with which the NWSC soil samples were described.

Water content and soil density are important engineering relationships and are useful correlations among samples for which a full suite of test data are not available. Water content is the amount of free water in a soil and soil density is the dry weight per soil volume.

Permeability tests were performed on one to three representative samples from each site to evaluate the hydrogeological conditions at each disposal site. The samples above bedrock and the water table furnished an approximate measure of possible migration of contaminants.

Cation exchange capacity

Cation Exchange Capacity (CEC) test procedures as specified by Technical Report EPA/CE 81-1 "Procedures for Handling and Chemical Analysis of Sediment and Water Samples" were followed during testing. The CEC of a soil is a measure of the cations (positive charged ions) reversibility capacity from the surface of the crystalline matrix of a mineral. These cations may be released into the water table under appropriate conditions. CEC tests were generally performed on the jar sample from the first sample tube in each boring. Detailed chemical test procedures and results are included in Appendix E.



UNIFIED SOIL CLASSIFICATION
(Including Identification and Description)

Major Divisions	Group Symbols	Typical Names	Field Identification Procedures (Excluding particles larger than 3 in. and basing fractions on estimated weights)	Information Required for Describing Soils	Laboratory Classification Criteria
Coarse-grained Soils: More than half of material is larger than No. 200 sieve size. For No. 200 sieve size is about the smallest grain visible to the naked eye. — Gravels: More than half of coarse fraction is larger than No. 4 sieve size. (For visual classification, the 1/4 in. size may be used as equivalent to the No. 4 sieve size.) — Clean Gravels (Little or no fines)	GW	Well-graded gravels, gravel-sand mixtures, little or no fines.	Wide range in grain sizes and substantial amounts of all intermediate particle sizes.	For undisturbed soils add information on stratification, degree of compactness, cementation, moisture conditions, and drainage characteristics.	$C_u = \frac{D_{60}}{D_{10}}$ Greater than 4; $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ Between 1 and 3. Not meeting all gradation requirements for GW
	GP	Poorly graded gravels or gravel-sand mixtures, little or no fines.	Predominantly one size or a range of sizes with some intermediate sizes missing.	Give typical name; indicate approximate percentages of sand and gravel, maximum size; angularity, surface condition, and hardness of the coarse grains; local or geologic name and other pertinent descriptive information; and symbol in parentheses.	
Gravels with Fines (Appreciable amount of fines)	GM	Silty gravels, gravel-sand-silt mixtures.	Nonplastic fines or fines with low plasticity (for identification procedures see ML below).		Atterberg limits below "A" line or PI less than 4. Above "A" line with PI between 4 and 7 are borderline cases requiring use of dual symbols.
	GC	Clayey gravels, gravel-sand-clay mixtures.	Plastic fines (for identification procedures see CL below).		Atterberg limits above "A" line with PI greater than 7.
Sands: More than half of coarse fraction is smaller than No. 4 sieve size. (For visual classification, the 1/4 in. size may be used as equivalent to the No. 4 sieve size.) — Clean Sands (Little or no fines)	SW	Well-graded sands, gravelly sands, little or no fines.	Wide range in grain size and substantial amounts of all intermediate particle sizes.	Example: (Silty sand, gravelly; about 20% hard, angular gravel particles 1/2-in. maximum size; rounded and subangular sand grains, coarse to fine; about 15% nonplastic fines with low dry strength; well compacted and moist in place; alluvial sand; (SM).	$C_u = \frac{D_{60}}{D_{10}}$ Greater than 6; $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ Between 1 and 3. Not meeting all gradation requirements for SW
	SP	Poorly graded sands or gravelly sands, little or no fines.	Predominantly one size or a range of sizes with some intermediate sizes missing.		
Sands with Fines (Appreciable amount of fines)	SM	Silty sands, sand-silt mixtures.	Nonplastic fines or fines with low plasticity (for identification procedures see ML below).		Atterberg limits below "A" line or PI less than 4. Above "A" line with PI between 4 and 7 are borderline cases requiring use of dual symbols.
	SC	Clayey sands, sand-clay mixtures.	Plastic fines (for identification procedures see CL below).		Atterberg limits above "A" line with PI greater than 7.

			Identification Procedures on Fraction Smaller than No. 40 Sieve Size: Dry Strength (Crushing characteristics)	Dilatancy (Reaction to shaking)	Toughness (Consistency near PL)	
Fine-grained Soils: More than half of material is smaller than No. 200 sieve size. For No. 200 sieve size is about the smallest grain visible to the naked eye. — Silts and Clays: Liquid limit less than 50	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity.	None to slight	Quick to slow	None	For undisturbed soils add information on structure, stratification, consistency in undisturbed and remolded states, moisture and drainage conditions.
	CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.	Medium to high	None to very slow	Medium	
	OL	Organic silts and organic silty clays of low plasticity.	Slight to medium	Slow	Slight	Give typical name; indicate degree and character of plasticity; amount and maximum size of coarse grains; color in wet condition; odor, if any; local or geologic name and other pertinent descriptive information; and symbol in parentheses.
Silts and Clays: Liquid limit 50 or greater	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.	Slight to medium	Slow to none	Slight to medium	
	CH	Inorganic clays of high plasticity, fat clays.	High to very high	None	High	Example: (Clayey silt, brown; slightly plastic; small percentage of fine sand; numerous vertical root holes; firm and dry in place; loess; (ML).
	OH	Organic clays of medium to high plasticity, organic silts.	Medium to high	None to very slow	Slight to medium	
Highly Organic Soils	Pt	Peat and other highly organic soils.	Readily identified by color, odor, spongy feel and frequently by fibrous texture.			

(1) Boundary classifications: Soils possessing characteristics of two groups are designated by combinations of group symbols. For example GW-GC, well-graded gravel-sand mixture with clay binder. (2) All sieve sizes on this chart are U. S. standard.

FIELD IDENTIFICATION PROCEDURES FOR FINE-GRAINED SOILS OR FRACTIONS

These procedures are to be performed on the sieve No. 40 sieve size particles, approximately 1/64 in. For field classification purposes, screening is not intended, simply remove by hand the coarse particles that interfere with the tests.

Dilatancy (reaction to shaking)

After removing particles larger than No. 40 sieve size, prepare a pat of moist soil with a volume of about one-half cubic inch. Add enough water if necessary to make the soil soft but not sticky.

Place the pat in the open palm of one hand and shake horizontally, striking vigorously against the other hand several times. A positive reaction consists of the appearance of water on the surface of the pat which changes to a livery consistency and becomes glossy. When the sample is squeezed between the fingers, the water and gloss disappear from the surface, the pat stiffens, and finally it cracks or crumbles. The rapidity of appearance of water during shaking and of its disappearance during squeezing assist in identifying the character of the fines in a soil.

Very fine clean sands give the quickest and most distinct reaction whereas a plastic clay has no reaction. Inorganic silts, such as a typical rock flour, show a moderately quick reaction.

Dry Strength (crushing characteristics)

After removing particles larger than No. 40 sieve size, mold a pat of soil to the consistency of putty, adding water if necessary. Allow the pat to dry completely by oven, sun, or air-drying, and then test its strength by breaking and crushing between the fingers. This strength is a measure of the character and quantity of the colloidal fraction contained in the soil. The dry strength increases with increasing plasticity.

High dry strength is characteristic for clays of the CH group. A typical inorganic silt possesses only very slight dry strength. Silty fine sands and silts have about the same slight dry strength, but can be distinguished by the feel when preparing the dried specimen. Fine sand feels gritty whereas a typical silt has the smooth feel of flour.

Toughness (consistency near plastic limit)

After particles larger than the No. 40 sieve size are removed, a specimen of soil about one-half inch cube in size, is molded to the consistency of putty. If too dry, water must be added and if sticky, the specimen should be spread out in a thin layer and allowed to lose some moisture by evaporation. Then the specimen is rolled out by hand on a smooth surface or between the palms into a thread about one-eighth inch in diameter. The thread is then folded and rerolled repeatedly. During this manipulation the moisture content is gradually reduced and the specimen stiffens, finally loses its plasticity, and crumbles when the plastic limit is reached.

After the thread crumbles, the pieces should be lumped together and a slight kneading action continued until the lump crumbles.

The tougher the thread near the plastic limit and the stiffer the lump when it finally crumbles, the more potent is the colloidal clay fraction in the soil. Stickiness of the thread at the plastic limit and quick loss of coherency of the lump below the plastic limit indicate either inorganic clay of low plasticity, or materials such as kaolinite-type clays and organic clays which occur below the A-line. Highly organic clays have a very weak and spongy feel at the plastic limit.

Figure 13. Unified Soil Classification System (USCS)

IN5 170 023 498

Groundwater

Groundwater at the Old Burning Pit and adjacent dumping grounds was encountered at shallow depths. Between the up gradient and down gradient monitoring wells, groundwater elevations range from 591 to 561 ft MSL, a difference of 30 ft. A groundwater contour map constructed from water measurements of 29 November 1981, shows flow to be in a northwesterly direction (see Figure 29). Groundwater data are presented in Appendix D.

Physical and chemical test

Laboratory classification of 40 soil samples resulted in the following soil distribution: 35 percent clay (CL), 22.5 percent clay-silt (CL-ML), 12.5 percent silt (ML), 12.5 percent clayey sand (SC), 5 percent silty sand (SM), 7.5 percent silty sand-sand (SP-SM) and 2.5 percent clayey sand-sand (SP-SC). These soils are brown to reddish brown. Soil permeability was calculated from samples 3, 6, and 3 of borings 3, 7, and 8, respectively, and ranged from 2.35×10^{-5} to 8.05×10^{-6} cm/sec. Appendix E presents the physical and chemical tests results.

Demolition Area

Location

The Demolition Area lies on two steep-sided ridgetops in SW¼, Sec. 26; SE¼, Sec. 27; NE¼, Sec. 34; and NW¼, Sec. 35; T5N, R4W (Figure 4). A total of 15 monitoring wells were installed at the Demolition Area with 7 monitoring wells along the south ridge, 5 monitoring wells along the east ridge, and 3 monitoring wells at the intersection of the two ridges as shown in Figure 30. The south ridge is used for disposal of military ordnance and contaminated insulation from production facilities was reported to have been buried along the east ridge.

Geology

Overburden at the Demolition Area ranges in thickness from 2 to 13 ft. The underlying rock on both the south and east ridges consists of interfingered and interbedded sandstone, shale, and coal seams from the Mansfield Formation of the Raccoon Creek Group (Table 1). Core boring WES-6-2-81 along the south ridge was drilled to a depth of 39 ft and, underlying the overburden, encountered 3 ft of a weathered, brown, friable, fine-grained sandstone of which

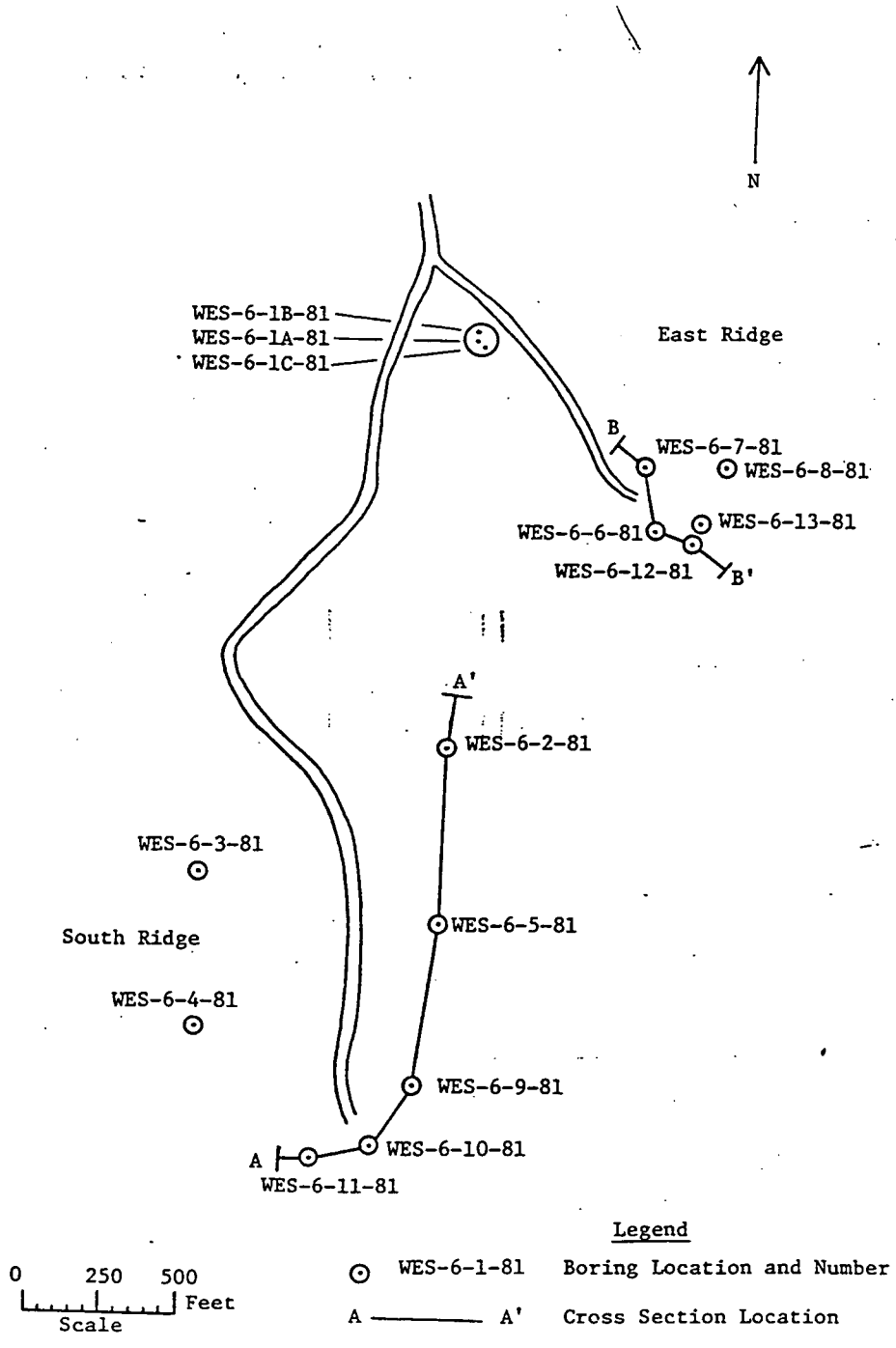


Figure 30. Well Locations and Cross Section Locations of Demolition Area

only partial sample recovery was made. This sandstone unit was underlain by about 2 ft of soft, grey to dark grey, partially organic shale which overlies 2.5 ft of brown, fine-grained, weathered, moderately friable sandstone containing approximately 20 percent thinly bedded shale seams. At a depth of 14 ft, the core grades into a 1-ft-thick bed of dark grey, soft, weathered, organic shale which is underlain by 18 ft of brown to grey, fine-grained, moderately hard sandstone containing 10 to 20 percent soft, black shale seams. At a depth of 34 ft, shale and sandstone are thinly interbedded in equal proportions. Core boring WES-6-7-81 along the east ridge was drilled to a depth of 29 ft and encountered a similar sequence of sedimentary materials. Beneath the overburden, 2 ft of brown to orange brown, weathered, friable, fine-grained quartz sandstone was encountered. This sandstone unit at a depth of 12 ft was underlain by 5 ft of soft, uniform, black shale which is underlain by approximately 1.5 ft of a black, soft, jointed coal. This coal seam was underlain by 10 ft of light to dark grey, very fine-grained shaley sandstone containing approximately 20 to 40 percent interbedded shale seams and lenses. Boring and groundwater data for the south ridge are shown in cross section A-A' (Figure 31) and for the east ridge, boring and groundwater data are shown in cross section B-B' (Figure 32). The boring logs are presented in Appendixes A and B.

Groundwater

Groundwater at the Demolition Area is flowing through fractures in a variety of rock types (see Figures 31 and 32). Groundwater elevations along the south ridge range from 648 to 595 ft MSL, a difference of 53 ft, while along the east ridge, groundwater elevations range from 645 to 630 ft MSL, a difference of 15 ft. Groundwater contour maps constructed from water measurements of 27 November 1981, shows flow on the south ridge to be in opposite directions off the ridge (Figure 33), while on the east ridge, flow is towards the southeast (Figure 34). Monitoring wells WES-6-1A, 1B, and 1C-81 were not used in contouring because all three wells are dry. The groundwater dropped below the screens in monitoring wells WES-6-1A and 1C-81 after several weeks after installation. Monitoring well WES-6-1B-81 never produced water even though water was present at time of drilling. The above three wells represent a nearly continuous screened interval from a depth of 4 ft to a depth of 39 ft. Groundwater data are presented in Appendix D.

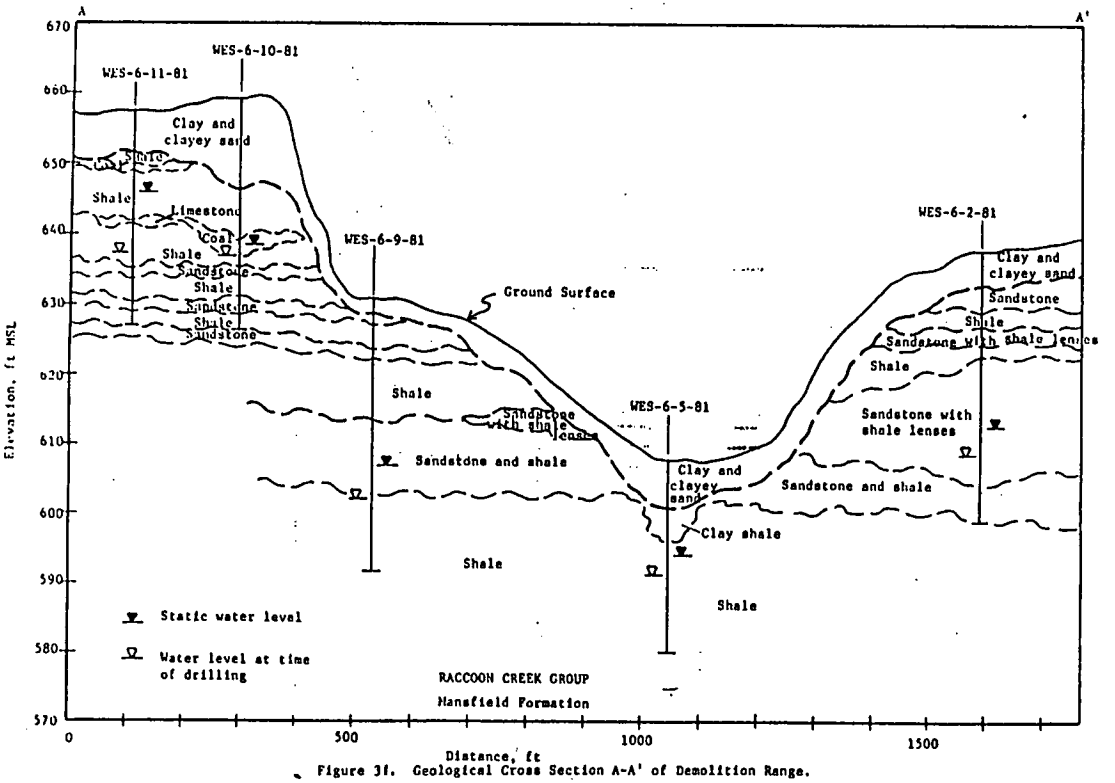


Figure 31. Geological Cross Section A-A' of Demolition Range.

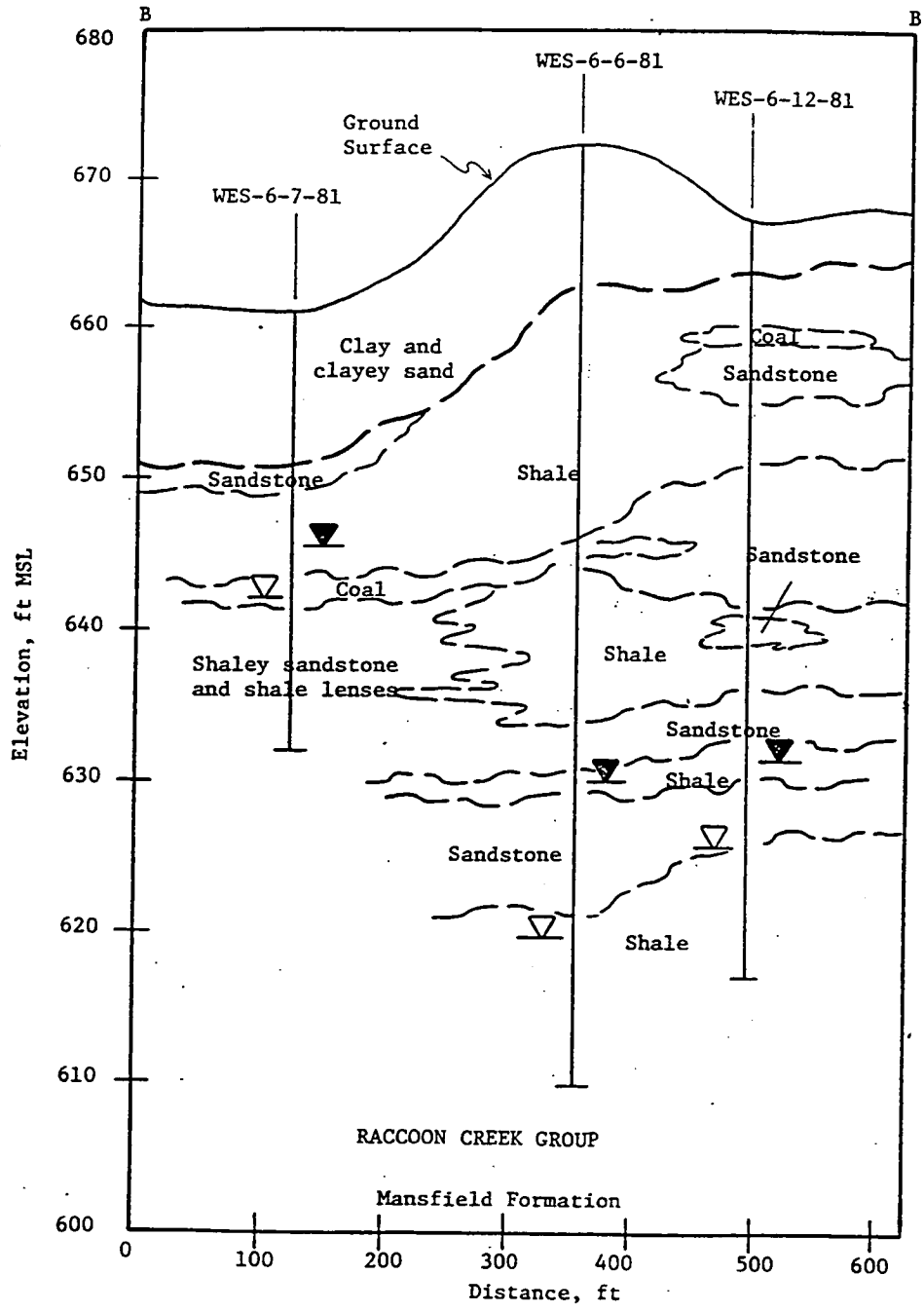


Figure 32. Geological Cross Section B-B' of Demolition Area

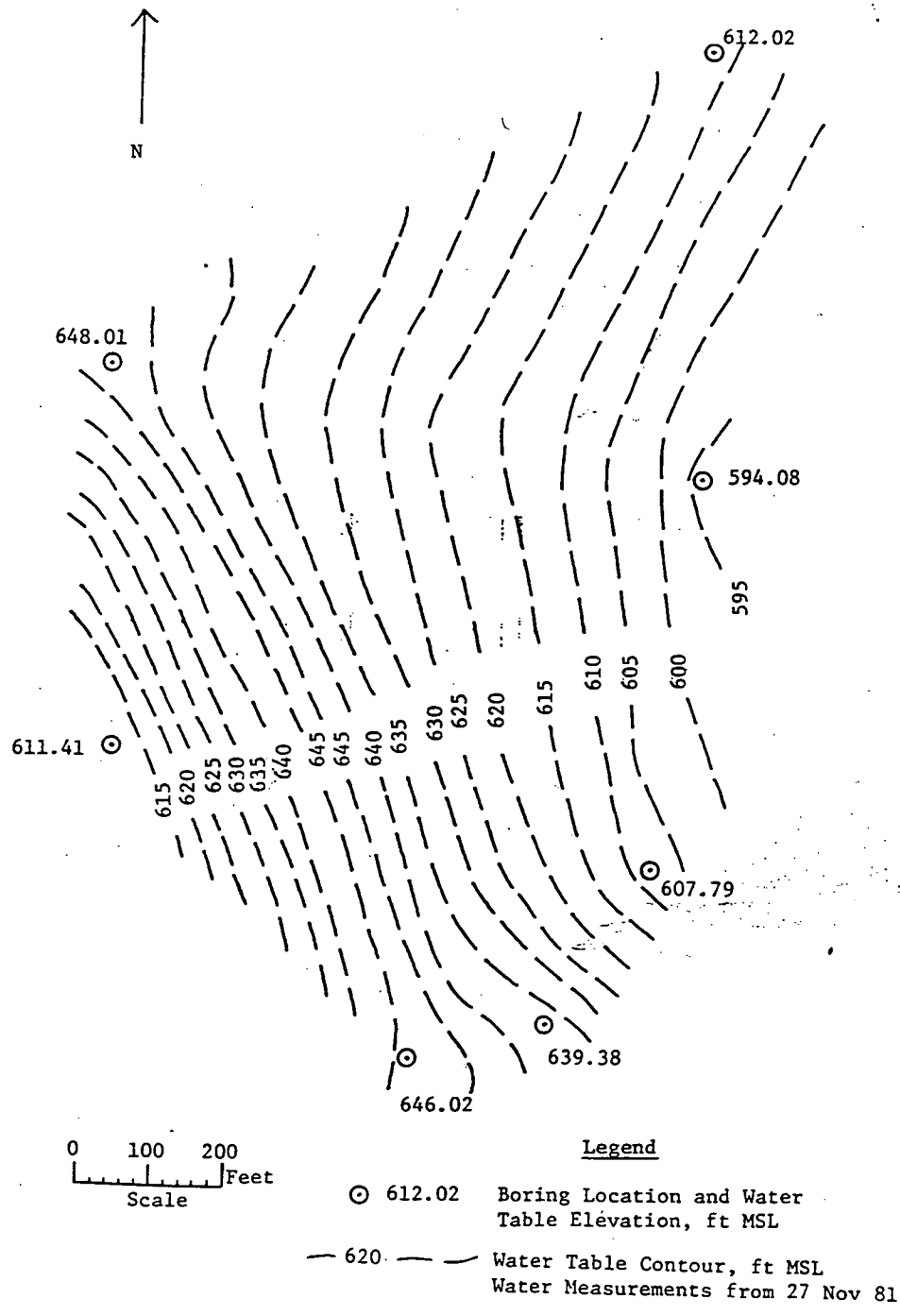


Figure 33. Water Table Contour Map of South Ridge of Demolition Area

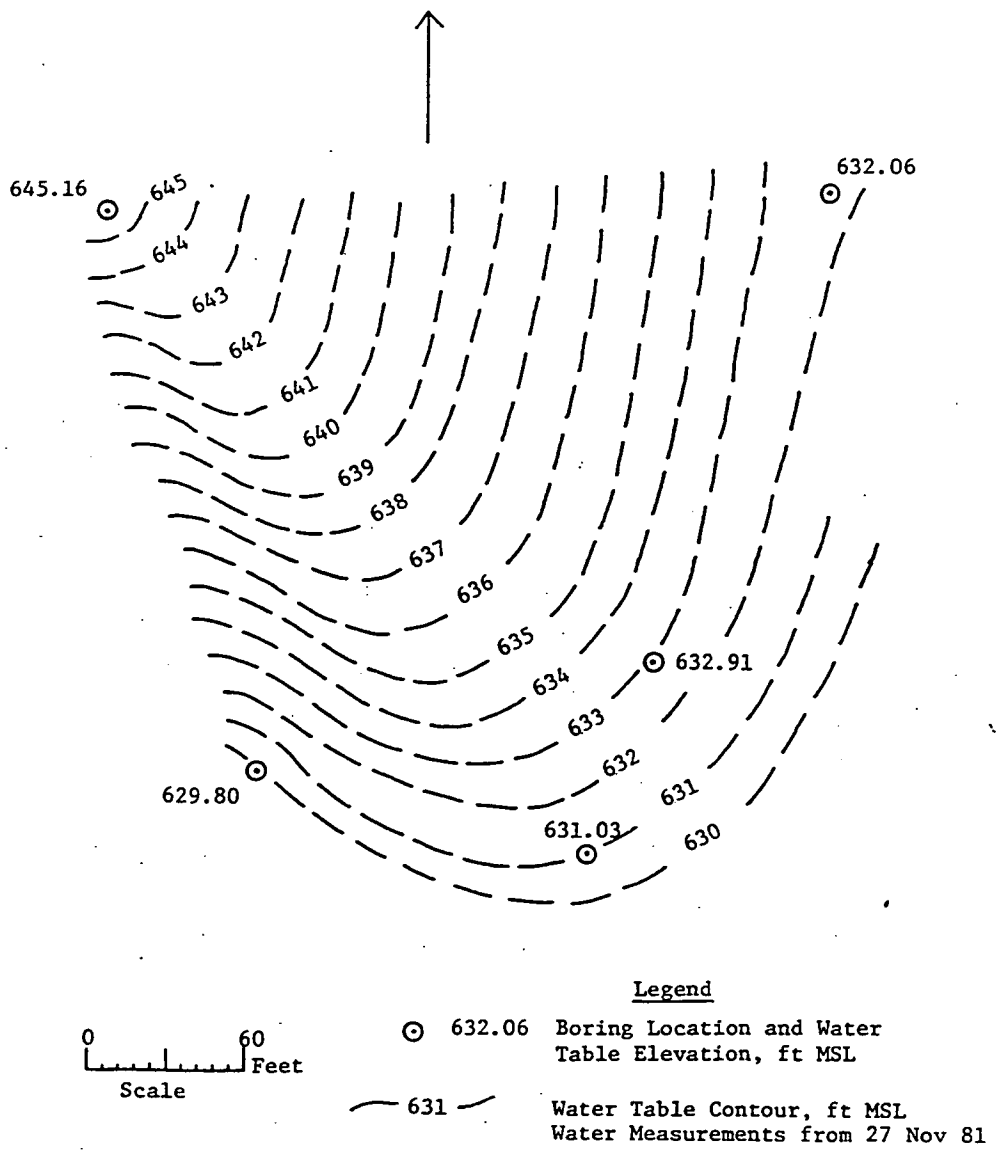


Figure 34. Water Table Contour Map of East Ridge of Demolition Area

Physical and chemical test

Laboratory classification of soil samples ranged from clay (CL and CH) to clayey sand (SC). These soils are light brown to greyish brown. Soil permeability ranges from 0.0 to 3.01 x 10^{-8} cm/sec for a clay (CL) soil (sample 2, boring 10, and sample 1, boring 6) and this soil composes 79 percent of the soil samples from this site. Appendix E presents the physical and the chemical tests results (NOT INCLUDED).

Old Rifle Range

Location

The Old Rifle Range is located within the confines of the Demolition Area in the N½, NW¼, Sec. 35, T5N, R4W (Figure 4). Seven monitoring wells were installed along either side of the gravel road as shown in Figure 35. Disposal operations involving military ordnance were reported to have been conducted several feet deep along either side of this north-south trending gravel road.

Geology

Overburden at the Old Rifle Range varies in thickness from less than 2 ft at the northern end to more than 20 ft at the southern end. The thick fine-grained deposits at the southern end are probably a former alluvial channel during Recent and Pleistocene times. The underlying rock in borings WES-6-15-81 and WES-6-17-81 consists of a fine-grained, uniform, well cemented, brown to reddish brown sandstone from the Hardinsburg Formation of the Stephensport Group (Table 1). Boring and groundwater data from 5 borings are shown in cross section A-A' (Figure 36). Boring logs are presented in Appendixes A and B.

Groundwater

Groundwater was encountered in fractures in the sandstone at the northern end and in the overburden at the southern end. Groundwater elevations between the up gradient and down gradient wells range from 504 to 498 ft MSL, a difference of 6 ft. A groundwater contour map constructed from water measurements of 29-30 November 1981, shows that flow is from the northwest and southwest with the direction of flow towards the east (see Figure 37). Monitoring well

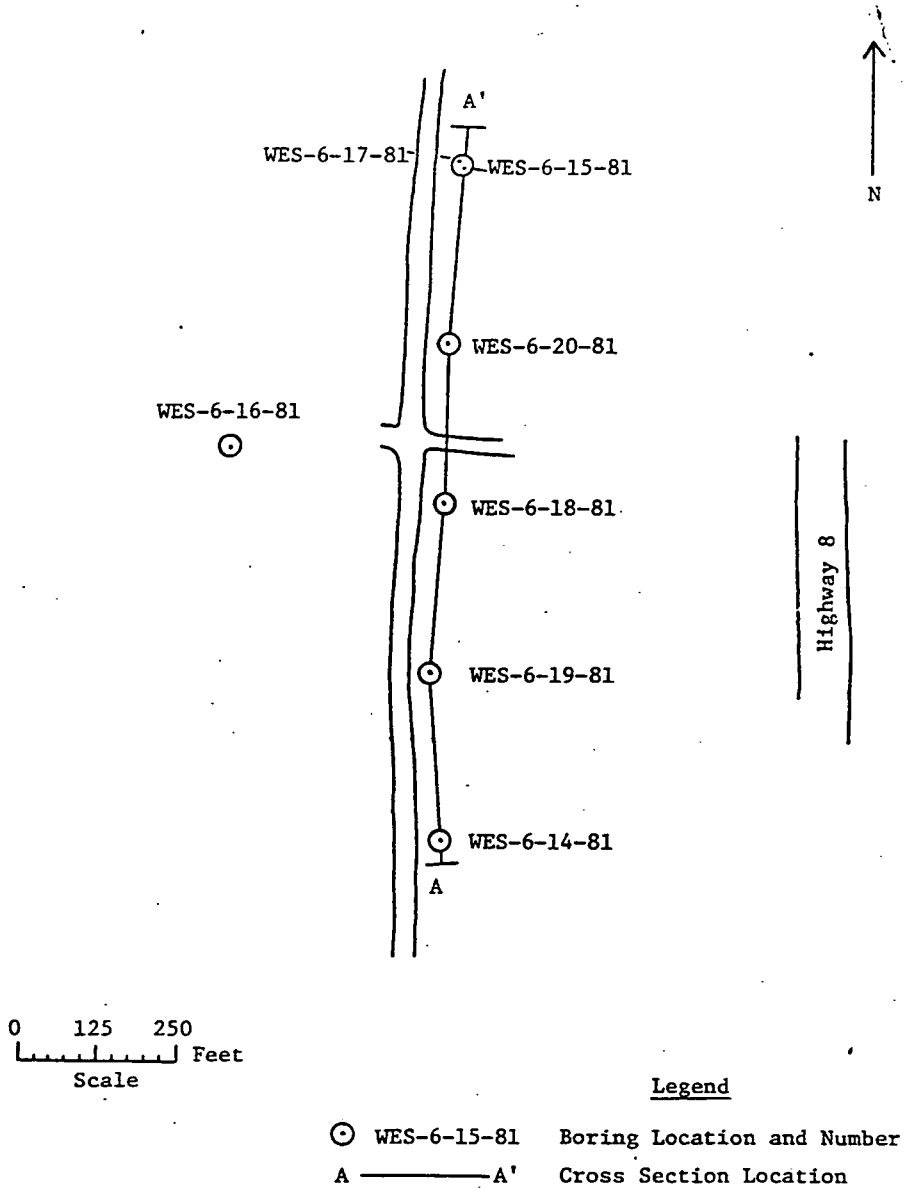


Figure 35. Well Locations and Cross Section Locations of Old Rifle Range

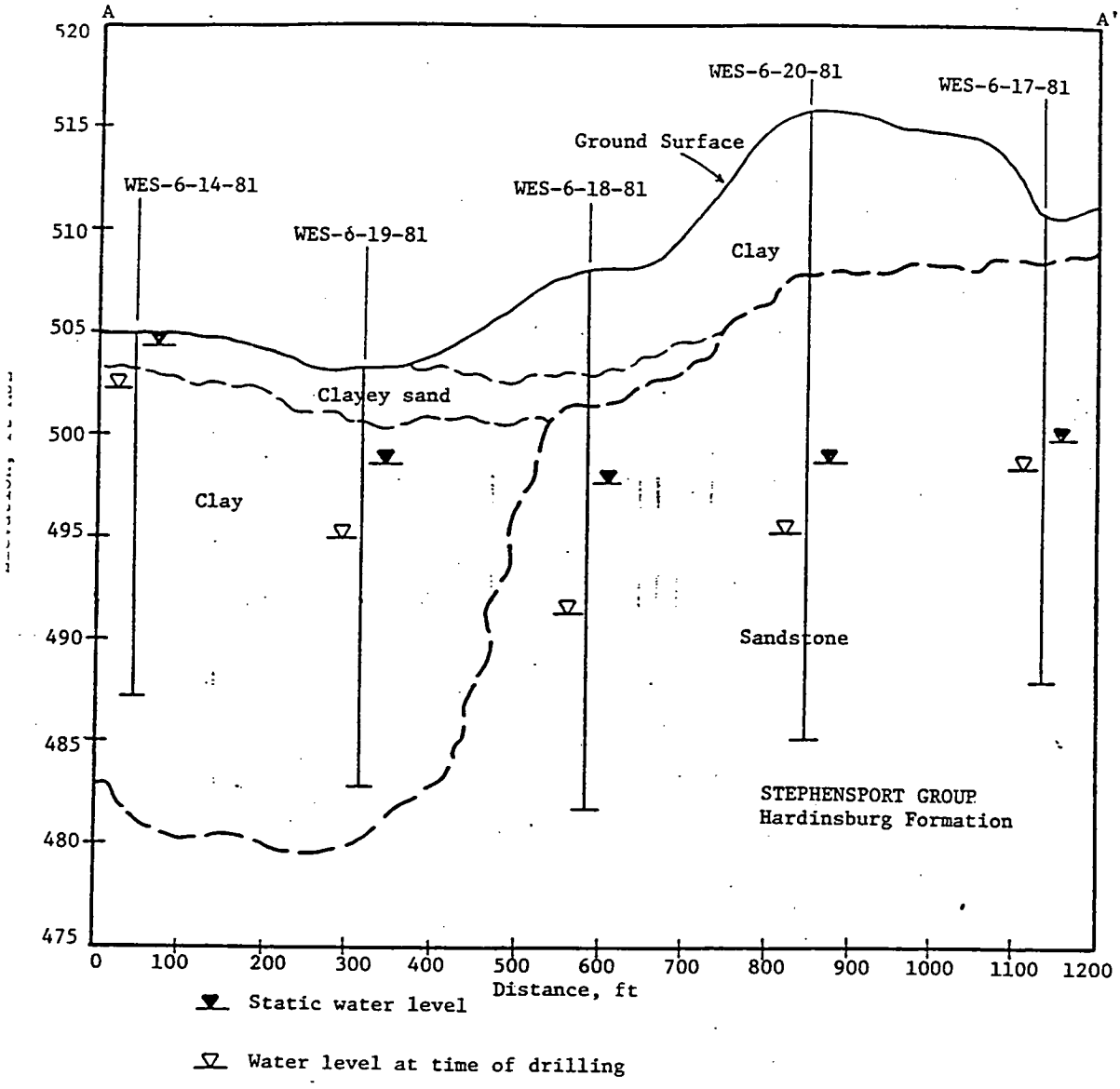


Figure 36. Geological Cross Section A-A' of Old Rifle Range.

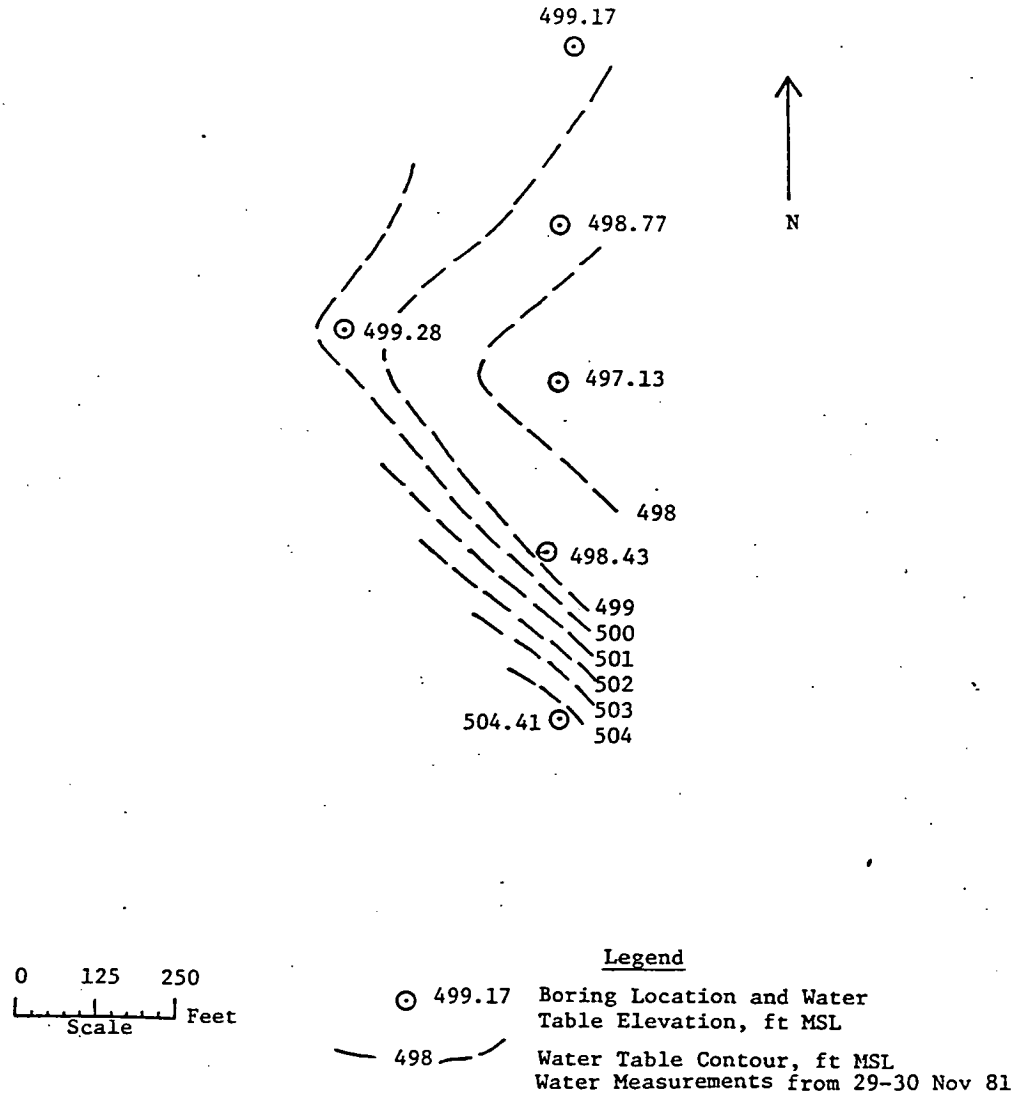


Figure 37. Water Table Contour Map of Old Rifle Range.

WES-6-15-81 was not used in contour construction since the water level fell below the screened portion shortly after installation. Groundwater data for this site are presented in Appendix D.

Physical and chemical test

Laboratory classification of soil samples ranged from clayey sand (SC) to clay (CL and CH). These soils are brown to tan. Soil permeability for a clay (CL) soil (sample 2, boring 14) was calculated to be 2.77×10^{-6} cm/sec and this soil composes 79 percent of the samples from this site. Appendix E presents the physical and chemical tests results.

Highway 58 Dump Site A

Location

The Highway 58 Dump Site A is located slightly north of the center of Sec. 26, T5N, R4W (Figure 4) and lies between Highway 45 and the NWSC Salvage Yard on Highway 58. Five monitoring wells were installed around the dump perimeter as shown in Figure 38.

Geology

Overburden at the Highway 58 Dump Site A ranges in thickness from less than 2 ft to 18.5 ft. Limestone, sandstone, and shale from the Mansfield Formation of the Raccoon Creek Group (Table 1) underlie the overburden. Boring WES-7-2-81 was drilled to a depth of 35 ft and beneath the overburden encountered 12 ft of a reddish brown, very stiff, dense, weathered gravelly clay shale. This clay shale at a depth of 15.5 ft grades into a soft, weathered, brown to dark grey, occasionally limonitic shale. From a depth of 20 ft, sandstone and shale are thinly interbedded in nearly equal proportions and at the end of the boring, the shale content declines to around 10 percent. The sandstone is light grey to dark grey, fine-grained, and moderately hard while the shale is dark grey to black and soft. Cross section A-A' (Figure 39) presents boring and groundwater data from 4 borings. Boring logs are presented in Appendixes A and B.

Groundwater

Groundwater at the Highway 58 Dump Site A was encountered in fractures in the sandstone. Groundwater elevations between the up gradient and the down gradient monitoring wells range from 606 to 570 ft MSL, a difference of 36 ft.

BORING LOG
FIELD DATA

Project NWSC Groundwater Study Site Crane, IN Date 17 Sept, 1981
Location Demolition Area Job No. 441-G150.11GR21/22
Drill Rig Failing Inspector J. Dunbar Operator C. Drake Surface El 682,63 Boring No. WES-6-1A-81

SAMPLE NUMBER	DATE TAKEN 1981	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd. Press	Cont	CLASSIFICATION AND REMARKS
1	17Sept	0.0		0.0	0.5	0.0	2.17	3" Shelby Tube	0	ST	Clay (CL): brown to grey in color,
1A				0.5	1.0	2.17	2.32		0	Jar	dry, moderate, cohesion, and uniform
				1.0	1.5				80		organic matter first foot.
				1.5	2.0				250		
				2.0	2.5				480		Sample length: 2.32 ft
				0.0	5.0			7" Folding Auger			Cleanout
2	17Sept			5.0	5.5	5.0	6.21	3"Fixed Piston Sampler		ST	Clay (CL): orange brown in color,
2A				5.5	6.0	6.21	6.36			Jar	dry, stiff, hard, and contains
				6.0	6.5						5-10% very fine, angular to rounded
				6.5	7.0						gravel.
				7.0	7.5						Sample length: 1.36 ft
			8.3	5.0	8.30			7"Hollow Stem Auger			Cleanout: bedrock at 8.3 ft.
		8.3	19.0	8.30	19.0			5 5/8" Rock Bit			Sandstone: reddish color and fine-
											grained. Water around 9 ft.

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Sheet 1 of 1 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project NWSC Groundwater Study Site Crane, IN Date 6 Nov. 1981
Location Demolition Area Job No. 441-G150.11GR21/22
Drill Rig Failing Inspector J. Dunbar Operator D. Taylor Surface El 683.27 Boring No. WES-6-1B-81

SAMPLE NUMBER	DATE TAKEN 1981	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd. Press	Cont.	CLASSIFICATION AND REMARKS
1	6 Nov	0.0		0.0	2.5	0.0	1.14	3" Shelby Tube		ST	Clay (CL): brown in color, very
1A						1.14	1.27			Jar	stiff, dry, and low plasticity.
											Sample length: 1.27 ft
				0.0	5.0	—	—	7" Solid Auger		—	Cleanout
2			7.0	5.0	7.0	5.0	6.14	3" Fixed Piston Sampler		ST	Sandy clay (CL): brown in color,
2A						6.14	6.29			Jar	very stiff, dry, and low plasticity.
											Sample length: 1.27 ft
	6 Nov	7.0	8.6	5.0	29.0	—	—	5 5/8" Rock Bit		—	Clay/shale: reddish brown
		8.6	12.6								Sandstone: light grey and hard
		12.6	13.2								Shale: brown
		13.2	14.0								Shale: grey
		14.0	15.2								Sandstone: reddish brown
		15.2	15.6								Shale: light grey
		15.6	16.3								Sandstone: light grey

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Sheet 1 of 2 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project _____ Site _____ Date _____
Location _____ Job No. _____
Drill Rig _____ Inspector _____ Operator _____ Surface El _____ Boring No. WES-6-1B-81

SAMPLE NUMBER	DATE TAKEN	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER			CLASSIFICATION AND REMARKS
		16.3	20.5								Shale: grey and hard
		20.5	24.5								Sandstone: light grey, very hard,
											and fine-grained.
		24.5	28.0								Sandstone: light grey and extremely
											hard.
		28.0	31.0								Shale: dark grey
	6 Nov			29.7	29.0	—	—	5 5/8" Rock	Bit	—	No water untill 29.3 ft (very slow).
											Drilled to 39.0 and will leave
											open overnight.
	7 Nov										Water at 8:05 a.m. 34.65 ft.
				39.0	44.7	—	—	5 5/8" Rock	Bit	—	Drilled 10 ft below water.
		31.0	44.7								Sandstone: brown and fine-grained.
											Installed well.

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Sheet 2 of 2 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project NWSC Groundwater Study Site Crane, IN Date 11 Nov. 1981
Location Demolition Area Job No. 441-G150.11GR21/22
Drill Rig Failing Inspector J. Dunbar Operator C. Drake Surface El 682.60 Boring No. WES-6-1C-81

SAMPLE NUMBER	DATE TAKEN 1981	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd. Press	Cont	CLASSIFICATION AND REMARKS
1	11 Nov	0.0		0.0	0.5	0.0	1.34	3" Shelby Tube	0	ST	Sandy clay (CL): brown in color,
1A				0.5	1.0	1.34	1.51		40	Jar	dry, soft, and slight cohesion.
				1.0	1.5				140		
				1.5	2.0				280		Sample length: 1.51 ft
				2.0	2.5				320		
			4.0	0.0	5.0			7" Folding Auger			Cleanout: assumed stratum change
2	11 Nov	4.0		5.0	5.5	5.0	6.25	3"Fixed Piston Sampler	0	ST	Clay (CH): brown in color, dry,
2A				5.5	6.0	6.25	6.40		0	Jar	very stiff, hard, and high plasti-
				6.0	6.5				20		city.
				6.5	7.0				180		Sample length: 1.40 ft
			7.5	7.0	7.31				320		
		7.5	8.2	5.0	8.3			7" Folding Auger			Sand and weathered sandstone:
											brown and fine-grained
		8.2	8.3								Sand and weathered sandstone:

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 1 of 3 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project _____ Site _____ Date _____
Location _____ Job No. _____
Drill Rig _____ Inspector _____ Operator _____ Surface El _____ Boring No. WES-6-1C-81

SAMPLE NUMBER	DATE TAKEN	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER			CLASSIFICATION AND REMARKS
											light grey and fine-grained.
	11 Nov	8.3	10.0	8.3	38.0	—	—	5 5/8" Rock	Bit	—	Sandstone: brown and fine-grained.
		10.0	12.3								Sandstone: grey with grey shale
											lenses
		12.3	12.5								Sandstone: dark brown
		12.5	15.1								Sandstone: brown
		15.1	17.2								Sandstone: brown with grey shale
											lenses
		17.2	23.7								Sandstone: soft, brown, and weathered
		23.7	27.8								Sandstone: hard and brown
		27.8	31.4								Shale and sandstone lenses
		31.4	35.7								Sandstone: brown and soft
		35.7	38.1								Sandstone: hard
	12 Nov										Water overnight at 9:20 a.m. at
											36.52 ft, water at 2:10 p.m. at
											36.20 ft. Blew wells 6-1A and

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 2 of 3 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project _____ Site _____ Date _____
Location _____ Job No. _____
Drill Rig _____ Inspector _____ Operator _____ Surface El _____ Boring No. WES-6-1C-81

SAMPLE NUMBER	DATE TAKEN	STRATUM		DRIVE		SAMPLE		TYPE OF SAMPLER			CLASSIFICATION AND REMARKS
		FROM	TO	FROM	TO	FROM	TO				
	18 Nov			0.0	38.1			1 3/4" Rock	Bit		6-1B with air to see if there was
											any communication between these borings
											and 6-1C. No communications was
											noticeable. Allowed hole to set
											untill 19 Nov. 1981, Jetted well
											several times and each time its
											making water.

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 3 of 3 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project NWSC Groundwater Study Site Crane, IN Date 18 Sept, 1981
Location Demolition Area Job No 441-G150.11GR21/22
Drill Rig Failing Inspector J. Dunbar Operator C. Drake Surface El 637.53 Boring No. WES-6-2-81

SAMPLE NUMBER	DATE TAKEN 1981	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd. Press	Cont.	CLASSIFICATION AND REMARKS
1	18Sept	0.0		0.0	0.5	0.0	1.58	3" Shelby Tube	0	ST	Clay (CL): brown in color, soft,
1A				0.5	1.0	1.58	1.78		0	Jar	little cohesion, uniform, slightly
				1.0	1.5				0		damp, and organic matter.
				1.5	2.0				0		Sample length, 1.78 ft
				2.0	2.5				20		
				0.0	5.0	—	—	7" Solid Auger		—	Cleanout
2A	18Sept		5.38	5.0	5.38			3"Fixed Piston Sampler	800	Jar	Clay (CL) and sandstone fragments:
											same as above
	19Sept			5.4	—			4 x 5-1/2"Core Barrel			See page two for log of core.

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 1 of 5 Sheets

IN5 170 023 498

Hole No. WES-6-2-81

DRILLING LOG	DIVISION U.S Navy	INSTALLATION Crane, IN	SHEET 2 OF 5 SHEETS

1. PROJECT NWSC Groundwater Study	10. SIZE AND TYPE OF BIT 4 x 5-1/2' Diamond bit
2. LOCATION (Coordinates or Station) Demolition Area	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL
3. DRILLING AGENCY CEWES	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) WES-6-2-81	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED zero; UNDISTURBED two
5. NAME OF DRILLER C. Drake	14. TOTAL NUMBER CORE BOXES zero
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE: STARTED 18 Sept. 81; COMPLETED 21 Sept. 81
7. THICKNESS OF OVERBURDEN 5.38 ft	17. ELEVATION TOP OF HOLE 657.53
8. DEPTH DRILLED INTO ROCK 33.62 ft	18. TOTAL CORE RECOVERY FOR BORING 93.4 %
9. TOTAL DEPTH OF HOLE 39.0 ft	19. SIGNATURE OF INSPECTOR Joseph B. Plumber

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
632.53	5.0		See page one for overburden information.			
631.53	6.0		No recovery			
630.53	7.0					19 Sept.81 WL - Run 1 Began 8:10 Rec 2.8' End 9:05 Loss 2.2' Time 55 min Gain - Drl time 55 min Hyd press 150psi Water press - RPM 75 Drl Action Smooth Water ret -
629.53	8.0		Sandstone; brown, fine-grained, weathered, and friable.			
			fractured			
628.53	9.0		Clay shale; grey and soft.			Remarks Used air
			closed			
627.53	10.0		Shale: dark grey to brown, soft, and dry.			
			Run 1	56%	-	
626.53	11.0		Shale: dark grey to black and highly organic			
625.53	12.0		Sandstone and interbedded Shale: sandstone is brown in color, fine-grained, moderately friable, and weathered. Shale averages around 20% of interval and thickness 1/16-1/4 in. with frequency increasing with depth.			WL - Run 2 Began 9:20 Rec 4.65' End 10:45 Loss - Time 25 min Gain - Drl time 25 min Hyd press 100-150psi Water press - RPM - Drl Action Smooth Water ret -
624.53	13.0					
			closed			Remarks -
623.53	14.0		Shale: dark grey in color, soft, organic, slightly moist, and weathered.			
622.53	15.0			100%	-	

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT) PROJECT HOLE NO.

Hole No. WES-6-2-81

DRILLING LOG	DIVISION	INSTALLATION	SHEET 3 OF 5 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number)	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
622.53	15.0		Run 2			
			Sandstone and interbedded shale: sandstone is grey to brown and moderately hard. Shale runs at 15% and is grey to dark grey in color.			
621.53	16.0					AL - Run 3 Began 11:05 Rec 4.8 End 11:50 Loss - Time 45 min Gain - Drl time 45 min Hyd press 150psi Water press - RPM 50-75 Drl Action Smooth Water ret -
620.53	17.0		Shale: black and soft			
			← closed			
619.53	18.0					Remarks -
			Sandstone: light grey to brown, fine-grained, and moderately hard.			
618.53	19.0		recemented breaks-iron			
			Run 3	100%	-	
617.53	20.0					
616.53	21.0		← 1/4 in. black shale			
			← 1/4 in. black shale			AL - Run 4 Began 12:40 Rec 4.7 End 1:30 Loss - Time 50 min Gain - Drl time 50 min Hyd press 100-150psi Water press - RPM 50-75 Drl Action Smooth Water ret -
615.53	22.0		Sandstone: grey to brown, fine-grained, and moderately hard to hard. Run contains 1-5% shale. Oxidized from 21.5-22.0 and 23.5-24.1 ft.			
614.53	23.0		← 1/4 in. black shale			Remarks -
			Shale seams in fractured sandstone			
613.53	24.0		Run 4	100%	-	
612.52	25.0					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT) PROJECT HOLE NO.

Hole No. WES-6-2-81

DRILLING LOG	DIVISION	INSTALLATION	SHEET 4 OF 5 SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
612.53	25.0					
611.53	26.0		1/2 in. black shale 3/4 in. black shale			AL - Run 5 Began 1:50 Rec 4.8 End - 2:25 Loss - Time 35 min Gain - Drl time 35 min Hyd press 150psi Water press - RPM 50-75 Drl Action Smooth Water ret -
610.53	27.0		closed			
609.53	28.0		Sandstone: grey in color, fine-grained, moderately hard, and inter-bedded with 10-20% black shale ranging in thickness from 1/8-3/4 in.			Remarks Water in hole at 29 ft
608.53	29.0		Run 5	100%	-	
607.53	30.0					
606.53	31.0		Sandstone: same-oxidized from 29.3-30.5 ft 1/4 in. shale			AL - Run 6 Began 2.50 Rec 5.1 End 3:24 Loss - Time 34 min Gain - Drl time 34 min Hyd press 150psi Water press - RPM 50-75 Drl Action Smooth Water ret -
605.53	32.0		1/4 in. shale			Remarks -
604.53	33.0		ripple marks			
603.53	34.0		Run 6	100%	-	
602.53	35.0		Sandstone and shale: closed			

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT) PROJECT HOLE NO.

Hole No. WES-6-2-81

DRILLING LOG	DIVISION	INSTALLATION	SHEET 5 OF 5 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number)	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
602.53	35.0					
601.53	36.0		Sandstone (50%) and shale (50%): sandstone is fine-grained, grey to dark grey and hard; shale is black and contains sand. Thickness ranges from 1/8 to 1-1/2 in. and averages runs 1-in.			WL - Run 7 Began 3:50 Rec 4.6 End 4:50 Loss - Time 60 min Gain - Drl time 55 min Hyd press 150 Water press - RPM 50-75 Drl Action Smooth Water ret -
600.53	37.0					
	38.0		Shale: black, soft, uniform and slakes on drying.			
	39.0		Run 7	100%	-	
			Installed well on 21 Sept. 81			

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT) PROJECT HOLE NO.

BORING LOG
FIELD DATA

Project NWSC Groundwater Study Site Crane, IN Date 21 Sept. 1981
Location Demolition Area Job No. 441-G150.11GR21/22
Drill Rig Failing Inspector J. Dunbar Operator C. Drake Surface El 659.77 Boring No. WES-6-3-81

SAMPLE NUMBER	DATE TAKEN 1981	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd. Press	Cont	CLASSIFICATION AND REMARKS
1	21Sept	0.0		0.0	0.5	0.0	1.74	3" Shelby Tube	0	ST	Clay (CL): dark brown in color,
1A				0.5	1.0	1.74	1.94		10	Jar	uniform, slight cohesion, organic
				1.0	1.5				50		matter, and very slight moisture.
				1.5	2.0				120		Sample length: 1.94 ft
			4.0	2.0	2.5				150		
				0.0	5.0			7" Folding Auger			Cleanout
2	21Sept	4.0	5.3	5.0	5.3	5.0	5.3	3"Fixed Piston Sampler	800	Jar	Sandy clay (CL): light brown in
											color, very stiff, dry, and contains
											10-20% sand.
	21Sept	5.3	8.0	5.3	20.3			5 5/8" Rock Bit			Cleanout: at 8.0 ft rock is harder,
											less weathered. Moisture between
											10-11 ft
		8.0	18.0								Sandstone
		18.0	20.3								Shale

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 1 of 2 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project _____ Site _____ Date _____
Location _____ Job No. _____
Drill Rig _____ Inspector _____ Operator _____ Surface El _____ Boring No. WES-6-3-81

SAMPLE NUMBER	DATE TAKEN	STRATUM		DRIVE		SAMPLE		TYPE OF SAMPLER			CLASSIFICATION AND REMARKS
		FROM	TO	FROM	TO	FROM	TO				
	21Sept										Water at 10.6 ft at 9:01 a.m.
											Blew hole and installed well.

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 2 of 2 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project NWSC Groundwater Study Site Crane, IN Date 1 Oct. 1981
Location Demolition Area Job No. 441-G150.11GR21/22
Drill Rig Failing Inspector J. Dunbar Operator D. Taylor Surface El 632.89 Boring No. WES-6-4-81

SAMPLE NUMBER	DATE TAKEN 1981	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd. Press	Cont	CLASSIFICATION AND REMARKS
1	1 Oct	0.0		0.0	0.5	0.0	1.46	3" Shelby Tube	40	ST	Gravelly clay (CL): brown in color,
1A				0.5	1.0	1.46	1.66		40	Jar	soft to slightly stiff, and dry.
				1.0	1.5				60		Gravel is fine-grained, friable
				1.5	2.0				80		sandstone.
				2.0	2.5				100		Sample length: 1.66 ft
			4.8	0.0	4.8	—	—	7" Solid Auger		—	Cleanout: bedrock at 4.8 ft
	2 Oct	4.8	6.5	4.8	30.0	—	—	5 5/8" Rock Bit		—	Weathered sandstone and clay: brown
		6.5	23.0								Sandstone and shale: light grey
											to green in color, and moderately
											hard
		23.0	26.0								Sandstone: greenish grey and hard
		26.0	27.8								Shale: hard and green
		27.8	30.0								Sandstone: hard and light grey
											Water at 19.5 ft

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 1 of 1 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project NWSC Groundwater Study Site Crane, IN Date 2 Oct. 1981
Location Demolition Area Job No. 441-G150.11GR21/22
Drill Rig Failing Inspector J. Dunbar Operator D. Taylor Surface El 607.89 Boring No. WES-6-5-81

SAMPLE NUMBER	DATE TAKEN 1981	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd. Press	Cont	CLASSIFICATION AND REMARKS
1	2 Oct	0.0		0.0	0.5	0.0	1.8	3" Shelby Tube	100	ST	Clay (CL): brown to reddish brown
1A				0.5	1.0	1.8	2.0		100	Jar	in color, soft to moderately stiff,
				1.0	1.5				160		dry, and contains 20-25% fine gravel.
				1.5	2.0				220		
				2.0	2.5				220		Sample length: 2.00 ft
			6.5	0.0	5.0	—	—	7" Solid Auger		—	Cleanout: assumed stratum change
2	3 Oct	6.5		5.0	5.5	5.0	6.85	3"Fixed Piston Sampler	160	ST	Clay shale: brown to grey, soft,
2A				5.5	6.0	6.85	7.05		220	Jar	and dry.
				6.0	6.5				240		
				6.5	7.0				260		Sample length: 2.05 ft
				7.0	7.5				300		
			11.5	7.5	27.0	—	—	5 5/8" Rock Bit		—	Clay shale: see above
		11.5	13.0								Shale: red in color
		13.0	27.0								Shale: grey in color and harder

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 1 of 2 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project _____ Site _____ Date _____
Location _____ Job No. _____
Drill Rig _____ Inspector _____ Operator _____ Surface El _____ Boring No. WES-6-5-81

SAMPLE NUMBER	DATE TAKEN	STRATUM		DRIVE		SAMPLE		TYPE OF SAMPLER			CLASSIFICATION AND REMARKS
		FROM	TO	FROM	TO	FROM	TO				
											at 26 ft.
											Hole making water at fairly good
											rate between 16.5 and 17.0 ft.
											Blew hole and installed well.

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 2 of 2 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project NWSC Groundwater Study Site Crane, IN Date 13 Oct. 1981
Location Demolition Area Job No. 441-G150,11GR21/22
Drill Rig Failing Inspector J. Dunbar Operator D. Taylor Surface El 672.06 Boring No. WES-6-6-81

SAMPLE NUMBER	DATE TAKEN 1981	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd. Press	Cont	CLASSIFICATION AND REMARKS
1	13Oct	0.0		0.0	0.5	0.0	1.41	3" Shelby Tube	200	ST	Clay (CL): brown in color, very
1A				0.5	1.0	1.41	1.58		160	Jar	stiff, dry, variable composition,
				1.0	1.5				240		and thinly bedded.
				1.5	2.0				300		
				2.0	2.5				460		Sample length: 1.58 ft
				0.0	5.0	—	—	7" Solid Auger		—	Cleanout
2	13Oct			5.0	5.5	5.0	6.27	*3"Fixed Piston Sampler	160	ST	Clay (CL): same as above except
2A				5.5	6.0	6.27	6.45		240	Jar	not as stiff.
				6.0	6.5				300		
				6.5	7.0				400		
				7.0	7.5				500		Sample length: 1.45 ft
			9.0	5.0	10.0	—	—	7" Solid Auger		—	Cleanout: assumed stratum change

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED *3" Fixed Piston Sampler = 3" F.P.S Sheet 1 of 3 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project _____ Site _____ Date _____
Location _____ Job No. _____
Drill Rig _____ Inspector _____ Operator _____ Surface El _____ Boring No. WES-6-6-81

SAMPLE NUMBER	DATE TAKEN 1981	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd. Press	Cont	CLASSIFICATION AND REMARKS
3	13Oct	9.0		10.0	10.5	10.0	11.30	3" F.P.S.	200	ST	Shale: brown and dark grey, dry,
3A				10.5	11.0	11.30	11.45		340	Jar	stiff, varied composition, and
			11.8	11.0	11.5				500		varied texture.
											Sample length: 1.45 ft
	13Oct	11.8	14.0	11.8	60.0			5 5/8" Rock	Bit		Shale: grey and medium hard
		14.0	15.2								Shale: brown and medium hard
		15.2	16.8								Shale: reddish brown and medium hard
		16.8	26.6								Shale: greyish brown and medium hard
		26.6	27.3								Coal: black and medium to hard
		27.3	36.0								Shale: grey and soft
		36.0	37.2								Shale: brown
		37.2	38.0								Shale: grey
		38.0	41.0								Sandstone: grey and hard
		41.0	42.2								Shale: grey and medium hard
		42.2	46.3								Sandstone: brown and medium hard

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 2 of 3 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project _____ Site _____ Date _____
Location _____ Job No. _____
Drill Rig _____ Inspector _____ Operator _____ Surface El _____ Boring No. WES-6-6-81

SAMPLE NUMBER	DATE TAKEN	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER			CLASSIFICATION AND REMARKS
		46.3	48.7								Sandstone: grey and hard
		48.7	51.0								Sandstone: light grey-grey and
											medium hard
		51.0	62.3								Shale: grey
	14Oct			60.0	62.3			5 5/8" Rock	Bit	—	Water level rose to 50.5 ft over-
											night, M-scope wouldn't give
											reading, water level measured on
											drill rods and estimate 2 ft
											displacement. Set well after
											blowing hole.

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 3 of 3 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project NWSC Groundwater Study Site Crane, IN Date 14 Oct. 1981
Location Demolition Area Job No. 441-G150.11GR21/22
Drill Rig Failing Inspector J. Dunbar Operator A. McNamara Surface El 660.92 Boring No. WES-6-7-81

SAMPLE NUMBER	DATE TAKEN 1981	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd. Press	Cont	CLASSIFICATION AND REMARKS
1	14Oct	0.0		0.0	0.5	0.0	2.22	3" Shelby Tube	20	ST	Clay (CL): brown in color, soft
1A				0.5	1.0	2.22	2.40		100	Jar	to slightly stiff, dry, and low
				1.0	1.5				250		plasticity- fill material
				1.5	2.0				300		Sample length: 2.40 ft
			4.5	2.0	2.5				300		
				0.0	5.0	—	—	7" Folding Auger	—		Cleanout
2	14Oct	4.5		5.0	5.5	5.0	6.45	*3"Fixed Piston Sampler	0	ST	Sandy clay (CL): orange brown in
2A				5.5	6.0	6.45	6.65		80	Jar	color, dry, variable composition,
				6.0	6.5				500		and contains 10-20% fine-grained
				6.5	7.0				550		sand. Possible black powder
			7.5	7.0	7.38				—		intermixed in sample.
											Sample length: 1.65 ft- chucks
											slipped
		7.5	10.0	5.0	10.0	—	—	7" Folding Auger	—		Cleanout: clay and weathered sandstone.

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED *3" Fixed Piston Sampler = 3"F.P.S. Sheet 1 of 4 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project _____ Site _____ Date _____
Location _____ Job No. _____
Drill Rig _____ Inspector _____ Operator _____ Surface El _____ Boring No. WES-6-7-81

SAMPLE NUMBER	DATE TAKEN 1981	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd. Press	Cont	CLASSIFICATION AND REMARKS
3A	14Oct	10.0		10.0	10.5	10.0	10.5	3"F.P.S.	700	Jar	Sandstone: grey brown in color,
											dry, weathered, and very fine-
											grained.
				10.7	——			4 x 5-1/2"Core Barrel			See page 3 (Engineer Form 1836)
											for log of core.

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 2 of 4 Sheets

IN5 170 023 498

Hole No. WES-6-7-81

DRILLING LOG	DIVISION U.S. Navy	INSTALLATION Crane, IN	SHEET 3 OF 4 SHEETS

1. PROJECT NWSC Groundwater Study	10. SIZE AND TYPE OF BIT 4 x 5 1/2' Diamond bit
2. LOCATION (Coordinates or Station) Demolition Area	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL
3. DRILLING AGENCY CEWES	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) WES-6-7-81	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED three; UNDISTURBED two
5. NAME OF DRILLER A. McNamara	14. TOTAL NUMBER CORE BOXES zero
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE: STARTED 14 Oct. 81; COMPLETED 15 Oct. 81
7. THICKNESS OF OVERBURDEN 10.0 ft	17. ELEVATION TOP OF HOLE 660.92
8. DEPTH DRILLED INTO ROCK 19.15 ft	18. TOTAL CORE RECOVERY FOR BORING 100%
9. TOTAL DEPTH OF HOLE 29.15 ft	19. SIGNATURE OF INSPECTOR [signature]

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
650.92	10.0		See pages 1 and 2 for			
649.92	11.0		Sandstone: brown to orange brown in color, fine-grained quartz and miscellaneous sand, weathered, dry, thinly bedded, and friable.			14 Oct. 81 WL - Began 2:05 End 3:00 Time 55 min Drl time 55 min Hyd press 100psi Water press - RPM 50+ Drl Action Smooth ~~Water~~ rot Reddish brown and grey Remarks Cored with air Run 1 Rec 4.15' Loss - Gain -
648.92	12.0		fractured			
647.92	13.0		Shale: black, dry, soft, and uniform, except for small, irregular seams and lenses of yellow, dry, and earthy oxidation product or precipitate.			
			fractured			
646.92	14.0					
			Run 1	100%	-	
645.92	15.0					
			Shale: same as above			
644.92	16.0		closed			WL - Began 3:45 End 4:50 Time 65 min Drl time 65 min Hyd press - Water press RPM 50-60+ Drl Action Smooth ~~Water~~ rot Dark black/dark grey Remarks Cored with air. Water began bubbling in at bottom of run. Checked water level 15 Oct. 81, at 8:00 and read 15.56 ft. Run 2 Rec 4.75 Loss - Gain -
643.92	17.0			100%	-	
642.92	18.0		Coal: black in color, brilliant luster, brittle, soft, and jointed with irregular pattern. From 17.9-18.1 ft, slight, earthy, orange brown crust. From 18.6-19.0 ft, material is more shale like in nature and softer.			
641.92	19.0					
			Run 2			
640.92	20.0		Shaley sandstone		-	

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT) PROJECT HOLE NO.

Hole No. WES-6-7-81

DRILLING LOG	DIVISION	INSTALLATION	SHEET 4 OF 4 SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
640.92	20.0		From 20-20.5 ft, soft, black shale.			15 Oct 81
639.92	21.0		Shaley sandstone: light to dark grey in color, moderately hard, very fine-grained, and contains 30-40% interbedded dark grey shale. Sandstone and shale is interbedded in irregular seams, lenses, and thin beds.			WL - Run 3 Began 9:30 Rec 0.0' End 9:45 Loss 0.8' Time 15 min Gain - Drl time 15 min Hyd press 100psi Water press - RPM 50 Drl Action Smooth ~~Water~~ ret Black Remarks Blocked off
638.92	22.0					
637.92	23.0					
636.92	24.0		Run 4	118%	-	WL - Run 4 Began 10:08 Rec 4.55' End 11:33 Loss - Time 85 min Gain 0.8 Drl time 85 min Hyd press 100psi Water press - RPM 50-70 Drl Action Smooth ~~Water~~ ret Black-dark grey Remarks -
635.92	25.0					
634.92	26.0		coal (1/4-1/2 in.) shale (1/2 in.)			
633.92	27.0					
632.92	28.0		Shaley sandstone and interbedded shale: 20-30% shale 70-80% sandstone			WL - Run 5 Began 12:18 Rec 5.05 End 2:00 Loss - Time 102 min Gain - Drl time 102 min Hyd press 100psi Water press - RPM 50 Drl Action Smooth ~~Water~~ ret Black Remarks -
631.92	29.0		Run 5	100%	-	
			Cleaned mud and cuttings from hole with water. Jetted hole of water and installed well screen.			

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT) PROJECT HOLE NO.

BORING LOG
FIELD DATA

Project NWSC Groundwater Study Site Crane, IN Date 14 Oct, 1981
Location Demolition Area Job No. 441-G150.11GR21/22
Drill Rig Failing Inspector J. Dunbar Operator D. Taylor Surface El 638.72 Boring No. WES-6-8-81

SAMPLE NUMBER	DATE TAKEN 1981	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd. Press	Cont	CLASSIFICATION AND REMARKS
1	14Oct	0.0		0.0	0.5	0.0	1.55	3" Shelby Tube	80	ST	Clay (CL): brown in color, soft,
1A				0.5	1.0	1.55	1.75		100	Jar	low plasticity, and uniform.
				1.0	1.5				120		Material is fill from dozer.
				1.5	2.0				120		Sample length: 1.75 ft
			4.2	2.0	2.5				140		
				0.0	5.0	—	—	7" Solid Auger	—		Cleanout
2	14Oct	4.2		5.0	5.5	5.0	5.99	3"Fixed Piston Sampler	700	ST	Sandstone: brown in color, weathered,
2A				5.5	6.0	5.99	6.19		400	Jar	very fine-grained, crumbles easily,
											and dry.
			6.3	6.0	—				700		Sample length: 1.19 ft
	14Oct	6.3	8.4	6.3	20.0	—	—	5 5/8" Rock Bit	—		Sandstone: weathered and brown
		8.4	9.2								Shale: reddish grey and soft
		9.2	11.4								Sandstone: grey
		11.4	17.3								Shale: grey and hard

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 1 of 2 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project _____ Site _____ Date _____
Location _____ Job No. _____
Drill Rig _____ Inspector _____ Operator _____ Surface El _____ Boring No. WES-6-8-81

SAMPLE NUMBER	DATE TAKEN	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER			CLASSIFICATION AND REMARKS
	15Oct	17.3	27.5	20.0	27.5	—	—	5 5/8" Rock	Bit	—	Shale: dark grey and hard
											Encountered water around 17.5 ft.
											Drilled to 27.5 ft. Water came up
											overnight to depth of 8 ft (reading
											taken on 15 Oct. 81 at 8:10 a.m.
											Blew hole and installed well.

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 2 of 2 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project NWSC Groundwater Study Site Crane, IN Date 16 Oct, 1981
Location Demolition Area Job No. 441-G150.11GR21/22
Drill Rig Failing Inspector J. Dunbar Operator D. Taylor Surface El 631.04 Boring No. WES-6-9-81

SAMPLE NUMBER	DATE TAKEN 1981	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd. Press	Cont	CLASSIFICATION AND REMARKS
1A		0.0		0.0	0.5	0.0	1.7	3" Shelby Tube	260	Jar	Sand (SP) and sandstone fragments:
				0.5	1.0				500		brown in color, dry, fine-grained
				1.0	1.5				700		quartz sand, and uniform. Tube
			1.7	1.5	1.7				700		was damaged in push.
		1.7	3.2	0.0	39.7	—	—	5 5/8" Rock Bit	—		Sandstone: brown and weathered
		3.2	6.6								Clay shale: brown
		6.6	7.5								Shale: grey
		7.5	8.6								Sandstone
		8.6	17.9								Shale: changing often from brown,
											to red, and to grey.
		17.9	19.7								Sandstone: rust colored
		19.7	23.2								Shale: grey
		23.2	24.2								Sandstone: brown
		24.2	25.0								Shale: grey
		25.0	27.5								Sandstone: brown

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 1 of 2 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project _____ Site _____ Date _____
Location _____ Job No. _____
Drill Rig _____ Inspector _____ Operator _____ Surface El _____ Boring No. WES-6-9-81

SAMPLE NUMBER	DATE TAKEN	STRATUM		DRIVE		SAMPLE		TYPE OF SAMPLER			CLASSIFICATION AND REMARKS
		FROM	TO	FROM	TO	FROM	TO				
		27.5	39.7								Shale: grey
											Water at 29 ft. Installed well
											after blowing hole.

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 2 of 2 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project NWSC Groundwater Study Site Crane, IN Date 17 Oct. 1981
Location Demolition Area Job No. 441-G150.11GR21/22
Drill Rig Failing Inspector J. Dunbar Operator A. McNamara Surface El 659.10 Boring No. WES-6-10-81

SAMPLE NUMBER	DATE TAKEN 1981	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd. Press	Cont	CLASSIFICATION AND REMARKS
1	17Oct	0.0		0.0	0.5	0.0	2.08	3" Shelby Tube	0	ST	Clay (CL): brown in color, dry,
1A				0.5	1.0	2 08	2.28		0	Jar	no cohesion, and organic matter.
				1.0	1.5				0		Material is fill from dozer.
				1.5	2.0				20		Sample length: 2.28 ft
			4.0	2.0	2.5				40		
				0.0	5.0	—	—	7" Folding Auger	—		Cleanout: fill ends at 4.0 ft
2	17Oct	4.0		5.0	5.5	5.0	6.99	3"Fixed Piston Sampler	40	ST	Clay (C): grey brown in color,
2A				5.5	6.0	6.99	7.14		100	Jar	uniform, stiff, dry, and high plas-
				6.0	6.5				150		ticity.
				6.5	7.0				250		Sample length: 2.14 ft
				7.0	7.35				400		
				5.0	10.0	—	—	7" Folding Auger	—		Cleanout

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED 3" Fixed Piston Sampler = 3" F.P.S. Sheet 1 of 2 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project _____ Site _____ Date _____
Location _____ Job No. _____
Drill Rig _____ Inspector _____ Operator _____ Surface El _____ Boring No. WES-6-10-81

SAMPLE NUMBER	DATE TAKEN 1981	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd. Press	Cont.	CLASSIFICATION AND REMARKS
3	17 Oct			10.0	10.5	10.0	11.49	3" F.P.S.	0	ST	Clay (CH): dark grey brown in color,
3A				10.5	11.0	11.49	11.68		20	Jar	dry, stiff, uniform, and high plas-
				11.0	11.5				50		ticity.
				11.5	12.0				400		Sample length: 1.68 ft
				12.0	12.40				500		
			13.34	10.0	15.0			7" Folding	Auger		Cleanout: assumed stratum change
4A	17 Oct	13.34	15.5	15.0	15.5	15.0	15.5	3" F.P.S.	700	Jar	Sandy shale: brownish dark grey
											in color, dry, and stiff to hard.
	17 Oct	15.5	20.0	15.0	32.7			5 5/8" Rock	Bit		Shale: brown to dark grey
		20.0	22.0								Coal: black- water at 22 ft
		22.0	32.7								Shale and interbedded sandstone
											Blew hole dry and installed well.

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 2 of 2 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project NWSC Groundwater Study Site Crane, IN Date 17 Oct. 1981
Location Demolition Area Job No. 441-G150.11GR21/22
Drill Rig Failing Inspector J. Dunbar Operator D. Taylor Surface El 657.43 Boring No. WES-6-11-81

SAMPLE NUMBER	DATE TAKEN 1981	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd. Press	Cont	CLASSIFICATION AND REMARKS
1	17Oct	0.0		0.0	0.5	0.0	2.39	3" Shelby Tube	50	ST	Sandy silt (SM): brown in color,
1A				0.5	1.0	2.39	2.62		75	Jar	dry, no cohesion, and contains 5-10%
				1.0	1.5				120		sandstone and limonite gravel.
				1.5	2.0				140		
			3.5	2.0	2.62				160		Sample length: 2.62 ft
				0.0	5.0	—	—	7" Solid Auger		—	Cleanout
2	17Oct	3.5	6.0	5.0	5.5	5.0	5.71	3"Fixed Piston Sampler	100	ST	Clay (CL) and shale: brown in color,
2A				5.5	5.9	5.71	5.90		500	Jar	low plasticity, dry, and contains
											30% hard shale fragments.
	17Oct	6.0	7.8	5.0	30.5	—	—	5 5/8" Rock Bit		—	Shale: grey
		7.8	8.5								Coal: black
		8.5	10.5								Shale: brown and grey mixed
		10.5	15.3								Shale: light brown

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 1 of 2 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project _____ Site _____ Date _____
Location _____ Job No. _____
Drill Rig _____ Inspector _____ Operator _____ Surface El _____ Boring No. WES-6-11-81

SAMPLE NUMBER	DATE TAKEN	STRATUM		DRIVE		SAMPLE		TYPE OF SAMPLER			CLASSIFICATION AND REMARKS
		FROM	TO	FROM	TO	FROM	TO				
		15.3	16.0								Limestone: light grey
		16.0	17.0								Shale: grey
		17.0	22.2								Shale: dark grey with water between
											20-20.5 ft
		22.2	23.0								Sandstone: brown and hard
		23.0	27.0								Shale: hard and grey
		27.0	27.8								Sandstone: hard
		27.8	30.5								Shale: grey
											Blew hole dry and installed well.

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 2 of 2 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project NWSC Groundwater Study Site Crane, IN Date 3 Nov. 1981
Location Demolition Area Job No. 441-G150.11GR21/22
Drill Rig Failing Inspector J. Dunbar Operator D. Taylor Surface El 667.28 Boring No. WES-6-12-81

SAMPLE NUMBER	DATE TAKEN 1981	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd. Press	Cont	CLASSIFICATION AND REMARKS
		0.0		0.0	1.1						Disturbed when setting up rig.
			1.5								Clay (CH): brown, soft, and slight
											moisture
1	3 Nov	1.5	2.8	1.1	3.6	1.10	2.20	3"Shelby Tube		ST	Clay (CH): brick red in color, dry,
1A						2.20	2.35			Jar	uniform, stiff, and high plasticity.
		2.8	3.1			Pressure gauge is broken					Sandy clay (CL): brown in color,
											dry, stiff, and brittle.
											Sample length: 1.25 ft
				0.0	5.0			7" Solid Auger			Cleanout
2	3 Nov	3.1	7.6	5.0	6.7	5.0	6.01	3"Fixed Piston Sampler		ST	Clay shale: brown to grey brown in
						6.01	6.15			Jar	color, dry, and stiff.
											Sample length: 1.15 ft

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 1 of 2 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project _____ Site _____ Date _____
Location _____ Job No. _____
Drill Rig _____ Inspector _____ Operator _____ Surface El _____ Boring No. WES-6-12-81

SAMPLE NUMBER	DATE TAKEN	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER			CLASSIFICATION AND REMARKS
	3 Nov	7.6	8.3	5.0	45.4	—	—	5 5/8" Rock	Bit	—	Coal; black
		8.3	12.0								Sandstone: light grey and medium
											hard
		12.0	16.3								Shale: dark grey
		16.3	26.0								Sandstone: light brown
		26.0	27.3								Shale: dark grey and hard
		27.3	28.5								Sandstone: brown
		28.5	31.8								Shale: dark grey
		31.8	34.5								Sandstone: grey and hard
		34.5	37.0								Shale: light grey
		37.0	41.8			Slight moisture at 37 ft					Sandstone: light grey
		41.8	51.7								Shale: grey
	4 Nov			45.4	51.7	—	—	5 5/8" Rock	Bit	—	Water came up to depth of 41.5 ft
											overnight. Drilled to 51.7 ft and
											set well.

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 2 of 2 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project NWSC Groundwater Study Site Crane, IN Date 5 Nov. 1981
Location Demolition Area Job No. 441-G150,11GR21/22
Drill Rig Failing Inspector J. Dunbar Operator D. Taylor Surface El 660.41 Boring No. WES-6-13-81

SAMPLE NUMBER	DATE TAKEN 1981	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd. Press	Cont	CLASSIFICATION AND REMARKS
1	5 Nov	0.0	3.7	0.0	2.5	0.0	1.29	3"Shelby Tube		ST	Clay (CL): reddish brown in color,
1A						1.29	1.44			Jar	slightly moist, stiff, and low
											plasticity.
											Sample length: 1.44 ft
2	5 Nov	3.7	5.7	0.0	5.0	3.7	5.0	7" Solid Auger		Jar	Clay shale: dark black in color,
											soft, dry, and highly organic.
		5.7	8.0	5.0	52.0	—	—	5 5/8" Rock Bit		—	Shale: mixture of grey and brown
		8.0	13.3								Shale: grey and soft
		13.3	14.4								Shale: brown and soft
		14.4	16.1								Sandstone: grey and hard
		16.1	18.2								Sandstone: brown
		18.2	23.7								Shale: grey and hard
		23.7	24.8								Sandstone: light grey
		24.8	27.7								Shale: grey and hard
		27.7	31.8								Sandstone: grey and hard

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 1 of 2 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project _____ Site _____ Date _____
Location _____ Job No. _____
Drill Rig _____ Inspector _____ Operator _____ Surface El _____ Boring No. WES-6-13-81

SAMPLE NUMBER	DATE TAKEN	STRATUM		DRIVE		SAMPLE		TYPE OF SAMPLER			CLASSIFICATION AND REMARKS
		FROM	TO	FROM	TO	FROM	TO				
		31.8	32.3								Sandstone: brown
		32.3	35.7								Sandstone: grey and hard
		35.7	50.2								Shale: dark grey and hard
		50.2	52.0								Sandstone: light grey and hard
											Water at 40.5 ft coming in very
											slow. Installed well.

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 2 of 2 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project NWSC Groundwater Study Site Crane, IN Date 27 Oct. 1981
Location Old Rifle Range Job No. 441-G150.11GR21/22
Drill Rig Failing Inspector J. Dunbar Operator C. Drake Surface El 505.06 Boring No. WES-6-14-81

SAMPLE NUMBER	DATE TAKEN 1981	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd. Press	Cont	CLASSIFICATION AND REMARKS
1	27Oct	0.0		0.0	0.5	0.0	1.61	3" Shelby Tube	0	ST	Sandy clay (CL) and sandstone gravel:
1A				0.5	1.0	1.61	1.89		0	Jar	brown in color, moist, and low
				1.0	1.5				0		plasticity.
				1.5	2.0				0		
				2.0	2.5						Sample length: 1.89 ft
			3.44	0.0	5.0	—	—	7" Folding Auger	—		Cleanout: assumed stratum change
2	27Oct	3.44		5.0	5.5	5.0	7.06	3"Fixed Piston Sampler	0	ST	Sandy clay (CL): grey to brown in
2A				5.5	6.0	7.06	7.30		0	Jar	color, moist, and low plasticity.
				6.0	6.5				0		Water level at 4.0 ft, ten minutes
				6.5	7.0				0		later, water level at 3.4 ft.
				7.0	7.4				10		Sample length: 2.30 ft
				5.0	10.0	—	—	7" Folding Auger	—		Cleanout

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED 3" Fixed Piston Sampler = 3" F.P.S. Sheet 1 of 2 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project _____ Site _____ Date _____
Location _____ Job No. _____
Drill Rig _____ Inspector _____ Operator _____ Surface El _____ Boring No. WES-6-14-81

SAMPLE NUMBER	DATE TAKEN 1981	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd. Press	Cont.	CLASSIFICATION AND REMARKS
3	27 Oct	11.8		10.0	10.5	10.0	11.67	3" F.P.S.	0	ST	Clay (CH): dark grey in color,
3A				10.5	11.0	11.67	11.89		0	Jar	uniform, soft, and high plasticity.
				11.0	11.5				10		
				11.5	12.0				30		
				12.0	12.4				70		Sample length: 1.89 ft
				10.0	15.0			7"Folding Auger			Cleanout
4	27 Oct			15.0	15.5	15.0	17.07	3" F.P.S.	0	ST	Clay (CH): same as above- water
4A				15.5	16.0	17.07	17.32		0	Jar	level rose to 2.6 ft after lunch.
				16.0	16.5				0		
				16.5	17.0				0		
				17.0	17.39				0		Sample length: 2.32 ft
			17.5	15.0	17.5			7" Folding Auger			Cleanout: installed well.

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 2 of 2 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project NWSC Groundwater Study Site Crane, IN Date 30 Oct. 1981
Location Old Rifle Range Job No. 441-G150.11GR21/22
Drill Rig Failing Inspector J. Dunbar Operator C. Drake Surface El 510.42 Boring No. WES-6-15-81

SAMPLE NUMBER	DATE TAKEN 1981	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd. Press	Cont	CLASSIFICATION AND REMARKS
1	30 Oct	0.0		0.0	0.5	0.0	1.35	3" Shelby Tube	0	ST	Sand (SP) and sandstone fragments.
1A				0.5	1.0	1.35	1.55		0	Jar	brown to orange brown in color, very
				1.0	1.5				50		fine to fine-grained, and dry.
				1.5	2.0				120		
			2.4	2.0	2.5				700		Sample length: 1.55 ft
				0.0	2.75			7" Folding Auger			Cleanout; bedrock starts at 2.4 ft
				0.0	2.8			5 5/8" Rock Bit			Cleanout
	31 Oct			2.8				4 x 5 1/2" Core Barrel			See page two for core log.

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 1 of 3 Sheets

IN5 170 023 498

Hole No. WES-6-15-81

DRILLING LOG	DIVISION U.S. Navy	INSTALLATION Crane, IN	SHEET 2 OF 3 SHEETS
1. PROJECT NWSC Groundwater Study		10. SIZE AND TYPE OF BIT 4 x 5 1/2 in. Diamond bit	
2. LOCATION (Coordinates or Station) Old Rifle Range		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL	
3. DRILLING AGENCY CEWES		12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500	
4. HOLE NO. (As shown on drawing title and file number) WES-6-15-81		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED zero; UNDISTURBED two	
5. NAME OF DRILLER C. Drake		14. TOTAL NUMBER CORE BOXES zero	
6. DIRECTION OF HOLE ☑ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE: STARTED 30 Oct. 81; COMPLETED 31 Oct. 81	
7. THICKNESS OF OVERBURDEN 2.75 ft		17. ELEVATION TOP OF HOLE 510.42	
8. DEPTH DRILLED INTO ROCK 14.50 ft		18. TOTAL CORE RECOVERY FOR BORING 95.2%	
9. TOTAL DEPTH OF HOLE 17.25 ft		19. SIGNATURE OF INSPECTOR Joseph B. Dunbar	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
510.42	0.0		See page one for overburden information.			
509.42	1.0					
508.42	2.0					
507.42	3.0		Sandstone: brown to rusty brown in color, uniform, fine-grained quartz sand, moderately hard, and oxidized. Bedding ranges from thinly bedded to around one foot maximum thickness and horizontal to sub-horizontal in attitude.			30 Oct. 81 WL - Run 1 Began 2:35 Rec 4.55' End 2:55 Loss - Time 20 min Gain - Drl time 20 min Hyd press 100psi Water press - RPM 50-75 Drl Action Smooth Water ret Brown Remarks Cored with air. Stuck core bbl-drilled 6" Cs around to break out.
506.43	4.0					
505.42	5.0					
504.42	6.0					
			Solution cavity.			
503.42	7.0		Water at end of run. Run 1	100%	-	31 Oct. 81 WL - Run 2 Began 9:42 Rec 3.85 End 10:15 Loss - Time 33 min Gain - Drl time 33 min Hyd press 100psi Water press - RPM 50-75 Drl Action Smooth Water ret Slight return-brown Remarks Stuck core bbl-Drilled 6" Cs around to break out.
502.42	8.0					
501.42	9.0		Sandstone: same			
500.42	10.0					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT) PROJECT HOLE NO.

Hole No. WES-6-15-81

DRILLING LOG	DIVISION	INSTALLATION	SHEET 3 OF 3 SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
500.42	10.0					
499.42	11.0		Run 2			
498.42	12.0					#L - Run 3 Began 1:09 Rec 4.1' End 1:39 Loss - Time 30 min Gain - Drl time 30 min Hyd press 100psi Water press - RPM 50 Drl Action Smooth ~~Water~~ ret Slight-brown Remarks Water more pronounced after second run.
497.42	13.0		Sandstone: same	100%	-	
			small cavity-1/2 x 1/2 x 1 in.			
496.42	14.0					
495.42	15.0		Run 3			
494.42	16.0		Sandstone: same	64.1%	-	#L - Run 4 Began 2:00 Rec 1.25 End 2:30 Loss 0.70 Time 30 min Gain - Drl time 30 min Hyd press 100+ Water press - RPM 50 Drl Action Smooth ~~Water~~ ret Slight-brown Remarks -
			Recovered to 16.55 ft			
493.42	17.0		Hole rodded at 17.25 ft Run 4			
			Blew hole dry and installed well.			

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT) PROJECT HOLE NO.

BORING LOG
FIELD DATA

Project NWSC Groundwater Study Site Crane, IN Date 2 Nov, 1981
Location Old Rifle Range Job No. 441-G150.11GR21/22
Drill Rig Failing Inspector J. Dunbar Operator C. Drake Surface El 527.88 Boring No. WES-6-16-81

SAMPLE NUMBER	DATE TAKEN 1981	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd. Press	Cont	CLASSIFICATION AND REMARKS
1	2 Nov	0.0		0.0	0.5	0.0	1.37	3" Shelby Tube	0	ST	Silt (ML): brown in color, uniform,
1A				0.5	1.0	1.37	1.52		0	Jar	dry, and stiff.
				1.0	1.5				200		
				1.5	2.0				480		
				2.0	2.5				620		Sample length: 1.52 ft
				0.0	3.0	—	—	7" Folding Auger	—		Cleanout: very hard
			4.5	3.0	5.0	—	—	5 5/8" Rock Bit	—		Cleanout: softer at 4.5 ft
2A	2 Nov	4.5	10.0	5.0	5.4	5.0	5.4	3"Fixed Piston Sampler	700	Jar	Sandy silt (ML): brown in color,
											dry, low plasticity, and contains
											5-10% fine to medium sand.
		10.0	27.0	5.0	45.15	—	—	5 5/8" Rock Bit	—		Clay shale: brown in color, very
											stiff to hard, weathered, and
											slightly moist in regions.

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 1 of 2 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project _____ Site _____ Date _____
Location _____ Job No. _____
Drill Rig _____ Inspector _____ Operator _____ Surface El _____ Boring No. WES-6-16-81

SAMPLE NUMBER	DATE TAKEN	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER			CLASSIFICATION AND REMARKS
		27.0	45.15								Sandstone: brown in color, medium
											hard, and fine-grained.
											Encountered water between 35 and 37ft.
											Meausred water level after 49
											minutes and it rose to 31.97 ft.
											Drilled to 45.15 ft and blew water
											from hole. Rinsed hole three times
											with clean water to remove mud.
											Installed well.

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 2 of 2 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project NWSC Groundwater Study Site Crane, IN Date 10 Nov, 1981
Location Old Rifle Range Job No. 441-G150.11GR21/22
Drill Rig Failing Inspector J. Dunbar Operator C. Drake Surface El 510.73 Boring No. WES-6-17-81

SAMPLE NUMBER	DATE TAKEN 1981	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd. Press	Cont	CLASSIFICATION AND REMARKS
1	10 Nov	0.0		0.0	0.5	0.0	1.39	3" Shelby Tube	0	ST	Clay (CL): brown in color, soft,
1A				0.5	1.0	1.39	1.57		0	Jar	slightly moist, and low plasticity.
				1.0	1.5				30		Sample length: 1.57 ft
			2.0	1.5	2.0				700		
	10 Nov	2.0		0.0	17.5	—	—	6 3/4" Rock Bit	—		Sandstone: brown, fine-grained,
											and medium hard. Checked hole for
											water at 6.8 ft, 10.0 ft, and
											12.4 ft. Moisture at 12.4 ft.
											Water visible from 12.4 to 17.5 ft
											coming in from sidewalls.
	10 Nov		22.5	17.5	22.55	—	—	4 x 5 1/2" Core Barrel	—		Sandstone: see page two for log
											of core.

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 1 of 2 Sheets

IN5 170 023 498

Hole No. WES-6-17-81

DRILLING LOG	DIVISION U.S. Navy	INSTALLATION Crane, IN	SHEET 2 OF 2 SHEETS

1. PROJECT NWSC Groundwater Study	10. SIZE AND TYPE OF BIT 4 x 5 1/2 in Diamond
2. LOCATION (Coordinates or Station) Old Rifle Range	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL
3. DRILLING AGENCY CEWES	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) WES-6-17-81	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED zero; UNDISTURBED one
5. NAME OF DRILLER C. Drake	14. TOTAL NUMBER CORE BOXES zero
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE: STARTED 10 Nov. 81; COMPLETED 10 Nov. 81
7. THICKNESS OF OVERBURDEN 2.0 ft	17. ELEVATION TOP OF HOLE 510.73
8. DEPTH DRILLED INTO ROCK 20.55 ft	18. TOTAL CORE RECOVERY FOR BORING 24.6%
9. TOTAL DEPTH OF HOLE 22.55 ft	19. SIGNATURE OF INSPECTOR Joseph B. Rissman

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
493.73	17.0					
492.73	18.0		From 17.5 to 18.0 ft, 1/4-3/4 in. alternating layers of rusty brown to dark brown sandstone.			10 Nov. 81 WL - Run 1 Began 1:13 Rec 5:05 End 1:56 Loss - Time 43 min Gain - Drl time 43 min Hyd press 100psi Water press - RPM 50-75 Drl Action Smooth Water ret Brown
491.73	19.0					
490.73	20.0		Sandstone: brown in color, uniform, fine-grained quartz sand, and medium hard. Pyrite crystals with oxidation rims from 21.65-21.9 ft and at 22.35 ft.			
489.73	21.0					
488.73	22.0					
			Run 1	100%	-	
487.73	23.0		Reamed hole out with 6-3/4 in rock bit and rinsed hole with clean water. Water level came up overnight to 12.7 ft. Blew dry and installed well.			

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT) PROJECT HOLE NO.

BORING LOG
FIELD DATA

Project NWSC Groundwater Study Site Crane, IN Date 13 Nov. 1981
Location Old Rifle Range Job No. 441-G150.11GR21/22
Drill Rig Failing Inspector J. Dunbar Operator C. Drake Surface El 508.03 Boring No. WES-6-18-81

SAMPLE NUMBER	DATE TAKEN 1981	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd. Press	Cont	CLASSIFICATION AND REMARKS
1	13 Nov	0.0		0.0	0.5	0.0	1.63	3" Shelby Tube	0	ST	Silty sand (SM): brown to rusty
1A				0.5	1.0	1.63	1.78		0	Jar	brown in color, fine-grained, and
				1.0	1.5				20		little cohesion.
				1.5	2.0				280		
			5.0	2.0	2.5				380		Sample length: 1.78 ft
				0.0	5.0			7" Folding Auger			Cleanout
2	13 Nov	5.0		5.0	5.5	5.0	6.58	3"Fixed Piston Sampler	0	ST	Sand (SP): brown in color, uniform,
2A				5.5	6.0	6.58	6.78		20	Jar	fine-grained quartz sand, and
				6.0	6.5				320		slightly damp.
			6.5	6.5	6.75				720		Sample length: 1.78 ft
		6.5	10.0	5.0	26.6			5 5/8" Rock Bit			Sandstone: brown, weathered, and
											fine-grained
		10.0	11.5								Sandstone with clay/shale lenses;
		11.5	14.4								Sandstone: brown, fine-grained,

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 1 of 2 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project _____ Site _____ Date _____
Location _____ Job No. _____
Drill Rig _____ Inspector _____ Operator _____ Surface El _____ Boring No. WES-6-18-81

SAMPLE NUMBER	DATE TAKEN	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER			CLASSIFICATION AND REMARKS
											and soft.
		14.4	26.6								Sandstone: brown, fine-grained,
											and hard.
											Water at 16.6 ft.
											Jetted hole twice to clear water
											and installed well.

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 2 of 2 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project NWSC Groundwater Study Site Crane, IN Date 23 Nov. 1981
Location Old Rifle Range Job No. 441-G150.11GR21/22
Drill Rig Failing Inspector J. Dunbar Operator C. Drake Surface El 503.42 Boring No. WES-6-19-81

SAMPLE NUMBER	DATE TAKEN 1981	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd. Press	Cont	CLASSIFICATION AND REMARKS
		0.0		0.0	5.0			7" Folding Auger			Cleanout: 0.0 to 5.0 ft is disturbed
											from setting up. Had to dump load
			3.0								of gravel to firm up area.
1	23 Nov	3.0		5.0	5.5	5.0	6.88	*3"Fixed Piston Sampler	0	ST	Clay (CH): grey with streaks of
1A				5.5	6.0	6.88	7.13		0	Jar	brown, soft, and high plasticity.
				6.0	6.5				0		Water in hole after cleanout- 8 ft.
				6.5	7.0				0		Sample length: 2.13 ft
				7.0	7.5				10		
			11.75	5.0	10.0			7" Folding Auger			Cleanout: assumed stratum change
2	23 Nov	11.75		10.0	10.5	10.0	11.66	3" F.P.S.	0	ST	Sandy clay (CL): dark grey in color,
2A				10.5	11.0	11.66	11.96		0	Jar	soft, low to medium plasticity, and
				11.0	11.5				0		contains 20% very fine-grained sand.
				11.5	12.0				0		
				12.0	12.39				0		Sample length: 1.96 ft

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED * 3" Fixed Piston Sampler = 3"F.P.S. Sheet 1 of 2 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project _____ Site _____ Date _____
Location _____ Job No. _____
Drill Rig _____ Inspector _____ Operator _____ Surface El _____ Boring No. WES-6-19-81

SAMPLE NUMBER	DATE TAKEN 1981	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd. Press	Cont	CLASSIFICATION AND REMARKS
			16.75	10.0	15.0			7" Folding Auger			Cleanout: assumed stratum change
3	23 Nov	16.75		15.0	15.5	15.0	17.06	3" F.P.S.	0	ST	Gravelly clay (CL): brown to grey
3A				15.5	16.0	17.06	17.36		0	Jar	with traces of red and green, fine
				16.0	16.5				0		to medium sized gravel, soft, and
				16.5	17.0				0		low plasticity.
				17.0	17.40				0		Sample length: 2.36 ft
			20.0	15.0	20.0			7" Folding Auger			Went additional few ft to provide
											better seal at surface.

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 2 of 2 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project NWSC Groundwater Study Site Crane, IN Date 24 Nov, 1981
Location Old Rifle Range Job No. 441-G150.11GR21/22
Drill Rig Failing Inspector J. Dunbar Operator C. Drake Surface El 515.68 Boring No. WES-6-20-81

SAMPLE NUMBER	DATE TAKEN 1981	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd. Press	Cont	CLASSIFICATION AND REMARKS
1	24 Nov	0.0		0.0	0.5	0.0	1.78	3" Shelby Tube	0	ST	Silt (ML), brown in color, soft,
				0.5	1.0	1.78	1.95		0	Jar	low plasticity, and dry.
				1.0	1.5				25		
				1.5	2.0				75		Sample length: 1.95 ft
				2.0	2.5				380		
				0.0	5.0			7" Folding Auger			Cleanout
2	24 Nov			5.0	5.5	5.0	6.75	3"Fixed Piston Sampler	0	ST	Silt (ML): brown in color with
2A				5.5	6.0	6.75	6.95		0	Jar	traces of grey, soft, and low
				6.0	6.5				10		plasticity.
				6.5	7.0				230		Sample length: 1.95 ft- chucks slipped
				7.0	7.5				380		
	25 Nov		8.0	5.0	8.0			7" Folding Auger			Cleanout

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 1 of 2 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

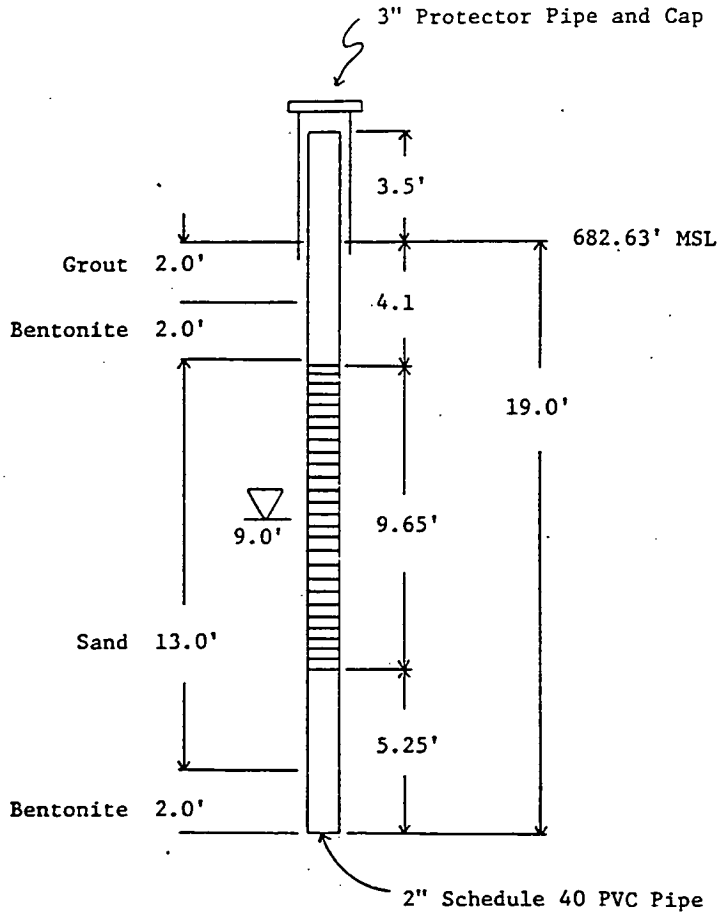
Project _____ Site _____ Date _____
Location _____ Job No. _____
Drill Rig _____ Inspector _____ Operator _____ Surface El _____ Boring No. WES-6-20-81

SAMPLE NUMBER	DATE TAKEN	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER			CLASSIFICATION AND REMARKS
	25 Nov	8.0	30.5	8.0	30.5			5 5/8" Rock	Bit	—	Sandstone; brown in color, fine-grained, and weathered. Water encountered around 20.5 ft. Installed well.

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 2 of 2 Sheets

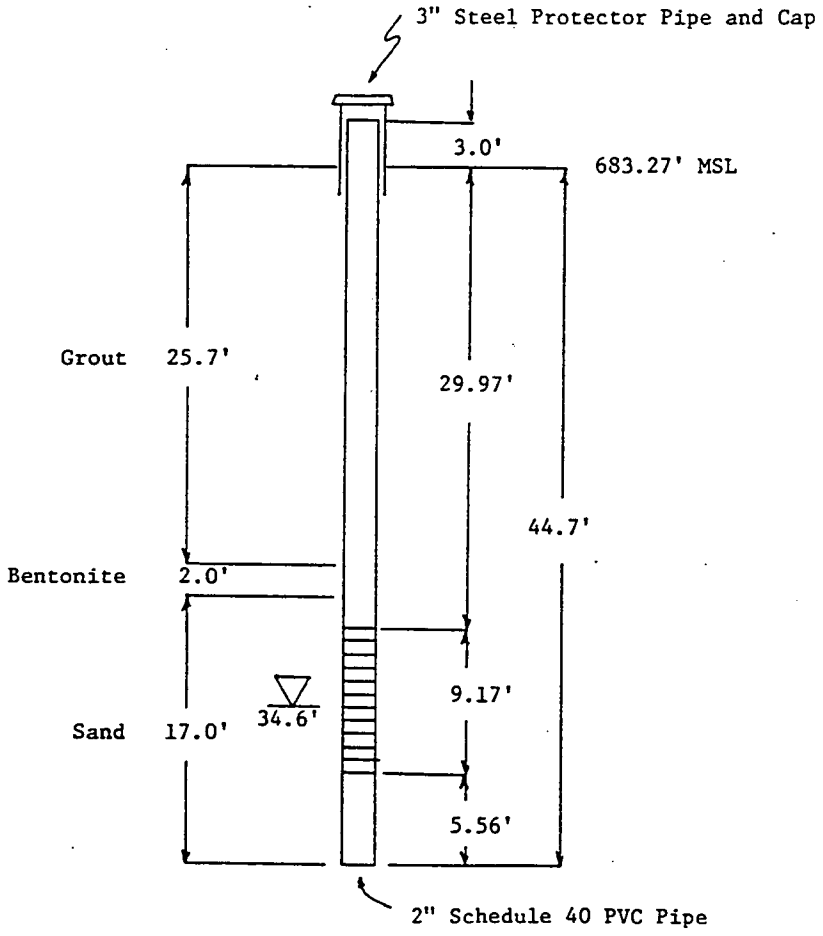
IN5 170 023 498



Well screen

Water depth at time of drilling

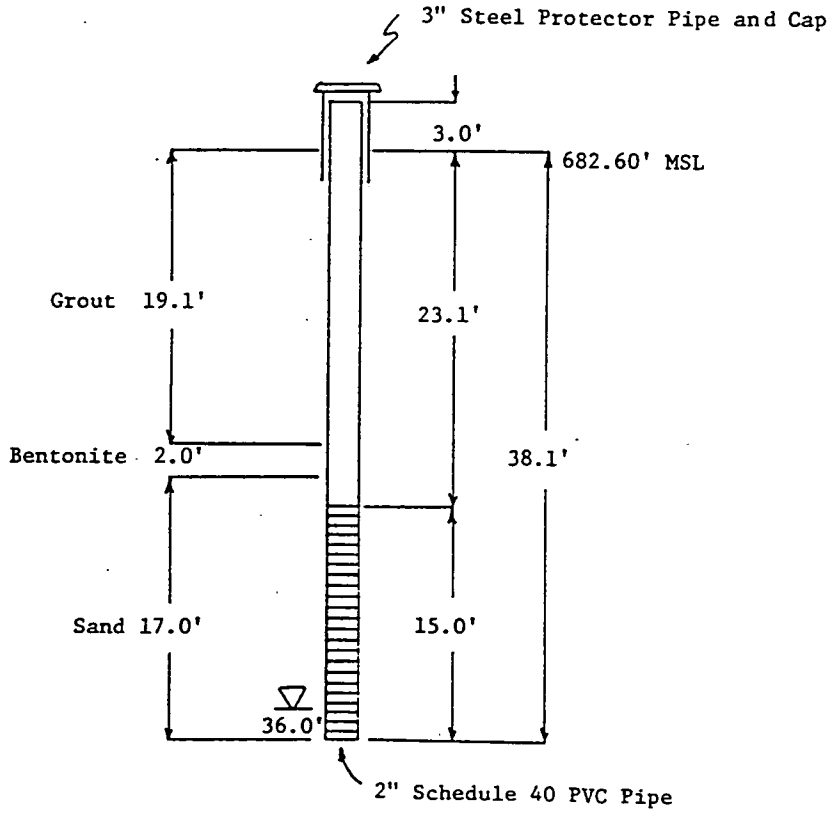
NWSC, Crane, Indiana
Demolition Area
Well Completion
Boring Number: WES-6-1A-b



Well screen

Water depth at time of drilling

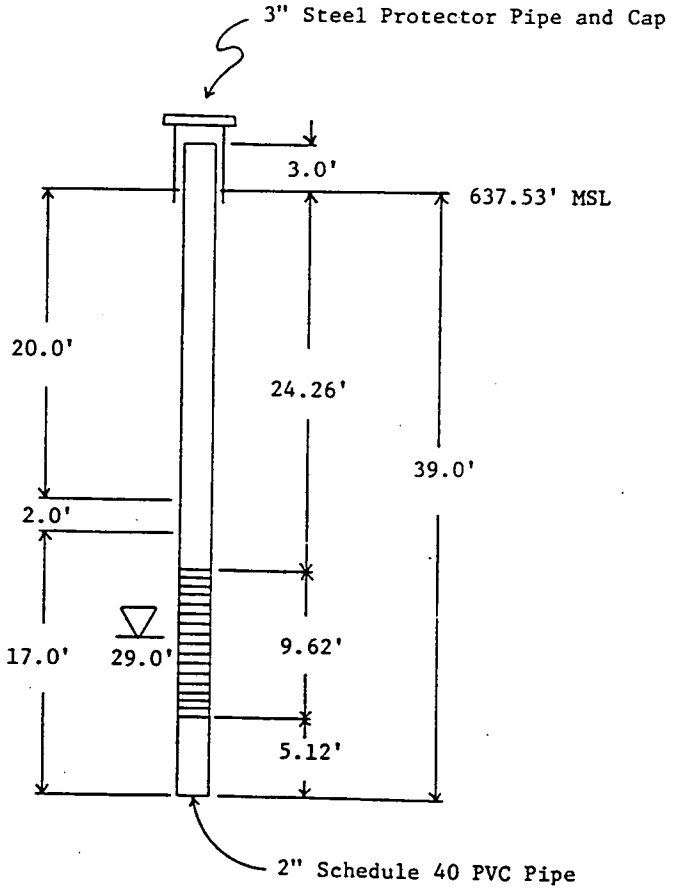
NWSC, Crane, Indiana
Demolition Area
Well Completion
Boring Number: WES-6-1B-81



Well screen

Water depth at time of drilling

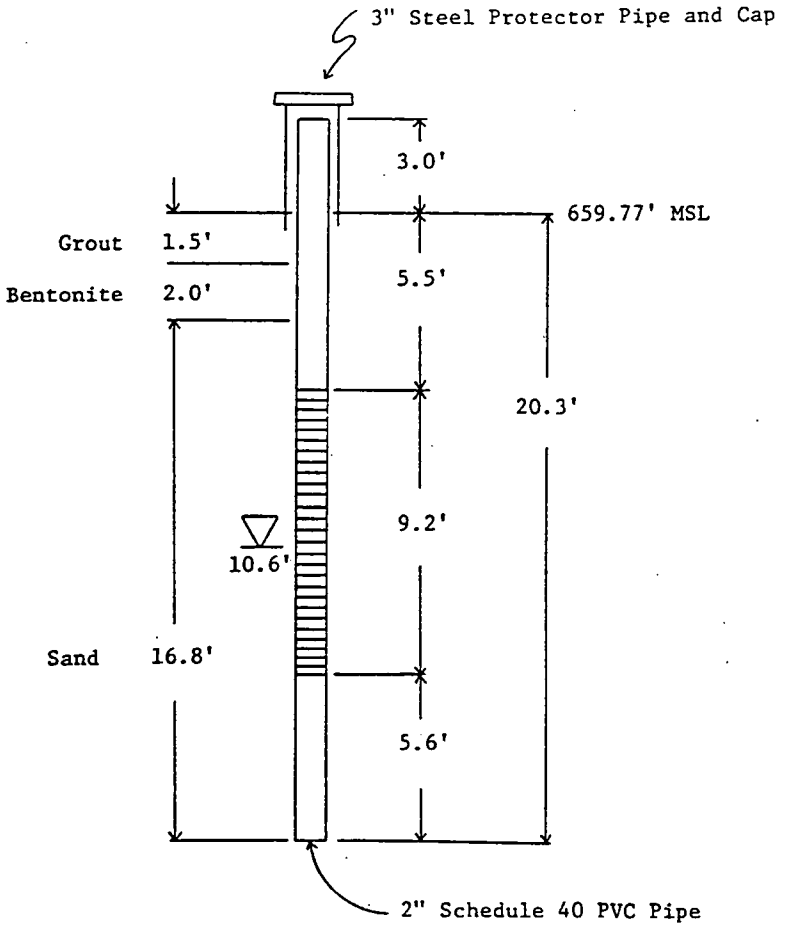
NWSC, Crane, Indiana
Demolition Area
Well Completion
Boring Number: WES-6-1C-81



Well screen

Water depth at time of drilling

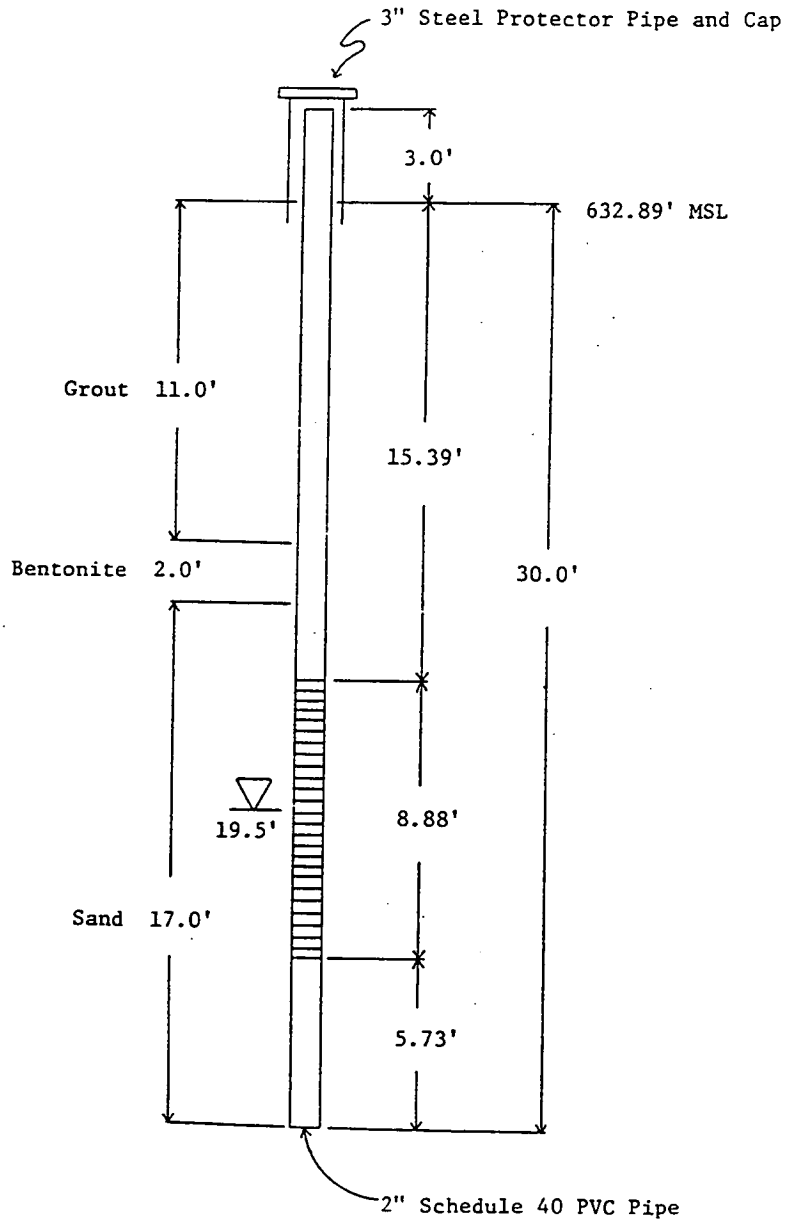
NWSC, Crane, Indiana
Demolition Area
Well Completion
Boring Number: WES-6-2-81



Well screen

Water depth at time of drilling

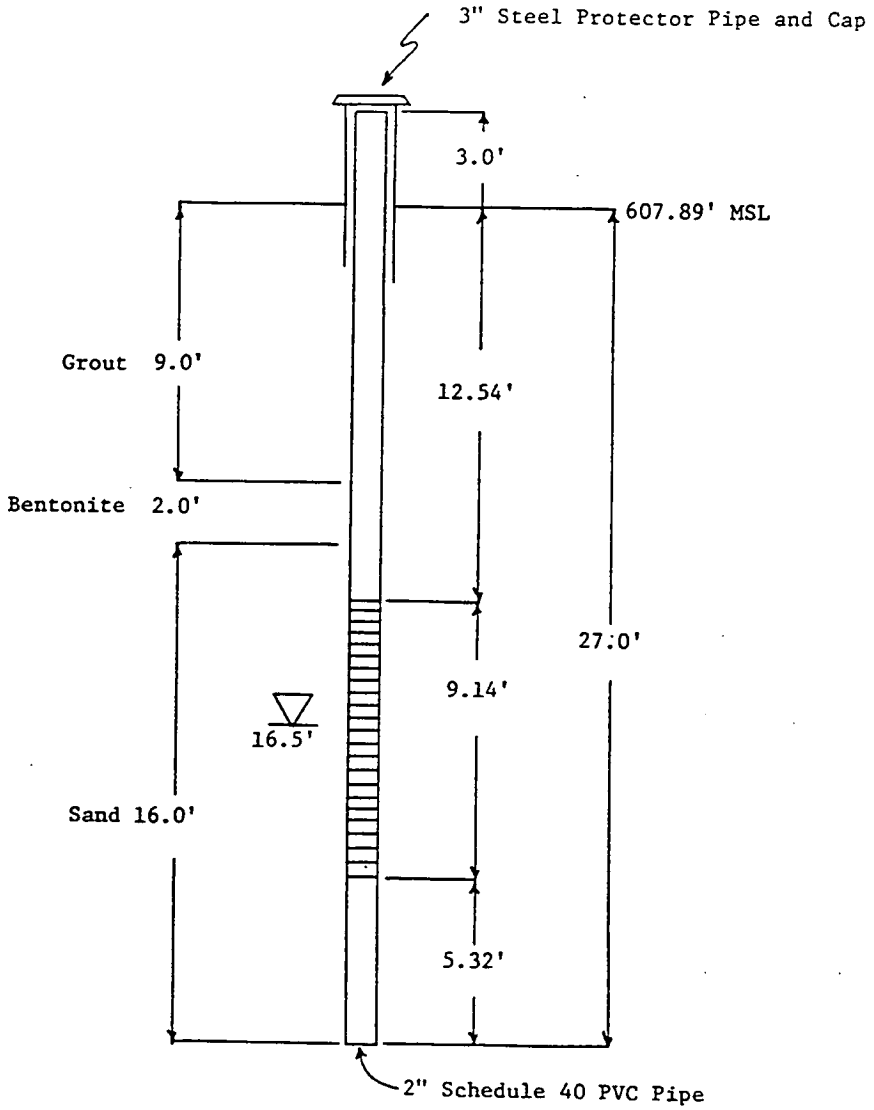
NWSC, Crane, Indiana
Demolition Area
Well Completion
Boring Number: WES-6-3-81



Well screen

Water depth at time of drilling

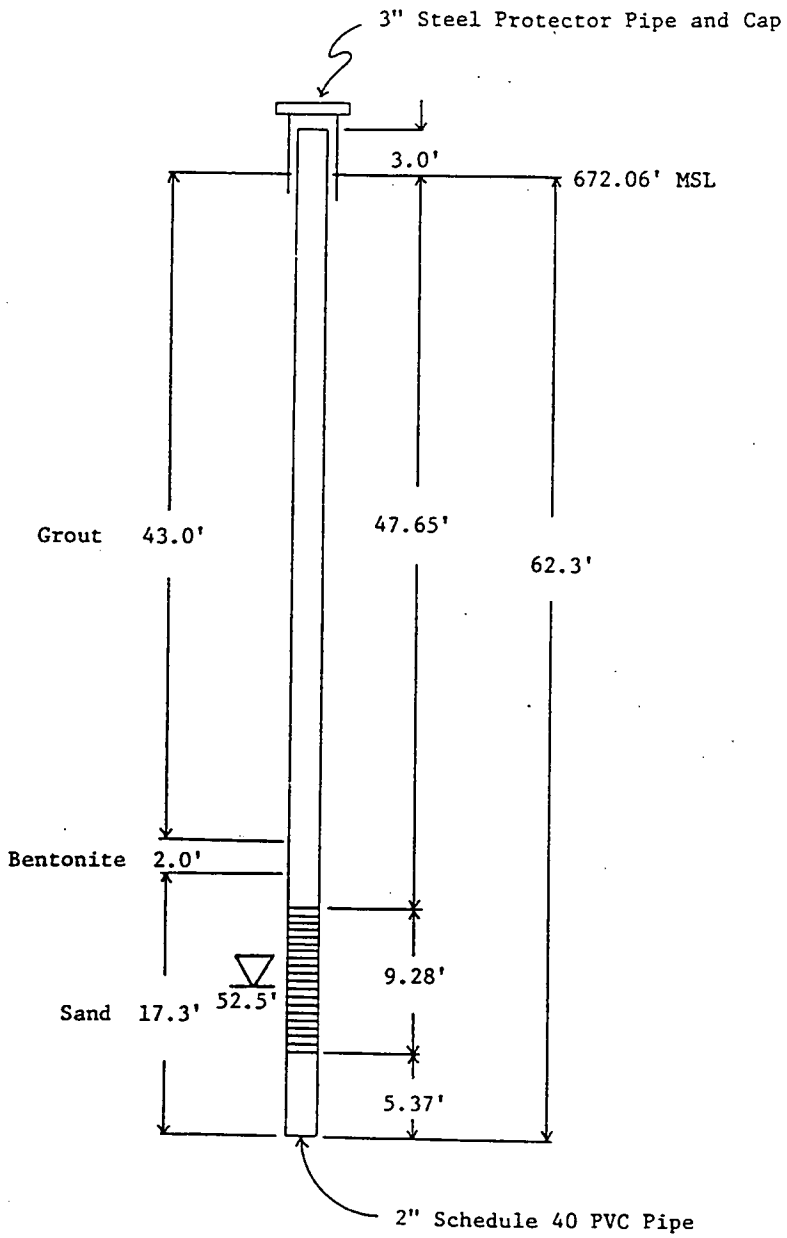
NWSC, Crane, Indiana
Demolition Area
Well Completion
Boring Number: WES-6-4-81



Well screen

Water depth at time of drilling

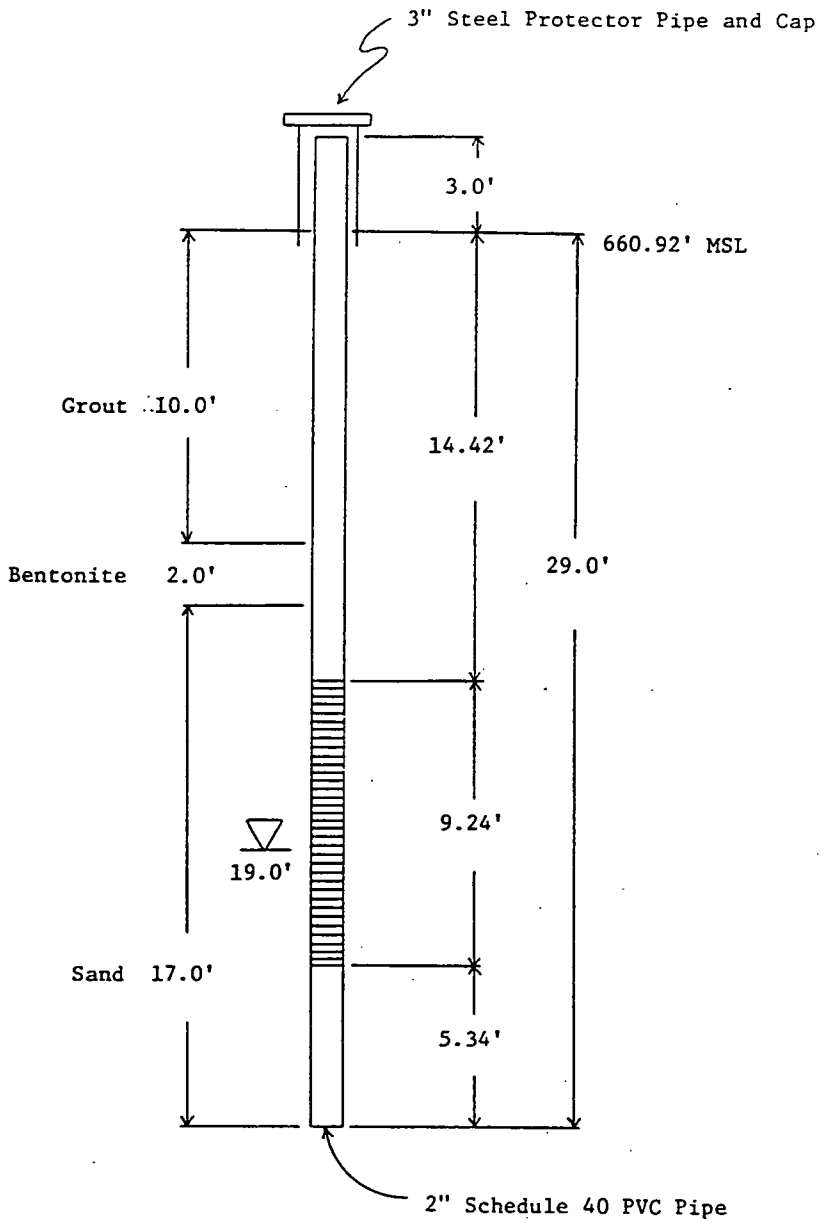
NWSC, Crane, Indiana
Demolition Area
Well Completion
Boring Number: WES-6-5-81



Well screen

Water depth at time of drilling

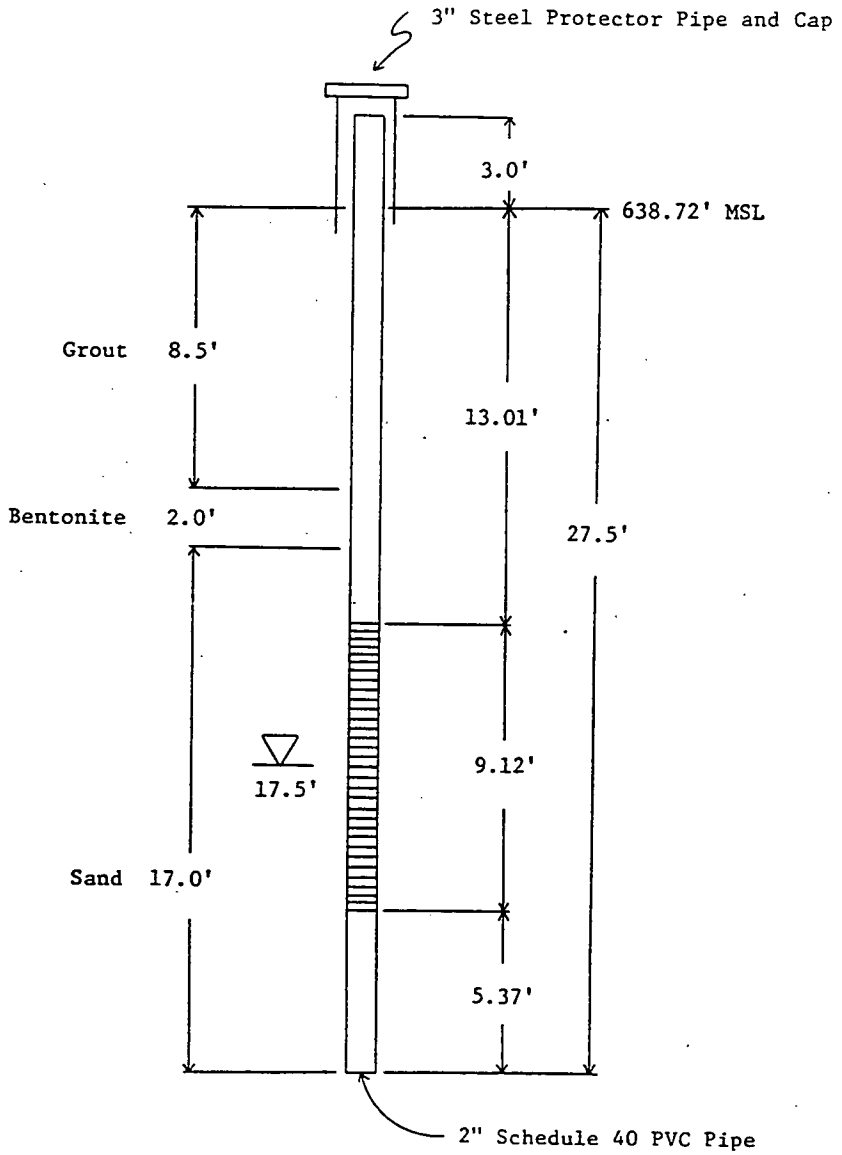
NWSC, Crane, Indiana
Demolition Area
Well Completion
Boring Number: WES-6-6-81



Well screen

Water depth at time of drilling

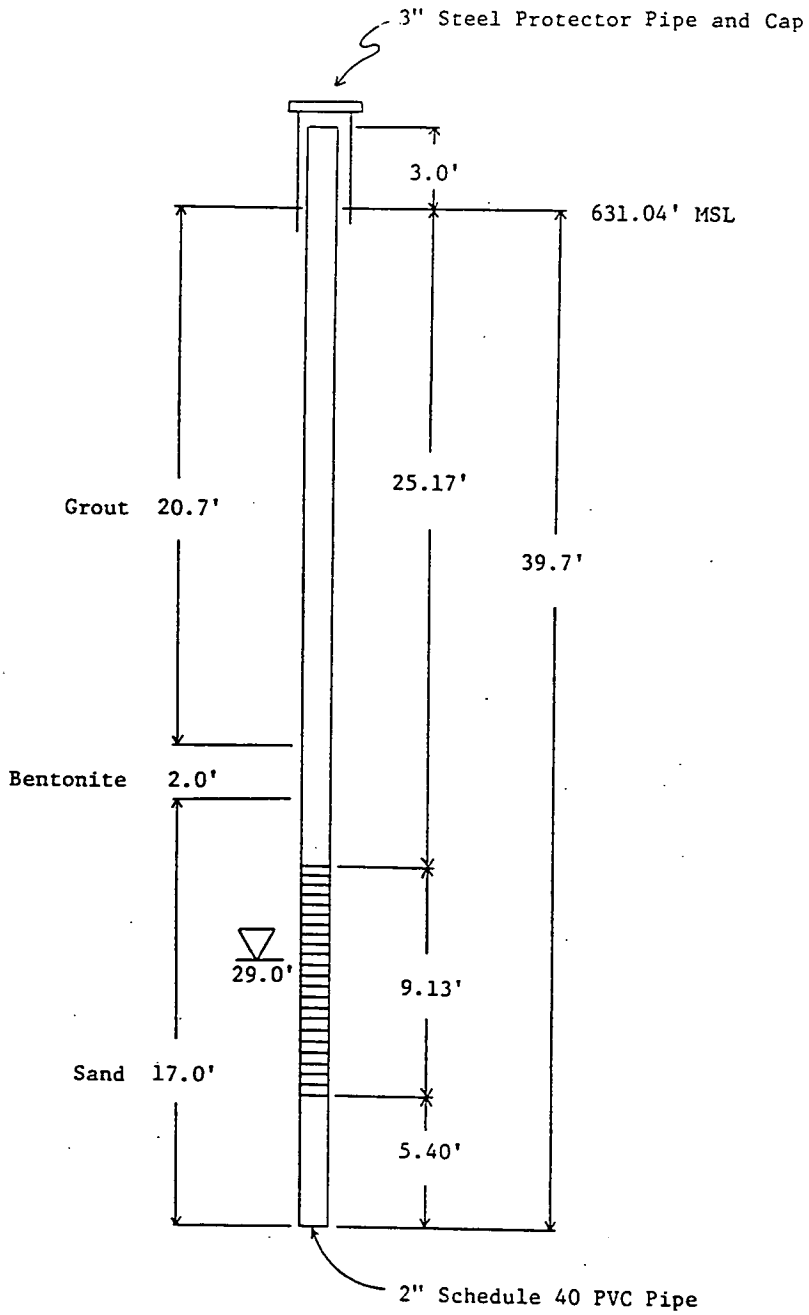
NWSC, Crane, Indiana
Demolition Area
Well Completion
Boring Number: WES-6-7-81



Well screen

Water depth at time of drilling

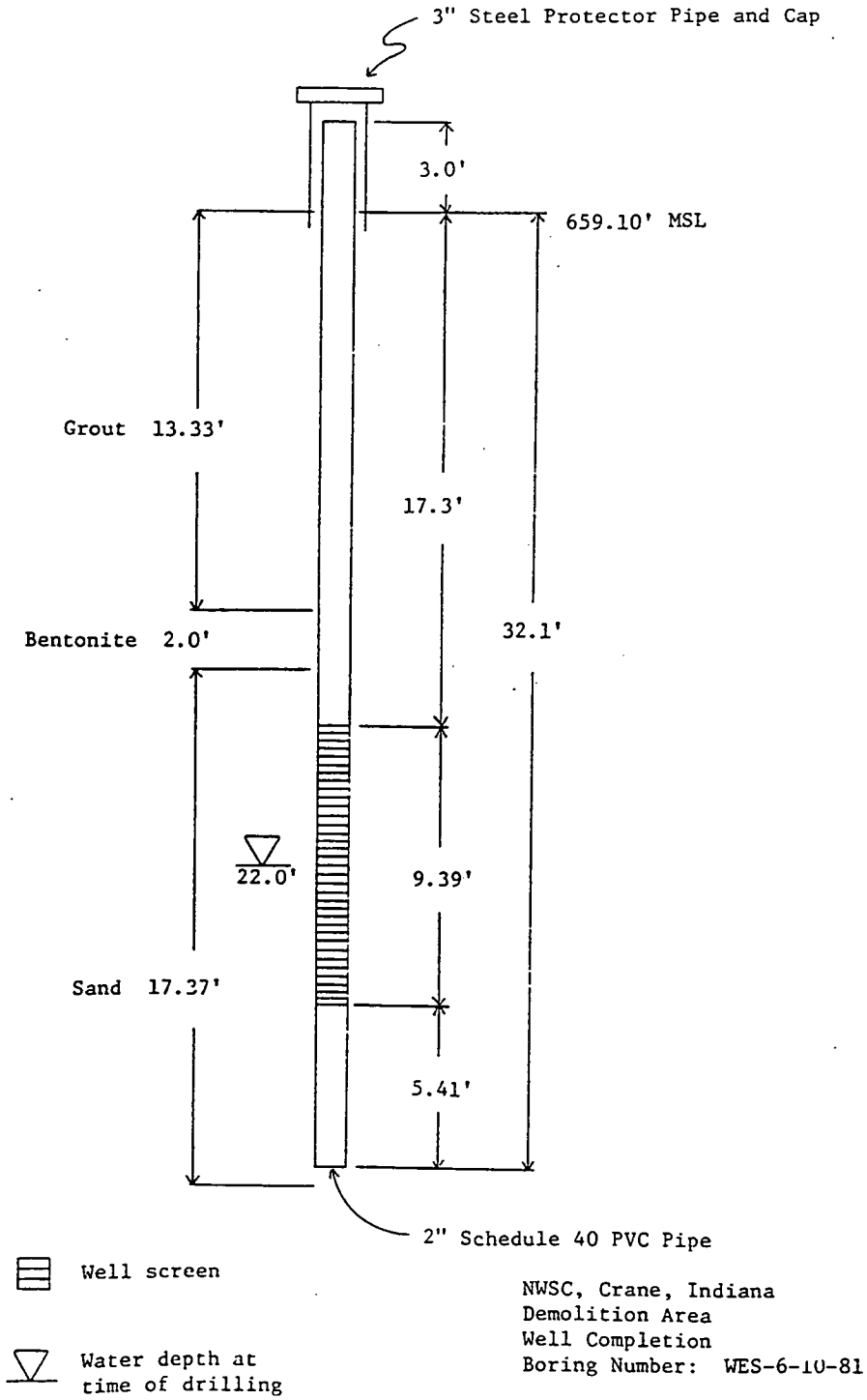
NWSC, Crane, Indiana
Demolition Area
Well Completion
Boring Number: WES-6-8-81



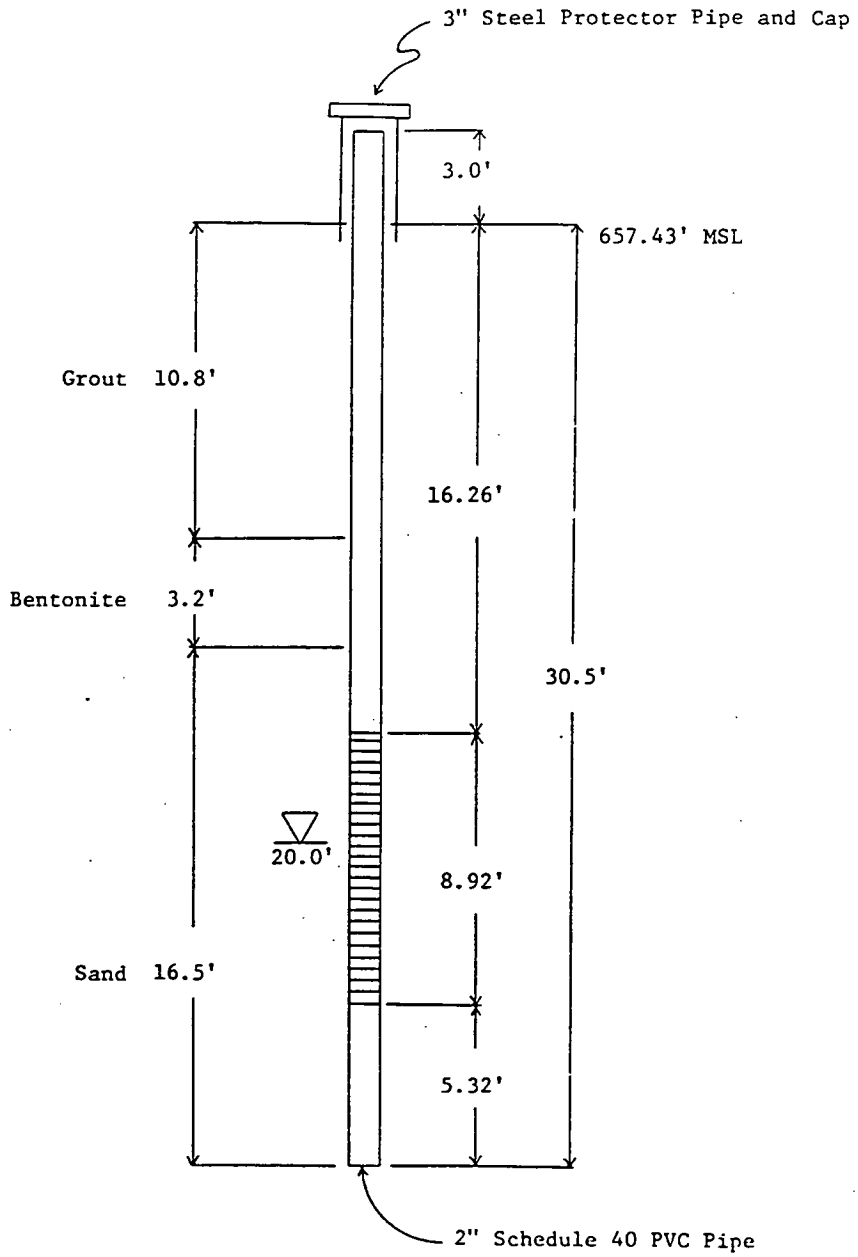
Well screen

Water depth at time of drilling

NWSC, Crane, Indiana
Demolition Area
Well Completion
Boring Number: WES-6-9-81



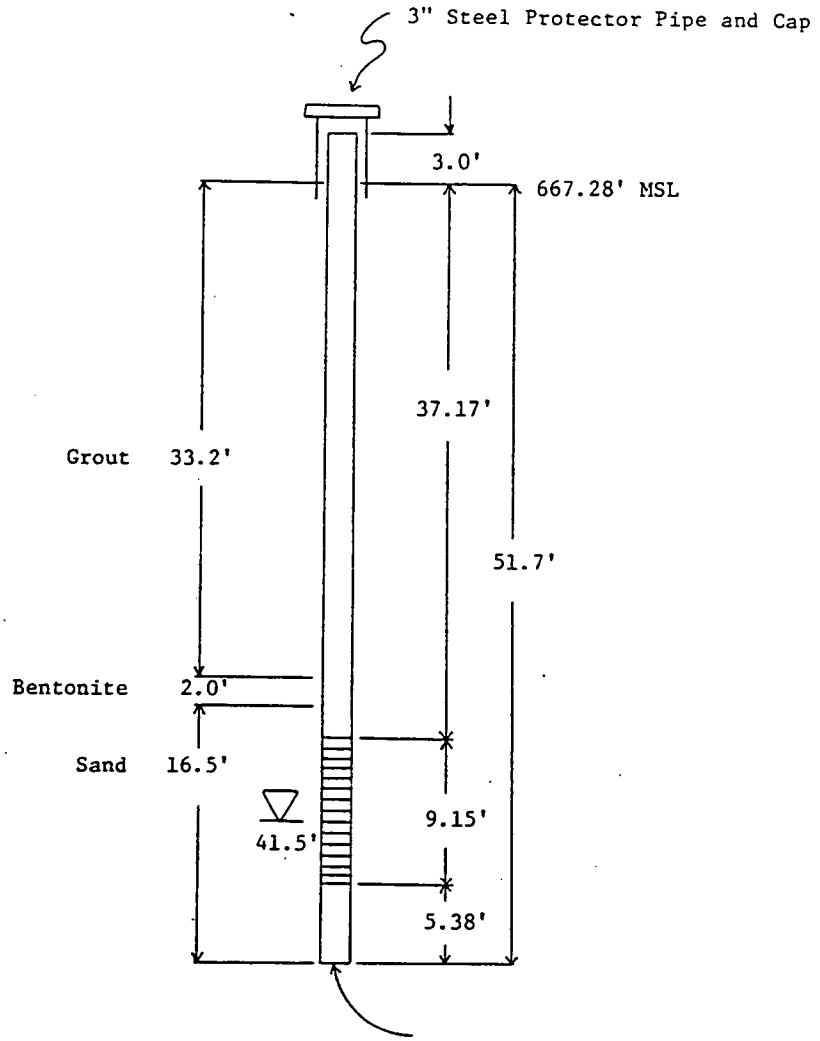
NWSC, Crane, Indiana
Demolition Area
Well Completion
Boring Number: WES-6-10-81



Well screen

Water depth at time of drilling

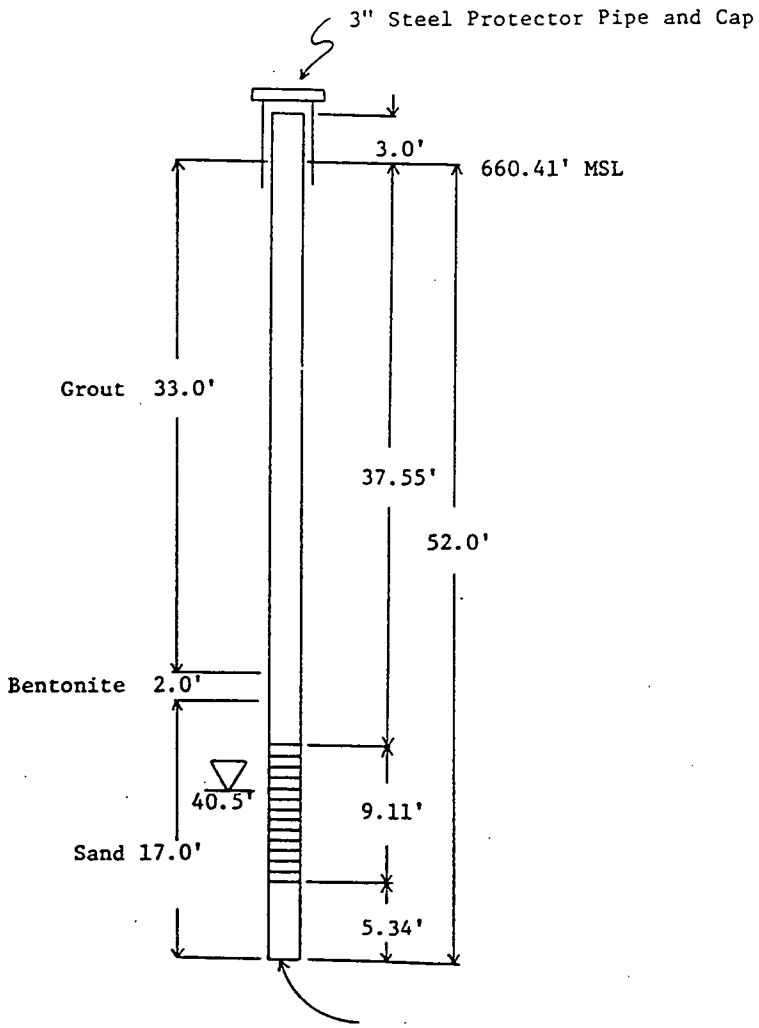
NWSC, Crane, Indiana
Demolition Area
Well Completion
Boring Number: WES-6-11-81



Well screen

Water depth at time of drilling

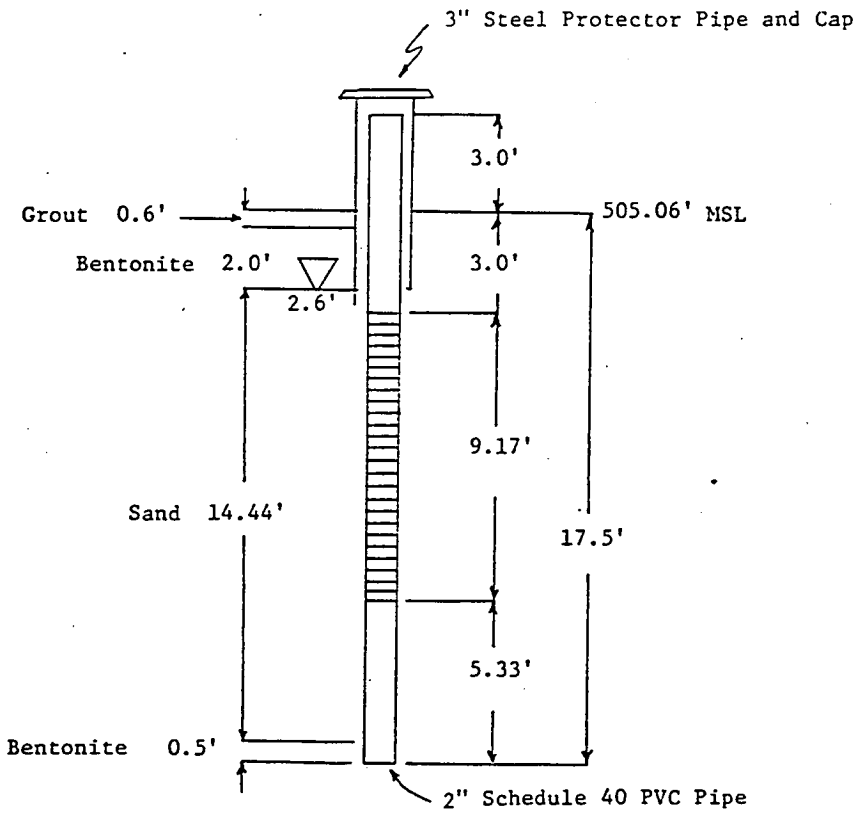
NWSC, Crane, Indiana
Demolition Area
Well Completion
Boring Number: WES-6-12-81



Well screen

Water depth at time of drilling

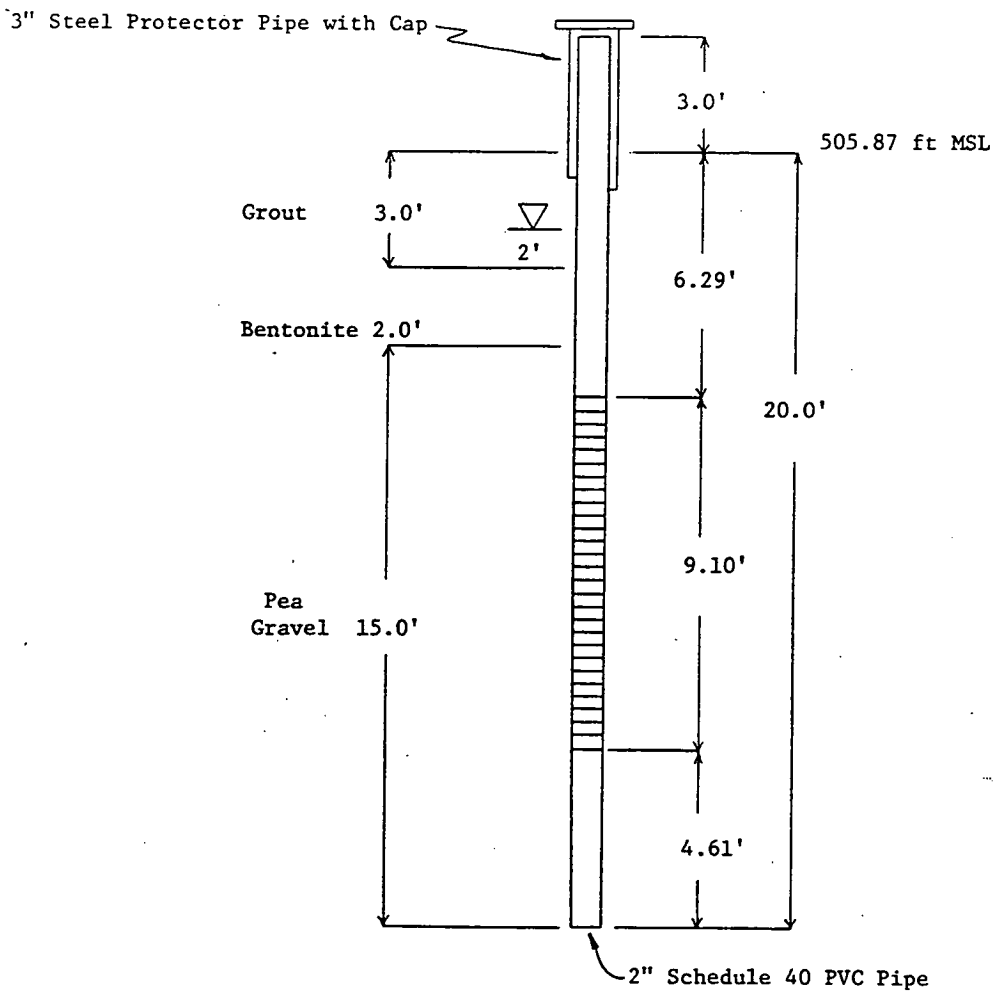
NWSC, Crane, Indiana
Demolition Area
Well Completion
Boring Number: WES-6-13-81



Well screen

Water depth at time of drilling

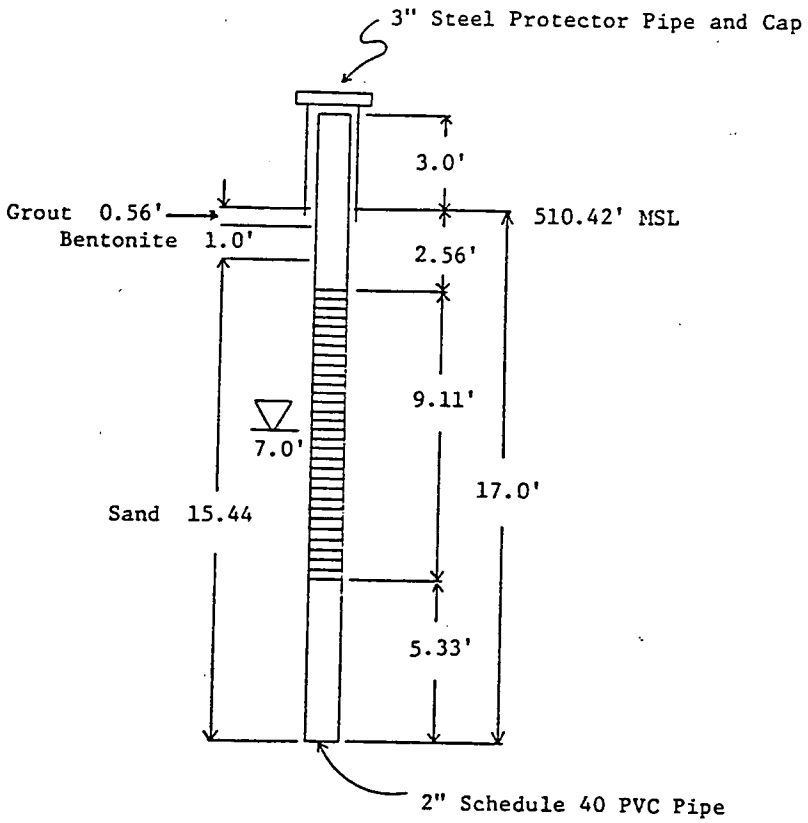
NWSC, Crane, Indiana
Rifle Range
Well Completion
Boring Number: WES-6-14-S1



Water depth at time of drilling

Well Screen

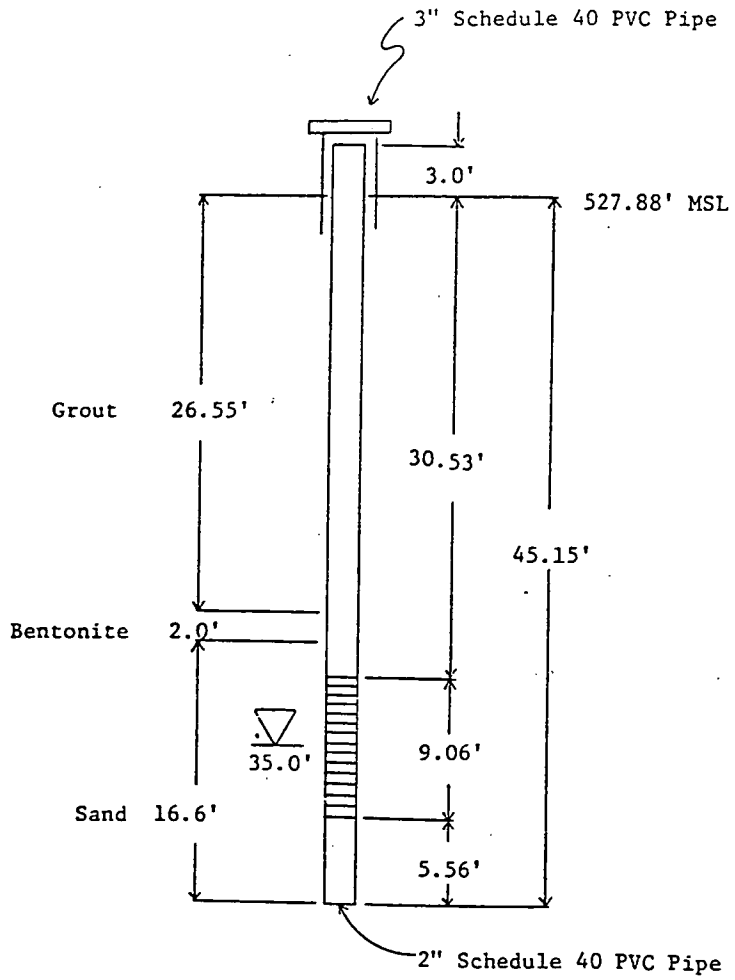
NWSC, Crane, Indiana
Old Rifle Range
Well Completion
Boring Number: WES-6-14A-83



Well screen

Water depth at time of drilling

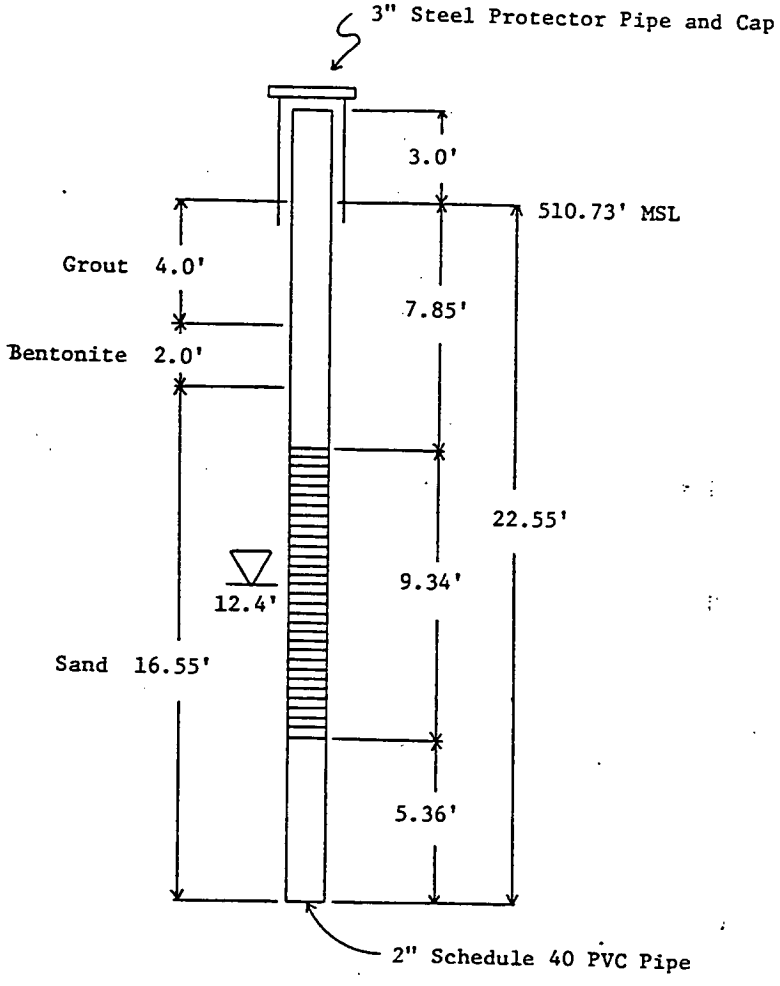
NWSC, Crane, Indiana
Rifle Range
Well Completion
Boring Number: WES-6-15-81



Well screen

Water depth at time of drilling

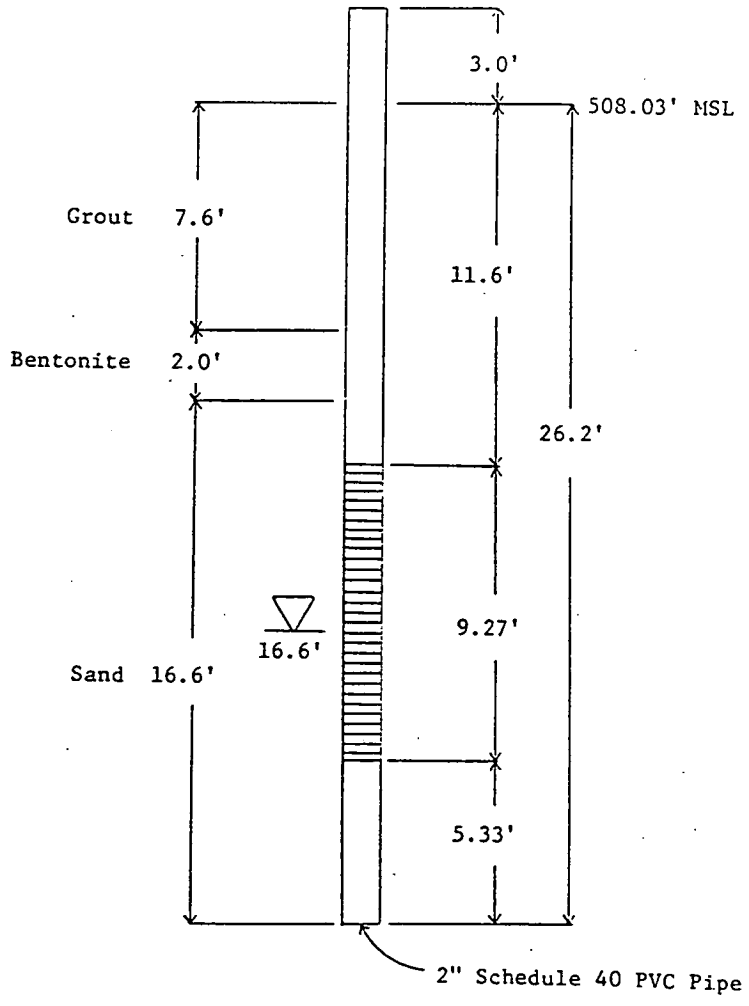
NWSC, Crane, Indiana
Rifle Range
Well Completion
Boring Number: WES-6-16-81



Well screen

Water depth at time of drilling

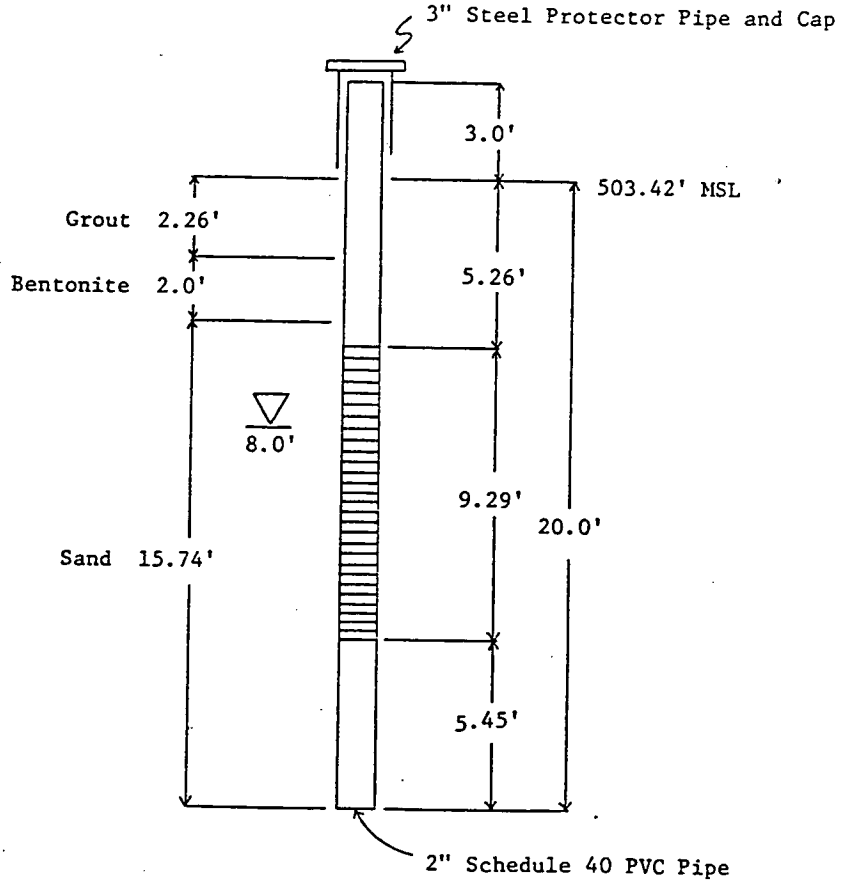
NWSC, Crane, Indiana
Rifle Range
Well Completion
Boring Number: WES-6-17-81



Well screen

Water depth at time of drilling

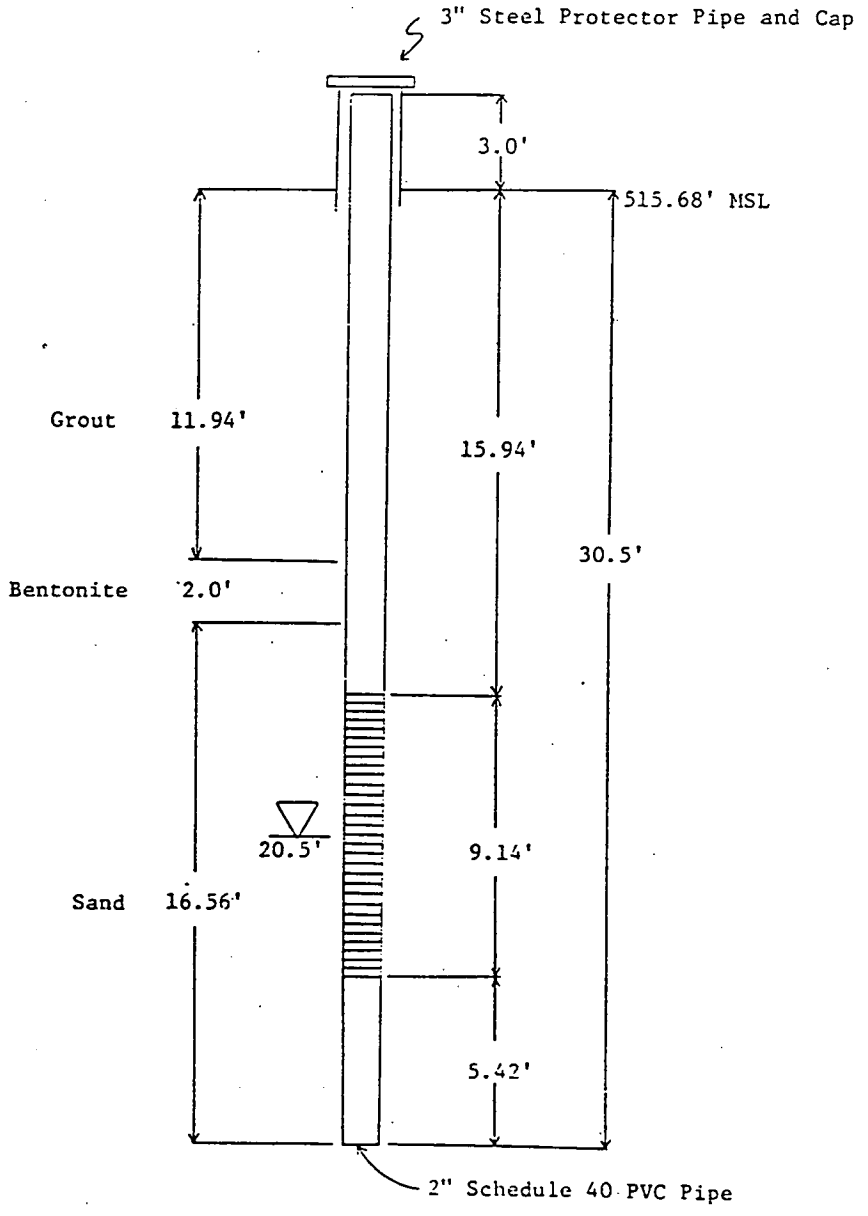
NWSC, Crane, Indiana
Rifle Range
Well Completion
Boring Number: WES-6-18-81



Well screen

Water depth at time of drilling

NWSC, Crane, Indiana
Rifle Range
Well Completion
Boring Number: WES-6-19-81



Well screen

Water depth at time of drilling

NWSC, Crane, Indiana
Rifle Range
Well Completion
Boring Number: WES-6-20-81

Appendix B
Copy of Confirmation Work Report of April, 1984 for Demolition Area/Old Rifle Range.

HYDROGEOLOGICAL SITE CHARACTERIZATION OF OLD RIFLE RANGE FOR HAZARDOUS WASTE DISPOSAL FACILITY, NAVAL WEAPONS SUPPORT CENTER, CRANE, INDIANA

by

Joseph B. Dunbar

Geotechnical Laboratory
U. S. Army Engineer Waterways Experiment Station
P. O. Box 631, Vicksburg MS 39180

April 1984

Prepared for
Naval Weapons Support Center
Crane, Indiana

PREFACE

This report is the fifth of six studies performed by personnel of the Geotechnical Laboratory (GL) of the U. S. Army Engineer Waterways Experiment Station (WES). Funding for this study was authorized by Order for Work and Services-NAVCOMPT Form 2275 (2-81) Number N0016483WR0G185 dated 17 May 1983 and amended 9 and 16 September 1983.

The field work was conducted during the periods 7 June 1983 to 11 October 1983. Data reduction was performed from October 1983 to April 1984 and report preparation was accomplished during this same period. The drilling was performed by the Exploration Group (EG), Engineering Geology and Rock Mechanics Division (EGRMD), GL, under the supervision of Mr. Joseph B. Dunbar, Site Characterization Unit (SCU), Engineering Geology Applications Group (EGAG) of the EGRMD. Mr. Dunbar prepared the report and Mr. Dale L. Barefoot assisted in data compilation.

The study was conducted under the direct supervision of Mr. Jerald D. Broughton, Acting Chief, SCU, and under the general supervision of Mr. John H. Shamburger, Chief, EGAG, Mr. Mark A. Vispi, Chief, EG, Dr. Don C. Banks, Chief, EGRMD, and Dr. William F. Marcuson III, Chief, GL.

Special acknowledgment is extented to Ms. Cathy Andrews and Mr. Jim Hunsicker of the Naval Weapons Support Center for their assistance during the study.

Commander and Director of WES during the conduct of the study was COL Tilford C. Creel, CE. The Technical Director was Mr. F. R. Brown.

CONTENTS

Page

PREFACE 1

PART I: INTRODUCTION 3

Background 3
Purpose and Scope 3

PART II: DATA COLLECTION 6

Data Review 6
Field Exploration 6

PART III: GEOLOGY AND GROUND WATER 10

Geology 10
Laboratory Soil Test Results 15
Ground Water 15

PART IV: CONCLUSIONS AND RECOMMENDATIONS 20

Conclusions 20
Recommendations 21

BIBLIOGRAPHY 22

APPENDIX A: FIELD BORING LOGS A1

APPENDIX B: GRAPHIC FIELD LOGS B1

APPENDIX C: LABORATORY SOIL TEST RESULTS C1

APPENDIX D: WELL COMPLETION DIAGRAMS D1

APPENDIX E: GROUND-WATER ELEVATIONS E1

PART I: INTRODUCTION

Background

1. The Naval Weapons Support Center (NWSC) plans to construct a permanent hazardous waste flashing facility at the Old Rifle Range (see Figure 1). The facility will recover the explosive-contaminated metal components from various types of military ordnance (e.g., large diameter projectile bodies). The treatment process to eliminate the explosive waste and salvage the metal components is by thermal incineration. The Old Rifle Range (ORR) facility will consist of two separate flashing areas with each area composed of several pits. Disposal of hazardous materials in each area will be dependent on type of explosive-contaminated ordnance; separate areas for flashing of explosive D-contaminated and explosive A-contaminated ordnance.

2. The flashing operation was previously located at the Ammunition Burning Grounds (ABG) along Jeep Trail 25 and was suspended because of possible contamination to the area's ground water and the Little Sulphur Creek. The flashing operation was moved to the ORR because environmental impact permits currently existed (ORR part of Demolition Area) and personnel from the Demolition Area (DEMO) are able to economically conduct DEMO and ORR operations simultaneously. In addition, ground-water monitoring wells had been implaced at the ORR for subsurface monitoring of a similar disposal operation. Seven monitoring wells were installed at the ORR by WES in 1981. The results from this work are presented in the WES draft report "Hydrogeological Investigation of Waste Disposal Sites at the Naval Weapons Support Center, Crane, Indiana" (Dunbar, 1982).

Purpose and Scope

3. The purposes of this investigation were to (a) define the hydrogeology (b) assist in selecting the best site for construction of a hazardous waste flashing facility, and (c) install additional ground-water monitoring wells as required to supplement the existing ground-water monitoring network to determine ground-water quality. Activities during this investigation included a review of existing boring and ground-water data, drilling, selected soil and rock

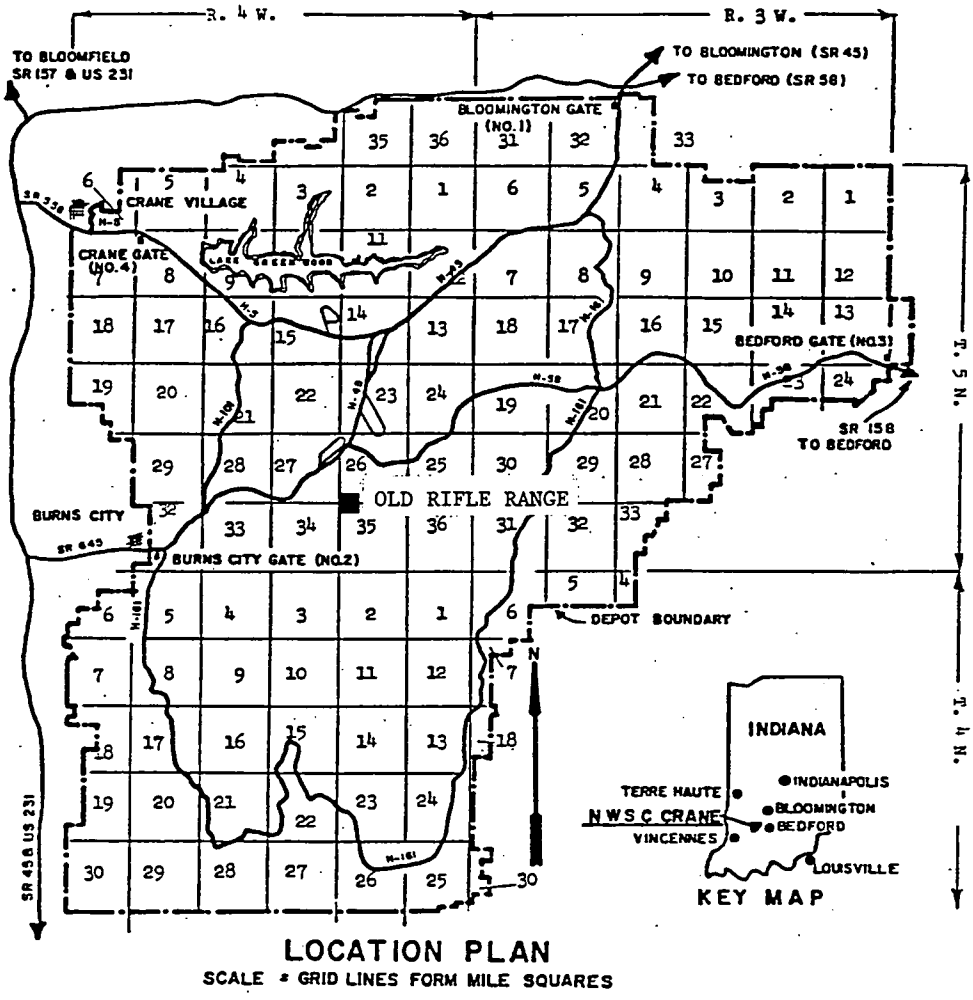


Figure 1. Location of Naval Weapons Support Center and Old Rifle Range

sampling, well installation, physical soil testing, and data analysis. Information on well installation and physical soil testing are omitted from this report because they are presented in a previous WES NWSC study.

PART II: DATA COLLECTION

Data Review

4. A review of existing geological and ground-water data was conducted to determine the best location for the flashing facility. The source of hydrogeological data was from monitoring wells installed by the WES in 1981. The data review identified a shallow water table at the southern end of the ORR which eliminated this area from consideration. The tentative location for the flashing facility was at the north end of the ORR, adjacent to and upslope from WES-6-20-81, where soil thickness, soil type, topography and depth to the water table were favorable.

Field Exploration

Pit Construction

5. The NWSC construction of a temporary flashing facility was conducted simultaneously with the WES drilling program to accomodate the NWSC time requirements for reduction of ordnance inventories. Three temporary flashing pits (TFP) for explosive D-contaminated ordnance were constructed adjacent to and up slope from monitoring well WES-6-20-81 (see Figure 2). The size of each flashing pit was governed by the dimensions of the temporary impermeable liner which was purchased locally. Each pit is about 120 ft in length with a basal width of about 15 ft and composed of an impermeable liner (4 sheets of 6 mil polyethylene plastic), overlain by 2 ft of compacted clay, 1 ft of coarse limestone gravel, and 10 inches of sand. Flashing pit construction is shown in Figure 3. A 2 ft thick compacted clay layer was omitted from below the impermeable liner, because the existing soil (field classified as a CL), met or exceeded NWSC pit construction requirements. Soil thickness and uniformity of soil type underlying the temporary liner were verified in pits 1 and 2 (see Figure 2 for pit locations) by backhoe excavations in the north and south ends of each pit to a depth of approximately 3.5 feet. Each excavation was backfilled and compacted prior to laying the impermeable liner. Jar samples of the clay underlying the liner were taken at three locations (north end, center, and south end) in flashing pits 1 and 2 for laboratory classification to confirm the field observations. In addition, ground elevations were taken at the base

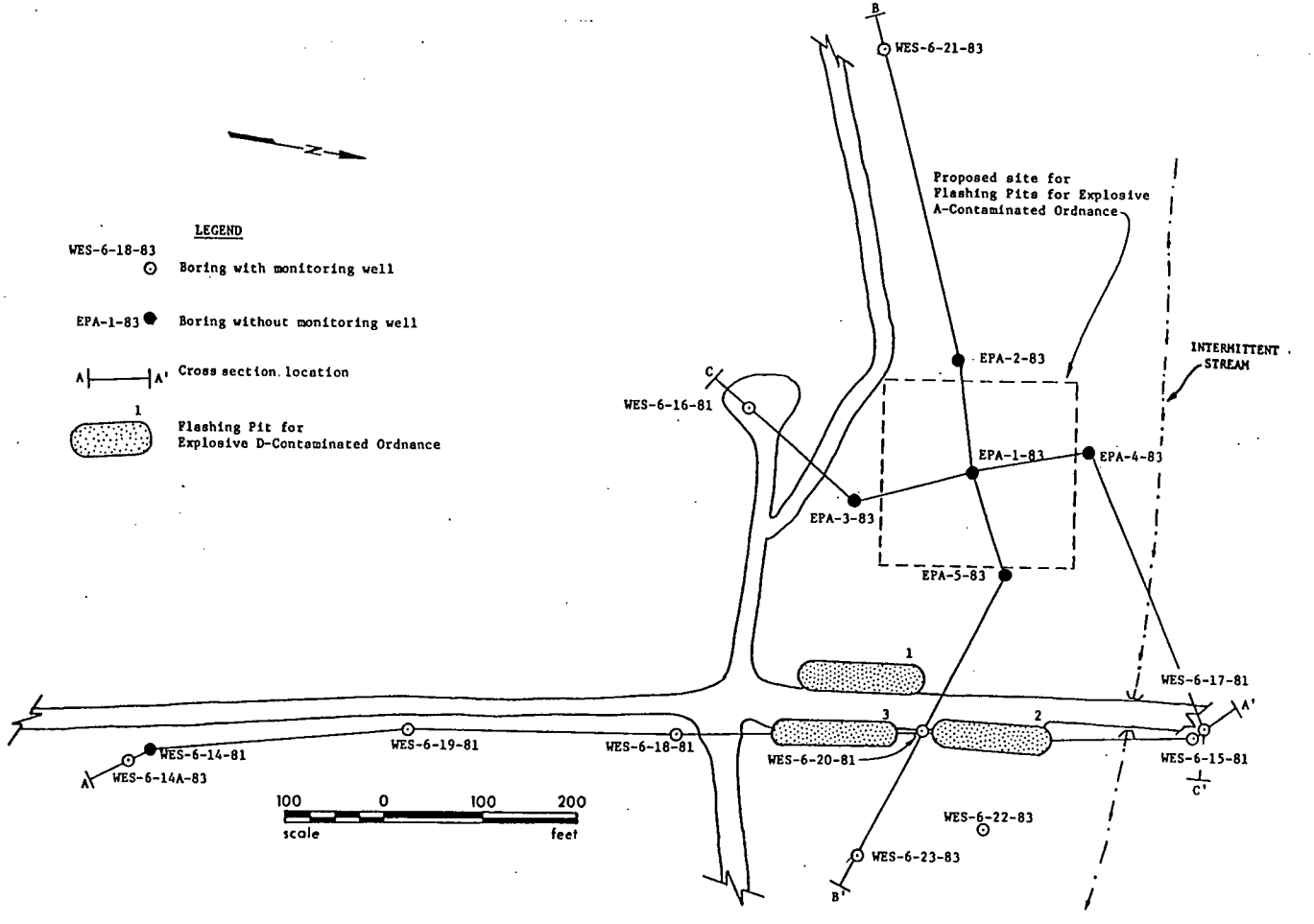


Figure 2. Old Rifle Range Boring, Monitoring Well, Flashing Pit, and Cross Section Locations

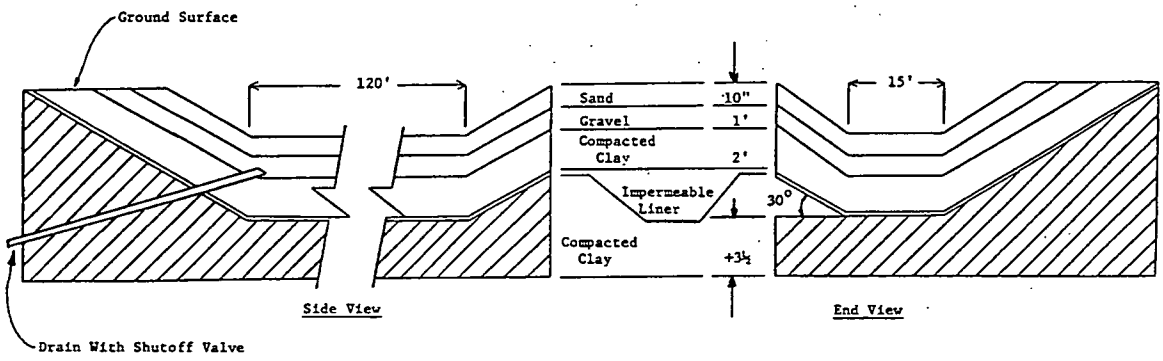


Figure 3. Schematic of Flashing Pit Construction

of the liner at the north and south ends of flashing pits 1 and 2 to establish the exact elevation of the impermeable liner with respect to the water table. A drain with a shutoff valve was installed in each flashing pit to collect precipitation and surface drainage for leachate treatment (see Figure 3).

Drilling and sampling

6. Drilling and sampling were conducted with a truck-mounted Failing 1500 drill rig. Five borings ("Explosive Pit A" borings EPA-1-83 to EPA-5-83) were drilled up slope or west of WES-6-20-81 at the proposed flashing site (PFS) for A-contaminated ordnance (see Figure 2). Borings were drilled on the outside perimeter of the PFS (approximately 200 x 200 ft) which was selected by WES and NWSC environmental and demolition personnel. Three inch undisturbed soil samples were taken in each boring at 5 ft intervals and at stratum changes until rock was encountered. Undisturbed soil samples were taken either with a Hvorslev sampler (fixed piston sampler) or a Pitcher sampler. When sampling with the Pitcher sampler, air was used to remove cuttings. Boring advance between soil samples was with a 5 inch open type or folding auger.

7. In boring EPA-1-83, continuous sampling was conducted in rock with a 4 in. inner diameter x 5-1/2 in. outer diameter x 7 ft long core barrel for detailed rock classification. Rock drilling in borings EPA-2-83 to EPA-5-83 was with a 5-5/8 tricone roller bit. Rock classification in roller bit borings was made from drill cuttings which identified rock type, grain size, and hardness (drilling resistance of the rock). Air was used to remove cuttings during rock drilling. Borings were terminated 10 ft below the water table and were left open for a period of several weeks to monitor the water table elevation before grouting. For a more detailed presentation of the particular sampling and drilling methods employed at the ORR, the reader is referred to the earlier WES report on the ORR.

PART III: GEOLOGY AND GROUND WATER

Geology

8. The geology of the ORR was defined from fifteen borings, field observations, and physical soil test data. The geology of the ORR is composed of residual soils formed by weathering of the underlying parent rock, unconsolidated alluvium, and Pennsylvanian and Mississippian age sedimentary rock. Soil thickness at the ORR ranges from less than 2 ft to a maximum of about 30 ft. The sedimentary rock underlying the two flashing sites is Mississippian age sedimentary rock from the Hardinsburg Formation of the Stephensport Group. West and up slope from the flashing sites (towards DEMO), the Hardinsburg Formation is overlain by the Mississippian age Glen Dean Limestone and by Pennsylvanian age sedimentary rock from the Mansfield Formation of the Raccoon Creek Group (see Table 1). The Glen Dean Limestone and Mansfield Formation are absent under the ORR flashing sites.

9. The geology of the ORR is shown in cross sections A-A', B-B', and C-C' in Figures 4, 5, and 6, respectively (see Figure 2 for locations). Overlying the rock in cross section A-A' is a stiff, brown clay which is approximately 4 ft thick below the impermeable liner in pits 2 and 3. Underlying the clay is a uniform, moderately friable, very fine-grained, massive quartz sandstone that ranges from tan to orange brown in color. South of the temporary flashing pits, between borings WES-6-18-81 and WES-6-19-81 and extending south of boring WES-6-14-81, is a former channel of the ancestral Turkey Creek which is believed to be late Pleistocene or early Holocene in age*. The former stream channel is filled with gravelly clay, sandy clay, clay, and clayey sand for a thickness of at least 20 ft as defined by boring WES-6-19-81.

10. The geology of the PFS and TFS is shown in cross section B-B'. Soils underlying the PFS are predominantly stiff, alluvial clay with minor amounts of sand and sandstone gravel or cobbles which range in thickness from 21 ft (EPA-5-83) to 30 ft (EPA-2-83). Sandstone underlies the ancestral Turkey Creek Channel at the PFS at approximately the 501 ft MSL elevation. Up slope from the PFS, boring WES-6-21-83 encountered a grey, fine-grained, hard limestone at approximately the 537 ft MSL elevation which is approximately 4.5 ft thick.

---

* Pleistocene is time period from 2-3 million years ago to 8000 years ago and Holocene is from 8000 years ago to present (Bates and Jackson 1980).

COLUMNAR SECTION SHOWING BEDROCK UNITS

TIME UNIT: PERIOD	TIME UNIT: EPOCH	MAP UNIT	THICKNESS (FEET)	LITHOLOGY	ROCK UNIT * SIGNIFICANT MEMBER	ROCK UNIT * FORMATION		ROCK UNIT * GROUP
PENNSYLVANIAN	CONEMAUGHIAN		175+		MEROM Ss.	MATTOON Fm.	MATTOON Fm. (FORMATIONS MAPPED IN ILLINOIS)	MCLEANSBORO
			150 to 200		LIVINGSTON Ls.	BOND Fm.	BOND Fm.	
					SHOAL CREEK Ls.			
			200 to 350			*PATOKA Fm.*	MODESTO Fm.	
					WEST FRANKLIN Ls.	SHELBURN Fm.		
	ALLEGHENIAN		300 to 400		DANVILLE COAL (VII)	DUGGER Fm.		CARBONDALE
					SPRINGFIELD COAL (V)	PETERSBURG Fm.		
					SURVANT COAL (IV)	LINTON Fm.		
	POTTSVILLIAN		250 to 800		SEELYVILLE COAL (III)	STAUNTON Fm.		*RACCOON CREEK*
					BUFFALOVILLE COAL, LOWER BLOCK COAL	BRAZIL Fm.		
						MANSFIELD Fm.		
MISSISSIPPIAN	CHESTERIAN	M, M_s	250 to 300					
			120 to 180					STEPHENSPORT
			70 to 150					WEST BADEN
	VALMEYERAN		250 to 650		LEVIAS, ROSICLARE, FREDONIA	STE. GENEVIEVE Ls.		BLUE RIVER
						ST. LOUIS Ls.		
			100 to 160			SALEM Ls.		SANDERS
						HARRODSBURG Ls.		
			600+			MULDRAUGH Fm.		BORDEN
						CARWOOD AND LOCUST POINT Fms.		
						NEW PROVIDENCE Sh.		

* ROCK-UNIT NAMES FOR PENNSYLVANIAN ROCKS IN INDIANA FOLLOW THE USAGE PROPOSED BY WHER (IN PREPARATION), STRATIGRAPHY OF MIDDLE AND UPPER PENNSYLVANIAN ROCKS IN SOUTHWESTERN INDIANA. NEW NAMES ARE SHOWN IN ITALICS AND ARE TENTATIVE UNTIL FORMAL PRESENTATION.

Table 1. Stratigraphy of Naval Weapons Support Center

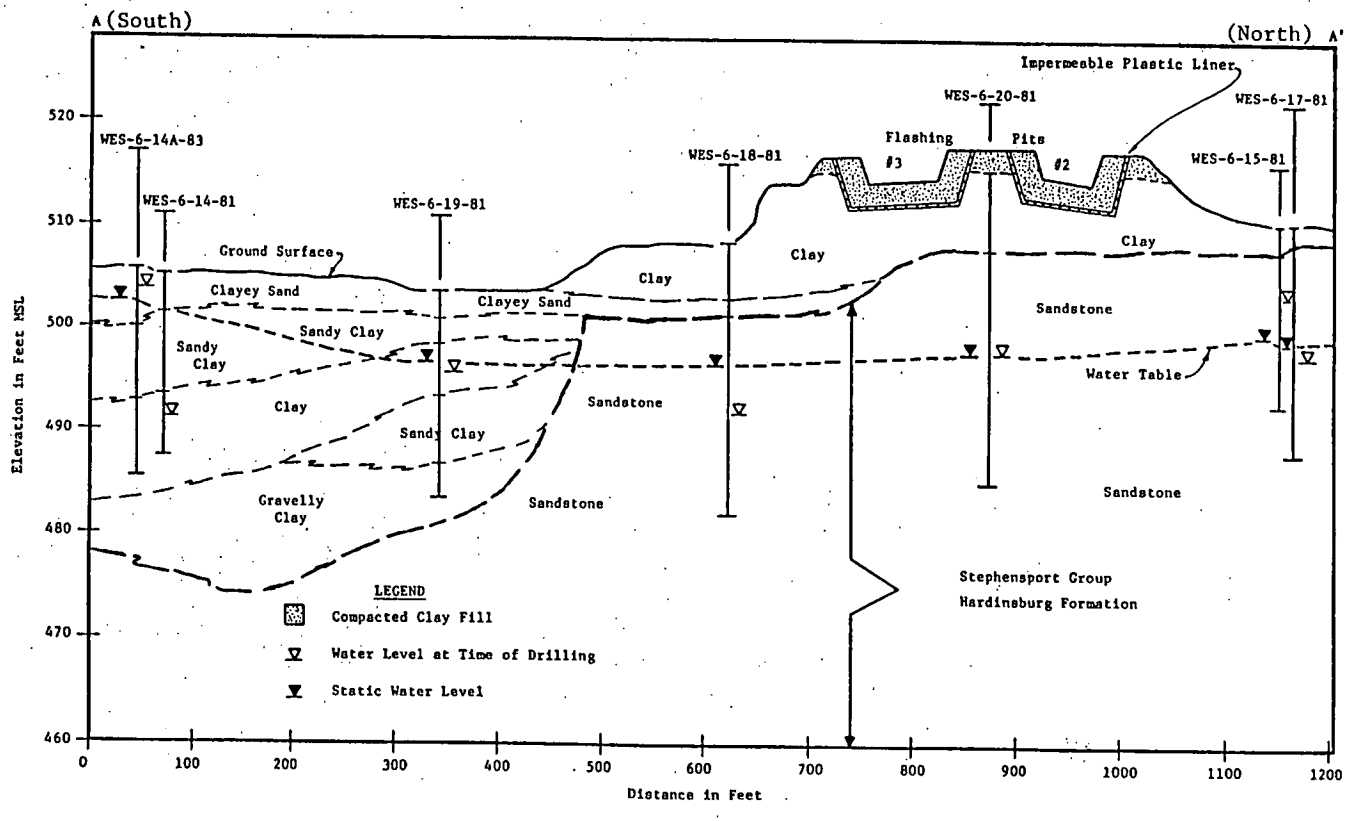


Figure 4. Old Rifle Range Geological Cross Section A-A'

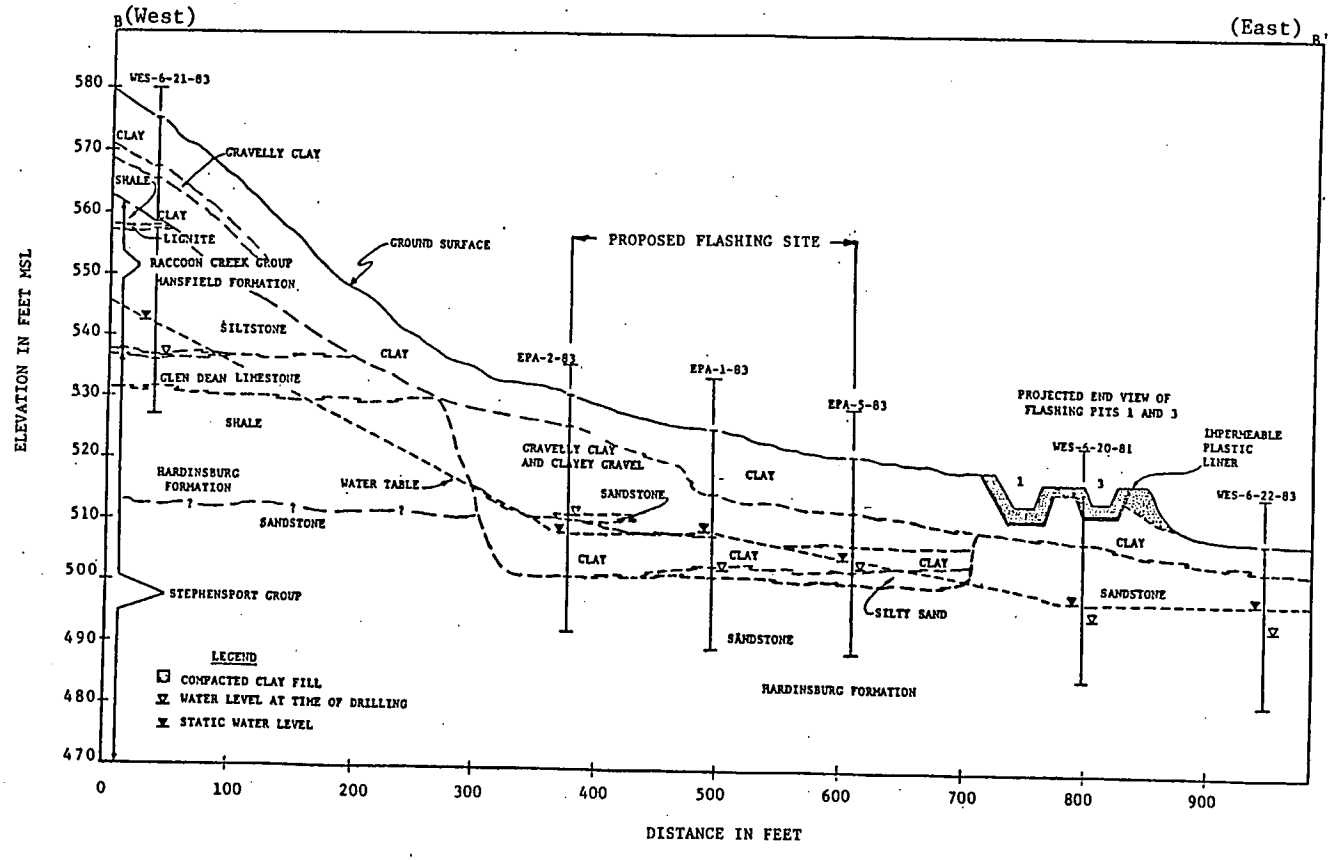


Figure 5. Old Rifle Range Geological Cross Section B-B'

IN5 170 023 498

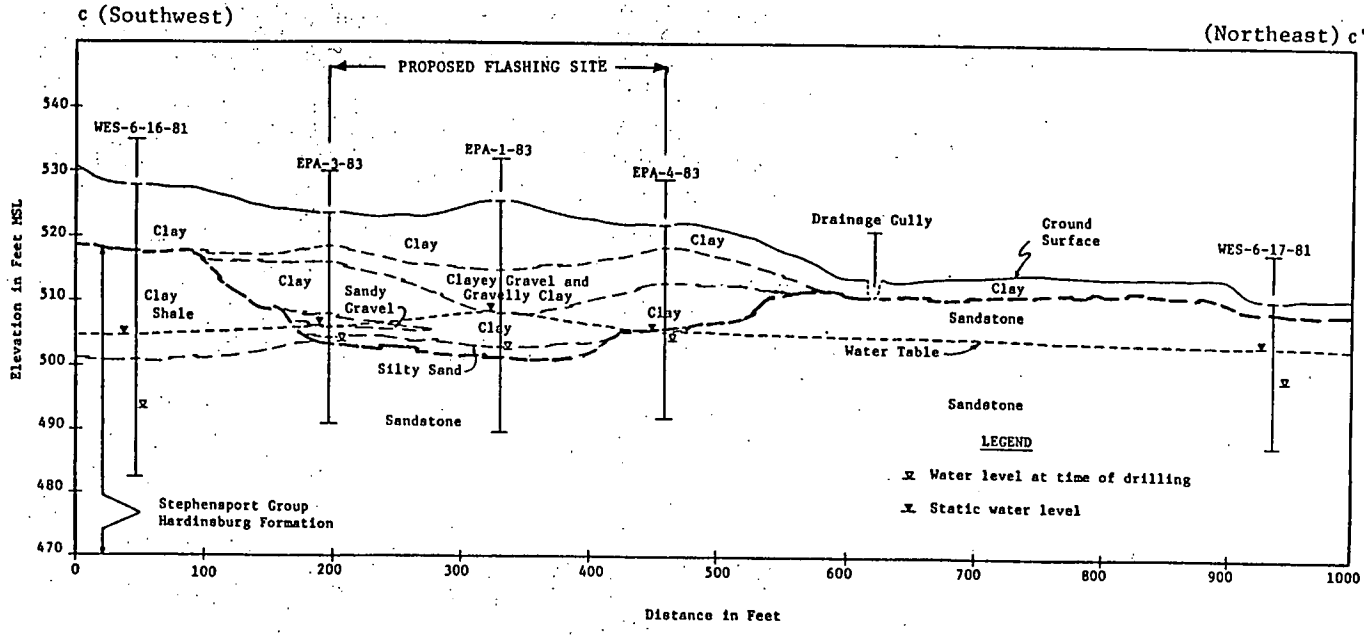


Figure 6. Old Rifle Range Geological Cross Section C-C'

This limestone is the Glen Dean Limestone, the upper most formation of the Stephensport Group. Overlying the Glen Dean Limestone is siltstone, lignite, and shale of the Mansfield formation. Underlying the Glen Dean Limestone is a dark grey, soft shale from the Hardinsburg Formation.

11. In cross section C-C', a predominantly stiff, alluvial clay underlies the PFS and ranges in thickness from 17 ft (EPA-4-83) to 25 ft (EPA-1-83). EPA borings also identify the ancestral Turkey Creek Channel and encountered the Hardinsburg sandstone at approximately the 502 to 508 ft MSL elevation. To the northeast at boring WES-6-17-81, sandstone lies within a few feet of ground surface at approximately the 509 ft MSL elevation. Drilling logs for all ORR borings are presented in Appendix A. Appendix B graphically summarizes the lithology from the field logs.

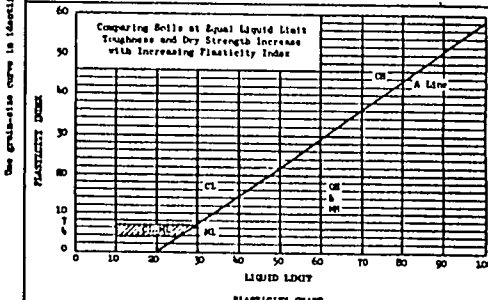
Laboratory Soil Test Results

12. Laboratory classification of NWSC soil samples was according to the Unified Soils Classification System (USCS) as shown by Figure 7. Soil at the ORR is predominantly clay (CL). In fact, from a total of 37 undisturbed and disturbed samples (1981 and 1983 studies), 89 percent were classified as a clay (CL) and the remaining 11 percent were either a clay (CH) or a clayey sand (SC). Laboratory classification of the clay underlying the TFS in flashing pits 1 and 2 was a CL at both sites. Average soil density and water content are 109.5 pounds per cubic foot and 17.7 percent. Average soil permeability from 4 samples (includes 3 samples from PFS was 3.61×10^{-6} centimeters per second (cm/sec) with a range from 3.70×10^{-7} to 9.21×10^{-6} cm/sec. Soil Cation Exchange Capacity (CEC) ranges from 3.71 to 11.20 milliequivalents per 100 grams of material. Soil test results are presented in Appendix C.

Ground Water

13. Four monitoring wells were installed for this study. Monitoring well WES-6-14A-83 was installed adjacent to damaged monitoring well WES-6-14-83 which was later removed and grouted. Monitoring well WES-6-21-83 was installed up gradient from the PFS to replace the existing ground-water monitoring system's up grdient well, WES-6-16-81, which will become a down gradient well after construction of the PFS. Monitoring wells WES-6-22-83 and WES-6-23-83 were installed to supplement the existing monitoring network. Well completion diagrams for all ORR monitoring wells are presented in Appendix D.

Major Divisions (1)	(2)		Group Symbols (3)	Typical Names (4)	Field Identification Procedures (Excluding particles larger than 3 in. and basing fractions on estimated weights) (5)			Information Required for Describing Soils (6)	Laboratory Classification Criteria (7)
Coarse-grained Soils: More than half of material is larger than No. 200 sieve size.	Gravels: More than half of coarse fraction is larger than No. 4 sieve size.	Clean Gravels (Little or no fines)	GW	Well-graded gravels, gravel-sand mixtures, little or no fines.	Wide range in grain sizes and substantial amounts of all intermediate particle sizes.			For undisturbed soils add information on stratification, degree of compactness, cementation, moisture conditions, and drainage characteristics.	Determine percentages of gravel and sand from grain-size curve. Depending on percentage of fines (fraction smaller than No. 200 sieve size) coarse-grained soils are classified as follows: Less than 5% = GW, GP, SW, SP. More than 12% = GM, GC, SM, SC. 5% to 12% = Borderline cases requiring use of dual symbols.
			GP	Poorly graded gravels or gravel-sand mixtures, little or no fines.	Predominantly one size or a range of sizes with some intermediate sizes missing.				$C_u = \frac{D_{60}}{D_{10}}$ Greater than 4; $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ Between 1 and 3; Not meeting all gradation requirements for GW
		Gravels with Fines (Appreciable amount of fines)	GM	Silty gravels, gravel-sand-silt mixture.	Nonplastic fines or fines with low plasticity (for identification procedures see ML below).			Give typical name; indicate approximate percentages of sand and gravel; maximum size; angularity, surface condition, and hardness of the coarse grains; local or geologic name and other pertinent descriptive information; and symbol in parentheses.	Atterberg limits below "A" line or PI less than 4
			GC	Clayey gravels, gravel-sand-clay mixtures.	Plastic fines (for identification procedures see CL below).				Atterberg limits above "A" line with PI greater than 7
	Sands: More than half of coarse fraction is smaller than No. 4 sieve size. (For visual classification, the 1/4-in. size may be used as equivalent to the No. 4 sieve size)	Clean Sands (Little or no fines)	SW	Well-graded sands, gravelly sands, little or no fines.	Wide range in grain size and substantial amounts of all intermediate particle sizes.			Example: Silty sand, gravelly; about 20% hard, angular gravel particles 1/2-in. maximum size; rounded and subangular sand grains, coarse to fine; about 15% nonplastic fines with low dry strength; well compacted and moist in place; alluvial sand; (SM).	Above "A" line with PI between 4 and 7 are borderline cases requiring use of dual symbols.
			SP	Poorly graded sands or gravelly sands, little or no fines.	Predominantly one size or a range of sizes with some intermediate sizes missing.				$C_u = \frac{D_{60}}{D_{10}}$ Greater than 6; $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ Between 1 and 3; Not meeting all gradation requirements for SW
		Sands with Fines (Appreciable amount of fines)	SM	Silty sands, sand-silt mixtures.	Nonplastic fines or fines with low plasticity (for identification procedures see ML below).				Atterberg limits below "A" line or PI less than 4
			SC	Clayey sands, sand-clay mixtures.	Plastic fines (for identification procedures see CL below).				Atterberg limits above "A" line with PI greater than 7
					Identification Procedures on Fraction Smaller than No. 40 Sieve Size				
					Dry Strength (Crushing characteristics)	Dilatancy (Reaction to shaking)	Toughness (Consistency near PL)		
Fine-grained Soils: More than half of material is smaller than No. 200 sieve size. The No. 200 sieve size is about the smallest particle visible to the naked eye.	Silts and Clays: Liquid limit is less than 50		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity.	None to slight	Quick to slow	None	For undisturbed soils add information on structure, stratification, consistency in undisturbed and remolded states, moisture and drainage conditions.	The grain-size curve is identifying the fractions as given under field identification.
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.	Medium to high	None to very slow	Medium		
			OL	Organic silts and organic silty clays of low plasticity.	Slight to medium	Slow	Slight		
	Silts and Clays: Liquid limit is greater than 50		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.	Slight to medium	Slow to none	Slight to medium	Give typical name; indicate degree and character of plasticity; amount and maximum size of coarse grains; color in wet condition; odor, if any; local or geologic name and other pertinent descriptive information; and symbol in parentheses.	
			CH	Inorganic clays of high plasticity, fat clays.	High to very high	None	High		
			OH	Organic clays of medium to high plasticity, organic silts.	Medium to high	None to very slow	Slight to medium	Example: Clayey silt, brown; slightly plastic; small percentage of fine sand; numerous vertical root holes; firm and dry in place; loess; (ML).	
Highly Organic Soils			Pt	Peat and other highly organic soils.	Readily identified by color, odor, spongy feel and frequently by fibrous texture.				



PLASTICITY CHART

For laboratory classification of fine-grained soils

(1) Boundary classifications: Soils possessing characteristics of two groups are designated by combinations of group symbols. For example GW-GC, well-graded gravel-sand mixture with clay binder. (2) All sieve sizes on this chart are U. S. standard.

FIELD IDENTIFICATION PROCEDURES FOR FINE-GRAINED SOILS OR FRACTIONS

These procedures are to be performed on the minus No. 40 sieve size particles, approximately 1/64 in. For field classification purposes, screening is not intended, simply remove by hand the coarse particles that interfere with the tests.

Dilatancy (reaction to shaking)

After removing particles larger than No. 40 sieve size, prepare a pat of moist soil with a volume of about one-half cubic inch. Add enough water if necessary to make the soil soft but not sticky.

Place the pat in the open palm of one hand and shake horizontally, striking vigorously against the other hand several times. A positive reaction consists of the appearance of water on the surface of the pat which changes to a livery consistency and becomes glossy. When the sample is squeezed between the fingers, the water and gloss disappear from the surface, the pat stiffens, and finally it cracks or crumbles. The rapidity of appearance of water during shaking and of its disappearance during squeezing assist in identifying the character of the fines in a soil.

Very fine clean sands give the quickest and most distinct reaction whereas a plastic clay has no reaction. Inorganic silts, such as a typical rock flour, show a moderately quick reaction.

Dry Strength (crushing characteristics)

After removing particles larger than No. 40 sieve size, mold a pat of soil to the consistency of putty, adding water if necessary. Allow the pat to dry completely by oven, sun, or air-drying, and then test its strength by breaking and crumbling between the fingers. This strength is a measure of the character and quantity of the colloidal fraction contained in the soil. The dry strength increases with increasing plasticity.

High dry strength is characteristic for clays of the CH group. A typical inorganic silt possesses only very slight dry strength. Silty fine sands and silts have about the same slight dry strength, but can be distinguished by the feel when pudering the dried specimen. Fine sand feels gritty whereas a typical silt has the smooth feel of flour.

Toughness (consistency near plastic limit)

After particles larger than the No. 40 sieve size are removed, a specimen of soil about one-half inch cube in size, is molded to the consistency of putty. If too dry, water must be added and if sticky, the specimen should be spread out in a thin layer and allowed to lose some moisture by evaporation. Then the specimen is rolled out by hand on a smooth surface or between the palms into a thread about one-eighth inch in diameter. The thread is then folded and rerolled repeatedly. During this manipulation the moisture content is gradually reduced and the specimen stiffens, finally loses its plasticity, and crumbles when the plastic limit is reached.

After the thread crumbles, the pieces should be lumped together and a slight kneading action continued until the lump crumbles.

The tougher the thread near the plastic limit and the stiffer the lump when it finally crumbles, the more potent is the colloidal clay fraction in the soil. Weakness of the thread at the plastic limit and quick loss of coherence of the lump below the plastic limit indicate either inorganic clay of low plasticity, or materials such as kaolin-type clays and organic clays which occur below the A-line.

Highly organic clays have a very weak and spongy feel at the plastic limit.

Figure 7. Unified Soils Classification System

14. Two ground-water contour maps are shown for the ORR; Figure 8 presents a ground-water contour map from EPA borings and previously existing ORR wells for 20 June 1983 and Figure 9 presents a ground-water contour map from previously existing and recently installed monitoring wells for 6 October 1983. EPA borings were grouted prior to drilling monitoring wells WES-6-21-83 through WES-6-23-83 and are consequently not shown in Figure 9. Regional ground-water flow at the ORR is to the east with a component of flow from the southwest and west as shown by Figures 8 and 9. In Figure 8 at the PFS, a third component is indicated by ground-water measurements from EPA borings with flow towards the northeast or towards monitoring wells WES-6-15-81 and WES-6-17-81. Water table elevations for 20 June 1983 range from approximately 508 ft MSL (EPA-2-83) to 500 ft MSL (WES-6-18-81) for a vertical difference of slightly less than 8 ft over a horizontal distance of approximately 500 ft. In Figure 9, the regional ground-water pattern is similar, but the overall water table elevation is lower. Water table elevations on 6 October 1983 are approximately 4 to 5 ft less than for late spring or early summer in Figure 8, where snow melt and higher precipitation rates resulted in a higher water table. Water table elevations for 6 October 1983 range from approximately 499 ft MSL (WES-6-16-81) to 496 ft MSL (WES-6-18-81) for a vertical difference of less than 3 ft over a horizontal distance of approximately 350 ft. The new up gradient monitoring well, WES-6-21-83 which is located approximately 400 ft up slope of WES-6-16-81, has a water table elevation of approximately 542 ft.

15. The water table at the TFS in pit 1 is approximately 9 ft below the impermeable liner during the spring and approximately 13.5 ft below the impermeable liner during the fall. Ground water is flowing in fractures in the sandstone rock beneath the TFS. At the PFS, the water table was approximately 17 ft below ground surface at boring EPA-1-83 during the spring. During the fall, the water table is estimated to decline an additional 4-5 ft at this site. Ground water is flowing through the soil at the PFS. Ground-water measurements from ORR borings and monitoring wells are presented in Appendix E.

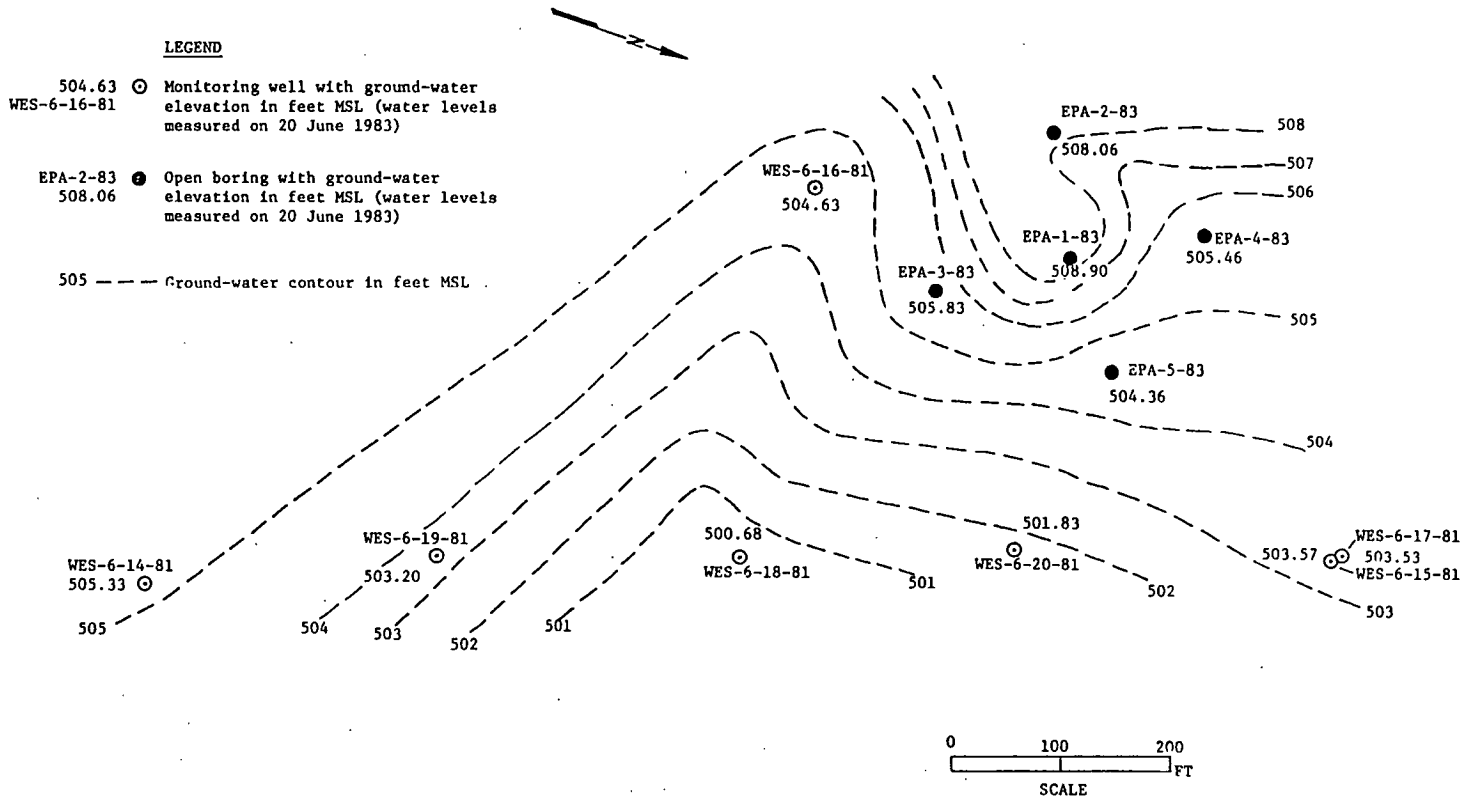


Figure 8. Old Rifle Range Ground-Water Contour Map - 20 June 1983

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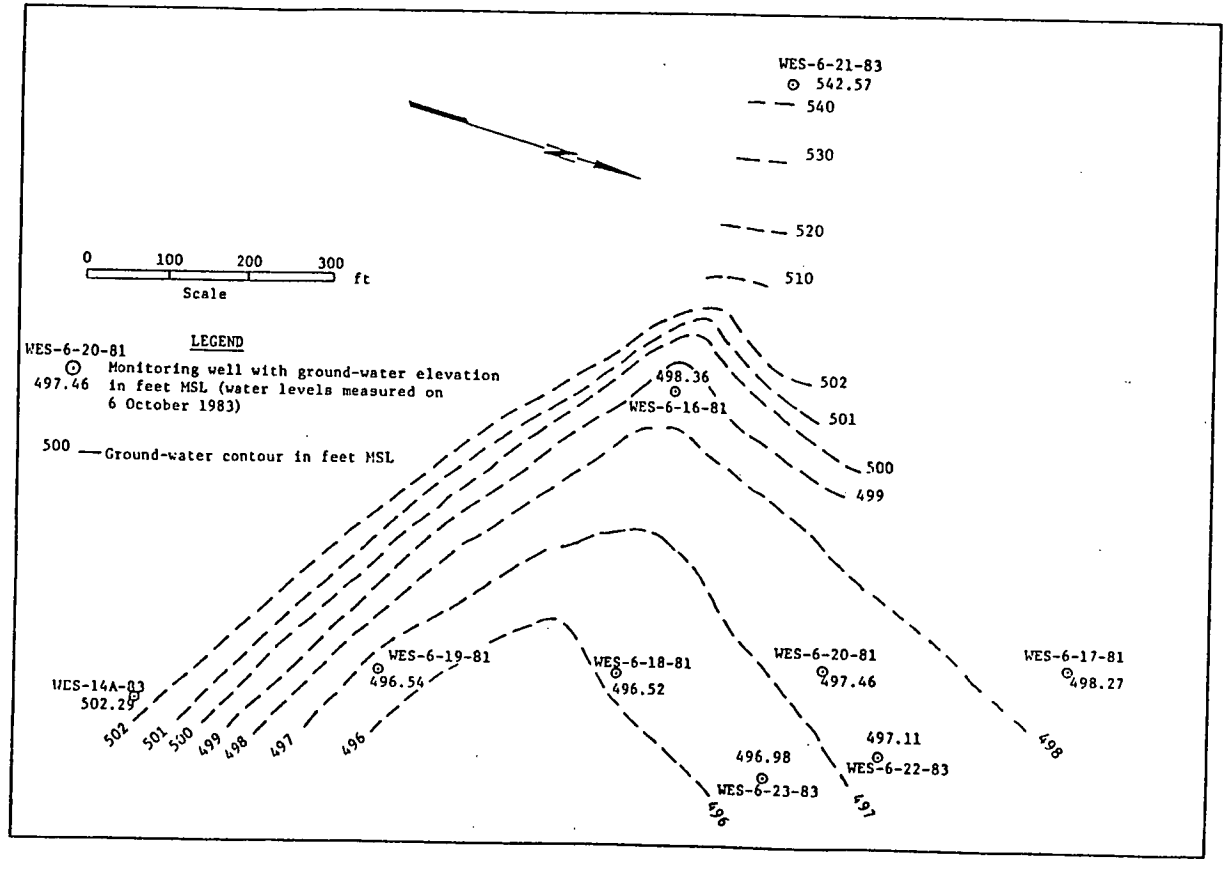

Figure 9. Old Rifle Range Ground-Water Contour Map - 6 October 1983

PART IV: CONCLUSIONS AND RECOMMENDATIONS

Conclusions

16. The conclusions from this study are:

(a) The most favorable siting area for a hazardous waste flashing facility at the ORR is adjacent to and west of monitoring well WES-6-20-81 because soil thickness and depth to the water table are favorable.

(b) Low permeability soils underlying the flashing sites should minimize vertical migration of contaminants to the ground water because about a 3.5 ft thick low permeability soil occurs between rock and the impermeable liner in each flashing pit at the TFS and a 9 to 14 ft (depending on seasonal water table fluctuation) low permeability soil occurs between the estimated position of the impermeable liner and the water table at the PFS.

(c) Ground-water flow parallels the surface drainage and is to the east in rock fractures at the TFS and in soil at the PFS at an average depth below ground surface of about 13 ft. Ground water will fluctuate about 5 ft depending on seasonal precipitation.

(d) Ground-water monitoring wells are located down gradient from both disposal facilities and should enable the NWSC to detect ground-water contamination that may be associated with the disposal operation.

Recommendations

17. In addition to the operational and environmental precautions to minimize the introduction of contaminants at the ORR as defined in the "Environmental Assessment of Explosive-Contaminated Metal Components Flashing Facility at Crane Army Ammunition Activity" (i.e., leachate collection system, covers for flashing pits, vegetation on surface slopes, etc.), the following recommendations are made:

(a) Upon conversion of the TFS to a permanent facility (i.e., replacement of the plastic impermeable liner with a rubber membrane liner in each pit), the effects of thermal incineration on the plastic liners should be determined and appropriate action taken as required.

(b) During construction of the PFS, surveyed elevations from each flashing pit base should be obtained to define exact position of impermeable liner with reference to the water table.

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BORING LOG
FIELD DATA

Project NWSC Ground - Water Study, Site Crane, IN Date 16 July 1983
Location Old Rifle Range Job No. 441-G150.13GR21/22
Drill Rig Failing Inspector J. Dunbar Operator C. Drake Surface El 575.27 Boring No. WES-6-21-83

SAMPLE NUMBER	DATE TAKEN 1983	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER			CLASSIFICATION AND REMARKS
	16 July	0.0	7.6	0.0	18.1			5"Folding Auger			Clay(CL): brown, soft to stiff, dry, sandy.
		7.6	9.6								Gravelly clay: reddish brown, red sandy, gravelly (med. hard ferruginous gravel) stiff to very stiff, dry, massive.
		9.6	10.6								Clay(CH): brown, very stiff, dry, silty, very thinly bedded.
		10.6	11.6								Clay(CH): grey, very stiff, dry, silty, very thinly bedded.
		11.6	16.6								Clay(CH): brown, soft to stiff, silty, slightly damp, very thinly bedded.

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Sheet 1 of 2 Sheets

IN5 170 023 498

IN5 170 023 498

BORING LOG
FIELD DATA

Project _____ Site _____ Date _____
Location _____ Job No. _____
Drill Rig _____ Inspector _____ Operator _____ Surface El _____ Boring No. WES-6-21-83

SAMPLE NUMBER	DATE TAKEN	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER			CLASSIFICATION AND REMARKS
		16.6	17.0								Shale: grey, soft to stiff, slightly damp.
		17.0	17.6								Lignite: black, earthy, sandy, soft
	18 July	17.6	38.5	18.1	48.0			6" Rock Bit			Siltstone: brownish grey, light to dark grey, soft, thinly bedded.
		38.5	39.0								Shale: grey, soft
		39.0	43.5								Limestone: grey, very fine-grained hard-water at 39 ft.
		43.5	48.0								Shale(?): no cuttings, soft
	18 July										Installed well-rinsed boring several times to remove mud.

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Sheet 2 of 2 Sheets

BORING LOG
FIELD DATA

Project NWSC Ground - Water Study Site Crane, IN Date 25 August 1983
Location Old Rifle Range Job No. 441-C150.13GR21/22
Drill Rig Failing Inspector J. Dunbar Operator C. Drake Surface El 507.64 Boring No. WES-6-22-83

SAMPLE NUMBER	DATE TAKEN 1983	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER			CLASSIFICATION AND REMARKS
	25Aug	0.0	4.6	0.0	4.6			5"Folding Auger			Clayey sand (SM) and sandstone gravel: brown, soft to stiff, very fine-grained sand (25%), sandstone gravel approximately 25%.
		4.6	26.0	4.6	26.0			5-5/8" Rock Bit			Sandstone: brown, reddish brown, uniform, very fine-grained, weathered soft, water at 14.6 ft
		26.0	--								Shale(?): possible change - no cuttings.
	25Aug										Rinsed boring with water to clear mud. Installed monitoring well.

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Sheet 1 of 1 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project NWSC Ground - Water Study Site Crane, IN Date 30 September 1983
Location Old Rifle Range Job No. 441-G150.13GR21/22
Drill Rig Failing Inspector J. Dunbar Operator B. Harried Surface El 506.41 Boring No. WES-6-23-83

SAMPLE NUMBER	DATE TAKEN 1983	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER			CLASSIFICATION AND REMARKS
	30Sept	0.0	4.3	0.0	27.0			5-5/8"RockBit			Sandy clay(CL): brown, soft to stiff, dry, sandy-very fine grained.
		4.3	27.0								Sandstone: light brown, brown and reddish brown, very fine-grained, uniform, quartz sandstone, soft and weathered to 24 ft water at 16 ft.
	30Sept										Installed well

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Sheet 1 of 1 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project NWSC Disposal Site Characterization Site Crane, IN Date 10 June 1983
Location Old Rifle Range Job No. 441-G150.13GR21/22
Drill Rig Failing Inspector J. Dunbar Operator C. Drake Surface El 525.52 Boring No. EPA-1-83

SAMPLE NUMBER	DATE TAKEN 1983	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	HYD PRESS	CONT	CLASSIFICATION AND REMARKS
1	10 June	0.0		0.0	0.5	0.0	2.4	3"Fixed Pist	100	ST	Clay(CL): brown, soft, damp
1A				0.5	1.0	2.4	2.5		150	Jar	Slightly sandy (very fine-grained),
				1.0	1.5				200		soft
				1.5	2.0				400		
				2.0	2.5				400		Sample length: 2.5 ft
				0.0	5.0			5"Folding Auger			Cleanout
2	10 June			5.0	5.5	5.0	7.3	3"Fixed Pist	150	ST	Clay(CL): mottled brown and grey,
2A				5.5	6.0	7.3	7.4		200	Jar	damp, soft, stiff
				6.0	6.5				260		
				6.5	7.0				300		
				7.0	7.4				330		Sample length: 2.4 ft
				5.0	10.0			5"Folding Auger			Cleanout
3	10 June		10.5	10.0	10.5	10.0	10.5	3"Fixed Pist	750	Jar	Clay(CL): grey and brown, sandy

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Sheet 1 of 6 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project _____ Site _____ Date _____
Location _____ Job No. _____
Drill Rig _____ Inspector _____ Operator _____ Surface El _____ Boring No. EPA-1-83

SAMPLE NUMBER	DATE TAKEN	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER			CLASSIFICATION AND REMARKS
	11 June	10.5		10.5	13.8	10.5	13.8	Core 4x5-1/2" Barrel	300=	Run1	Sandstone and clay (CL): brown, tan and grey, very fine-grained, predominantly quartz sandstone interbedded with brown sandy clay. Recovered approximately 2 ft with sandstone fragments ranging from fine to coarse gravel. Recovered two core pieces approx. 0.4 ft long. Sandstone is weathered, gravel fragments very friable and larger fragments moderately friable, very fine-grained. Drill Time 49 min:

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Sheet 2 of 6 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project _____ Site _____ Date _____
Location _____ Job No _____
Drill Rig _____ Inspector _____ Operator _____ Surface El _____ Boring No. EPA-1-83

SAMPLE NUMBER	DATE TAKEN	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER			CLASSIFICATION AND REMARKS
	11 June			13.8	19.0	13.8	19.0	Core 4x51/2"Barre	100-300	Run2	Sandstone and clay(CL): 60% weathered sandstone interbedded with 40% sandy clay(CL); sandstone is brown, and reddish brown, very fine-grained, predominantly quartz sandstone, clay is brown and reddish brown. Sandstone fragments range from fine to coarse gravel. Recovered: approx. 2.0ft Loss: " 3.0ft Drill Time: 53 min.
	11 June		24.0	19.0	24.0	19.0	24.0	Core 4x51/2"Barre	100-300	Run3	Sandstone and clay(CL): No recovery except for several gravel sized sandstone fragments. Drill Time: 8 min. Water at 24 ft.

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Sheet 3 of 6 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project _____ Site _____ Date _____
Location _____ Job No _____
Drill Rig _____ Inspector _____ Operator _____ Surface El _____ Boring No. EPA-1-83

SAMPLE NUMBER	DATE TAKEN	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER			CLASSIFICATION AND REMARKS
	11 June	24.0		24.0	25.0	24.0	25.0	3" Pitcher Sampler	750		Sandstone: tan, brown, and reddish brown, very fine-grained uniform, quartz, very friable to moderately friable.
				—	25.0			5 5/8" Rock Bit			Cleanout
	11 June			25.0	29.8			4x5 1/2" Core Barrel		Run4	See Page 5
	11 June			29.8	32.3			" "		Run5	
	11 June		35.9	32.3	35.9			" "		Run6	
											Drilled last three runs with water. Left hole open to obtain water level measurements.

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Sheet 4 of 6 Sheets

Hole No. EPA-1-83

DRILLING LOG	DIVISION U.S. Navy	INSTALLATION NWSC, Crane, IN	SHEET 5 OF 6 SHEETS

1. PROJECT: Disposal Site Characterization	10. SIZE AND TYPE OF BIT: 4x5½" Diamond
2. LOCATION (Coordinates or Station): Old Rifle Range	11. DATUM FOR ELEVATION SHOWN (TBM or MSL): MSL
3. DRILLING AGENCY: CERES	12. MANUFACTURER'S DESIGNATION OF DRILL: Failing 1500
4. HOLE NO. (As shown on drawing title and file number): EPA-1-83	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED 0; UNDISTURBED Three
5. NAME OF DRILLER: C. Drake	14. TOTAL NUMBER CORE BOXES: --
6. DIRECTION OF HOLE: [X] VERTICAL [ ] INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE: STARTED 10 June 1983; COMPLETED 11 June 1983
7. THICKNESS OF OVERBURDEN: 24.0	17. ELEVATION TOP OF HOLE: 525.62
8. DEPTH DRILLED INTO ROCK: 11.9	18. TOTAL CORE RECOVERY FOR BORING: 42.9%
9. TOTAL DEPTH OF HOLE: 35.9	19. SIGNATURE OF INSPECTOR: Joseph B. Kruk

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
500.62	25		Sandstone: tan, reddish brown, oxidized, soft, very fine-grained, uniform, predominantly quartz, weathered, bedding is horizontal and very thinly bedded.	100%	--	AL -- Run 4 Began 2:44 Rec 4.8 End 3:00 Loss -- Time 16 min Gain -- Drl time 16 min Hyd press 100-300 PSI Water press -- RPM 75-100+ Drl Action Smooth Water ret Brown Remarks
499.62	26					
498.62	27					
497.62	28					
496.62	29		Run 4 RQD=72.9%			
495.62	30		Sandstone: see above and see remarks.	100%		AL -- Run 5 Began 3:27 Rec 2.5' End 3:37 Loss -- Time 10 min Gain -- Drl time 10 min Hyd press 100-200 PSI Water press -- RPM 75-100+ Drl Action Smooth Water ret Brown Blocked off fractured run.
494.64	31					
493.62	32		Run 5 RQD=0.0%			
492.62	33		Sandstone: see above	100%		AL -- Run 6 Began 4:03 Rec 3.6 End 4:18 Loss -- Time 15 min Gain -- Drl time 15 min Hyd press 200 PSI Water press -- RPM 75-100+ Drl Action Smooth Water ret Brown Remarks
491.62	34					
490.62	35					

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Hole No. EPA-1-83

DRILLING LOG	DIVISION	INSTALLATION	SHEET 6 OF 6 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number)	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
490.62	35		Sandstone: see above	100%		
			Run 6 RQD=100%			
489.62	36					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT)

PROJECT HOLE NO.

Appendix B Copy of Confirmation Work Report of April, 1984 for Demolition Area/Old Rifle Range

BORING LOG
FIELD DATA

Project NWSC Disposal Site Characterization Site Crane, IN Date 13 June 1983
Location Old Rifle Range Job No. 441-C150.13GR21/22
Drill Rig Failing Inspector J. Dunbar Operator C. Drake Surface El 530.91 Boring No. EPA-2-83

SAMPLE NUMBER	DATE TAKEN 1983	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd Press	Cont	CLASSIFICATION AND REMARKS
1	13June	0.0		0.0	0.5	0.0	2.10	3"Shelby tube	80	ST	Clay(CL): brown with streaks
1A				0.5	1.0	2.10	2.25		160	Jar	of grey, soft, damp, organic matter
				1.0	1.5				200		(roots).
				1.5	2.0				260		Sample length: 2.25 ft
			5.0	2.0	2.5				340		
				0.0	5.0			5"Folding Auger			Cleanout
2	13June	5.0		5.0	5.5	5.0	6.35	3" Fixed piston	160	ST	Gravelly clay(CL): reddish brown
2A				5.5	6.0	6.35	6.50		260	Jar	clay with decomposed sandstone rock,
				6.0	6.5				400		fine to coarse gravel sized rock
											fragments, clay is soft and slightly
											damp, rock, approx 30%
											Sample length: 1.50 ft
			8.5	5.0	10.0			5"Folding Auger			Cleanout

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 1 of 3 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project _____ Site _____ Date _____
Location _____ Job No _____
Drill Rig _____ Inspector _____ Operator _____ Surface El _____ Boring No. EPA-2-83

SAMPLE NUMBER	DATE TAKEN	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd Press	Cont	CLASSIFICATION AND REMARKS
3		8.5		10.0	12.5	10.0	11.35	Pitcher 3" Sampler	300	ST	Clayey Gravel(GC): reddish brown,
3A						11.35	11.50			Jar	sandstone from fine to coarse gravel,
											rock approximately 65%, clay approx-
											imately 35%. Sandstone is very
											fine-grained, weathered.
											Sample length 1.5 ft
				10.0	15.0			5 5/8 RockBit			Cleanout
4			19.5	15.0	16.1	15.0	15.95	Pitcher 3" Sampler	300	ST	Clayey Gravel(GC): same as above.
4A						15.95	16.1			Jar	Sample length: 1.1 ft
		19.5	20.2	15.0	38.5			5 5/8 RockBit			Sandstone: reddish brown, soft
		20.2	25.5								Clay: brown, damp water at 20.2 ft
		25.5	27.8								Clay: grey, soft
		27.8	28.5								Clay: brown, soft

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 2 of 3 Sheets

BORING LOG
FIELD DATA

Project _____ Site _____ Date _____
Location _____ Job No. _____
Drill Rig _____ Inspector _____ Operator _____ Surface El _____ Boring No. EPA-2-83

SAMPLE NUMBER	DATE TAKEN	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER			CLASSIFICATION AND REMARKS
				28.5	29.5						Clay: brown, soft.
				29.5	38.5						Sandstone: brown, reddish brown,
											fine-grained, soft
											Installed 2 ft. piece of casing
											to keep hole open to monitor water
											levels.

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 3 of 3 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project NWSC Disposal Site Characterization Site Crane, IN Date 14 June 1983
Location Old Rifle Range Job No. 441-G150. 13GR21/22
Drill Rig Failing Inspector J. Dunbar Operator C. Drake Surface El 523.20 Boring No. EPA-3-83

SAMPLE NUMBER	DATE TAKEN 1983	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd Press	Cont	CLASSIFICATION AND REMARKS
1	14June	0.0		0.0	0.5	0.0	2.25	3"ShelbyTube	80	ST	Clay(CL): brown and grey, soft,
1A				0.5	1.0	2.25	2.40		100	Jar	damp, slightly sandy (5%)
				1.0	1.5				170		
				1.5	2.0				220		
			6.0	2.0	2.5				500		Sample Length: 2.4 ft
				0.0	5.0			5"Folding Auger			Cleanout
2	14June	6.0		5.0	5.5	5.0	6.08	3" Fixed Piston	280	ST	Clayey Gravel(GC): reddish brown,
2A				5.5	6.0	6.08	6.28		550	Jar	fine to medium gravel sized sand-
				6.0	6.5				610		stone fragments with soft, sandy
				6.5	7.0				620		clay.
			7.5	7.0	7.5				640		Sample length: 1.28 ft
				5.0	10.0			5"Folding Auger			Cleanout

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 1 of 3 Sheets

BORING LOG
FIELD DATA

Project _____ Site _____ Date _____
Location _____ Job No. _____
Drill Rig _____ Inspector _____ Operator _____ Surface El _____ Boring No. EPA-3-83

SAMPLE NUMBER	DATE TAKEN 1983	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd Press	Cont	CLASSIFICATION AND REMARKS
3	14 June	7.5		10.0	10.5	10.0	12.12	3" Fixed Piston	80	ST	Clay(CL and CH): grey and light
3A				10.5	11.0	12.12	12.27		120	Jar	brown, soft, damp, dense, grades
				11.0	11.5				130		from a CH to a CL between 10 and 11
				11.5	12.0				160		ft.
			16.5	12.0	12.45				160		Sample length: 2.27 ft
				10.0	15.0			5"Folding Auger			Cleanout
4		16.5	17.5	15.0	15.5	15.0	16.1	3" Fixed Piston	190	ST	Sandy Gravel: reddish brown, black
4A				15.5	16.0	16.1	16.3		320	Jar	weathered, very fine-grained
				16.0	16.5				600		sandstone.
				16.5	17.0				450		Sample length: 1.3 ft
				17.0	17.45				430		
		17.5	19.0	15.0	20.0			5"Folding Auger			Clay(CL): brown, reddish brown,
											damp, sandy, gravelly(fine), thinly bedded
		19.0	20.0								Sand(SM): brown, very fine-grained

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 2 of 3 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project _____ Site _____ Date _____
Location _____ Job No _____
Drill Rig _____ Inspector _____ Operator _____ Surface El _____ Boring No. EPA-3-83

SAMPLE NUMBER	DATE TAKEN	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER			CLASSIFICATION AND REMARKS
											damp, silty, clayey(slight binder)
5A	14June			20.0	20.6	20.0	20.6	3" Fixed Piston	750	Jar	Sandy Gravel(GC): reddish brown, brown, dark grey, weathered, very fine-grained sandstone, damp.
		20.0	32.5	20.0	32.5			5-5/8"RockBit			Sandstone: brown, very fine-grained weathered, uniform quartz sandstone.
											Installed 2 ft. piece of casing to keep hole open to monitor water levels.

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 3 of 3 Sheets

BORING LOG
FIELD DATA

Project NWSC Disposal Site Characterization Site Crane, IN Date 14 June 1983
Location Old Rifle Range Job No. 441-G150.13GR21/22
Drill Rig Failing Inspector J. Dunbar Operator C. Drake Surface El 521.89 Boring No. EPA-4-83

SAMPLE NUMBER	DATE TAKEN 1983	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd Press	Cont	CLASSIFICATION AND REMARKS
1	14June	0.0		0.0	0.5	0.0	1.5	3"ShelbyTube	80	ST	Clay(CL): brown, soft, uniform,
1A				0.5	1.0	1.5	1.7		120	Jar	damp.
				1.0	1.5				160		
				1.5	2.0				180		Sample length: 1.7 ft
			3.5	2.0	2.5				170		
						0.0	5.0	5"Folding Auger			Cleanout
2A	14June	3.5		5.0	5.5	5.0	5.95	3" Fixed Piston	280	Jar	Gravelly clay(CL): reddish brown,
				5.5	5.95				750t		dark brown, brittle, stiff, dry
											with 10 to 20% rock fragments
											(sandstone) ranging from coarse
											sand size to medium gravel, angular
			9.0								fragments.
				5.0	10.0			5"Folding Auger			Cleanout
3	14June	9.0		10.0	10.5	10.0	12.18	3" Fixed Piston	100	ST	Clay(CL): brown with streaks of

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 1 of 3 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project _____ Site _____ Date _____
Location _____ Job No. _____
Drill Rig _____ Inspector _____ Operator _____ Surface El _____ Boring No. EPA-4-83

SAMPLE NUMBER	DATE TAKEN	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER			CLASSIFICATION AND REMARKS
3A	14June			10.5	11.0	12.18	12.38		220	Jar	grey, stiff, brittle, slightly moist
4A	14June			11.0	11.5	15.0	16.0		230	Jar	sandy, thinly bedded
				11.5	12.0				260		
			16.0	12.0	12.45				270		Sample length: 2.38 ft
				10.0	16.0	15.0	16.0	5"FoldingAuger			Cleanout- hard at 16 ft
5		16.0	18.0	16.0	18.5	16.0	18.35	3"Pitcher Sampler	700	ST	Sandstone: brown and black, very
5A						18.35	18.50			Jar	weathered, primarily gravel and
											coarse sand fragments.
		18.0	18.5								Shale: greenish grey, brittle dry
											soft, uniform - water in bottom
											of hole.

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 2 of 3 Sheets

BORING LOG
FIELD DATA

Project _____ Site _____ Date _____
Location _____ Job No. _____
Drill Rig _____ Inspector _____ Operator _____ Surface El _____ Boring No. EPA-4-83

SAMPLE NUMBER	DATE TAKEN	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER			CLASSIFICATION AND REMARKS
		18.5	21.0	16.0	30.0			5-5/8"RockBit			Sandstone: brown, weathered, soft
		21.0	30.0								Sandstone: tan, light grey, medium
											good rock, very fine-grained, quartz
											sandstone.
											Installed 3.0 ft casing and left
											hole open to monitor water levels.

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 3 of 3 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project NWSC Disposal Site Characterization Site Crane, IN Date 16 June 1983
Location Old Rifle Range Job No. 441-C150.13CR21/22
Drill Rig Failing Inspector J. Dunbar Operator C. Drake Surface El 521.16 Boring No. EPA-5-83

SAMPLE NUMBER	DATE TAKEN 1983	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd Press	Cont	CLASSIFICATION AND REMARKS
1	16 June	0.0		0.0	0.5	0.0	2.25	3" Shelby Tube	50	ST	Clay(CL): brown, soft, dry,
1A				0.5	1.0	2.25	2.40		60	Jar	sandy
				1.0	1.5				100		
				1.5	2.0				160		
				2.0	2.5				260		Sample length: 2.40 ft.
				0.0	5.0			5" Folding Auger			Cleanout
2	16 June			5.0	5.5	5.0	6.85	3" Fixed Piston	190	ST	Clay(CL): brown with streaks
2A				5.5	6.0	6.85	7.0		260	Jar	of grey, stiff, soft, damp,
				6.0	6.5				350		slightly sandy.
				6.5	7.0				380		
			9.0	7.0	7.38				400		Sample length: 2.0 ft.
				5.0	10.0			5" Folding Auger			Cleanout
3	16 June	9.0	14.2	10.0	10.5	10.0	11.22	3" Fixed Piston	130	ST	Gravelly clay(CL): reddish brown

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 1 of 3 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project _____ Site _____ Date _____
Location _____ Job No. _____
Drill Rig _____ Inspector _____ Operator _____ Surface El _____ Boring No. EPA-5-83

SAMPLE NUMBER	DATE TAKEN	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd Press	Cont	CLASSIFICATION AND REMARKS
3A	16June					10.0	12.0	5" Folding Auger	150	Jar	stiff, brittle, dry; gravel fragments
									320		are angular, fine to coarse sandstone
									520		Sample length: 1.32 ft - tube
									700		stopped and bent on gravel/cobble
				10.0	15.0			5"FoldingAuger			Cleanout
4	16June	14.2		15.0	15.5	15.0	17.15	3" Fixed Piston		ST	Clay(CL): brown and grey, soft,
4A				15.5	16.0	17.15	17.30			Jar	damp.
				16.0	16.5						
				16.5	17.0						
			18.5	17.0	17.45						Sample length: 2.3 ft.
5A		18.5	20.4	15.0	20.0	18.5	19.9	3"Folding Auger		Jar	Silty Sand(SM): brownish grey,
											moist, very fine-grained, uniform.

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 2 of 3 Sheets

IN5 170 023 498

BORING LOG
FIELD DATA

Project _____ Site _____ Date _____
Location _____ Job No. _____
Drill Rig _____ Inspector _____ Operator _____ Surface El. _____ Boring No. EPA-5-83

SAMPLE NUMBER	DATE TAKEN	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	Hyd Press	Cont	CLASSIFICATION AND REMARKS
6A	16June			20.0	20.4	20.0	20.4	3" Pitcher Sampler	100	Jar	Silty sand(SM): greyish brown, wet, very fine-grained, uniform - hard at 20.4
		20.4	32.0	20.0	32.0			5 5/8" RockBit			Sandstone: light brown, light grey, very fine-grained, slightly weathered.
											Left hole open to obtain water level measurments.
											Installed 2 ft. piece of casing.

WES FORM JAN 74 819 EDITION OF NOV 1971 MAY BE USED

Sheet 3 of 3 Sheets

Appendix C
Copy of Cover Letter, EPA Permit for NSWC Crane

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

Name of Permittee: Owner: United States Department of Navy
Operator: United States Department of Navy

Facility Location: Street Address: (None)
City, State: Crane, Indiana

EPA Identification Number: IN5 170 023 498

Issuance Date:

Authorized Activities:

Pursuant to the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984, (42 U.S.C. §6901, et seq.), and regulations promulgated thereunder by the United States Environmental Protection Agency (U.S. EPA) (codified in Title 40 of the Code of Federal Regulations (CFR)), Federal permit conditions (hereinafter called the permit) of the RCRA permit are issued to United States Department of Navy (USN) (hereinafter called the Permittee), for the facility Naval Weapons Support Center (NWSC) located at Crane, Indiana.

The RCRA permit contains both the effective Federal permit conditions (contained herein) and the effective State permit conditions issued by the State of Indiana's RCRA program authorized under 40 CFR Part 271 (hereinafter called the State permit). When both this permit and the State permit are effective, the Permittee has an effective RCRA permit which authorizes the Permittee to conduct hazardous waste management activities as specified in the RCRA permit.

Permit Approval:

On January 31, 1986, the State of Indiana received final authorization pursuant to Section 3006 of RCRA, 42 U.S.C. §6926, and 40 CFR Part 271, to administer the pre-HSWA RCRA hazardous waste program. Since the State of Indiana has not yet received authorization to administer the entire hazardous waste program requirements of HSWA, additional permit conditions must be issued by the U.S. EPA to address these new requirements. These additional conditions are contained in this permit.

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein (including those in any attachments) and the applicable regulations contained in 40 CFR Parts 260, 261, 262, 264, 266, 268, 270, and 124, and applicable provisions of HSWA.

This permit is based on the assumption that the information submitted in the

permit application attached to the Permittee's letter, dated October 12, 1984, and in any subsequent amendments (hereinafter referred to as the application), and in the certification regarding potential releases from solid waste management units, dated June 13, 1985, is accurate. Any inaccuracies found in this information may be grounds for the termination, revocation and reissuance, or modification of this permit (see 40 CFR §270.41, §270.42 and §270.43) and potential enforcement action. The Permittee must inform U.S. EPA of any deviation from or changes in the information in the submitted information.

Effective Date:

The RCRA permit is effective when both this permit and the State permit are effective. This permit is effective as of thirty days after service of notice, unless a review is requested under 40 CFR §124.19 (unless no comments requested a change in the draft permit in which case the permit shall become effective immediately upon issuance), and shall remain in effect for 5 years, unless revoked and reissued, or terminated (40 CFR §270.41, §270.42, and §270.43), or continued in accordance with 40 CFR §270.51.

Issued this _____ day of _____,

by _____.

Basil G. Constantelos, Director
Waste Management Division

Appendix D
Boring Logs of RFI exploration borings at Demolition Area/Old Rifle Range, November 1989 to June 1990

Hole No. WES-6-IC-89

DRILLING LOG	DIVISION U.S. Navy	INSTALLATION NWEC Crane In.	SHEET 1 OF 13 SHEETS
1. PROJECT Hydrogeologic Studies, Demo. Area.		10. SIZE AND TYPE OF BIT HQ wireline Core	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL	
3. DRILLING AGENCY WES		12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500	
4. HOLE NO. (As shown on drawing title and file number) WES-6-IC-89		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER Dan Taylor		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED 11/9/89 / COMPLETED 11/23/89
7. THICKNESS OF OVERBURDEN 0.0		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE 242.7		19. SIGNATURE OF ~~INSPECTOR~~ Geologist Richard W. Hunt	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	0		Sandstone, ltan, vf-f, hard, oxidized			Started on hard SS at surface. Ran RR bit to 10.0' & started coring
	2					
			Soft SS & clay			
	4					
	6		? ? 6.0'			
			Shale, dGr w/yBr mottling, oxidized along bd & jts, occ silty-sdy pts, thin bd, firm (more like claystone)			
	8					
	10			10.0' Run 1		Coring w/ HQ wireline
	12					
	14			10.8 / 10.8 = (Recovery) / (Run)		
	16		Jts in Sh are [illegible]			
	18					
	20		20.0'			

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-1C-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 2 OF 13 SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number) WES-6-1C-89		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	20		Sandstone / olive tan-Gr, th bd rippled, vf-f, minor oxid along bd, occ lGr silty-shly pts.	20.8' Run 2		
	22					
	24					
	26			9.7/9.9		
			Jts along bd w/ [illegible]. Some jts shown may be drill breaks	-0.2'		
	28					
	30			30.7' Run 3		
	32		32.2'	2.1/2.2 -0.1		Lost all drill water at ~31.5'
			d Red	32.9' Run 4		
	34		Sandstone changes to more oxidized, y tan - l tan (otherwise similar to above)			
			d Red			
	36			9.1/10.0		
	38			-0.9		
	40					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-10-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 3 OF 13 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-10-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
	15. ELEVATION GROUND WATER
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	40		SS (cont.)			
	42			42.9 Run 5		
			Blk coal inclus.			
	44		44.4	2.7/2.8 -0.1		
			Sandstone, mGr, vf, th bd w/abundant coal grains, flakes, hd.	45.7 Run 6		
	46		coal streaks + swirls in lower zone 47.2			
	48		Shale, Blk-vdGr w/ alter lGr vf sandstone lens + pts, rippled bd, hard.	4.6/5.2 -0.6		
	50			50.9 Run 7		11/10/89
	52			1.9/2.0 -0.1 52.9 Run 8		
	54		changes to predominately lGr SS w/ sh lens (as above)			
	56		55.7 Shale, vdGr-Blk, th bd, hd, occ siderite lens, platey.	7.2/7.7		
	58					Reamed hole w/ 10" R.R. bit + set 8" dia casing to 59.0'. Poured 25 gal cement/bentonite (cont.)
	60					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

IN5 170 023 498

Hole No. WES-6-IC-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 4 OF 13 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-IC-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	60		Shale (Cont.)	60.6		grout mix thru drill rods (5' off bot.) before setting casing. Poured additional 25 gal. Grout mix around outside of casing from top and let set for 24 hrs. 11/14/89 - Poured in ~6 gal sand to plug jts in SS + then poured in 25 gal grout too bring grout to surface.
				Run 9	11/5/89	
				1.9/2.3 -0.4		
	62			62.9		
				Run 10		
	64					
	66			9.6/10.0		
	68			-0.4		
			69.0			
	70		Shaley, Sandy, Sideritic Conglomerate, v hd, vd Gr - gr Bk. Th bd SS in bot 0.2' (71.0')			
	72		Shale, l-m olive Gr, th bd, crumbly, soapy texture, num. s'sides (73.0')	72.9		
				Run 11		
	74		Shale, vd Gr - Blk, th bd. Fissile to platy, home, occ. Siderite lens, hd.			
	76					
	78			9.9/10.0		
				-0.1		
	80					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-10-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 5 OF 13 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-10-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	80		Shale (cont.)			
	82			82.9 Run 12		11/16/89 Had to replace pin in kelley which broke at beginning of Run 12. Had to cut old pin out w/ torch + weld new one in.
	84					
	86			5.9/6.5 -0.6		
	88			89.4 Run 13		
	90			3.0/3.3 -0.3		
	92			92.7 Run 14		11/17/89
	94		Siderite Conglomerate 93.9			
	96		Sandstone lGr-olive Gr, th bd-mass, occ clayey/shaley lens-pts + irreg inclus, slightly oxidized down to ~104.0', sli friable, cross-bd.	10.0/10.0		
	98					
	100					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WFS-6-1C-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 6 OF 13 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WFS-6-1C-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE — STARTED — COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	100		Sandstone (cont.)			
	102			102.7 Run 15		
	104		(No oxidation below 104.0') shaley			
	106		Jts are along bd & could be mill breaks	9.6/10.0		
	108			-0.4		
	110		very friable below 108 ft			
	112		irreg white chalky inclus	112.7 Run 16		112.6 - Pull depth
	114			5.3/5.2 +0.1		Losing 30-40% water return
	116		wavy shly pts			
			Shale, dGr, th bd fissile soft. (116.8)			
			Coal, blk, blocky, hd (117.5) (118.0)	117.9 Run 17		
	118		Shale, vdGr, th bd, hd, blocky	4.7/4.8 -0.1		
	120					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-1C-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 7 OF 13 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-1C-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
	15. ELEVATION GROUND WATER
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	120		Sh (Cont.) vf sdy			Reamed hole to 7 7/8" + set 6" PVC Casing to 122.7'. Grouted to surface.
	122			122.7 Run 18		
			(Bot zone is laminated m-d Gr sh)			11/22/89
	124					
			(Base Mansfield fm.) (125.7)	3.9 / 4.7		PENN (Sedi) 125.7'
	126		(Hardinsburg fm) Shale, m-d gr Gn, mass, v hd, blocky	-0.8 -0.6		MISS (Sedi)
				127.4 Run 19		122.2 pull depth
	128		angular Conglomeritic (129.9')			
	130		Shale, m-d gr Gn th bd w silty pts, hard, platey.	5.5 / 5.3 +0.2		
	132			132.7 Run 20		
	134					
	136			9.8 / 10.0		
	138			-0.2		
	140					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-12-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 8 OF 13 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-12-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	140		Base Hardinsburg (140.2') (Top Golconda/Haney Ls) Limestone, lGr, vf grained, mass, v hd, v dens.			
	142			142.7 Run 21		
	144		Alternating beds of dGr shale + lGr Limestone (as above) Beds 0.5' to 2.0' thick.			
	146			10.0/10.0		
	148					
	150					
	152		Crystaline Limestone lgrBr, m-c grain, mass, v hd, v den.	152.7 Run 22		Flange
	154					
	156		Shaley Ls - Limey sh m-dGr thbd v hd, fossiliferous.	10.0/10.0		
	158					
	160					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-1C-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 9 OF 13 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-1C-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	160		Ls (cont)			
	162			162.7 Run 23		
	164					Note: The Gokonda had no jts & appears to have very little porosity. There was no loss of drill water in the formation. Water left in drill hole at a depth of ~ 8-10' showed no drop after being left to stand over night. It was decided to continue drilling w/o setting a casing in the Indian Spgs. Sh.
	166					
	168			9.8/10.0		
				-0.2		
	170			0.0		
	172		(Base Gokonda) (172.5) (Top Ind. Spgs. mem.) Shale, d.gnGr, mass crumbly, hd.	172.7 Run 24		172.5
	174			2.6/2.4 +0.2		
				175.1 Run 25		Blocked
			175.6' (Top of Big Cliffy SS.)			11/23/89
	176		Sandstone, 1-m gnGr w/alter shaley lams & pts, th bd rippled, hd. (not oxidized)			
	178			7.5/7.6		
				-0.1		
	180					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

IN5 170 023 498

Hole No. WES-6-1C-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 10 OF 13 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-1C-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE — STARTED — COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	180					
	182		Sandstone lGr, thbd - mass, ripped, vf-f, hd, sli friac,	182.7 / 24n26		
	184					
	186			10.0 / 10.0		
	188		No Joints			
	190					
	192			192.7 / 24n27		
	194					
	196			10.0 / 10.0		
	198					
	200					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-1C-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 11 OF 13 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-1C-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE: STARTED / COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	200		Sandstone (cont.)			
	202			202.7 Run 28		
	204					
	206					
	208			10.0 / 10.0		
	210		num small rounded pyrite inclus in bot 8-10'			
	212			212.7 Run 29		
	214					
	216		(Base Big Clifty fm) (216.6) (Top Beech Creek fm)	10.0 / 10.0		
	218		Limestone, lgr Br, m-c crystalline, v hd, v den, fossiliferous, occ stylolites			
	220					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-1C-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 12 OF 13 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-1C-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE: STARTED / COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	220		Limestone (cont.)			
	222		Ls, dGr, f crystalline occ varvy shly pts	222.7	Run 30	
			(No Jts in Ls)			
	224					
	226					
				9.8 / 10.0		
	228					
				0.2		
	230					
	232		(Base Beech Creek) (232.2) (Top Ellwood Ls)	232.7	Run 31	
			Shale, dGn, mass, hd, s sides, occ Siderite nodules			
	234					
	236			10.0 / 10.0		
	238					
	240					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-1C-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 13 OF 13 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-1C-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	240		Sh (cont.)			
	242			242.7		
			Tot. Depth - 242.7'			
	244					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-1C-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)	WES-6-1C-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No: WES-6-1C-89			Date well screen was set: 11/24/89
			+2.5			
			0.0' Ground surface			
			Grout mixture			Water level just Prior to setting screen. –
			173.0			
			Bentonite Pellets			2" dia. PVC Screen + Riser
			176.0			
			Filter Pack			
			192.0			
			Well Screen			
			232.0			
			~~Trap~~			Note: 235.0 to 242.2 Bentonite pellets. 232.0 to 235.0 Sand
			242.47 Boring Depth			

Hole No. 6-01CP2-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)	WES-6-1CP2-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
		15. ELEVATION GROUND WATER	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No.: WES-6-1CP2-89			Date well screen was set: 11/29/89
			+2.5			
			0.0' Ground surface			
			Grout mixture			Water level just Prior to setting screen. –
			90.0			6" Surface Casing; 4" PVC Casing to 59.0'
			Bentonite Pellets			
			93.0			
						2" dia PVC Riser + screen
			Filter Pack			
			107.0			
			Well Screen			
			117.0			
			~~Trap~~			
			117.0 Boring Depth			

6-01CP3-01
Hole No.

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)	WES-6-1CP3-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No: WES-6-1CP3-89			Date well screen was set: 11/89
			+2.5			
			0.0' Ground surface			
			Grout mixture			Water level just Prior to setting Screen -
			17.0			
			Bentonite Pellets			6" Surface Casing
			20.0			
			Filter Pack			
			45.0			
			Well Screen			
			55.0			
			~~Trap~~			
			55.0 Boring Depth			

Hole No. WES-6-2C-89

DRILLING LOG	DIVISION US Navy	INSTALLATION NWSC, Crane In	SHEET 1 OF 4 SHEETS

1. PROJECT Hydrogeologic Studies at Demo. Area	10. SIZE AND TYPE OF BIT 4 1/8 Wireline
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY WES	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-2C-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER Don Taylor	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED 12/5/89 — COMPLETED 12/7/89
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE 73.8'	19. SIGNATURE OF INSPECTOR Richard W. Hunt

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	0		Silty Clay, Br-tan, firm, moist			12" dia flight Auger from 0.0 to 8.7'
	2					
	4		(4.7')			
			(Indian Spgs Mem) Shale / Clayshale, m olive-olive Gr, firm, sli moist-dry			
	6					Refusal to Auger at 8.7'
	8			8.7'		Set 8" dia PVC Casing to 8.7' & Grouted to surface.
	10		contains Ls lens + or nodules w/sh lams + pts, v hd			R.R. Bit from 8.7 - 12.0'
	12			12.0'		
			(Base of Indian Spgs) 13.0	Run 1		
			(Top Big Clifty SS) Sandstone, l olive to olive tan, th bd rippled, v fine, hard, sli friable, rounded glc grains oxidized (olive Gr shale pts in top 1.5')			
	14					
	16			8.1/9.2 (Recovery/Run)		
	18			-0.8' (Core loss)		
	20					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-2C-95

DRILLING LOG	DIVISION	INSTALLATION	SHEET 2 OF 4 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number)	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	20		SS (cont.)			
				21.2 Run 2		
	22			2.6/2.6		
				23.8 Run 3		
	24					
	26					
				10.0/10.0		
	28		occ small pyrite nodules			
	30		(Bd [illegible] shown on [illegible] larger drill [illegible]) ? no [illegible]			
	32					
				33.8 Run 4		
	34					
	36					
	38			10.0/10.0		
			It is [illegible]			
	40		Bot oxidation at 39.8'			

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-2C-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 3 OF 4 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number)	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	40		SS (cont.), but not oxid, lGr			
	42		occ pyrite nodules are generally ≤1/8" dia but few are >1" dia, + have sugary texture.			
				43.8 / Run 5		
	44					
	46					
			SS becomes slightly coarser in bot few ft.	10.0 / 10.0		
	48					
			1/2" to 1" conglomeritic zone at bot. contact. The contact is tight + has a stylolitic appearance.			
	50		Base of Big Clifty fm (51.0') (Top Beech Creek fm)			
			Limestone, l-m gr Br, m-c crystalline, vhd + vdam, fossiliferous, occ stylolites			
	52					
				53.8 / Run 6		12/7/89
	54					
	56					
				10.0 / 10.0		
	58		LS is m-d Gr + finer grained than above, occ wavy shly pts			
	60					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-2C-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 4 OF 4 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number)	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	60		LS (Cont.)			
	62					
	64			63.2 Run 7		
				3.3/3.3		
	66					
			(Base Beech Creek fm) (Top Elwren fm)	67.1' Run 8		Blocked
	68		Shale, m-d Gn, mass. hd, s'sides			
	70			6.7/6.7		
	72		Th bd, w/alter rippled vf sdy-silty pts.	73.8		
	74		Bot. Depth- 73.8'			
	76					
	78					
	80					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. 6-02C89

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number) WES-6-2C-89		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No: WES-6-2C-89			Date well screen was set: 12/7/89
			+2.5			
			0.0' Ground surface			
			Grout mixture			Water level just Prior to setting Screen. –
			42.0			
			Bentonite Pellets			6" Casing to 8.7'
			45.0			
			Filter Pack			
			47.1			
			Well Screen			
			67.1			
			~~Cap~~			Note: 70.0 to 72.8' Bentonite Pellets: 67.1' to 70.0' Sand
			72.8 Boring Depth			

6-DACP2-87

Hole No.

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number) WFS-6-2CP2-89		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No: WFS-6-2CP2-89			Date well screen was set: 12/11/89
			+2.5			
			0.0' Ground surface			
			Grout mixture			Water level just Prior to setting screen –
			10.0			
			Bentonite Pellets			6" Surface casing
			13.0			
			Filter Pack			
			30.0'			
			Well Screen			
			40.0			
			~~Trap~~			
			40.0 Boring Depth			

Hole No. WES-6-3C-89

DRILLING LOG	DIVISION U.S. Navy	INSTALLATION NWSC Crane, In	SHEET 1 OF 5 SHEETS
1. PROJECT Hydrogeologic Studies, Demo Site		10. SIZE AND TYPE OF BIT HQ Wireline Core	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL	
3. DRILLING AGENCY WES		12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500	
4. HOLE NO. (As shown on drawing title and file number) WES-6-3C-89		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER Dan Taylor		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☑ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED 12/9/89 / COMPLETED 12/13/89
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE 91.8'		19. SIGNATURE OF ~~INSPECTOR~~ Geologist Richard W. Hunt	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	0		Silty clay, ytan, w/ SS frags, soft, v moist-wet			0.0-12.6' Auger
	2					
	4					Note: Hit refusal(?) at 12.6'; however was able to push 6" PVC casing to 14.3'; 6" casing is ~ ½' below surface; Grouted 8" dia auger outside 6" casing to a depth of 6' + w/a 1' stick-up above ground.
	6		7.5			
	8		Silty clay, olive gr, soft-v moist w/ fossil incluns, limey			
	10		Note: in RR Bit boring for 6-3CP2, hit crystaline Ls at 8.7-13.5' + 14.2-15.'			Cleaned hole w/ R.R. bit.
	12		Zone is solutioned + was portion of Golconda Ls fm			
	14			14.3		
				Run 1		started coring w/ HQ wireline at 14.3'.
	16		Limey shale in Bot zone.	5.7 / 8.7		Core Recovery / Core Run
	18					more Loss/gain
			(~ Bot. Golconda) 19.5'	-3.10		
	20		(Top Fieldian Spirs member)	-2.8		

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-3C-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 2 OF 5 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-3C-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE — STARTED — COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	20		(Cont.) Shale, vdGr, th bd, fissile, m hd-soft,			
	22			23.0 Run 2		22.8 Pull depth
	24		Shale is grGn, mass, crumbly	5.0/4.8		
	26			+0.2		
	28		m gGn shaly LS Conglo. (Bot Indian Spgs) 29.7	27.8 Run 3		
	30		(Top Big Clifty SS) Sandstone, lGr w/ Gn tint, th bd-mass, rippled, vf homo, (shly pts in top 2-3') sli friable	5.0/5.2 -0.2		No water loss
	32			33.0 Run 4		
	34					
	36			9.7/10.0		
	38		oxidized, Lim abun jts	-0.3		
	40		ss color is m Gn			

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-3C-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 3 OF 5 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-3C-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE — STARTED — COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	40		SS (Cont.) mGn Color			
		30				
	42					
				43.0 Run 5		
	44					
			mum ~ hor breaks in core along bd; appear to be drill breaks. Core is friable.			
	46					
				9.5/10.0		
	48					
				-0.5		
	50					
	52					
				53.0 Run 6		
	54					
	56					
				9.5/10.0		
	58			-0.5		
	60					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-3-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 4 OF 5 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-3-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	60		SS (Cont.)			
	62					
				63.0 Run 7		
	64					
	66					Lost water return at ~66.0' but ~50 to 70% returned later
	68			9.9/10.0		
	70			-0.1		
			(Bot. Big Clifty SS) 71.0' (Top Beech Creek Ls)			
	72		Limestone, lmgrBr, mass, m-c Crystalline, fossiliferous, v hd, vdense occ stylolites.	73.0 Run 8		Lost all water return for good at ~72.0' 72.5 pulldown
	74					
	76					
			Ls changes to dGr, f Crystalline	10.1/10.0		
	78			+0.1		
	80					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-3C-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 5 OF 5 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-3C-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
	15. ELEVATION GROUND WATER
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	80		Ls (cont.)			
	82					
				83.0 Run 9		
	84			3.8/3.8		
	86		(Bot Beach Creek Ls)	86.8		Blocked
			(Top Elwren Fm) Shale, dGn, thbd, occ silty pts + pyrite nodules, nd	Run 10		
	88			4.3/5.0		
	90		+ Br/Gn mottling in bot ft.	-0.7		
				91.8		
	92		Bot Depth- 91.8'			

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. 6-03C-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)	WES-6-3C-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No: WES-6-3C-89			Date well screen was set: 12/14/89
			+2.5			
			0.0 Ground surface			
			Grout mixture			Water level just Prior to setting screen. –
			25.0			
			Bentonite Pellets			6" Surface Casing
			28.0			
			Filter Pack			
			66.8			
			Well Screen			
			86.8			
			~~Trap~~			
			91.8 Boring Depth			

6-D3CP2-89

Hole No.

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number) WES-6-3CP2-89		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No: WES-6-3CP2-89			Date well screen was set: 12/15/89
			+2.5			
			0.0 Ground surface			
			Grout mixture			Water level just Prior to setting Screen –
			8.0			
			Bentonite Pellets			
			9.0			6" Surface Casing
			Filter Pack			
			10.0			
			Well Screen			
			20.0			
			~~Trap~~			
			20.0 Boring Depth			

Hole No. WES-6-4C-89

DRILLING LOG	DIVISION U.S. Navy	INSTALLATION NWSC, Crane In	SHEET 1 OF 6 SHEETS
1. PROJECT Hydrogeologic Studies, Demo Site		10. SIZE AND TYPE OF BIT HQ Wireline Core	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL	
3. DRILLING AGENCY WES		12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500	
4. HOLE NO. (As shown on drawing title and file number) WES-6-4C-89		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER Don Taylor		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☑ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED 1/17/90 / COMPLETED 1/22/90
7. THICKNESS OF OVERBURDEN 8.8'		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE 103.3'		19. SIGNATURE OF INSPECTOR Geologist Richard W. Hunt	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	0		Silty Clay, y tan, soft, v moist			0.0 - 10.0' Auger
	2					
	4					
	6		Silty Clay, olive-Tan, w/ss frags, soft, v moist			
	8		8.8' Limey Shale, m-dGr, fossils, dry (Golconda fm)			Set 6" dia. Surface casing to 10.0'
	10		Limestone, lGr Br, m-c crystalline, fossil, v hd, v den	10.0 Run 1		Started coring w/ HQ wire line at 10.0'
	12					Core Recovery / Core Run
	14		Shaley LS - Limey Sh, m-d Gr th bd, hd, fossiliferous; soft clay + oxid along dts.	4.2/6.6 -2.4'		Core loss/core gain
	16			16.6 Run 2		
	18			4.4/6.6 -2.2'		
	20					

Hole No. WES-6-4C-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 2 OF 6 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-4C-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	20		shly Ls (cont.)			
	22			23.2		
			Crystalino Ls (as above)	Run 3		1/18/90
	24		Solu in top ½ ft + oxid	3.4/3.8		
			(Becomes shly in bot ½')	-0.4'		
	26		(Base Colorado fm) (26.4')	0.0		
			(Top Indian spgs mem)	27.0'		26.6' (Run 4) Pull depth
			Shale vd Gr, th bd, fissile hd, fossils in top 2.0'	Run 4		
	28			3.1/4.5		
	30			-1.4' +0.4		29.7 (Run 5) - Run depth
				31.5		
	32			Run 5 3.5/4.7 (+1.8)		Reamed hole & set 4" PVC casing to 33.2'
				33.2		
	34			Run 6		1/20/90
	36			8.3/9.3		
	38		Below ~ 37.5' shale is dolive Gr + soft.	-1.0'		
	40					

Hole No. WES-6-4C-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 3 OF 6 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-3C-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE — STARTED — COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	40		(Sh, cont.)			
	42		(Bot. Ind Sprs) 142.5' (TOP Big Clifty SS)	42.5 Run 7		
	44		Sandstone, lgnGr, th bd w/num olive gr shaley pts, rippled, vf grained, pyrite inclus			
	46		olive Gr sh			
				8.9 / 9.3		no water loss
	48		olive Gr sh	-0.4		
			Sandstone (similar to above) lGr, th bd, rippled, vf, homo, sli friable, hd	-0.1		
	50					
	52			51.8 Run 8		51.5 Run 8 Pull depth
	54		(very few to no Jts)			
	56			10.1 / 10.4		
				-0.3		
	58			+0.3		
	60					

Hole No. WES-6-4C-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 4 OF 6 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-4C-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
	15. ELEVATION GROUND WATER
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	60		SS (cont)			
						6.6 / Run 9 — Pull depth
	62			62.2		
				Run 9		
	64					
	66					
				10.2 / 10.2		
	68					
	70					
						71.8' / Run 10 — Pull depth
	72			72.4		
				Run 10		
	74					
	76			10.3 / 10.0		
	78			+0.3		
			SS is calcareous + v hd below ~ 79.0'	+0.6		
	80					

Hole No. WES-6-40-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 5 OF 6 SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number) WES-6-40-89		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
		15. ELEVATION GROUND WATER	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	80		Bot Big Clifty ss (80.9') (Top Beech Creek Ls)			Lost all water return at ~81.0'
	82		Limestone, l-m gr Br, m crystalline, fossiliferous, v hd, v dens, occ stylolites	82.4 Run 11		82.1 Run 11 pulldown 1/22/90
	84					
	86					
	88		Ls is m-d Gr, f-m crystalline, occ shly pts.	10.4 / 10.1		
	90					No water return
	92			92.5 Run 12		
	94			4.4 / 4.4		
	96			96.9 Run 13		
	98		(Bot Beech Creek Ls) 97.4 (Top Elwren fm) Shale, d gr Gn, th bd hd.			
	100					

ENG FORM

Hole No. wES-6-4C-85

DRILLING LOG	DIVISION	INSTALLATION	SHEET 6 OF 6 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number)	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED _____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	100		Sh (cont.)			
				6.4/6.4'		
	102					
				103.3		
	104		Bot. Depth - 103.3'			

IN5 170 023 498

Hole No. 6-04C-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number) WES-6-4C-89		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

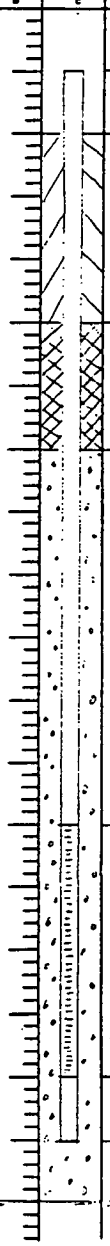
ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No: WES-6-4C-89			Date well screen was set: 1/22/90
			+2.5			
			0.0' Ground surface			
			Grout mixture			Water level just Prior to setting Screen. –
			38.0			
			Bentonite Pellets			6" Surface casing
			42.5			4" Casing to 33.2'
			Filter Pack			
			78.0			
			Well Screen			
			98.0			
			~~Trap~~			
			103.3 Boring Depth			

6-04CP2-89

Hole No.

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)	WES-6-4CP2-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
		15. ELEVATION GROUND WATER	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		16. DATE HOLE	STARTED / COMPLETED
		17. ELEVATION TOP OF HOLE	
7. THICKNESS OF OVERBURDEN		18. TOTAL CORE RECOVERY FOR BORING %	
8. DEPTH DRILLED INTO ROCK		19. SIGNATURE OF INSPECTOR	
9. TOTAL DEPTH OF HOLE			

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No: WES-6-4C-89			Date well screen was set: 1/23/90
			+2.5			
			0.0' Ground surface			
			Grout mixture			Water level just Prior to setting Screen –
			9.0			
			Bentonite Pellets			6" Surface casing to 9.0'
			10.0			
			Filter Pack			
			17.0			
			Well Screen			
			27.0			
			~~Trap~~			
			27.0 Boring Depth			



Hole No. WES-6-SC-89

DRILLING LOG	DIVISION U.S Navy	INSTALLATION Nwsc Crane In.	SHEET 1 OF 5 SHEETS
1. PROJECT Hydrogeologic Studies, Demo Area		10. SIZE AND TYPE OF BIT HQ wireline	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL	
3. DRILLING AGENCY WES		12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500	
4. HOLE NO. (As shown on drawing title and file number) WES-6-SC-89		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER Dan Taylor		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☑ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED 1/24/90 / COMPLETED 1/25/90
7. THICKNESS OF OVERBURDEN 6.4 ft		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE 86.4 ft		19. SIGNATURE OF ~~INSPECTOR~~ Geologist Richard W. Hunt	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	0		Silty clay, y tan, w/ ss frags, soft, moist - v moist.			Augered from 0.0 to 13.6'
	2					
	4					
	6		6.4'			
	8		Clay / Clayshale (Residual weathered Golconda / Haney fm), d olive - olive Br, hard, dry, calcareous, w/ fossils + fossil frags			
	10					
	12					Set 8" pvc casing to 13.6 + grouted
			13.5'	13.6		
	14		(Indian Springs mem) Shale, d Gr, th bd fissile, soft-mod firm, lim stn along fractures in top 2-3'.	Run 1 3.1/4.6 (-1.5')		Started coring w/ HQ wireline at 13.6'
	16					
	18			18.2 Run 2		
	20					

Hole No. WES-6-SC-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 2 OF 5 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-SC-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	20		Sh (cont.)			
				4.4/5.5		
	22			(-1.1)		
				23.7 Run 3		
	24					
			Shale/claystone mod Gn, mass w/num irregular shaped LS(?) nodules (conglomeritic effect)			
	26			8.4/9.5		
	28		th bd w/occ ss lens. (Bot. Ind. spars) (28.5)	(-1.1)		
			(Top Big Clifty ss)			
	30		Sandstone, lgr, vf, w/num grGn Sh lens + pts, rippled hd, sli friable			
	32			32.1		32.1. pull depth
				33.2 Run 4		
	34					
			olive sh			
	36		Sandstone lGr th bd, rippled, vf, homo, rounded qtz sd, sli friable, sli oxid between 34.0 + 43.2'	9.6/8.7		
	38			(+0.9) +0.2 +1.1		
	40					

Hole No. WES-6-SC-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 3 OF 5 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-SC-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	40		Sandstone (cont.)			
				41.9 Run 5		41.7 – Pull depth
	42					
	44					
	46			10.3 / 10.3		
				(+0.2)		
	48					
	50					
	52			52.2 Run 6		52.0 – Pull depth
	54					
	56			10.4 / 10.2		
				(+0.2)		
	58					
	60					

Hole No. wES-6-SC-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 4 OF 5 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) wES-6-SC-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	60		SS (cont.			
	62		SS, (as above) but calcareous + hd. (not friable)	62.4 Run 7		
	64					
		30	(Base of Big Cliffy) 65.2' (Top Beech Creek) (solution contact)			
	66		Limestone, mgrBr, mass, m-c crystalline fossiliferous, v hd, vden, occ stylolites	9.9/10.1		
	68			(-0.2)		
	70					
	72			72.5 Run 8		
	74					
	76		Ls changes to dGr, f crystalline, occ shly pts.	10.1/10.2		
	78			(-0.1)		
	80					

Hole No. WES-6-5C-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 5 OF 5 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-5C-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
	15. ELEVATION GROUND WATER
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	80		Ls (cont.) 80.4			
			(Top Eluren fm)			
			Shale, dgrGn, thbd-mass, hard			
	82			82.7		
				Run 9		
	84			3.6 / 3.7		
				-0.1		
	86			86.4		
			Bot. Depth - 86.4 ft.			
	88					
	90					

6-05C-89

Hole No.

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number) WES-6-SC-89		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No: WES-6-SC-89			Date well screen was set: 1/25/90
			+2.5			
			0.0' Ground surface			
			Grout mixture			Water level just Prior to setting screen –
			25.0			
			Bentonite Pellets			
			29.0			
						8" Casing to 13.6'
			Filter Pack			
			60.4			
			Well Screen			
			80.4			
			~~Trap~~			
			86.4 Boring Depth			

Hole No. WES-6-GC-89

DRILLING LOG	DIVISION US Navy	INSTALLATION NWSC Crane In	SHEET 1 OF 4 SHEETS
1. PROJECT Hydrogeologic Studies, Demo Site		10. SIZE AND TYPE OF BIT HO Wireline	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL	
3. DRILLING AGENCY WES		12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500	
4. HOLE NO. (As shown on drawing title and file number) WES-6-GC-89		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED	
5. NAME OF DRILLER Dan Taylor		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☑ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE: STARTED 1/26/90 COMPLETED 1/29/90	
7. THICKNESS OF OVERBURDEN 23.5' (?)		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE 75.4'		19. SIGNATURE OF ~~INSPECTOR~~ Geologist Richard Wilhunt	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	0		Silty clay, Br in top, becoming y Br below ~1.0', SS frags, moist, soft			0.0 to 23.5' drilled with Auger
	2					
	4					
	6					
	8					Note Outcrop in slope above boring surface elev. consists of thinly bd platy SS w/ plant castings & ripple marks. (Fluv. Sediments)
	10		Becomes more moist below ~10'.			
	12		Silty-sdy clay, y Br, Red + Gr mott, soft, v moist			
	14					
	16		Silty clay, rusty olive Br, sdy w/ num. SS frags (pebbly size) blk staining, dryer than above			
	18					
	20		Silty-clayey v f Sand			

ENG FORM 1836

Hole No. WES-6-6C-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 2 OF 4 SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number) WES-6-6C-89		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
		15. ELEVATION GROUND WATER	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	20		yBr + Gr mottled, very soft, v moist.			
	22					Set 8" dia. PVC Casing to 23.5'
				23.5		
	24		Core recovered is 1.0' of fine, oxidized SS in thin laminations + frags.	Run 1		Started Coring w/ HQ wireline at 23.5'. (Very little to No water loss during complete drilling of boring.)
	26		Core loss is probably wax platy SS as seen in outcrop above boring location (Sheet 1)	1.0 / 9.6		
	28			(-8.6')		Core ground away during drilling; very easy advancement.
	30					
	32		(32.1')			- contact w/ clay sh determined from drill action
			Shale / Clayshale, m Gr, mass, soft-mod firm.	33.1 / Run 2		
	34		- lGr vf SS, pyrite nodules			
	36		- lGr vf SS (37.3')			
	38		Sandstone, lGr, th bd - mass, vf, cross bd + swirled bd occ dGr shly pls + pyrite nodules, contains Blk	-5.8 / 7.1 / -1.3		
	40					

Hole No. WES-6-6C-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 3 OF 4 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-6C-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE — STARTED — COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	40		Carbonaceous flakes, hard.	40.2 / Run 3		
	42			2.2 / 2.9 (-0.7)		
				43.1 / Run 4		43.0 — pull depth
	44					
	46			6.1 / 6.0 (+0.1)		
	48			49.1 / Run 5		
	50			3.7 / 4.0		
	52		Below 51.6', abundant Carbonaceous shaley swirls + flakes	-0.3 / 53.1 / Run 6		
	54					
	56		abundant pyrite inclus; unconformity (56.3') (Beach Creek Fm)	9.5 / 9.6		PENN / Miss
	58		Limestone, lGr Br, m-c crystalline, v hd, v den, occ stylolites; LS changes to dGr, finely crystalline (as above)	-0.1		
	60					

Hole No. WES-6-GC-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 4 OF 4 SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number) WES-6-GC-89		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	60		Ls (cont.)			
	62			62.7		62.6 - Pull depth
				Run 7		
	64			5.5 / 5.4 +0.1		
	66					
	68			68.1		
				Run 8		
			(Base of Beech Creek) (69.4) (Top Ellwen fm)			
	70		Shale d Gn	4.7 / 4.8 -0.1		
	72			72.9		72.8 pull depth
				Run 9		
	74			2.6 / 2.5 +0.1		
				75.4		
	76		Bot. Depth - 75.4			
	78					
	80					

6-D6C-89
Hole No.

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number) WES-6-6C-89		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No. WES-6-6C-89			Date well screen was set: 1/29/90
			+2.5			
			0.0' Ground surface			
			Grout mixture			Water level just Prior to setting Screen. –
			33.0			
			Bentonite Pellets			
			38.0			8" Casing to 23.5'
			Filter Pack			
			49.4			
			Well Screen			
			69.4			
			~~Trap~~			
			75.4' Boring Depth			

Hole No. 6-06CP2-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)	WES-6-6CP2-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No: WES-6-6CP2-89			Date well screen was set: 1/30/89
			+2.5			
			0.0' Ground surface			
			Grout mixture			Water level just Prior to setting Screen. –
			12.0			
			Bentonite Pellets			
			15.0			Surface casing to 10.0'
			Filter Pack			
			22.5			
			Well Screen			
			32.5			
			~~Trap~~			
			32.5 Boring Depth			

Hole No. WES-6-7C-89

DRILLING LOG	DIVISION US Navy	INSTALLATION NWSC, Crane In	SHEET 1 OF 5 SHEETS
1. PROJECT Hydrogeologic Studies, Demo Site		10. SIZE AND TYPE OF BIT HQ wireline Core	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL	
3. DRILLING AGENCY WES		12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500	
4. HOLE NO. (As shown on drawing title and file number) WES-6-7C-89		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER Dan Taylor		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☑ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED 2/2/90 / COMPLETED 2/6/90
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE 87.5		19. SIGNATURE OF ~~INSPECTOR~~ Geologist Richard W. Hunt	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	0		Silty Clay, Br, soft, moist			0.0-3.2 Augered Refusal @ 3.2'
	2			3.2'		set 8" PVC casing to 3.2
	4		Wea Sandstone frags + clay (?), no spl's [No water return (Dr.!!) water flowing out at toe of Road bank in Boggs Creek, ~10-12' lower than boring ground surface.]	NO Rec		Made several runs w/NX core bl from 3.2 to 9.9' w/o recovery Losing all water return just below 3.2'
	6					
	8					
	10		(11.4')	9.9' Run 1		Started coring w/HQ wireline at 9.9'
	12		Clayshale, vdGr-Blk, th bd, carbonaceous, soft. 13.2	5.6/6.4		
	14		Thinly laminated lGr vf sandstone and dGr shale ~ hor bd, hard,	-0.8'		
	16			16.3' Run 2		
			vdGr-Blk shale, carb			Losing all drill water
			- 0.1' coal seam			
	18		vdGr-Blk shale, carb			
			Lam ss/sh (as above)	5.3/6.6, -1.3		
	20					

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE PROJECT HOLE NO.

Hole No. WES-6-7C-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 2 OF 5 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-7C-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	20		Lam ss/sh (Cont.)			
	22			22.9' Run 3		22.6' Full depth
	24					
	26					
			27.0'			
	28		Shale, vdGr, th bd, platey, hd, occ th sdy bds, occ siderite lens	10.3/10.0 +0.3		
	30					
	32		32.4			
		++	Coal/lignite, Blk, soft flakey (33.0)	32.9' Run 4		Reamed hole + set 6" PVC Casing to 34.8'.
	34		Shale Blk in Top zone changing to dGr w/depth th bd, fissile highly carbonaceous soft-firm.	1.7/1.9 (-0.2) 34.6 Run 5		Blasted 2/5/90
	36					
	38			7.6/8.1 -0.5		Got back 100% water return after setting casing
	40					

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE PROJECT HOLE NO.

Hole No. WES-6-70-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 3 OF 5 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-70-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE — STARTED — COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	40		Sh (cont.)			
			(41.2)			
	42		Shale, dGr, th bd, w/occ sdy zones, hard, num pyrite nodules + occ carbonaceous inclus, occ s'sides.	42.9 Run 6		
	44					
	46					
	48			9.5 / 10.0		
				-0.5		
	50					
	52					
			(52.9)	52.9		
	54		Sandstone, 1-m Gr, th bd, irreg-wavy bd, num pyrite nodules, occ carb inclus + flakes (shaley pts)	Run 7		
	56			10.0 / 10.0		95-100% water return
	58		conglomeritic + abundant Pyrite.			PENN
			unconformity (58.9') (Beech Creek Fm)			MISS
	60		Ls (cont - next sheet)			

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE PROJECT HOLE NO.

Hole No. WES-6-7C-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 4 OF 5 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-7C-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
	15. ELEVATION GROUND WATER
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	60		Limestone, lGrBr, m-c crystaline, foss, v hd, v den, occ stylolites			
	62	10		62.9 Run 8		
	64					
	66	85 90	Ls (as above) but m-d Gr, f cryst, occ shly pts (Near vert. St is tight + at least partially healed insitu)	10.0 / 10.0		No water loss in Ls (95-100% return)
	68					
	70					
	72	0		72.9 Run 9		
	74	0				
	76	0		9.9 / 10.0		
	78	0	Ls changes to lgr Br, coaser grained, + somewhat conglomeritic in appearance, w/num rounded to angular			
	80					

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE — PROJECT — HOLE NO.

Hole No. WES-6-70-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 5 OF 5 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-70-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED _____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	80		inclus of d Gn (Elwren) sh. Coarser + more conglomeritic in bot ft. (Base Beaverdam Creek fm) (81.6)			
	82		(Top Elwren fm) Shale d Gn w/16r alter sdy pts + th lens; rippled bd,	82.9		82.2 — Pull depth
	84		Sdy lens increase w/ depth.	4.7 / 4.6		95-100% water return
	86		(zone appears good as an aquaclude.)	+0.1		
				87.5		
	88		Bot. Depth - 87.5'			
	90					

ENG FORM 1092 PROJECT

106-07C-89

Hole No.

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number) WES-6-7C-89		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
		15. ELEVATION GROUND WATER	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No: WES-6-7C-89			Date well screen was set: 2/6/90
			+2.5			
			0.0' Ground surface			
			Grout mixture			Water level just Prior to setting screen –
			48.0			
			Bentonite Pellets			
			52.0			6" casing to 34.8'
			Filter Pack			
			61.6			
			Well Screen			
			81.6			
			~~Trap~~			
			87.6 Boring Depth			

Hole No. WES-6-BC-89

DRILLING LOG	DIVISION U.S. Navy	INSTALLATION NWSC Crane In.	SHEET 1 OF SHEETS
1. PROJECT Hydrogeologic Studies, Demo Site		10. SIZE AND TYPE OF BIT HQ Wireline Core	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL	
3. DRILLING AGENCY WES		12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500	
4. HOLE NO. (As shown on drawing title and file number) WES-6-BC-89		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER Dan Taylor		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED 2/9/90 / COMPLETED 2/20/90
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF ~~INSPECTOR~~ Geologist Richard W. Hunt	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	0		Silty clay, sdy, hd, dry - sli moist			0.0 - 8.5 Augered
	2					
	4					
			5.8			
	6		Sandstone, lt tan - rusty Br, m-c grain, cross bd, micaceous, highly oxid - friable, occ Lim crusting.			set 10" PVC casing to 8.5'
	8					
						8.5 to 11.8' - R.R. Bit.
	10					
				11.8		
	12			Run 1		started coring w/ HQ wireline at 11.8'
	14					
	16			10.0 / 10.2		Recovery (core) / Run (")
				-0.4		Core loss/gain
	18					
	20					

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-BC-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 2 OF SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-BC-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE — STARTED — COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	20		Sandstone (cont.)			
	22			22.0		21.8 — pull dept
				Run 2		
	24					
	26			10.3 / 10.1		
	28			+0.2'		
	30					
	32			32.1		
				Run 3		
	34					
	36			8.8 / 10.2		
	38			14		
	40					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-BC-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 3 OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)	WES-6-BC-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE		15. ELEVATION GROUND WATER	
☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING	%
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	40		Sandstone (cont.)			
	42			42.3 Run 4		
	44		Lim crusting; ss - ltan Gr, w/dGr sh pts.; Lim crusting			
	46			8.0 / 10.3		
	48			-2.3'		
	50		(~50.0) ? Core loss ?			
	52		(~52.3) Coal, Blk, blocky, hcl. (Pyrite inclus) (53.1)	52.6 Run 5		2/10/90
	54		Sandstone, lGr, mass, w/ abundant Blk thin swirls of Carbonaceous inclus.			
	56		th bd w/shly pts & carb inclus. (57.9)	9.5 / 10.3		
	58		Sandy shale highly burrowed, vdGr-Blk th bd, occ siderite nodules	-0.8'		
	60					

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE PROJECT HOLE NO.

Hole No. W ES-6-BC-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 4 OF SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number)	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE — STARTED — COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	60		Sdy sh (Cont.)			
	62		(63.0)	62.9		
			Shale, Blk, th bd - mass, Carbonaceous, occ Siderite lens, hd.	Run 6		
	64					
	66					
				9.8 / 10.0		
	68					
			69.7	-0.2		
	70		Shale, Sandstone - Sandy shale, vdGr, burrowed, th bd, highly Carb, has num rounded - flattened lBr ss inclus (concentration in top ft)			Reamed hole and attempted to set 8" dia PVC Casing to 72.0', however Casing got hung at ~37.0'. A 6" dia PVC Casing was inserted & set to 72.0', thr. the hung 8" Casing & grouted to surface. 2/13/90
	72		(72.5)	72.9		
			Shale, dGr, th bd, occ Carb inclus, blocky, hd	Run 7		
	74					
	76					
			(77.2)	9.5 / 9.9		
			Coal, Blk, blocky, hd, pyrite inclus (78.2)	-0.4		
	78		Shale, vdGr, mass - th bd, hd, occ thin Coal pts & inclus.			
	80		(80.0)			

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE | PROJECT | HOLE NO.

Hole No. wES-6-BC-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 5 OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)	wES-6-BC-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	80		Sandstone, lGr, vF, shly, carb incls. -- soft clsh			
			(82.0)			
	82		Sandstone, lGr, rippled, vF, clean rounded qtz sd	82.8' Run 8		
	84					
	86		occ shly pts in lower 2'.	8.7 / 8.7		
	88		88.7			
			SS, (similar to above) but num carb shale & coal pts, (thin closely spaced bd)			
	90			91.5		
	92		Shale Blk, th bd, blocky - platey, hd, homo, slick.	Run 9		
	94			4.5 / 4.5		Reamed hole & set 4" dia PVC casing thr. 6" (previously set) casing to 96.0'.
	96			96.0' Run 10		
	98			6.4 / 6.8		12/16/90
			(99.2)			
	100		Sandstone, f-m Gr. (cont.)	-0.4		

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE | PROJECT | HOLE NO.

Hole No. WES-6-BE-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 6 OF SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-BE-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	100		th bd, w/occ alter dGr shly lens + thin beds, rippled, vf, hd.			
	102					102.4 Pull depth
				102.8 Run 11		
	104					
	106					
				10.2 / 9.8		
	108			10/4		
	110					
	112		Num blk coal pts + inclus, occ Br SS inclus	112.6 Run 12		
	114					
	116		more shly lens in bot 6' than SS lens.			
	118		(118.1) Shale, blk, th bd, occ siderite lens, (siderite Conglo in top 0.5'), hd. blocky-pklen, (Stick)	9.4 / 9.4		
	120					

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE PROJECT

Hole No. WES-6-BC-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 7 OF SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-BC-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE — STARTED — COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	120		Sholo (cont)			
	122			122.0 / Run 13		
	124		- sandy			
	126			9.9 / 10.4		
	128			-0.5		
	130					
	132			132.4 / Run 14		
	134					
	136		- olive Gr, sdy at bot.	9.7 / 10.1		
	138			-0.4 / -0.1		
	140					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-BC-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 8 OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)	WES-6-BC-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	140		Sh (cont.)			
	142			142.5 Run 15		142.2 Pull depth
			siderite	2.4 / 2.4		
	144		SS yl gn Gr - gr Gn, f-m mass, w/ irreg flattened shale inclus.	144.9 Run 16		144.6 Pull depth
	146		olive gn Gr sh, s'sidos			2/17/90
			149.2			
	148		shale, blk, th bd, platy, occ sideritic nodules, w/ plant imprints along bd	7.8 / 7.9		
	150			~0.1 ~0.3		
			(Sh grades to dGr below ~151' and also has s'sidos and occ minor lGr sdy pts)			
	152			152.4 / 152.8 Run 17		- Pull depth
	154					
	156			10.4 / 10.0		
	158			~0.4		
	160					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT | HOLE NO.

Hole No. WES-6-BE-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 9 OF SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-BE-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	160		Shale cont.			
	162			162.8 / Run 18		
	164					
	166					
	168			9.9 / 10.0		
				-0.1		
	170					
			171.1			
	172		sh (as above) but w/num rippled lgr vf ss pts & thin lens	172.8 / Run 19		
	174					
	176		(176.3')			
			Sandstone, lm Gr, vf, th bd. moss, silty pts, occ Carb inclus & swirls.	9.3 / 9.3		
	178					
	180					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT | HOLE NO.

Hole No. WES-6-88-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 10 OF SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-88-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE — STARTED — COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	180		SS (cont.)			
	182		(182.1)	182.1		
			Shale, Blk, th bd, platy, carb, w/ occ thin coal lens + pts.	Run 20		
	184		(184.8)			
			Sandstone, 1-m Gr, th bd, vF, occ to num Blk Sh rippled pts, occ possible burrows.	10.2/10.2		
	186					
	188					
	190					
	192		(192.3)	192.3		
			Shale Blk-dGr, th bd, mass, abundant carb inclus, occ th coal lens, occ siderite nodules	Run 21		2/19/90
	194					
	196			9.7/9.7		
			(197.8)			
	198		Sandstone/siltstone, lGr, shaley, th bd, w/ dGr shly + carb pts, plant imprints			
	200					

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE PROJECT HOLE NO.

Hole No. WES-6-BR-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 11 OF SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-BR-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE — STARTED — COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	200		Sandstone/siltstone (cont.)			
	202			202.0 Run 22		
	204			6.2/6.2		
	206					
	208		(208.2)	208.2		
			shale, dGr-Blk, th bd, platey, carb.	Run 23		
	210		Lignite	2.7/2.7		
			sdy in bot	210.9		
			(211.5)	Run 24		
	212		Clayey Sandstone, l-d Gr-Gn, mass, hd, f-c grain, occ Carb flakes, ss+sh inclus,			
	214			10.3/10.3		
	216					
	218		(Angular lgr Br Ls frags + fossils as inclus in bot 2'.)			PENN
			Basemans(field) fm (219.1)			unconformity
			(Indian Springs mem) shale, d Gn, th bd-mass,			MISS
	220					

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-BC-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 12 OF SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-BC-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
	15. ELEVATION GROUND WATER
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	16. DATE HOLE: STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	220		(Sh cont.), hd			
				221.2		
				Run 25		
	222			3.3 / 3.3		
	224			224.5		
				Run 26		
			(Base Indian Spgs) 225.5 (Top Big Clifty ss)			
	226		Alternating lGr vf ss + dGn sh lens, ls nodules in top 2'			
	228			8.6 / 8.6		
	230					
			231.5			
	232		Sandstone, lgnGr, th bd-mass, rippled, vf, homo, sli friable,	233.1		
				Run 27		
	234					
	236			10.0 / 10.1		
	238			-0.1		
	240					

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE | PROJECT | HOLE NO.

Hole No. WES-6-BC-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 14 OF 15 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-BC-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE: STARTED / COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	260		SS (cont.)			
	262					
				263.2 Run 30		
	264		(Base Big Cliffy SS) (264.2) (Top) Beech Creek Ls)			
			Limestone, lgr Br, m-c crystalline, fossiliferous, occ stylolites, den, hd.			
	266					
	268			9.9/10.0		
	270		270.2			
			Ls (as above) but dl Gr, f-m crystl, occ wavy shly pts			
	272					
				273.2 Run 31		273.1 pull depth
	274					
	276			7.1/7.0		
	278					
	280		(Base Beech Creek Ls) (279.8)			

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE | PROJECT | HOLE NO.

Hole No. WES-6-BC-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET 15 OF 15 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-BC-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE — STARTED — COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	280		(Top Elwin fm) (279.2)	280.2		
			Shale, d Gn, mass,	Run 52		
			becomes th bd w/depth			
			w/alt th ss lens.	3.0/3.0		
	282					
				283.2		
	284		Bot Depth- 283.2'			
	286					
	288					
	290					

ENG FORM 1836 PREVIOUS EDITION ARE OBSOLETE. PROJECT HOLE NO.

Hole No. 06DBC-89

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number) WES-6-BC-89		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No: WES-6-BC-89			Date well screen was set: 2/20/90
			+2.5			
			0.0' Ground surface			
			Grout mixture			Water level just Prior to setting screen –
			220.0			
			Bentonite Pellets			
			225.0			
			Filter Pack			4" PVC Casing to 96.0'
			239.8			
			Well Screen			
			279.8			
			~~Trap~~			
			283.2 Boring Depth			

Hole No. 06D8CP2

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)	WES-6-8CP2-89	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No: WES-6-8CP2-89			Date well screen was set: 2/22/90
			+2.5			
			0.0' Ground surface			
			Grout mixture			Water level just Prior to setting screen -
			73.0			
			Bentonite Pellets			Surface casing to (10.0')
			76.0			
			Filter Pack			
			81.5			
			Well Screen			
			91.5			
			~~Trap~~			
			91.5 Boring Depth			

Hole No. WES-6-9C-90

DRILLING LOG	DIVISION U.S. Navy	INSTALLATION NWSC Crane In	SHEET 1 OF 4 SHEETS
1. PROJECT Hydrogeologic Studies OB Rifle Range Demo Site		10. SIZE AND TYPE OF BIT HQ Wireline Core	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL	
3. DRILLING AGENCY WES		12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500	
4. HOLE NO. (As shown on drawing title and file number) WES-6-9C-90		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER Dan Taylor		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED 2/26/90 / COMPLETED 2/28/90
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE 63.0'		19. SIGNATURE OF ~~INSPECTOR~~ Geologist Richard W. Hunt	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	0		Silty clay, y tan, soft, moist			This boring site is next to well # WES-6-18-83. 0.0 to 16.5 Drilled w/ auger
	2					
	4		(5.0')			
	6		Silty-sdy clay, r Br, occ ss frags, soft, sli moist			
	8					
	10		(10.0') Sdy Clay w/ ss pebbly grav. r Br-tan, v soft, wet-saturated.			
	12		(12.0') Sdy-grav Clay, Red-Tan Br & yel, soft, moist, small ss grav (Conglomeritic)			
	14					
	16		16.5' (Big Cliffy fm)	16.5 P.R.Q.T 17.0		Set 6" PVC casing to 16.5'
	18		Sandstone, y tan, th bd, rippled, vf-f, sli friable, high oxid, nun bed sts	Run 1 5.4/6.0 -0.6		2/27/90
	20					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT | HOLE NO.

Hole No. 06090-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-90-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE: STARTED / COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	20		SS (cont.)			
	22					
				23.0		
				Run 2		
	24					
	26					
				9.0/10.0		
	28					Lost all water return at ~27.5'
				-1.0		
	30					
	32					
				33.0		
				Run 3		
	34					
	36			8.5/10.0		
	38			-1.5		
	40					

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE | PROJECT | HOLE NO.

Hole No. 06 09C - 90

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)	WES-6-9C-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	40		SS (cont.)			
	42		SS / Gr, not oxid.			
				43.0' Run 4		
	44		(Base Big Clifty SS) (44.1') (Top Beech Creek Ls)			
	46		Limestone, lg Br, mass, m-c crystalline, v hd, dens, fossiliferous, occ stylolites			
	48			8.9/10.0 -1.1		
			48.4'			
	50		Ls changes to m-d Gr, f crystalline w/ occ wavy shly pts, (otherwise as above)			
	52			53.0' Run 5		2/28/90
	54					
	56			9.1/10.0		
	58			-0.9'		
	60		(Bot. Beech Creek Ls) 59.7 (Top Elwren fm)			

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE PROJECT HOLE NO.

Hole No. 0609C-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)	WES-6-90-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	60		Shale, dGn, thbd, mass, hd			
	62			63.0'		
			Bot. Depth - 63.0'			
	64					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. 06890-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)	WES-6-90-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No: WES-6-90-90			Date well screen was set: 2/28/90
			+2.5			
			0.0 Ground surface			
			Grout mixture			Water level just Prior to setting Screen. –
			16.0			
			Bentonite Pellets			
			18.0			Surface Casing to 16.5'
			Filter Pack			
			49.7			
			Well Screen			
			59.7			
			~~Trap~~			
			63.0 Boring Depth			

Hole No. WES-6-100-90

DRILLING LOG	DIVISION US Navy	INSTALLATION Naval Crane In.	SHEET 1 OF 4 SHEETS

1. PROJECT Hydrogeologic Studies, Old Rifle Rg	10. SIZE AND TYPE OF BIT HQ Wireline
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL
3. DRILLING AGENCY WES	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) WES-6-100-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED: — UNDISTURBED:
5. NAME OF DRILLER Don Taylor	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☑ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE — STARTED 3/3/90 — COMPLETED 3/5/90
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE 72.5	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF ~~INSPECTOR~~ Geologist Richard W. Hunt

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	0		Silty Clay, yBr, soft, moist,			0.0 to 11.3' Auger
	2					
	4					
	6		Grades to wea sh below; Wet in Bot Zone.			
	8		8.5'			
	10		Shale, olive Gr, soft, mod firm (Ind springs member) (11.3')	11.3		Set 6" PVC Casing to 11.3' Refusal
	12		? (top Big Cliffy SS) Sandstone, lgnGr, thbd, rippled, vf, sli oxid in upper zone, sli friable	Run 1 2.8/3.3 -0.5		Started Coring w/ HQ wireline at 11.3'
	14			14.6		
	16		? 15.2 Sandstone, lytan, th bd-mass, (rippled) vf, sli friable, oxid (occ lim nodules)	Run 2 7.3/7.9 -0.6		
	18					
	20					

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-XX-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET 2 OF 4 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-XX-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE — STARTED — COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	20		Sandstone (cont.)			
	22			22.5 Run 3		
	24					
	26			10.0/10.0		
	28					
	30					
	32			32.5 Run 4		
	34		1 Gr SS & 1 Gr Sh burrowed			
	36		SS not oxidized below 34 ft. see pyrite nodules	10.0/10.0		
	38					
	40					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-10C-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET 3 OF 4 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-10C-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE — STARTED — COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	40		SS (cont.)			
	42			42.5 / Run 5		
	44					
	46					
	48			10.0 / 10.0		
			(Base of Big Clifty) 48.9' (Top of Beech Creek Ls)			
	50		Limestone, lgr-Br, mass, m-c crystalline, hd, den, fossiliferous, occ stylolites			~100% water return
	52			52.5 / Run 6		
	54					
			55.2'			
	56		LS (as above) but m-d Gr, f crystalline, occ wavy shly pts.	10.2 / 10.2		
	58					
	60					

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE PROJECT HOLE NO.

IN5 170 023 498

Hole No. WES-6-10C-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET 4 OF 4 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-10C-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE: STARTED / COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	60		Ls (Cont.)			
				62.7		
	62			Run 7		
	64			3.5/4.3		
			(Base Beech Creek Ls) (65.5)			No water Loss
			(Top Elwren Fm)	-0.8		
	66		Shale, dGn, mass, hd, occ Ls nodules	67.0		
				Run 8		
	68					
				5.4/5.5		
	70			-0.1		
	72			72.5		
			Bot Depth - 72.5			
	74					
	76					
	78					
	80					

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE | PROJECT | HOLE NO.

Hole No. 06IOC-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number) WES-6-10C-90		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
		15. ELEVATION GROUND WATER	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No: WES-6-10C-90			Date well screen was set: 3/5/90
			+2.5			
			0.0' Ground surface			
			~~Grout mixture~~ (See Note)			Water level just Prior to setting screen -
			32.0			
			Bentonite Pellets			Casing to 11.3'
			35.0			Note: (0.0 to 11.0' Grout); (11.0 to 13.0 Bentonite); (13.0 to 32.0' - Sand)
			Filter Pack			
			45.5			
			Well Screen			
			65.5			
			~~Trap~~			
			72.5 Boring Depth			

Hole No. 06100PZ-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)	WES-6-100PZ-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No: WES-100PZ-90			Date well screen was set: 3/6/90
			+2.5'			
			0.0' Ground surface			
			Grout mixture			Water level just Prior to setting Screen -
			11.0			
			Bentonite Pellets			
			13.0			Set surface casing
			Filter Pack			
			23.0			
			Well Screen			
			33.0			
			~~Trap~~			
			33.0 Boring Depth			

Hole No. WES-6-11C-90

DRILLING LOG	DIVISION US Navy	INSTALLATION NWSC Crane In	SHEET 1 OF 4 SHEETS
1. PROJECT Hydrogeologic Studies Demo Site Old Rifle Rg.		10. SIZE AND TYPE OF BIT HQ wireline Core	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL	
3. DRILLING AGENCY WES		12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500	
4. HOLE NO. (As shown on drawing title and file number) WES-6-11C-90		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER Dan Taylor		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☑ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED 3/7/90 / COMPLETED 3/8/90
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE 61.1		19. SIGNATURE OF INSPECTOR Geologist Richard W. Hunt	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	0		Silty clay, Br, soft, moist			0.0 to 13.5' drilled w/auger
			(2.0')			
	2		Silty clay, y Tan, soft becoming v moist			
			(4.0')			
	4		Silty-pebbly clay, y tan SS pebbles, v soft, wet.			
	6		(6.5')			
			Silty clay, y tan + Gr mottled, lim stn, v soft, moist			
	8					
	10					
	12					
				13.5'		set 6" casing to 13.5'
	14			R.P. B.T.		
			(15.3')	15.3		
	16		Silty-sdy clay w/ SS cobble + boulder size frags (stream deposits), d Gr + d Gn color	Run 1		
	18			2.2/7.6		
				-5.4'		Lost ~70% water return
	20					

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE | PROJECT | HOLE NO.

Hole No. WES-6-11C-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET 2 OF 4 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-11C-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	20					
	22					
	24		(24.1') (Big cliffy ss)	22.9' / Run 2		
	26		Sandstone, ltan Gr, th bd, rippled, vf, homo, sli friable, oxid in top 2'.			
	28			8.8 / 10.0		Losing ~20% water return.
	30		Occ small pyrite nodules.	(-1.2') -1.0'		
	32			32.9' / Run 3		32.7' Pull depth
	34					
	36			9.8 / 9.6		
	38			+0.2		
	40		(Base Big cliffy fm) (39.6') (Top Beech Creek Ls)			

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE PROJECT HOLE NO.

Hole No. WES-6-11C-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET 3 OF 4 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-11C-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE: STARTED / COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	40		Limestone, 1-m grBr, mass, m-c crystalline, fossiliferous, occ stylolites, hd den,			
	42			42.5' Run 4		
	44					
	46		(46.0') Ls (as above) but dGr, f crystalline, occ wavy shly pts.	10.2/10.2		
	48					
	50					Still Losing ~ 20% water Return
	52			52.7' Run 5		
	54			5.4/5.4		
	56		(Bare Branch Creek Ls) (56.2') (Top Elkrich fm) Shale, dGn, mass, occ Ls nodules in top, hd, slickensides along jts.			
	58			58.1 Run 6 2.5/3.0 -0.5'		
	60					

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE | PROJECT | HOLE NO.

Hole No. WES-6-11C-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET 4 OF 4 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-11C-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	60		Sh (cont.)	61.1		
	62		Bot. Depth- 61.1'			

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE PROJECT HOLE NO.

Hole No. 06 11C 90

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)	WES-6-11C-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No: WES-11C-90			Date well screen was set: 3/8/90
			+2.5			
			0.0' Ground surface			
			~~Grout mixture~~ (see Note)			Water level just Prior to setting screen. –
			29.0			
			Bentonite Pellets			
			32.0			set surface casing to 13.5'
			Filter Pack			Note: 0.0 to 13.0 - Grout 13.0 to 15.0 - Bentonite 15.0 to 29.0 - Sand
			36.2			
			Well Screen			
			56.2			
			~~Trap~~			
			61.1 Boring Depth			

Hole No. 061P2-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)	WES-6-1KP2-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No: WES-6-11CP2-90			Date well screen was set: 3/8/90
			+2.5			
			0.0' Ground surface			
			Grout mixture			Water level just Prior to setting Screen. –
			13.0			
			Bentonite Pellets			
			15.0			set 4" Surface casing
			Filter Pack			
			20.0			
			Well Screen			
			30.0			
			~~Trap~~			
			30.0 Boring Depth			

Hole No. WES-6-12C-90

DRILLING LOG	DIVISION US Navy (Old Rifle Rg)	INSTALLATION NWSC Crane In	SHEET 1 OF 5 SHEETS
1. PROJECT Hydrogeologic Studies Demo Site		10. SIZE AND TYPE OF BIT HQ wireline Core	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL	
3. DRILLING AGENCY WES		12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500	
4. HOLE NO. (As shown on drawing title and file number) WES-6-12C-90		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED	
5. NAME OF DRILLER Dan Taylor		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE: STARTED 3/9/90 / COMPLETED 3/12/90	
7. THICKNESS OF OVERBURDEN 8.5'		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE 82.8		19. SIGNATURE OF ~~INSPECTOR~~ Geologist Richard W. Hunt	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	0		Silty clay, Br-lBr, w/ num small ss frags			0.0-4.4' Drilled w/ Auger
	2					
	4		(4.4)	4.4		Set 6" PVC Casing to 4.4' (Refusal)
			Silty clay, + ss frags + ss blocks.			Drilled 4.4 to 11.8' w/ R. R. Bit
	6			R. R. Bit		
	8		(8.5)			
			(Coleanda fm) Limey Shale/Shaley Limestone, th bd, dGr, fossiliferous.			
	10					
				11.8		
	12			Run 1 2.8/3.1 -0.3		Started Coring w/ HQ wireline
	14			14.9		
				Run 2 4.5/5.0 -0.5		
	16		(16.4) (Indian springs member) Shale, dGn, mass-th bd hd,			
	18		sh + Ls Conglomerate (dGn sh w/mGr Ls angular inclus) (19.5')	19.5'		
	20					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-RC-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET 2 OF 5 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-RC-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE — STARTED — COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	20		(Top Big Cliffy SS 19.5')	Run 3		
			Alternating silty vf grn SS & olive Gn sh lens.	2.6/2.9		
	22			-0.3		3-10-90 - Reamed hole & set 4" PVC casing to 22.8'
				22.8'		
				Run 4		3/12/90
	24					
			25.4'			
	26		Sandstone, olive Gr mass, rippled, vf, homo, sli friable, sli oxid to 33.8'	9.4/10.0		
	28			~~0.6~~ -0.5		
	30					
	32					
				32.8'		32.7 mill depth
			(LGr below 33.8') not oxidized	Run 5		
	34					(No Jts)
	36			9.9/10.0		
	38			~~-0.1~~ +0.1		
	40					

ENG FORM 1836 PREVIOUS EDITIONS OBSOLETE PROJECT

Hole No. WES-6-12C-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET 3 OF 5 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-12C-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
	15. ELEVATION GROUND WATER
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	16. DATE HOLE: STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	40		SS (cont.)			
	42			42.8		42.6' Pull depth
				Run 6		
	44					
	46			10.1/10.0		
	48			+0.2		Lost ~ 40% water return at ~ 48'
	50					
	52			52.8		52.7 Pull depth
				Run 7		
	54					Losing ~ 40-50% water return
	56			10.1/10.0		
	58			+0.1		
	60		(Base of Big Cliff SS) (59.7') (Top Beech Creek Ls)			

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-12C-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET 4 OF 5 SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)	WES-6-12C-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	60		Ls, l-m gr Br, m-c crystalline, fossiliferous, occ stylolites, hd, dense			
	62		(open)	62.8 / Run 7		
	64					
	66		66.0' Ls (as above) but d Gr, f-m crystalline, occ shly pts. (above)	9.7 / 10.0 / 9.7		40-50% water return
	68					
	70					
	72			72.5 / 77.8 / Run 8		- Pu: drilling - (Based on core characteristics)
	74					
	76		(Base Beech Creek Ls) 76.5' (Top Elwren Fm) Shale, d Gn, mass, hd, Ls nodules in top ft.	-0.3 Blown out (Flowing) / 10.0 / 10.0		40-50% water return
	78					
	80					

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE PROJECT HOLE NO.

Hole No. WES-6-12C-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET 5 OF 5 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-12C-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE — STARTED — COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	80					
	82			82.8		
	84		Bot. Depth - 82.8'			

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE PROJECT HOLE NO.

Hole No. 0612C-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-12C-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE: STARTED / COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No: WES-6-12C-90			Date well screen was set: 3/12/90
			+2.5			
			0.0' Ground surface			
			~~Grout mixture~~ (See Note)			Water level just Prior to setting screen –
						6" PVC Casing to 22.3'
			42.0			
			Bentonite Pellets			Note:
						0.0 to 22.0 - Grout
			45.0			22.0 to 25.0' - Bentonite
						25.0 to 42.0 - Sand
			Filter Pack			
			56.5			
			Well Screen			
			76.5			
			~~Trap~~			
			82.8 Boring Depth			

Hole No. 96 12C P2-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-12CP2-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED _____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No: WES-6-12CP2-90			Date well screen was set: 3/13/90
			+2.5			
			0.0' Ground surface			
			Grout mixture			Water level just Prior to setting Screen. –
			19.0			
			Bentonite Pellets			
			21.0			Casing to 19.0'
			Filter Pack			
			28.0'			
			Well Screen			
			38.0'			
			~~Trap~~			
			38.0 Boring Depth			

Hole No. WES-6-13C-90

DRILLING LOG	DIVISION U.S. Navy	INSTALLATION Nwsc Crane In	SHEET 1 OF 4 SHEETS
1. PROJECT Hydrogeologic Studies Demo Site.		10. SIZE AND TYPE OF BIT HQ wireline	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL	
3. DRILLING AGENCY WES		12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500	
4. HOLE NO. (As shown on drawing title and file number) WES-6-13C-90		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER Dan Taylor		14. TOTAL NUMBER CORE BOXES 4	
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED 5/19/90 / COMPLETED 5/19/90
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE 62.9'		19. SIGNATURE OF ~~INSPECTOR~~ Geologist Richard W. Hunt	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	0		silty clay, dBr in top 2' changing to tan Br w/Cr mottling w/depth, soft, moist.			Drilled 0.0 to 22.5' w/ auger
	2					
	4					
	6		v moist below ~6'			
	8					
	10		silty clay becomes v soft & wet below ~ 11.0'			
	12					
	14					
	16					
	18		(18.0') silty clay, dGr, sli sdy, v soft, wet			
	20					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT)

PROJECT | HOLE NO.

Hole No. WES-6-13C-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET 2 OF 4 SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)	WES-6-13C-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	20		Silty Clay (cont), becomes more sdy, firmer & less wet below ~20.0'			
	22		Base of Alluvium (22.5')	22.5		Set 4" PVC casing to 22.5'
			Big clifty Lwr SS?	22.9 Run 1		R.R.G.I. Started coring w/ HQ wireline at 22.9'
	24		?			
	26		Core Ground away, probably Conglomeritic & clayey SS, may be stream deposit	3.5/7.9 -4.4		~50% water return
	28		SS Conglomerate, angular-sub rounded frags, oxid. (Big clifty fm) Sandstone, olive Gr, th bd, vf-f, sli fri, w/ alter shly pts, bd ~ hor to 20° dip.			
	30			30.7 Run 2		
	32		Lim sim frags, oxidized	2.3/3.3 -1.0		~50% water return
			? core loss	34.0 Run 3		
	34		(35.1) Sandstone similar to above w/o shly pts.			Lost all water return at ~36.5'
	36			7.6/8.9		
			- oxid, lim sim.			
	38		37.9 ? core loss (Bot. Big clifty fm) (39.2')	-1.3		
	40		(Top Beech Creek fm) Limestone (Cont.)			

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT) PROJECT HOLE NO.

Hole No. WES-6-13C-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET 3 OF 4 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-13C-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE — STARTED — COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	40		Limestone, lgr Br, m-c crystalline, mass, hd, den fossiliferous, occ, stylolites			
	42	10				
		0		42.9		
				Run 4		Ran out of water
	44	0	(44.0')			
		0	Lm, changes to dGr, f crystalline, w/occ wavey, shaley pts, fossiliferous			
	46	0				
		0		10.0 / 10.0		
	48	5				
		0				
	50	0				
	52	0				
				52.9		Flange
						5/19/90
	54	0	(Base Beech Creek Ls) (54.3') (Top Elwren fm)			
			Shale, dGn, th bd, soft, crumbly			
	56			10.0 / 10.0		
	58		(58.0')			
			Shale, m-d Gn, th bd, w/alter vf silty sandstone pts spaced ~½' apart, ~hor bd, hard			
	60					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-13C-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET 4 OF 4 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-13C-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	60		Sh (cont.)			
	62			C29		
			Bot. Depth 62.9'			
	64					
	66					
	68					
	70					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT) PROJECT HOLE NO.

Hole No. 06 13C-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)	WES-6-13C-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No. WES-6-13C-90			Date well screen was set: 5/19/90
			+2.5			
			0.0 Ground surface			
			~~Grout mixture~~ (see Note)			Water level just Prior to setting Screen. –
			28.0			
			Bentonite Pellets			4" PVC casing to 22.5'
			30.0			Note: 0.0 to 20.0 - Grout; 20.0 to 22.5 - Bent.; 22.5 to 28.0 - Sand
			Filter Pack			
			35.0			
			Well Screen			
			55.0			
			~~Trap~~			
			62.9' Boring Depth			

Hole No. DLo 13CPZ

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)	WES-6-13CPZ-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No: WES-6-13CPZ-90			Date well screen was set: 5/19/90
			+2.5			
			0.0' Ground surface			
			Grout mixture			Water level just Prior to setting Screen. –
			13.0			
			Bentonite Pellets			Set 4" Surface Casing
			15.0			
			Filter Pack			
			20.0			
			Well Screen			
			30.0			
			~~Trap~~			
			30.0 Boring Depth			

Hole No. WES-6-14C-90

DRILLING LOG	DIVISION U.S. Navy	INSTALLATION NWSC Crane, In	SHEET 1 OF 3 SHEETS
1. PROJECT Hydrogeologic Studies (Old Rifle Rg.) Demo Site		10. SIZE AND TYPE OF BIT HQ wireline core	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL	
3. DRILLING AGENCY WES		12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500	
4. HOLE NO. (As shown on drawing title and file number) WES-6-14C-90		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER Don Taylor		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED 5/23/90 / COMPLETED 5/24/90
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE 52.7'		19. SIGNATURE OF INSPECTOR Geologist Richard W. Hunt	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	0		Silty clay, d Br, soft, moist			0.0-13.0' drilled w/ Auger
			1.0'			
	2		Silty-sdy clay, w/ SS grit & frags, v soft, v moist becoming wet-saturated below ~3.0'			
	4					(water 1½-2' from surface in auger hole)
	6		Pebbley clay (similar to above) (6.5')			
	8		Silty clay, y tan w/ gray mottling, sli sdy, soft, moist, occ SS frags.			
	10					
	12		11.5 y-org vf sand (wea Big clifty ss) soft, moist	13.0		Set 4" PVC casing to 13.0' Refusal
	14		? 14.5 (Big clifty fm) Sandstone, y tan, mass, vf-f, homo, oxid, sli friable.	Run 1 8.1/9.6 -1.5'		5/24/90 Started coring w/ HQ wireline at 13.0'
	16					
	18					
	20					

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE PROJECT HOLE NO.

Hole No. WES-6-14C-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET 2 OF 3 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-14C-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	20		SS (cont			
	22			22.6		
			SS is less oxidized below ~22.0'	Run 2		
	24					
	26		occ zones w/ silty shly pts, (rippled)	9.8/10.1		
	28			-0.3		
	30		(Base Big cliffy SS) 31.6' (Top Beech Creek Ls)			Lost all water return at ~ 31.6'
	32		open at Limestn. Limestone, lgr Gr, m-c crystalline, fossiliferous, occ stylolites, hd, den	32.7 Run 3		Flange
	34			2.2/2.2		
				34.9 Run 4		
	36					
	38		37.8' Ls (as above) but dGr, f crystalline, occ many shaley pts.	7.6/7.8		
	40			-0.2		

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-142-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET 3 OF 3 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-142-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	40		Ls Cmnt			
	42			42.7		42.5 – Full depth
				Run 5		Note: Core loss carried below to top of sh.
	44			4.6/4.9		
	46			-0.3		
90: 23-47.1			(Base Beech Creek Ls) (47.1') (Top Elwren Fm)	47.1' f26		Full depth Out of water
	48		Shale, dk Gn massive bd fissile tenuously. (soft sh) (core loss ground away)	Run 6 4.6/5.1		
	50			-0.5		
			51.3' Sh becomes m-d Gn, hard, + w/occ silty-sd pts.			
	52			52.7		
			Bot Depth- 52.7'			
	54					
	56					
	58					
	60					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. 0614C-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number) WES-6-14C-90		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No. WES-6-14C-90			Date well screen was set: 5/24/90
			+2.5			
			0.0 Ground surface			
			~~Grout mixture~~ (see Note)			Water level just Prior to setting screen. –
			23.0			Casing to 13.0'
			Bentonite Pellets			
			25.0			Note: 0.0 to 13.0 Grout. 13.0 to 15.0' Bentonite. 15.0 to 23.0' Sand
			Filter Pack			
			28.0			
			Well Screen			
			48.0			
			~~Trap~~			
			52.7 Boring Depth			

Hole No. 06 14 C P2 90

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number) WFS-6-14CP2-90		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED _____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No. WES-6-14CP2-90			Date well screen was set: 5/25/90
			+2.5			
			0.0' Ground surface			
			Grout mixture			Water level just Prior to setting Screen. –
			8.0'			
			Bentonite Pellets			
			10.0			Set 4" Surface Casing
			Filter Pack			
			15.0			
			Well Screen			
			25.0			
			~~Trap~~			
			25.0 Boring Depth			

Hole No. WES-6-15C-90

DRILLING LOG	DIVISION U.S. Army	INSTALLATION NWSC, Crane In	SHEET 1 OF 4 SHEETS
1. PROJECT Hydrogeologic Studies (Old Rifle Rg) Demo Area		10. SIZE AND TYPE OF BIT HQ wireline Core	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL	
3. DRILLING AGENCY WES		12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500	
4. HOLE NO. (As shown on drawing title and file number) WES-6-15C-90		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER Dan Taylor		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☑ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED 5/25/90 / COMPLETED 5/26/90
7. THICKNESS OF OVERBURDEN 1.5'		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE 62.2'		19. SIGNATURE OF ~~INSPECTOR~~ Geologist Richard W. Hunt	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	0		Silty clay w/ sand moist 1.5'			Auger 0.0-1.5'
	2		(Big clifty ss)			R.R.Bit to 9.7' Set 6" Casing to 2.8'
	4			R.R. Bit		
	6		Sandstone gray, massive bd, rippled, vf, homo, sli friable, highly oxid			
	8					
				9.7		set 4" casing to 9.7'
	10			Run 1		
	12					
	14			10.2/10.3		Breaks along bd (~hor) are probably induced + show spots.
				0.1		
	16					
	18					
	20			20.0'		

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT)

PROJECT | HOLE NO.

Hole No. WES-6-15C-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET 2 OF 4 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-15C-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE — STARTED — COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	20		SS (cont.)	Run 2		5/26/90
				2.2		
	22		Below ~20.0' there are many rounded lim nodules 1/8-1/4" dia. (oxid Pyrite)	22.2		
				Run 3		
	24					
	26			9.9/10.0		
				-0.1		
	28					
	30		Below ~30' is not oxid, olive tan buff ss, w/pyrite nodules (as above)			
	32			32.2		
				Run 4		
	34		occ shly pts			
	36		shly pts	9.8/10.0		
	38			-0.2		
			(Base Big cliffy SS) 39.2' (Top Beech Creek LS)			
	40					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT)

PROJECT | HOLE NO.

Hole No. WES-6-15C-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET 3 OF 4 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-15C-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	40		(soil) Limestone, lgr Br, mass m-c crystalline fossiliferous, occ stylolites, hd den			Lost all water return at 40.3'
	42			42.2		42.0' Pull depth
				Run 5		
	44					
			45.5			
	46		Ls (as above) but dGr, f-m crystalline, occ shly pts	10.2/10.0		No Return
				10.2		
	48					
	50					(Ran out of water at ~49.0')
	52			52.2		
				Run 6		
	54			3.8/3.8		
			(rounded inclus of Elwren) (sh in bot 0.2-0.3' Ls)			
	56		(Bot Beech Creek Ls) (56.0') (Top Elwren fm)	56.0'		Blocked
			Shale, dGr, hd, crumbly fissile, soft.			
	58		Burrows) hard mottled GrtGr sh + siltstone	6.2/6.2		
			--- 59.5			
	60					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-15C-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET 4 OF 4 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-15C-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED _____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	60		Sltly silty sandstone, lt gr & Gn, thin bd, hd, burrowed			
	62			62.2'		
			Bot. Depth - 62.2'			
	64					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT)

PROJECT | HOLE NO.

Hole No. 0615C-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number) WES-6-15C-90		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No: WES-6-15C-90			Date well screen was set: 5/26/90
			+2.5			
			0.0' Ground surface			
			~~Grout mixture~~ (See Note)			Water level just Prior to setting screen. –
			28.0			
			Bentonite Pellets			Set 4" casing to 9.7'
			30.0			
			Filter Pack			Note: 0.0 to 9.0 - Grout; 9.0 to 11.0 - Bent.; 11.0 to 28.0 Sand
			36.0			
			Well Screen			
			56.0			
			~~Trap~~			
			62.2' Boring Depth			

Hole No. 06/5CP2-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number) WES-6-15CP2-90		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No. WES-6-15CP2-90			Date well screen was set: 5/27/90
			+2.5			
			0.0' Ground surface			
			Grout mixture			Water level just Prior to setting Screen –
			6.0			
			Bentonite Pellets			4" Casing to 7.0'
			8.0			
			Filter Pack			
			20.0			
			Well Screen			
			30.0			
			~~Trap~~			
			30.0 Boring Depth			

Hole No. WES-6-16C-90

DRILLING LOG	DIVISION U.S. Navy	INSTALLATION NWSC Crane In	SHEET 1 OF 5 SHEETS
1. PROJECT Hydrogeologic Studies (Old Rifle Rg) Demo Site		10. SIZE AND TYPE OF BIT HQ Wireline	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL	
3. DRILLING AGENCY WES		12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500	
4. HOLE NO. (As shown on drawing title and file number) WES-6-16C-90		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER Dan Taylor		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☑ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED 5/31/90 / COMPLETED 6/4/90
7. THICKNESS OF OVERBURDEN 8.3'		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE 88.5'		19. SIGNATURE OF ~~INSPECTOR~~ Geologist Richard W. Hunt	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	0		Silty clay, yl-brn, soft-mod soft, moist, occ SS frags			0.0 to 8.3 - Auger
	2					
	4					
	6		becomes more sdy + w/ increase in SS frags below ~5'.			Set 6" PVC casing to 8.3'
	8			8.3'		Refusal
	10		(Golconda Fm) Limey shale w/ shly-crystalline Ls lens + interbeds, dGr, fossiliferous	R.R. 8.4		8.3-12.0' drilled w/ R.R. bit.
	12			12.0'		
	14			Run1 1.2/5.7 -4.5		Started coring w/ HQ Wireline at 12.0'
	16		? Core loss ground away (limey sh)?			Lost all water, return at ~14.5'
	18		(Base Golconda Ls) 18.8' (Top Indian Springs member) Shale, dgnGr, th bd	17.7 Run 2 0.3/0.3 (0.2) Run 3 1.0/1.0 19.4 Run 4 1.1/1.1		No return; blocking off
	20					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT)

PROJECT | HOLE NO.

IN5 170 023 498

Hole No. WES-6-162-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET 1 OF 5 SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number) WES-6-162-90		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
		15. ELEVATION GROUND WATER	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	20		Sh, (cont.)	20.5 Run 5		
	22			1.9/2.4 -0.5 22.9		Reamed hole & set 4" Casing to 22.9'; let set for 2 hrs
			(Crumbly in bot 3')	Run 6		6/2/90
	24		(Base Indian Spr) (25.9')			
	26		(Top Big Clifty ss) Sandstone, lgrGn, th bd, rippled, occ to num lGr sh/shly pts. occ tan Gr hd nodules in top 2' vf, sli friable	9.1/10.0		~ 100% return
	28			-0.6 -0.4		
	30		Lim sh (oxid)			
			30.9'			
	32		Sandstone, lgnGr, th bd-mass, rippled, vf, friable, occ granular pyrite nodules 1/8 to 1/2" size.	32.9 Run 7		32.7 - Pulldepth
	34		(SS similar to above but w/o shly pts)			
	36			10.2/10.0		~ 90-95% return
	38			+0.2		
	40					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT)

PROJECT | HOLE NO.

Hole No. WES-6-16C-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET 3 OF 5 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-16C-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE — STARTED — COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	40		55 (cont.)			
			Jts are fresh			
	42			42.9		
				Run 8		
	44					
	46			9.7 / 10.0		~90-95% Return
	48					
	50					
	52			52.9		52.6' Pull depth
			52.0 - 60.4' -occ vdGr shly pts along ripples	Run 9		
	54					
			Jts shown are along bd + are Fresh breaks.			
	56			10.1 / 9.9		
	58			+0.2 +6.3		
	60					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT)

PROJECT | HOLE NO.

Hole No. WES-6 46C-9D

DRILLING LOG	DIVISION	INSTALLATION	SHEET 4 OF 5 SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
		15. ELEVATION GROUND WATER	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	60		SS (Cont.)			
	62			62.8 Run 10		62.7 Pull depth
	64					
	66			10.2 / 10.1		Losing ~50-60%
			Base Big Cliffs (67.7')			
	68		Top Bomb creek Ls. Limestone, lgr Br, mass, m-c crystaline, fossiliferous, occ stylolites, hd. den			
	70					
	72			77.9 Run 11		
			73.1 Ls (as above) but dGr, f-m crystaline occ wavy shly pts.			Lost all drill water at beginning of run 11
	74					
	76			5.8 / 6.1		
	78			-0.3		out of drill water 78.7' Pull depth
				79.0 Run 12		
	81					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-16C90

DRILLING LOG	DIVISION	INSTALLATION	SHEET 5 OF 5 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-16C-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE — STARTED — COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Ls (cont.)			
				4.2/3.9 +0.3		No return
	82	a				
		a		82.9		
				Run 13		6/4/90
			Base Beech Creek Ls 83.8' Top Elwren Fm			
	84		Shale, dGn, mass, hard.	4.6/5.6		No Return
	86			-0.1		
	88		Core left in hole?	88.5'		
			Bot depth - 88.5'			
	90					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT) PROJECT HOLE NO.

Hole No. 06166-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)	WES-6-16C-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No: WES-6-16C-90			Date well screen was set: 6/4/90
			+2.5			
			0.0' Ground surface			
			~~Grout mixture~~ (See Note)			Water level just Prior to setting Screen –
			52.0			
			Bentonite Pellets			6" casing to 8.3' 4" " " 22.9'
			55.0			
			Filter Pack			Note: 0.0 to 24.0' - Grout. 24.0 to 26.0' - Bent. 26.0 to 52.0' - Sand
			63.8			
			Well Screen			
			83.8			
			~~Trap~~			
			88.5 Boring Depth			

Hole No. 06116C.P2-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)	WES-6-16CP2-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
		15. ELEVATION GROUND WATER	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No: WES-6-16CP2-90			Date well screen was set: 6/5/90
			+2.5			
			0.0' Ground surface			
			Grout mixture			Water level just Prior to setting screen –
			24.0			
			Bentonite Pellets			4" casing to 23.0'
			26.0			
			Filter Pack			
			30.0			
			Well Screen			
			40.0			
			~~Trap~~			
			40.0 Boring Depth			

Hole No. D616CP3-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)	WES-6-16CP3-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No: WES-6-16CP3-90			Date well screen was set: 6/7/90
			+2.5			
			0.0 Ground surface			
			Grout mixture			Water level just Prior to setting screen –
			6.0			
			Bentonite Pellets			Surface casing to ~ 5'
			8.0			
			Filter Pack			
			10.0			
			Well Screen			
			20.0			
			~~Trap~~			
			20.0 Boring Depth			

Hole No. WES-6-IX-90

DRILLING LOG	DIVISION US Navy	INSTALLATION NWSC Crane Ind	SHEET 1 OF 5 SHEETS

1. PROJECT Hydrogeologic Studies Old Rifle Rg. Demo Site	10. SIZE AND TYPE OF BIT HQ Wireline
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL
3. DRILLING AGENCY WES	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) WES-6-IX-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER Dan Taylor	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE: STARTED 5/8/90 COMPLETED 6/12/90
7. THICKNESS OF OVERBURDEN 28.8'	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE 81.2'	19. SIGNATURE OF ~~INSPECTOR~~ Geologist Richard W. Hunt

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	0		Silty clay, tan-Br, soft-v soft, v moist			0.0 to 4.9' Drilled w/Auger. Set 6" PVC Casing to 4.9'
	2					
	4		wet at bot. 4.9'			
			Silty clay, y tan Red + Gr mottled, w/ ss blocks + pebbley frags, soft, v moist-moist, (Alluvial/Colluvial Soil)			4.9 to 11.5' R.P. Bit
	6					
	8					
	10			11.5		
	12			Run 1		
	14			3.0 / 10.0		100% Water Return
	16			7.0'		Caloss Ground away
	18					
	20					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-12-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET 2 OF 3 SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)	WES-6-12-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	20		Silty clay w/SS inclus (cont.)			
				21.5		
				Run 2		
	22			6.0/7.0	10	
				22.5		
				Run 3		
	24					
	26			5.3/6.0		100% water Return
	28			-4.7'		
			28.8			
			(Big cliffy fm) Sandstone, lytan, th bd - mass, rippled, vf-f, homo, oxidized, sli friable			
	30					
	32			32.5		32.0 — Pull depth
				Run 4		
	34					
	36			10.0/7.5		90-95% water Return
	38			+0.5		
	40					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-17-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET 3 OF 5 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-17-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	40		SS (cont)			
				42.0'		
	42			Run 5		6/12/90
	44					
			occ shly pts			90-95% water Return
	46			10.1/10.3		
	48			0.2		
	50		49.8 Base of ...			
			occ shly pts			
			SS (as above) but 1 Gr			
	52			52.3		
				Run 6		
	54					
	56		shly pts			90-95% water Return
				9.7/10.2		
	58			0.5		
	60					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-170-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET 4 OF 5 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-170-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
	15. ELEVATION GROUND WATER
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED _____ DEG. FROM VERT.	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	60		SS (cont.)			
			(Base Big Cliffy SS) 61.5' (Top Beech Creek Ls)			
	62		Limestone, lgr Br, m crystalline, fossiliferous, hd, den, occ stylolites	62.5 Run 7		62.0 – Full depth
			open w/or sd fillings.			
	64					Lost all water Return at ~62.7' thr ~hor Jt. (0.2' core loss - brought down from Run 6)
	66			10.3/10.0		
	68		68.7'	10.3		
			Ls (as above) but dGr, f-m crystalline, occ wavy shly pts			
	70					
	72			72.5 Run 8		
	74					
				6.9/7.0		No Return
	76			-0.1		
	78		(Base Beech Creek Ls) 77.2 (Top Elwren Fm)			
	80		Shale, dGn th bd, hd	Run 9		Blocked

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-17C-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET 5 OF 5 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-17C-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
	15. ELEVATION GROUND WATER
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	80		Sh (cont.)	1.7/1.7 81.2		
	82		Bot. Depth - 81.2'			
	84					
	86					
	88					
	90					
	92					
	94					
	96					
	98					
	100					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-17C-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No: WES-6-17C-90			Date well screen was set: 6/12/90
			+2.5			
			0.0 Ground surface			
			~~Grout mixture~~ (See Note)			Water level just Prior to setting Screen. –
			47.0			Set 6" Surface Casing
			Bentonite Pellets			Note:
			50.0			0.0 to 25.0 - Grout 25.0 to 28.0 - Bent. 28.0 to 47.0 - Sand.
			Filter Pack			
			59.2			
			Well Screen			
			79.2			
			~~Cap~~			
			81.2 Boring Depth			

Hole No. WES-6-18-90

DRILLING LOG	DIVISION U.S. Navy	INSTALLATION NWSE Crane In	SHEET 1 OF 4 SHEETS
1. PROJECT Hydrogeologic Studies, Old Rifle Rg. Demo Site		10. SIZE AND TYPE OF BIT H O Wireline Core	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL	
3. DRILLING AGENCY WES		12. MANUFACTURER'S DESIGNATION OF DRILL Failing 150-U	
4. HOLE NO. (As shown on drawing title and file number) WES-6-18c-90		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER Dan Taylor		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☑ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED 6/13/90 / COMPLETED 6/14/90
7. THICKNESS OF OVERBURDEN 23.3		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE 62.4'		19. SIGNATURE OF ~~INSPECTOR~~ Geologist Richard W. Hunt	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	0		Silty clay - dBr changing to tan w/depth, moist soft, w/ss frags.			Augered 0.0 to 13.5'
	2					
	4		(5.0')			
			Silty Clay, mGr, v soft. v moist-wet.			
	6					
	8		Clay becomes v soft & hole continued to squeeze in starting at ~ 6.0'			
	10					Note: After augering to 13.5', put in 6" PVC casing and was able to push the casing downward to 22.3', using hydralics on kelly, and w/o pre-drilling. Cleaned inside of casing out w/ R.R. bit and started coring at 23.3'
	12					
	14					
	16					
	18					
	20		~20.0'			

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-MW-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET 2 OF 4 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-PBC-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE — STARTED — COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	20		Sand, Clayey, dGr-gnGr, vFine			
	22		TOD 22 (Big Clifty SS)	23.3		
	24		Sandstone, Gn in top 2-3' becoming 1'Gr below, mass, vf-f, homo, friable, num pyrite nodules	Run 1		6/14/90 Started coring w/ HQ wireline at 23.3'
	26					
	28			8.2/9.1		
				-0.9		
	30					
	32			32.4		
				Run 2		
	34					
	36			9.9/10.0		
				-0.1		
	38					
	41					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-18C-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET 3 OF 4 SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)	WES-6-18C-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	40		Sandstone (Cont.)			
	42			42.4		
			Conglomerate in Bot 0.1'	Run 3		
			Base Big Cliff SS 43.4			
			(Top Beech Creek Ls)			
	44		Limestone, lgrBr mass, m-c crystalline, fossiliferous, occ stylolites, bed. clay.			
	46					
	48			9.9 / 10.0		90-95% water return
			49.3'	-0.1		
	50		Ls (as above) but m-d Gr, f-m cryst, occ wavy shly pts.			
	52			52.4		52.3' Full depth
				Run 4		
	54					Carry 0.1' core loss down to top Elwren from Run 3
	56					
	58			9.8 / 10.0		
			Bot Beech Creek Ls 59.2'	-0.2		
			(Top Elwren fm)			
	60					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

HOLE NO. WES-6-18X-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET 1 OF 4 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) WES-6-18X-90	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE — STARTED — COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	60		Shale, dGn, th bd, ha			
	62			62.4		
			Bot. Depth - 62.4			
	64					

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. WES-6-18r-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number)	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
	15. ELEVATION GROUND WATER
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	16. DATE HOLE — STARTED — COMPLETED
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING %
9. TOTAL DEPTH OF HOLE	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No: WES-6-18r-90			Date well screen was set: 6/14/90
			+2.5			
			0.0' Ground surface			
			~~Grout mixture~~ (See Note)			Water level just Prior to setting screen. –
			31.0			4" Casing to 22.6'
			Bentonite Pellets			Note: 0.0 to 22.0 - Grout; 22.0 to 24.0 - Bent.; 24.0 to 31.0' sand
			34.0			
			Filter Pack			
			39.2			
			Well Screen			
			59.2			
			~~Trap~~			
			62.4 Boring Depth			

Hole No. WES-6-18PZ-90

DRILLING LOG	DIVISION	INSTALLATION	SHEET OF SHEETS
1. PROJECT		10. SIZE AND TYPE OF BIT	
2. LOCATION (Coordinates or Station)		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY		12. MANUFACTURER'S DESIGNATION OF DRILL	
4. HOLE NO. (As shown on drawing title and file number)		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER	
		16. DATE HOLE	STARTED / COMPLETED
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING %	
9. TOTAL DEPTH OF HOLE		19. SIGNATURE OF INSPECTOR	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Well No. WES-6-18PZ-90			Date well screen was set: 6/15/90
			+2.5			
			0.0' Ground surface			
			Grout mixture			Water level just Prior to setting Screen –
			18.0			
			Bentonite Pellets			4" Casing cut to 19.0'
			20.0			
			Filter Pack			
			23.0			
			Well Screen			
			33.0			
			~~Trap~~			
			33.0 Boring Depth			

DRILLING LOG | DIVISION | INSTALLATION: Crane NSWC | SHEET 1 OF 4 SHEETS

1. PROJECT: Old Rifle Range Monitoring Wells
2. LOCATION (Coordinates or Station): E. of Hiway 8 (~300 ft ENE of OGC18 (azimuth from C19 to C18 is 255°))
3. DRILLING AGENCY: WES
4. HOLE NO. (As shown on drawing title and file number): OGC19
5. NAME OF DRILLER: E. Brown
6. DIRECTION OF HOLE: ☒ VERTICAL ☐ INCLINED _____ DEG. FROM VERT.
7. THICKNESS OF OVERBURDEN: 18.4'
8. DEPTH DRILLED INTO ROCK: 36.4'
9. TOTAL DEPTH OF HOLE: 54.4'
10. SIZE AND TYPE OF BIT: HQ
11. DATUM FOR ELEVATION SHOWN (TBM or MSL): MSL
12. MANUFACTURER'S DESIGNATION OF DRILL: Longyear BK-81
13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED: ; UNDISTURBED: 4
14. TOTAL NUMBER CORE BOXES: 3
15. ELEVATION GROUND WATER: 5.4' NOV 26, 1994
16. DATE HOLE: STARTED 18 Nov '94; COMPLETED 25 NOV 94
17. ELEVATION TOP OF HOLE:
18. TOTAL CORE RECOVERY FOR BORING: %
19. SIGNATURE OF INSPECTOR: W.F. Murphy and E. Glynn

ELEVATION a	DEPTH FT b	LEGEND c	CLASSIFICATION OF MATERIALS (Description)	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	0		TOP OF GROUND			
			0.0-12.0 Silt (ML) to clay (CL-CH). Dry to moist at depth. Brown. Mottled brown, tan, gray, black below 10ft. Alluvium probably	PUSH 1 0.0-1.5		Pushed 1½" Splitspoon for soil samples. Advanced boring w/ 7" hollow stem auger. Sampled thru auger. Hole remained open to top of rock.
	2					
	4					
				PUSH 2 5.0-6.5	SAMP 1	5.4-6.0 Silt to stiff clay at bottom. Dry
	6					
	8					
	10			PUSH 3 10.0-11.5	SAMP 2	10.4-11.2 Mottled silt/clay and organic debris. Slightly moist ▼ 1558, 11/18
	12		12.0-18.4 Clay (CH), gravel GP, GC and Sand SP w/ gravel. Gravel is in layered zones (see log for P2 also). Gravel is pebbles and cobbles. Max size sampled was 1½". Rounded gravel of sandstone. Gravel has a clayey matrix. Water entered boring when gravel encountered.			▼ 1520, 11/18 measured after drilling to 15.0ft
	14					
	16			PUSH 4 15.0-16.5	SAMP 3 SAMP 4	15.0-15.2 soft wet clay 15.2-16.0 clayey sand, gravel.
	18		TOP OF ROCK 18.4			Refusal 18.4
			SANDSTONE (Bag Chfty) Lt gray, fine grained, friable rounded grained top of run	PUSH 5		
	20			RUN 1		Started coring 18.9

ENG FORM ...

DRILLING LOG (Cont Sheet) ELEVATION TOP OF HOLE

PROJECT 22 NOV 94 | INSTALLATION | Hole No. 06C19 | SHEET 2 OF 4 SHEETS

ELEVATION a	DEPTH Ft b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			SANDSTONE (Big Cliffy) some shale some iron nodules looks like pyrite less shale in solid pc. 21.7 - 22.5	3.1/4.2 -1.1 RUN 1	20.0	Reamed hole w/ 7 1/2" flight auger to 18.1' to set 6" PVC casing to top of rock. Poured 6 handsfull of bentonite hole plug. Set 6" casing to 18.4'; w/ 2 ft stickup. Grouted around annulus from surface w/ bentonite/ cement mixture.
RUN 1	22 23.1					
	24		SS. same as above except less shale + less breakage. Hard, dense. Some soln. cavities at 26.6. (5 breaks in Run)	4.6/5.0	BOX 1	Started 22 NOV 94 Coring at 18.9 - 23.1
	26			-0.4		15 breaks at 0° run 1
RUN 2	28 28.1		28.1 same as above sl. less pyrite nod.	RUN 2		began to lose H_2O at 26.1 faster than we could fill pan w/water truck. Hooked H_2O directly to pump from truck to keep up w/ water loss to form.
	30		more shale partings	4.8/5.0	30.5	
	32	45°	jt at 45° @ 31.7	-0.1	BOX 2	
RUN 3	33.1		brownish banding at 33.9-34.6	RUN 3		
	34		Limestone, lt. gray, fn. grn. stylolitic, foss. hard, dense, mass. @ 34.8	9.2/9.5		tape bottom hole 42.6 believe that bottom of casing is not in Rock, since we are losing so much water & found gravel in core barrel, run 3.
	36					
	38			-1.3		
	40		39.6 thin shale bed, at break			
	41.3					
	42			RUN 4		
RUN 4	42.6				42.6	RUN5 - 42.6-47.0 NO WATER RETURN
	44				3	

ENG FORM 1836-A JUN 67 (ER 1110-1-1801) GPO 1980 OF-628-603 PROJECT PRANE 22 NOV 94 HOLE NO. 06C19

DRILLING LOG (Cont Sheet) ELEVATION TOP OF HOLE — Hole No. 06C19

PROJECT 22 NOV 94 — INSTALLATION — SHEET 3 OF 4 SHEETS

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	44		LS. same as above breaks of shaley beds			Rec. 4.6 core 4.4
	45			4.6 / 4.4 +0.2		rock v. competent except for drilling breaks at shale ptg.
	46			RUN 5		
RUN 5 46.8			NOV 23 1994			NO WATER RETURN NOV 23, 1994 RUN 3
	48		1 inch thick bands of shale stringers @ 46.8–47.4	3.9 / 4.3 -0.4'	3	3 breaks. Rock is very competent dense & hard except drill breaks at shale.
	50			Run 6		
RUN 6 51.1	52		Shale, lt. grey/green some slickensides at 52.0 – hard – many drill breaks top 1.0'	5.3 / 3.3		51.1–54.4 took ~30 min to core 3.3 ft. NO WATER RETURN
	54			RUN7		bot 54.4
	56				23NOV	sand to 27.6. bentonite pellets dry to 22.9'
					25NOV	bentonite 22.6'
	58					
	60					

ENG FORM 1836-A JUN 67 (ER 1110-1-1801) GPO 1980 OF-629-603 PROJECT CRANE 22 NOV 94 HOLE NO. 06C19

DRILLING LOG (Cont Sheet) ELEVATION TOP OF HOLE

Hole No. 06C19

PROJECT

INSTALLATION CRANE INDIANA

SHEET 4 OF 4 SHEETS

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	3					
			▼ 5.4' 26 NOV 94 (disregard until well is developed).			
	6					
	9					
	12					
	15					
	18		6 inch PVC casing 18.4'			
	21					
			Top of bentonite 22.4 after swelling			
	24					
	27		TOP FILTER SAND 27.6			
	30					
	33		TOP OF SCREEN 34.4			
	36					
	39					
	42					
	45					
	48					
	51					
	54		BOT OF HOLE 54.4 AND BOT OF SCREEN			
	57					

ENG FORM 1836-A JUN 67 (ER 1110-1-1801) GPO 1980 OF-628-603

PROJECT CRANE 22 NOV 94

HOLE NO. N-119

DRILLING LOG

DIVISION	
INSTALLATION	WES - GL
SHEET	1 OF 3 SHEETS
1. PROJECT	Old Rifle Range Monitoring Wells
2. LOCATION (Coordinates or Station)	N 300' E of 06C18, A/SWC
3. DRILLING AGENCY	WES
4. HOLE NO. (As shown on drawing title and file number)	06C19P2
5. NAME OF DRILLER	E. Brown w/ V. Moxon
6. DIRECTION OF HOLE	☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.
7. THICKNESS OF OVERBURDEN	18.2
8. DEPTH DRILLED INTO ROCK	25.0
9. TOTAL DEPTH OF HOLE	25.0, hole filled to 21.5
10. SIZE AND TYPE OF BIT	Varies
11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
12. MANUFACTURER'S DESIGNATION OF DRILL	Longyear BK 81
13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED: 4 ; UNDISTURBED:
14. TOTAL NUMBER CORE BOXES	0
15. ELEVATION GROUND WATER	
16. DATE HOLE	STARTED 11/19/94 ; COMPLETED
17. ELEVATION TOP OF HOLE	
18. TOTAL CORE RECOVERY FOR BORING	%
19. NAME OF INSPECTOR	E. Glynn / B. Murphy

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			0.0 - 9.5 Clay (CL) See log of 06C19 (deep boring of this cluster) for details			Rockbit w/ 8" Rock bit to 10.0 ft to start splitspoon sampling. Circulated w/ clean water then mud pan. (did not have 8" flight auger available). Rockbit to 11.0 ft to set 6" surface PVC casing. Set casing at 11.0 ft in holeplug bentonite. Tremied grout thru 1" pipe in annulus, bottom to top of ground. Grout = neat cement + Quik-gel bentonite.
	2					
	4					
	6					
	8					11.0 - 25.0 ft - advanced boring w/ 5 7/8" rock bit.
	10		9.5-18.2 Sand and sandy gravel. See description of split spoon samples at right. Alluvium.	PUSH 1 10.0 - 11.5	SAMP 1	10.7-11.2 Mottled red-brn sandy clay w/small pebbles and organic mat'l. Wet
	12			PUSH 2 11.5 - 12.5	SAMP 2	11.6-12.2 Mottled red-brn tbilk sand in clay matrix.
				PUSH 3 12.5 - 14.0	no Samp.	12.5-14.0 Sand, med gravel, brn., sparse pebbles.
	14			PUSH 4 14.0 - 15.5	SAMP 3	14.0-15.5 Sandy gravel (GP-GM) Rounded pebbles to 1" diam. Some organic mat'l
	16			MISSED		
	18		Top of Rock 18.2	PUSH 5 17.4 - 18.9	SAMP 4	17.8-18.2 Sandy gravel as above Top of Rock 18.2
			SANDSTONE (Big Cliffs).			Refusal at 18.9 (top of unweathered rock.
	20					

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE | PROJECT | HOLE NO.

DRILLING LOG (Cont Sheet)

ELEVATION TOP OF HOLE

Hole No. 06C13P2

PROJECT: Old Rifle Range Monitoring Wells

INSTALLATION

SHEET 2 OF 3 SHEETS

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			Bottom of Screen 21.5'			Rockbit to 25.0 feet. Sand from alluvium above washed into the hole. We were able to jet the casing to 21.5' using the empty HQ outer barrel to wash the sand as casing was advanced thru the barrel.
	22					
	24					
			Bottom of boring 25.0			Set 10 ft. of 2" PVC well screen from 21.5 to 11.5' (TOC). continued to surface w/ 2" PVC riser. Left about 4' stickup, protected with 6" pvc cover on gravel apron.
	26					
						Drillers developed well about 2 wks later by surging and bailing.

ENG FORM 1836-A (ER 1110-1-1801) GPO 1980 OF-628-603 PROJECT HOLE NO.

DRILLING LOG (Cont Sheet) ELEVATION TOP OF HOLE — Hole No. 06C19PZ

PROJECT: OLD RIFLE RANGE Monit. Wells — INSTALLATION: CRANE IN — SHEET 3 OF 3 SHEETS

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) 06C19PZ d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	0.0		TOP OF GROUND			
						This well spans the alluvial aquifer and the top 3.3' of the rock (sandstone) aquifer.
			bentonite cement grout 7.0 to 0.0 in annulus between 2" and 6" PVC casings.			
	7.0		7.0 Bentonite Pellets			
	10.0		Top of filter Sand 10.0 Ft			
			6" Surface casing O.D. 11.0 Ft			
	11.5		11.5 - Top of 10' PVC (2") Screen			
					11.4'	water level measured in 06C19 boring on 11/18/94. (alluvial aquifer level).
			18.2 top of rock			
	21.5		BOTTOM OF HOLE and SCREEN			
			21.5 - 25.0 - hole backfilled w/ Sand washed in from alluvium above top of rock			

ENG FORM 1836-A JUN 67 (ER 1110-1-1801) GPO 1980 OF-628-603 — PROJECT: OLD RIFLE RANGE — HOLE NO. 06C19PZ

Appendix E
Field measurements of well parameters

Well Number	Sample Date	Well Depth (ft)	Water Level (ft)	Volume Purged (gals)	pH	Cond. (μmhos)	Temp °C
0601A	11/27/90	23.18	12.25	2.5[1]	7.23	1,000	12.1
	05/31/91	23.05	10.75	2.0[1]	7.01	1,200	11.9
	11/20/91	23.00	14.35	2.5[1]	6.50	1,400	17.3
	03/31/92	23.10	12.70	1.5[1]	6.89	720	14.0
0601B	11/27/90	48.00	--	DRY	--	--	--
	05/30/91	48.00	--	DRY	--	--	--
	11/20/91	48.00	--	DRY	--	--	--
	03/31/92	48.00	--	DRY	--	--	--
0606	11/27/90	65.55	45.35	10.0	7.17	3,500	17.9
	05/30/91	65.55	45.30	10.0	7.01	3,450	11.5
	11/20/91	65.00	45.15	4.0[1,2]	5.74	2,850	17.0
	03/31/92	65.00	45.25	4.0[1,2]	5.95	2,880	13.8
0607	11/27/90	32.25	19.00	7.0	4.76	2,700	18.4
	05/30/91	32.20	18.85	6.5	3.45	2,900	18.0
	11/20/91	31.95	19.40	4.0[1]	4.54	2,600	16.1
	03/31/92	31.90	16.60	5.0[1]	5.23	2,750	13.3
0612	11/27/90	55.00	39.60	3.5[1]	6.61	2,550	11.1
	05/30/91	54.95	39.75	3.0[1]	6.59	3,008	11.1
	11/20/91	54.75	39.40	3.0[1]	6.48	2,750	15.3
	03/31/92	54.70	39.70	3.0[1]	6.89	2,700	12.0
06C01	11/28/90	233.10	181.95	26.0	6.59	1,400	6.2
	05/31/91	233.15	179.20	27.0	7.41	355	15.3
	11/20/91	230.25	185.10	23.0[2]	7.88	320	18.1
	03/31/92	230.30	182.40	24.0[2]	8.29	320	14.5
06C01P2	11/28/90	121.40	--	DRY	--	--	--
	05/31/91	121.35	--	DRY	--	--	--
	11/20/91	121.35	--	DRY	--	--	--
	03/31/92	121.35	--	DRY	--	--	--

(Sheet 1 of 5)

[1] Purged dry.
[2] Pumped.

Well Number	Sample Date	Well Depth (ft)	Water Level (ft)	Volume Purged (gals)	pH	Cond. (μmhos)	Temp °C
06C01P3	11/28/90	57.40	43.30	7.5	7.38	2,450	5.3
	05/31/91	57.35	42.55	7.0	6.12	2,300	5.0
	11/20/91	57.00	43.25	3.0[1,2]	6.62	1,900	17.8
	03/31/92	57.00	43.90	7.0[1]	6.75	1,950	14.5
06C02	03/06/91	69.60	16.10	27.0	7.09	312	13.6
	06/04/91	69.55	17.40	27.0[2]	7.09	435	14.2
	11/19/91	69.15	20.50	25.0[2]	7.75	390	15.3
	04/02/92	69.15	17.55	26.0[2]	7.75	375	12.5
06C02P2	03/06/91	42.30	14.95	14.0	7.00	421	13.4
	06/04/91	42.35	16.35	13.0[2]	7.20	450	16.0
	11/19/91	42.30	20.30	11.0[2]	7.86	415	15.3
	04/02/92	42.30	16.60	13.0[2]	7.65	385	12.7
06C03	03/16/91	89.65	13.60	38.0	6.97	350	14.7
	06/05/91	89.50	15.45	38.0[2]	6.80	350	11.7
	11/19/91	89.25	19.85	35.0[2]	7.81	355	16.8
	04/02/92	89.30	14.85	38.0[2]	7.54	355	12.5
06C03P2	03/16/91	23.30	2.35	10.5	7.35	401	13.1
	06/05/91	23.35	4.15	5.0[1,2]	6.98	425	12.8
	11/19/91	23.00	4.70	3.0[1,2]	8.32	439	16.6
	04/02/92	23.00	2.50	5.5[1]	7.55	385	10.5
06C04	03/16/91	101.40	28.07	37.0	7.22	500	13.2
	06/05/91	101.35	29.65	37.0[2]	7.35	500	13.5
	11/19/91	101.50	35.00	34.0[2]	7.83	510	14.2
	04/02/92	101.50	29.60	36.0[2]	7.55	495	12.4
06C04P2	03/16/91	29.35	20.00	5.0	6.98	610	13.1
	06/05/91	29.30	21.35	2.5[1]	7.86	800	14.4
	11/19/91	29.15	21.90	2.5[1]	7.82	750	15.1
	04/02/92	29.15	20.40	3.5[1]	7.58	600	11.6
06C05	03/16/91	83.00	16.10	33.0	7.72	510	12.9
	06/05/91	83.05	17.75	34.0[2]	7.53	500	13.5
	11/19/91	83.00	24.15	30.0[2]	8.21	550	14.7
	04/02/92	83.00	18.25	33.0[2]	7.99	500	11.9
06C06	03/16/91	67.20	19.35	24.0	8.30	480	9.1
	06/05/91	67.20	20.80	24.0[2]	8.30	500	13.6
	11/19/91	67.00	26.60	20.5[2]	9.03	510	14.3
	04/02/92	67.00	20.95	24.0[2]	8.61	500	12.7
06C06P2	03/16/91	34.90	6.15	14.5	8.31	100	8.7
	06/05/91	34.85	10.20	3.0[1,2]	6.34	125	13.6
	11/19/91	34.60	13.90	3.0[1,2]	7.57	100	15.6
	04/02/92	34.70	6.35	5.0[1,2]	8.61	115	12.7
06C07	03/17/91	84.18	19.10	32.5	8.35	460	10.4
	06/05/91	84.10	20.75	32.0[2]	8.09	500	15.1
	11/19/91	83.85	25.20	29.0[2]	8.09	510	14.2
	04/02/92	83.80	20.35	32.0[2]	8.81	485	12.4
06C08	11/27/90	286.80	211.28	38.0	9.44	500	15.2
	05/31/91	286.90	209.30	38.0	9.40	650	17.4
	11/20/91	285.95	214.20	24.0[1,2]	9.95	550	15.2
	03/31/92	286.00	211.50	24.0[1,2]	9.37	600	14.7

(Sheet 2 of 5)

[1] Purged dry.
[2] Pumped.

Well Number	Sample Date	Well Depth (ft)	Water Level (ft)	Volume Purged (gals)	pH	Cond. (μmhos)	Temp °C
06C08P2	11/27/90	94.20	70.35	8.5[1]	5.95	185	16.8
	05/31/91	94.35	68.45	13.0	4.36	190	14.6
	11/20/91	94.00	72.90	6.0[1,2]	6.95	174	14.0
	03/31/92	94.00	68.45	8.0[1,2]	5.87	175	15.2
0614A	03/16/91	21.20	3.80	9.0	6.45	250	8.7
	06/04/91	21.15	6.20	7.5[2]	6.29	330	16.5
	11/18/91	21.45	7.75	5.0[1,2]	7.36	289	15.3
	04/01/92	21.50	3.80	9.0	8.00	220	7.6
0615	11/30/90	20.10	13.45	1.5[1]	6.46	193	11.9
	06/03/91	20.00	11.90	1.5[1]	6.18	240	17.8
	11/16/91	19.85	19.00	DRY	--	--	--
	04/01/92	19.95	12.55	1.0[1]	6.79	200	9.8
0616	11/30/90	48.10	32.00	8.0	6.99	189	10.4
	06/03/91	18.15	30.50	8.5	6.19	240	15.3
	11/19/91	47.85	35.95	6.0	8.18	200	14.1
	04/01/92	47.90	30.70	5.0[1,2]	7.49	138	9.8
0617	11/30/90	25.70	13.90	2.5[1]	6.09	149	12.3
	06/03/91	25.85	12.35	3.5[1]	5.14	180	18.0
	11/16/91	25.05	18.10	1.5[1]	7.14	124	14.9
	04/01/92	25.05	13.05	3.0[1]	6.93	140	9.8
0618	11/30/90	29.50	13.33	5.0[1]	7.03	255	12.6
	06/03/91	29.45	12.60	4.0[1]	6.55	225	14.5
	11/18/91	29.00	17.05	3.5[1]	7.38	285	15.6
	04/01/92	29.00	12.65	4.0[1]	6.87	190	10.9
0619	03/16/91	23.00	4.45	9.5[1]	6.88	328	8.0
	06/04/91	23.05	7.40	2.5[1,2]	7.17	450	18.9
	11/18/91	23.25	12.40	2.0[1]	7.11	510	15.5
	04/01/92	23.25	4.00	8.5	7.16	295	8.2
0620	11/30/90	28.28	23.30	2.5	6.56	370	11.6
	06/03/91	28.25	19.00	2.5[1]	6.76	450	15.8
	11/18/91	28.00	24.10	1.0[1]	7.04	442	15.7
	04/01/92	28.00	19.80	2.5[1]	7.06	335	11.5
0621	11/30/90	51.25	43.20	4.5	6.67	910	11.8
	06/02/91	51.00	42.95	3.0[1,2]	6.90	1,200	17.0
	11/18/91	50.85	45.65	1.0[3]	7.34	1,000	14.3
	04/01/92	50.85	42.45	1.5[1]	8.16	1,000	10.9
0622	11/30/90	29.10	11.50	9.0	6.99	292	12.6
	06/03/91	29.00	10.95	4.5[1,2]	6.20	380	15.7
	11/18/91	28.95	16.05	6.5	7.50	367	15.4
	04/01/92	28.95	11.50	7.0	7.46	260	10.4
0623	11/30/90	25.50	10.17	7.5	6.78	149	12.7
	06/03/91	25.45	9.85	8.0[2]	6.54	150	16.7
	11/18/91	25.50	15.15	3.5[1]	7.06	253	15.5
	04/01/92	25.55	9.00	8.0	7.49	40	9.1
06C09	11/30/90	62.50	14.65	24.0	7.30	220	11.6
	06/03/91	62.50	14.40	24.0[2]	6.61	210	14.2
	11/18/91	61.95	18.20	22.0[2]	7.72	219	15.5
	04/01/92	62.00	14.45	24.0[2]	6.40	200	12.9

(Sheet 3 of 5)

[1] Purged dry.
[2] Pumped.
[3] Purged dry and no recharge.

Well Number	Sample Date	Well Depth (ft)	Water Level (ft)	Volume Purged (gals)	pH	Cond. (μmhos)	Temp °C
06C10	03/16/91	68.00	13.70	23.5	6.96	355	9.9
	06/04/91	68.15	15.15	27.0[2]	7.04	400	14.0
	11/18/91	68.00	19.60	24.0[2]	7.77	385	14.7
	04/01/92	68.00	15.40	27.0[2]	7.72	360	11.8
06C10P2	03/16/91	34.75	12.85	11.0	7.05	450	9.5
	06/04/91	34.75	14.45	10.0[2]	7.18	500	14.6
	11/18/91	33.70	19.15	7.0[2]	7.30	480	14.8
	04/01/92	34.70	14.50	10.0[2]	7.74	480	11.9
06C11	03/16/91	58.85	3.95	27.5	7.02	308	9.8
	06/04/91	58.80	5.45	27.0[2]	7.21	395	18.8
	11/18/91	58.25	9.50	24.0[2]	7.87	405	14.7
	04/02/92	58.30	5.60	20.0[1,2]	8.47	550	10.3
06C11P2	03/16/91	32.75	3.90	14.0	6.95	262	8.0
	06/04/91	32.70	5.45	14.0[2]	6.97	310	14.4
	11/18/91	31.95	9.60	11.0[2]	8.09	305	13.9
	04/02/92	31.95	5.55	13.0[2]	8.29	285	10.5
06C12	03/16/91	79.15	22.85	23.5	7.12	385	10.8
	06/04/91	79.10	24.00	23.0[2]	7.48	490	23.6
	11/19/91	79.00	28.60	20.5[2]	7.92	360	13.8
	04/01/92	79.10	24.35	27.0[2]	7.26	435	10.6
06C12P2	03/16/91	41.05	22.20	9.5	6.99	485	11.3
	06/04/91	41.00	23.45	9.0[2]	7.18	480	13.0
	11/19/91	40.95	28.30	2.5[1,2]	7.69	375	14.4
	04/01/92	41.05	23.65	9.0[2]	7.73	395	12.1
06C13	11/30/90	57.65	10.65	24.0	6.95	221	11.9
	06/03/91	57.55	10.35	24.0[2]	6.43	270	22.8
	11/18/91	57.25	14.20	22.0[2]	7.10	225	15.6
	04/02/92	27.20	10.60	24.0[2]	5.66	220	12.8
06C13P2	11/30/90	33.02	10.25	12.0	7.15	480	13.1
	06/03/91	33.00	9.95	12.0[2]	6.23	500	15.8
	11/18/91	32.85	14.05	10.0[2]	6.81	435	15.0
	04/02/92	32.85	10.05	11.0[2]	6.07	405	12.8
06C14	11/28/90	53.00	13.22	18.5	6.45	275	13.9
	06/01/91	53.10	13.15	20.0[2]	6.34	290	13.7
	11/16/91	52.95	17.45	18.0[2]	7.02	319	14.4
	04/02/92	53.00	13.35	20.0[2]	6.90	235	9.9
06C14P2	11/28/90	27.95	12.43	8.0	6.39	119	16.1
	06/01/91	27.90	12.35	7.5[1,2]	3.74	195	22.1
	11/16/91	27.50	16.05	4.5[1]	6.05	90	14.7
	04/02/92	27.50	12.45	5.0[1,2]	6.55	60	10.2
06C15	11/29/90	58.55	16.95	21.0	5.35	200	12.8
	06/02/91	58.55	16.80	21.0[2]	5.68	210	25.1
	11/16/91	57.30	20.65	19.0[2]	6.43	285	14.0
	04/01/92	57.35	16.90	12.0[2]	7.77	278	12.7
06C15P2	11/29/90	32.84	15.55	9.0	4.84	108	10.7
	06/02/91	32.80	14.05	5.0[1,2]	6.35	350	19.3
	11/16/91	31.35	18.95	5.5	6.70	140	14.4
	04/01/92	31.40	15.55	8.0	7.27	118	10.8

(Sheet 4 of 5)

[1] Purged dry.
[2] Pumped.

Well Number	Sample Date	Well Depth (ft)	Water Level (ft)	Volume Purged (gals)	pH	Cond. (μmhos)	Temp °C
06C16	11/29/90	85.50	36.00	25.0	7.58	500	11.3
	06/02/91	85.55	35.60	25.0[2]	7.21	560	14.5
	11/16/91	84.80	39.70	23.0[2]	7.67	500	13.0
	04/01/92	84.95	35.90	25.0[2]	8.03	550	11.7
06C16P2	11/29/90	44.15	33.40	5.5	6.76	405	11.6
	06/02/91	44.05	31.15	3.0[1]	7.29	850	19.0
	11/16/91	44.00	36.00	2.0[1]	8.09	650	12.6
	04/01/92	44.00	32.80	3.5[1]	7.92	600	11.5
06C16P3	11/29/90	22.75	16.23	3.5	7.74	405	12.2
	06/02/91	22.80	17.00	1.0[1]	7.33	510	16.5
	11/16/91	22.80	18.20	1.0[1]	8.01	385	13.3
	04/01/92	22.80	16.15	1.5[1]	7.84	440	10.5
06C17	11/30/90	82.20	32.55	25.0	6.67	220	11.2
	06/03/91	82.35	32.25	25.0[2]	6.89	270	15.1
	11/18/91	81.85	36.10	22.0[2]	7.84	278	15.2
	04/01/92	81.85	32.45	25.0[2]	7.79	160	12.0
06C18	11/30/90	62.13	10.75	26.0	7.26	325	12.1
	06/04/91	62.10	10.65	26.0[2]	7.21	350	13.0
	11/19/91	61.95	14.35	24.0[2]	7.96	335	14.2
	04/02/92	62.00	10.75	26.0[2]	8.15	345	12.5
06C18P2	11/30/90	35.40	10.73	13.0	6.58	500	12.0
	06/04/91	35.45	10.80	12.5[2]	6.16	485	21.0
	11/19/91	35.00	14.60	10.5[2]	7.43	330	14.6
	04/02/92	35.00	10.75	12.5[2]	6.94	455	12.7

(Sheet 5 of 5)

[1] Purged dry.
[2] Pumped.

Appendix F
Validated (qualified) analytical data

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB1 08238 11/28/90	R1 08239 11/28/90	R2 08322 11/29/90	R3 08333 11/29/90	R4	06-01A 08330 11/29/90	06-01B 16951 11/20/91	06-06 08242 11/28/90	06-07 08243 11/28/90
BNA	MCL									
Acenaphthene	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Acenaphthylene	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Aniline	---	0.020U	0.020U	0.020U	0.020U		0.020U	NOT SAMPLED	0.020U	0.020U
Anthracene	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Benzidine	---	0.050U	0.050U	0.050U	0.050U		0.050U	NOT SAMPLED	0.050U	0.050U
Benzoic Acid	---	0.050U	0.050U	0.050U	0.050U		0.050U	NOT SAMPLED	0.050U	0.050U
Benzo(a)Anthracene	0.0001(P)	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Benzo(a)Pyrene	0.0002(P)	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Benzo(b)Fluoranthene	0.0002(P)	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Benzo(G,H,I)Perylene	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Benzo(k)Fluoranthene	0.0002(P)	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Benzyl Alcohol	---	0.020U	0.020U	0.020U	0.020U		0.020U	NOT SAMPLED	0.020U	0.020U
Bis(2-Chloroethoxy)Methane	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Bis(2-Chloroethyl)Ether	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Bis(2-Chloroisopropyl)Ether	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Bis(2-Ethylhexyl)Phthalate	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Butylbenzylphthalate	0.1(P)	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Chrysene	0.0002(P)	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Dibenzofuran	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Dibenzo(A,H)Anthracene	0.0003(P)	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Dibutylphthalate	---	0.010U	0.010U	0.010U	0.010U		0.010BJ	NOT SAMPLED	0.010U	0.010U
Diethyl Phthalate	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Dimethyl Phthalate	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Di-N-Octylphthalate	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Fluoranthene	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Fluorene	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Hexachlorobenzene	0.001(P)	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Hexachlorobutadiene	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Hexachlorocyclopentadiene	0.05(P)	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Hexachloroethane	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Indeno(1,2,3-C,D)Pyrene	0.0004(P)	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Isophorone	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Naphthalene	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Nitrobenzene	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
N-Nitrosodimethylamine	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
N-Nitroso-Di-N-Propylamine	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
N-Nitrosodiphenyl Amine	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Pentachlorophenol	0.001(F)	0.050U	0.050U	0.050U	0.050U		0.050U	NOT SAMPLED	0.050U	0.050U
Phenanthrene	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06-12 / 08331 / 11/29/90	06C01 / 08328 / 11/29/90	06C01P2 / 16940 / 11/19/91	06C01P3 / 08329 / 11/29/90	06C02 / 16942 / 11/19/91	06C02P2 / 16943 / 11/19/91	06C03 / 16944 / 11/19/91	06C03P2 / 16945 / 11/19/91	06C04 / 16947 / 11/19/91
BNA	MCL					444444				
Acenaphthene	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Acenaphthylene	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Aniline	---	0.020U	0.020U	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
Anthracene	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzidine	---	0.050U	0.050U	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Benzoic Acid	---	0.050U	0.050U	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Benzo(a)Anthracene	0.0001(P)	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(a)Pyrene	0.0002(P)	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(b)Fluoranthene	0.0002(P)	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(G,H,I)Perylene	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(k)Fluoranthene	0.0002(P)	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzyl Alcohol	---	0.020U	0.020U	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
Bis(2-Chloroethoxy)Methane	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Chloroethyl)Ether	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Chloroisopropyl)Ether	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Ethylhexyl)Phthalate	---	0.010U	0.008J	NOT SAMPLED	0.014	0.010U	0.010U	0.010U	0.010U	0.010U
Butylbenzylphthalate	0.1(P)	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Chrysene	0.0002(P)	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibenzofuran	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibenzo(A,H)Anthracene	0.0003(P)	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibutylphthalate	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Diethyl Phthalate	---	0.003J	0.010U	NOT SAMPLED	0.003BJ	0.010U	0.010U	0.010U	0.010U	0.010U
Dimethyl Phthalate	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Di-N-Octylphthalate	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Fluoranthene	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Fluorene	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorobenzene	0.001(P)	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorobutadiene	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorocyclopentadiene	0.05(P)	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachloroethane	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Indeno(1,2,3-C,D)Pyrene	0.0004(P)	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Isophorone	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Naphthalene	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Nitrobenzene	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitrosodimethylamine	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitroso-Di-N-Propylamine	---	0.006J	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitrosodiphenyl Amine	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Pentachlorophenol	0.001(F)	0.050U	0.050U	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Phenanthrene	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB1 08238 11/28/90	R1 08239 11/28/90	R2 08322 11/29/90	R3 08333 11/29/90	R4 11/20/91	06-01A 08330 11/29/90	06-01B 16951 11/20/91	06-06 08242 11/28/90	06-07 08243 11/28/90
BNA	MCL									
Phenol	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Pyrene	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
1,2-Dichlorobenzene	0.6(L)	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
1,2-Diphenylhydrazine	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
1,2,4-Trichlorobenzene	0.07(P)	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
1,3-Dichlorobenzene	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
1,4-Dichlorobenzene	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
2-Chloronaphthalene	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
2-Chlorophenol	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
2-Methyl-4,6-Dinotrophenol	---	0.050U	0.050U	0.050U	0.050U		0.050U	NOT SAMPLED	0.050U	0.050U
2-Methylnaphthalene	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
2-Methylphenol	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
2-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U		0.050U	NOT SAMPLED	0.050U	0.050U
2-Nitrophenol	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
2,4-Dichlorophenol	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
2,4-Dimethylphenol	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
2,4-Dinitrophenol	---	0.050U	0.050U	0.050U	0.050U		0.050U	NOT SAMPLED	0.050U	0.050U
2,4-Dinitrotoluene	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
2,4,5-Trichlorophenol	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
2,4,6-Trichlorophenol	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
2,6-Dinitrotoluene	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
3-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U		0.050U	NOT SAMPLED	0.050U	0.050U
3,3'Dichlorobenzidine	---	0.020U	0.020U	0.020U	0.020U		0.020U	NOT SAMPLED	0.020U	0.020U
4-Bromophenyl Ether	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
4-Chloro-3-Methylphenol	---	0.020U	0.020U	0.020U	0.020U		0.020U	NOT SAMPLED	0.020U	0.020U
4-Chloroaniline	---	0.020U	0.020U	0.020U	0.020U		0.020U	NOT SAMPLED	0.020U	0.020U
4-Chlorophenyl Phenyl Ether	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
4-Methylphenol	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
4-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U		0.050U	NOT SAMPLED	0.050U	0.050U
4-Nitrophenol	---	0.050U	0.050U	0.050U	0.050U		0.050U	NOT SAMPLED	0.050U	0.050U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C04P2 / 16948 / 11/19/91	06C05 / 16949 / 11/19/91	06C06 / 16950 / 11/19/91	06C06P2 / 16962 / 11/20/91	06C07 / 16952 / 11/20/91	06C08 / 08240 / 11/28/90	06C08P2 / 08241 / 11/28/90
BNA	MCL							
		44444444						
Acenaphthene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Acenaphthylene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Aniline	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
Anthracene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzidine	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Benzoic Acid	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Benzo(a)Anthracene	0.0001(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(a)Pyrene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(b)Fluoranthene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(G,H,I)Perylene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(k)Fluoranthene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzyl Alcohol	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
Bis(2-Chloroethoxy)Methane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Chloroethyl)Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Chloroisopropyl)Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Ethylhexyl)Phthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.002J
Butylbenzylphthalate	0.1(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Chrysene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibenzofuran	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibenzo(A,H)Anthracene	0.0003(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibutylphthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Diethyl Phthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.004J
Dimethyl Phthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Di-N-Octylphthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Fluoranthene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Fluorene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorobenzene	0.001(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorobutadiene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorocyclopentadiene	0.05(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachloroethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Indeno(1,2,3-C,D)Pyrene	0.0004(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Isophorone	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Naphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Nitrobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitrosodimethylamine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitroso-Di-N-Propylamine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitrosodiphenyl Amine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Pentachlorophenol	0.001(F)	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Phenanthrene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06-12 / 08331 / 11/29/90	06C01 / 08328 / 11/29/90	06C01P2 / 16940 / 11/19/91	06C01P3 / 08329 / 11/29/90	06C02 / 16942 / 11/19/91	06C02P2 / 16943 / 11/19/91	06C03 / 16944 / 11/19/91	06C03P2 / 16945 / 11/19/91	06C04 / 16947 / 11/19/91
BNA	MCL									
						44444				
Phenol	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Pyrene	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2-Dichlorobenzene	0.6(L)	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2-Diphenylhydrazine	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2,4-Trichlorobenzene	0.07(P)	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,3-Dichlorobenzene	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,4-Dichlorobenzene	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Chloronaphthalene	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Chlorophenol	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Methyl-4,6-Dinotrophenol	---	0.050U	0.050U	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2-Methylnaphthalene	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Methylphenol	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Nitroaniline	---	0.050U	0.050U	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2-Nitrophenol	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dichlorophenol	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dimethylphenol	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dinitrophenol	---	0.050U	0.050U	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2,4-Dinitrotoluene	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4,5-Trichlorophenol	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4,6-Trichlorophenol	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,6-Dinitrotoluene	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
3-Nitroaniline	---	0.050U	0.050U	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
3,3'Dichlorobenzidine	---	0.020U	0.020U	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Bromophenyl Ether	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Chloro-3-Methylphenol	---	0.020U	0.020U	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Chloroaniline	---	0.020U	0.020U	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Chlorophenyl Phenyl Ether	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Methylphenol	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Nitroaniline	---	0.050U	0.050U	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
4-Nitrophenol	---	0.050U	0.050U	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C04P2 / 16948 / 11/19/91 / 12/11/91	06C05 / 16949 / 11/19/91 / 12/11/91	06C06 / 16950 / 11/19/91 / 12/11/91	06C06P2 / 16962 / 11/20/91 / 12/12/91	06C07 / 16952 / 11/20/91 / 12/11/91	06C08 / 08240 / 11/28/90	06C08P2 / 08241 / 11/28/90
BNA	MCL							
		44444						
Phenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Pyrene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2-Dichlorobenzene	0.6(L)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2-Diphenylhydrazine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2,4-Trichlorobenzene	0.07(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,3-Dichlorobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,4-Dichlorobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Chloronaphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Chlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Methyl-4,6-Dinotrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2-Methylnaphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Methylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2-Nitrophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dimethylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dinitrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2,4-Dinitrotoluene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4,5-Trichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4,6-Trichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,6-Dinitrotoluene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
3-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
3,3'Dichlorobenzidine	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Bromophenyl Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Chloro-3-Methylphenol	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Chloroaniline	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Chlorophenyl Phenyl Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Methylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
4-Nitrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB1 08226 11/28/90	R1 08227 11/28/90	R2 08294 11/29/90	R3 08305 11/29/90	R4 11/20/91	06-01A 08302 11/29/90	06-01B 16924 11/20/91	06-06 08230 11/28/90	06-07 08231 11/28/90
EXPLOSIVES	MCL									
DNB	---	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U	NOT SAMPLED	0.020U	0.020U
HMX	---	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U	NOT SAMPLED	0.020U	0.020U
RDX	---	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U	NOT SAMPLED	0.020U	0.020U
TETRYL	---	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	0.050U	NOT SAMPLED	0.050U	0.050U
TNB	---	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U	NOT SAMPLED	0.020U	0.020U
TNT	---	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U	NOT SAMPLED	0.020U	0.020U
2,4-DNT	---	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U	NOT SAMPLED	0.020U	0.020U
2,6-DNT	---	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U	NOT SAMPLED	0.020U	0.020U

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06-12 08303 11/29/90	06C01 08300 11/29/90	06C01P2 16913 11/19/91	06C01P3 08301 11/29/90	06C02 16915 11/19/91	06C02P2 16916 11/19/91	06C03 16917 11/19/91	06C03P2 16918 11/19/91	06C04 16920 11/19/91
EXPLOSIVES	MCL									
DNB	---	0.020U	0.020U	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
HMX	---	0.020U	0.020U	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
RDX	---	0.020U	0.020U	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TETRYL	---	0.050U	0.050U	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
TNB	---	0.020U	0.020U	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TNT	---	0.020U	0.020U	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
2,4-DNT	---	0.020U	0.020U	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
2,6-DNT	---	0.020U	0.020U	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE Demolition Site
Project NWSCC - ~~Dye Burial Ground Site~~
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C04P2 / 16921 / 11/19/91	06C05 / 16922 / 11/19/91	06C06 / 16923 / 11/19/91	06C06P2 / 16935 / 11/20/91	06C07 / 16925 / 11/20/91	06C08 / 08228 / 11/28/90	06C08P2 / 08229 / 11/28/90
EXPLOSIVES	MCL							
DNB	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
HMX	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
RDX	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TETRYL	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
TNB	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TNT	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
2,4-DNT	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
2,6-DNT	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB1 / 08232 / 11/28/90	R1 / 08233 / 11/28/90	R2 / 08308 / 11/29/90	R3 / 08319 / 11/29/90	R4 / 11/20/91	06-01A / 08316 / 11/29/90	06-01B / 17005 / 11/20/91	06-06 / 08236 / 11/28/90	06-07 / 08237 / 11/28/90
HERBICIDES	MCL									
2,4-D	0.07(F)	0.012U	0.012U	0.012U	0.012U		0.012U	NOT SAMPLED	0.012U	0.012U
2,4,5-T	---	0.0020U	0.0020U	0.0020U	0.0020U		0.0020U	NOT SAMPLED	0.0020U	0.0020U
2,4,5-TP	0.05(F)	0.0027B	0.0028B	0.0025B	0.0026B		0.0017U	NOT SAMPLED	0.0024B	0.0025B
Dinoseb	0.007(P)	0.00070U	0.00070U	0.00070U	0.00070U		0.00070U	NOT SAMPLED	0.00070U	0.00070U

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Anal. (CN): / Date Anal. (S):	FB1 / 08220 / 11/28/90	R1 / 08221 / 11/28/90	R2 / 08280 / 11/29/90	R3 / 08291 / 11/29/90	R4 / 11/20/91	06-01A / 08288 / 11/29/90	06-01B / 17060 / 11/20/91	06-06 / 08224 / 11/28/90	06-07 / 08225 / 11/28/90
CYANIDE and SULFIDE	MCL									
Cyanide	0.2(P)	0.005U	0.005U	0.005U	0.005U		0.005U	NOT SAMPLED	0.005U	0.005U
Sulfide	---	0.020U	0.020U	0.020U	0.020U		0.020U	NOT SAMPLED	0.215	0.020U

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06-12 / 08317 / 11/29/90	06C01 / 08314 / 11/29/90	06C01P2 / 16994 / 11/19/91	06C01P3 / 08315 / 11/29/90	06C02 / 16996 / 11/19/91	06C02P2 / 16997 / 11/19/91	06C03 / 16998 / 11/19/91	06C03P2 / 16999 / 11/19/91	06C04 / 17001 / 11/19/91
HERBICIDES	MCL									
						2222				
2,4-D	0.07(F)	0.012U	0.012U	NOT SAMPLED	0.012U	0.012U	0.012U	0.012U	0.012U	0.012U
2,4,5-T	---	0.0020U	0.0020U	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
2,4,5-TP	0.05(F)	0.0017U	0.0032B	NOT SAMPLED	0.0028B	0.0017U	0.00034J	0.00040J	0.00040J	0.00034J
Dinoseb	0.007(P)	0.00070U	0.00070U	NOT SAMPLED	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	06-12	06C01	06C01P2	06C01P3	06C02	06C02P2	06C03	06C03P2	06C04
	Lab Sample No:	08289	08286	17049	08287	17051	17052	17053	17054	17056
	Date Sampled:	11/29/90	11/29/90	11/19/91	11/29/90	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91
	Date Anal. (CN):									
	Date Anal. (S):									
CYANIDE and SULFIDE	MCL									
						44444				
Cyanide	0.2(P)	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Sulfide	---	0.020U	0.020U	NOT SAMPLED	0.020U	0.029	0.020U	0.020U	0.020U	0.020U

Analyte	Well No:	06C04P2	06C05	06C06	06C06P2	06C07	06C08	06C08P2
	Lab Sample No:	17002	17003	17004	17016	17006	08234	08235
	Date Sampled:	11/19/91	11/19/91	11/19/91	11/20/91	11/20/91	11/28/90	11/28/90
	Date Analyzed:							
HERBICIDES	MCL							
		222						
2,4-D	0.07(F)	0.012U	0.012U	0.012U	0.012U	0.012U	0.012U	0.012U
2,4,5-T	---	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
2,4,5-TP	0.05(F)	0.0017U	0.00044BJ	0.00031BJ	0.0017U	0.00044BJ	0.0024B	0.0017B
Dinoseb	0.007(P)	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U

Analyte	Well No:	06C04P2	06C05	06C06	06C06P2	06C07	06C08	06C08P2
	Lab Sample No:	17057	17058	17059	17071	17061	08222	08223
	Date Sampled:	11/19/91	11/19/91	11/19/91	11/20/91	11/20/91	11/28/90	11/28/90
	Date Anal. (CN):							
	Date Anal. (S):							
CYANIDE and SULFIDE	MCL							
		2222						
Cyanide	0.2(P)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Sulfide	---	0.156	0.020U	0.020U	0.025	0.020U	0.054	0.020U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB1	R1	R2	R3	R4	06-01A	06-01B	06-06	06-07
	Lab Sample No:	08214	08215	17045	17046		08274	17032	08218	08219
	Date Sampled:	11/28/90	11/28/90	11/20/91	11/20/91	11/20/91	11/29/90	11/20/91	11/28/90	11/28/90
	Date Analyzed:	11/26/91	01/09/92	02/02/92	02/02/92		02/02/92	02/02/92	02/02/92	02/02/92
METALS	MCL									
Aluminum	---	0.010U	0.010U	0.010UN	0.010UN		0.010U	NOT SAMPLED	0.111	145
Antimony	0.01(P)	0.0030U	0.0038B	0.0116B	0.0138B		0.0142BW	NOT SAMPLED	0.0094BW	0.0051BW
Arsenic	0.05(F)	0.0020U	0.0020U	0.0020U	0.0020U		0.0020U	NOT SAMPLED	0.0020U	0.0084BW
Barium	2.0(F)	0.010U	0.010U	0.010U	0.014B		0.020B	NOT SAMPLED	0.014B	0.010U
Beryllium	0.001(P)	0.0010U	0.0010U	0.0010U	0.0010U		0.0010U	NOT SAMPLED	0.0010U	0.013
Cadmium	0.005(F)	0.004U	0.004U	0.00020U	0.00020U		0.004U	NOT SAMPLED	0.004U	0.004U
Calcium	---	0.050U	0.050U	0.302B	135		114	NOT SAMPLED	563	275
Chromium	0.1(F)	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.032
Cobalt	---	0.005U	0.005U	0.015B	0.039B		0.017B	NOT SAMPLED	0.316	0.577
Copper	1.3(F)	0.005U	0.009	0.036	0.030		0.005U	NOT SAMPLED	0.005U	0.005U
Iron	---	0.010U	0.010U	0.010U	0.020B		0.020B	NOT SAMPLED	3.60	78.5
Lead	0.015(F)	0.0010U	0.0010U	0.0010U	0.0010U		0.0010U	NOT SAMPLED	0.0010U	0.0014B
Magnesium	---	0.100U	0.100U	0.133B	96.5		86.7	NOT SAMPLED	438	232
Manganese	---	0.005U	0.005U	0.011B	0.055		0.043	NOT SAMPLED	37.7	12.4
Mercury	0.002(F)	0.0002U	0.0002U	0.0002U	0.0002U		0.0002U	NOT SAMPLED	0.0002U	0.0002U
Nickel	0.1(P)	0.005U	0.005U	0.005UN	0.005UN		0.005U	NOT SAMPLED	0.951	1.98
Potassium	---	1.00U	1.00U	0.318B	3.31B		1.00U	NOT SAMPLED	10.4	3.12B
Selenium	0.05(F)	0.0020U	0.0020U	0.0020U	0.0020U		0.0020U	NOT SAMPLED	0.0020UW	0.0020UW
Silver	---	0.0010U	0.0010UW	0.0010UW	0.0010U		0.0010UW	NOT SAMPLED	0.0010UW	0.0010UW
Sodium	---	0.050U	0.063B	0.333B	141		117	NOT SAMPLED	72.4	69.8
Thallium	0.002(P)	0.0020U	0.0020U	0.0020U	0.0020UW		0.0020UW	NOT SAMPLED	0.0020UW	0.0029BW
Tin	---	0.042UJ	0.043UJ	0.050U	0.050U		0.050U	NOT SAMPLED	0.050U	0.041
Vanadium	---	0.010U	0.010U	0.010U	0.010U		0.010U	NOT SAMPLED	0.010U	0.010U
Zinc	---	0.005U	0.005U	0.005U	0.005U		0.005U	NOT SAMPLED	0.521	3.00

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IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	06-12	06C01	06C01P2	06C01P3	06C02	06C02P2	06C03	06C03P2	06C04
	Lab Sample No:	08275	08273	17021	17022	17023	17024	17025	17026	17028
	Date Sampled:	11/29/90	11/29/90	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91
	Date Analyzed:		02/02/92	02/02/92	02/02/92	02/02/92	02/02/92	02/02/92	02/02/92	02/02/92
METALS	MCL									
				4444						
Aluminum	---	0.010U	0.010U	0.011B	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Antimony	0.01(P)	0.01778W	0.0044B	0.0089B	0.0033B	0.0030U	0.0084B	0.0034B	0.0199B	0.0030UW
Arsenic	0.05(F)	0.0020U	0.0020U	0.0020U	0.0020U	0.0107	0.0020U	0.0020U	0.0020U	0.0020U
Barium	2.0(F)	0.013B	0.124B	0.110B	0.026B	0.084B	0.081B	0.145B	0.022B	0.054B
Beryllium	0.001(P)	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U
Cadmium	0.005(F)	0.004U	0.004U	0.00020U	0.00020U	0.00020U	0.00020U	0.00020U	0.00027B	0.00020U
Calcium	---	492	53.6	63.7	49.5	52.9	70.8	68.7	66.8	11.5
Chromium	0.1(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Cobalt	---	0.120	0.005U	0.010U	0.010U	0.012B	0.014B	0.019B	0.031B	0.041B
Copper	1.3(F)	0.005U	0.005U	0.012B	0.005U	0.005U	0.028	0.005U	0.085	0.005U
Iron	---	0.305	0.012B	1.99	0.010U	7.09	0.028B	1.41	0.064B	0.035B
Lead	0.015(F)	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U
Magnesium	---	389	11.1	13.0	34.6	11.7	17.4	21.9	42.7	3.14
Manganese	---	21.9	0.029	0.160	0.036	0.405	0.009B	0.151	0.069	0.010B
Mercury	0.002(F)	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U
Nickel	0.1(P)	0.543	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Potassium	---	91.0	1.00U	1.24B	1.48B	1.12	1.80	2.42B	3.67B	1.24B
Selenium	0.05(F)	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
Silver	---	0.0010UW	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U
Sodium	---	41.8	15.5	25.5	5.43	19.5	17.8	43.8	112	176
Thallium	0.002(P)	0.0020UW	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
Tin	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Vanadium	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Zinc	---	0.392	0.043	0.005U	0.005U	0.005UN	0.005UN	0.005UN	0.005UN	0.005UN

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IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C04P2 / 17029 / 11/19/91 / 02/02/92	06C05 / 17030 / 11/19/91 / 02/02/92	06C06 / 17031 / 11/19/91 / 02/02/92	06C06P2 / 17043 / 11/20/91 / 02/02/92	06C07 / 17033 / 11/20/91 / 02/02/92	06C08 / 08216 / 11/28/90	06C08P2 / 08217 / 11/28/90
METALS	MCL							
		44444						
Aluminum	---	0.010U	0.010U	0.010U	0.096BN	0.225	0.178B	0.225
Antimony	0.01(P)	0.0049B	0.0080B	0.0097B	0.0048B	0.0068B	0.0057B	0.0068B
Arsenic	0.05(F)	0.0020U	0.0020U	0.0020U	00079B	0.0020U	0.0121	0.0020U
Barium	2.0(F)	0.045B	0.014B	0.212	0.011B	0.027B	0.010U	0.027B
Beryllium	0.001(P)	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U
Cadmium	0.005(F)	0.00020U	0.00020U	0.00020U	0.00020U	0.00020U	0.004U	0.00020U
Calcium	---	11.0	7.92	6.94	2.03B	1.04.	1.49B	1.04
Chromium	0.1(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Cobalt	---	0.027B	0.010U	0.020B	0.045B	0.010U	0.015B	0.010B
Copper	1.3(F)	0.005U	0.043	0.021B	0.005U	0.033	0.005U	0.005U
Iron	---	0.038B	0.041B	0.022B	0.013B	0.57B	0.049B	16.2
Lead	0.015(F)	0.0010U	0.0010U	0.0010U	0.0010U	0.0026B	0.0010U	0.0029B
Magnesium	---	6.79	4.02B	6.99	0.199B	5.92	0.10U	6.10
Manganese	---	0.075	0.017	0.010B	0.005U	0.647	0.005U	0.637
Mercury	0.002(F)	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U
Nickel	0.1(P)	0.005U	0.007B	0.005U	0.007BN	0.030B	0.005U	0.026B
Potassium	---	2.08B	1.18B	3.10B	3.50B	2.76B	4.73B	2.17B
Selenium	0.05(F)	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
Silver	---	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010UW
Sodium	---	172	12.1	163	196	6.73	136	5.09
Thallium	0.002(P)	0.0020U	0.0020U	0.0020UW	0.0020U	0.0020U	0.0020U	0.0020U
Tin	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.068	0.061
Vanadium	---	0.010U	0.010U	0.010U	0.013B	0.010U	0.010U	0.010U
Zinc	---	0.005UN	0.005UN	0.005U	0.005U	0.034	0.005B	0.024

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IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	F81 08232 11/28/90 12/19/91	R1 08233 11/28/90 12/19/91	R2 08308 11/29/90 12/26/91	R3 08319 11/29/90	R4 11/20/91	06-01A 08316 11/29/90 12/26/91	06-01B 16978 11/20/91 12/24/91	06-06 08236 11/28/90 12/24/91	06-07 08237 11/28/90 12/19/91
PESTICIDES/PCBs	MCL									
A-BHC	---	0.000030U	0.000030U	0.000030U	0.000030U	NOT SAMPLED	0.000030U	NOT SAMPLED	0.000030U	0.000030U
a-CHLORDANE	0.002(F)	0.000004J	0.000050U	0.000050U	0.000050U	NOT SAMPLED	0.000050U	NOT SAMPLED	0.000050U	0.000050U
A-Endosulfan	---	0.00014U	0.00014U	0.00014U	0.00014U	NOT SAMPLED	0.00014U	NOT SAMPLED	0.00014U	0.00014U
Aldrin	---	0.000040U	0.000040U	0.000040U	0.000040U	NOT SAMPLED	0.000040U	NOT SAMPLED	0.000040U	0.000040U
B-BHC	---	0.000060U	0.000060U	0.000060U	0.000060U	NOT SAMPLED	0.000060U	NOT SAMPLED	0.000060U	0.000060U
B-Endosulfan	---	0.000040U	0.000040U	0.000040U	0.000040U	NOT SAMPLED	0.000040U	NOT SAMPLED	0.000040U	0.000040U
D-BHC	---	0.000090U	0.000090U	0.000090U	0.000090U	NOT SAMPLED	0.000090U	NOT SAMPLED	0.000090U	0.000090U
Dieldrin	---	0.000020U	0.000020U	0.000020U	0.000020U	NOT SAMPLED	0.000020U	NOT SAMPLED	0.000020U	0.000020U
Disulfoton	---	0.00070U	0.00070U	0.00070U	0.00070U	NOT SAMPLED	0.00070U	NOT SAMPLED	0.00070U	0.00070U
Endosulfan sulfate	---	0.00066U	0.00066U	0.00066U	0.00066U	NOT SAMPLED	0.00066U	NOT SAMPLED	0.00066U	0.00066U
Endrin	0.002(P)	0.000060U	0.000060U	0.000060U	0.000060U	NOT SAMPLED	0.000060U	NOT SAMPLED	0.000060U	0.000060U
Endrin Aldehyde	---	0.00023U	0.00023U	0.00023U	0.00023U	NOT SAMPLED	0.00023U	NOT SAMPLED	0.00023U	0.00023U
Ethyl Parathion	---	0.00060U	0.00060U	0.00060U	0.00060U	NOT SAMPLED	0.00060U	NOT SAMPLED	0.00060U	0.00060U
Famphur	---	0.0012U	0.0012U	0.0012U	0.0012U	NOT SAMPLED	0.0012U	NOT SAMPLED	0.0012U	0.0012U
G-BHC	---	0.000040U	0.000040U	0.000040U	0.000040U	NOT SAMPLED	0.000040U	NOT SAMPLED	0.000040U	0.000040U
g-CHLORDANE	0.002(F)	0.000050U	0.000050U	0.000050U	0.000050U	NOT SAMPLED	0.000050U	NOT SAMPLED	0.000050U	0.000050U
Heptachlor	0.0004(F)	0.000030U	0.000030U	0.000030U	0.000030U	NOT SAMPLED	0.000030U	NOT SAMPLED	0.000030U	0.000001BJ
Heptachlor Epoxide	0.0002(F)	0.00083U	0.00083U	0.00083U	0.00083U	NOT SAMPLED	0.00083U	NOT SAMPLED	0.00083U	0.00083U
KEPONE	---	0.0060U	0.0060U	0.0060U	0.0060U	NOT SAMPLED	0.0060U	NOT SAMPLED	0.0060U	0.0060U
Methoxychlor	0.04(F)	0.00004J	0.0018U	0.00003J	0.0018U	NOT SAMPLED	0.0018U	NOT SAMPLED	0.0018U	0.0018U
Methyl Parathion	---	0.0012U	0.0012U	0.0012U	0.0012U	NOT SAMPLED	0.0012U	NOT SAMPLED	0.0012U	0.0012U
PCB-1016	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	NOT SAMPLED	0.0007U	NOT SAMPLED	0.0007U	0.0007U
PCB-1221	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	NOT SAMPLED	0.0007U	NOT SAMPLED	0.0007U	0.0007U
PCB-1232	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	NOT SAMPLED	0.0007U	NOT SAMPLED	0.0007U	0.0007U
PCB-1242	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	NOT SAMPLED	0.0007U	NOT SAMPLED	0.0007U	0.0007U
PCB-1248	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	NOT SAMPLED	0.0007U	NOT SAMPLED	0.0007U	0.0007U
PCB-1254	0.0005(F)	0.0013U	0.0013U	0.0013U	0.0013U	NOT SAMPLED	0.0013U	NOT SAMPLED	0.0013U	0.0013U
PCB-1260	0.0005(F)	0.0013U	0.0013U	0.0013U	0.0013U	NOT SAMPLED	0.0013U	NOT SAMPLED	0.0013U	0.0013U
Phorate	---	0.00040U	0.00040U	0.00040U	0.00040U	NOT SAMPLED	0.00040U	NOT SAMPLED	0.00040U	0.00040U
PPDDD	---	0.00011U	0.00011U	0.00011U	0.00011U	NOT SAMPLED	0.00011U	NOT SAMPLED	0.00011U	0.00011U
PPDDE	---	0.000040U	0.000040U	0.000040U	0.000040U	NOT SAMPLED	0.000040U	NOT SAMPLED	0.000040U	0.000040U
PPDDT	---	0.00012U	0.00012U	0.00012U	0.00012U	NOT SAMPLED	0.00012U	NOT SAMPLED	0.00012U	0.00012U
Toxaphene	0.003(F)	0.0024U	0.0024U	0.0024U	0.0024U	NOT SAMPLED	0.0024U	NOT SAMPLED	0.0024U	0.0024U

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B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06-12 / 08317 / 11/29/90	06C01 / 08314 / 11/29/90 / 12/19/91	06C01P2 / 16967 / 11/19/91 / 12/19/91	06C01P3 / 08315 / 11/29/90 / 12/19/91	06C02 / 16969 / 11/19/91 / 12/19/91	06C02P2 / 16970 / 11/19/91 / 12/19/91	06C03 / 16971 / 11/19/91 / 12/19/91	06C03P2 / 16972 / 11/19/91 / 12/19/91	06C04 / 16974 / 11/19/91 / 12/24/91
PESTICIDES/PCBs	MCL									
A-BHC	---	0.000030U	0.000030U	NOT SAMPLED	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U
a-CHLORDANE	0.002(F)	0.000050U	0.000050U	NOT SAMPLED	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U
A-Endosulfan	---	0.00014U	0.00014U	NOT SAMPLED	0.00014U	0.00014U	0.00014U	0.00014U	0.00014U	0.00014U
Aldrin	---	0.000040U	0.000040U	NOT SAMPLED	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U
B-BHC	---	0.000060U	0.000060U	NOT SAMPLED	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U
B-Endosulfan	---	0.000040U	0.000040U	NOT SAMPLED	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U
D-BHC	---	0.000090U	0.000090U	NOT SAMPLED	0.000090U	0.000090U	0.000090U	0.000090U	0.000090U	0.000090U
Dieldrin	---	0.000020U	0.000020U	NOT SAMPLED	0.000020U	0.000020U	0.000020U	0.000020U	0.000020U	0.000020U
Disulfoton	---	0.00070U	0.00070U	NOT SAMPLED	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U
Endosulfan sulfate	---	0.00066U	0.00066U	NOT SAMPLED	0.00066U	0.00066U	0.00066U	0.00066U	0.00066U	0.00066U
Endrin	0.002(P)	0.000060U	0.000060U	NOT SAMPLED	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U
Endrin Aldehyde	---	0.00023U	0.00023U	NOT SAMPLED	0.00023U	0.00023U	0.00023U	0.00023U	0.00023U	0.00023U
Ethyl Parathion	---	0.00060U	0.00060U	NOT SAMPLED	0.00060U	0.00060U	0.00060U	0.00060U	0.00060U	0.00060U
Famphur	---	0.0012U	0.0012U	NOT SAMPLED	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U
G-BHC	---	0.000040U	0.000040U	NOT SAMPLED	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U
g-CHLORDANE	0.002(F)	0.000050U	0.000050U	NOT SAMPLED	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U
Heptachlor	0.0004(F)	0.000030U	0.000030U	NOT SAMPLED	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U
Heptachlor Epoxide	0.0002(F)	0.00083U	0.00083U	NOT SAMPLED	0.00083U	0.00083U	0.00083U	0.00083U	0.00083U	0.00083U
KEPONE	---	0.0060U	0.0060U	NOT SAMPLED	0.0060U	0.0060U	0.0060U	0.0060U	0.0060U	0.0060U
Methoxychlor	0.04(F)	0.0018U	0.0018U	NOT SAMPLED	0.0018U	0.0018U	0.0018U	0.0018U	0.0018U	0.0018U
Methyl Parathion	---	0.0012U	0.0012U	NOT SAMPLED	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U
PCB-1016	0.0005(F)	0.0007U	0.0007U	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1221	0.0005(F)	0.0007U	0.0007U	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1232	0.0005(F)	0.0007U	0.0007U	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1242	0.0005(F)	0.0007U	0.0007U	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1248	0.0005(F)	0.0007U	0.0007U	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1254	0.0005(F)	0.0013U	0.0013U	NOT SAMPLED	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U
PCB-1260	0.0005(F)	0.0013U	0.0013U	NOT SAMPLED	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U
Phorate	---	0.00040U	0.00040U	NOT SAMPLED	0.00040U	0.00040U	0.00040U	0.00040U	0.00040U	0.00040U
PPDDD	---	0.00011U	0.00011U	NOT SAMPLED	0.00011U	0.00011U	0.00011U	0.00011U	0.00011U	0.00011U
PPDDE	---	0.000040U	0.000040U	NOT SAMPLED	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U
PPDDT	---	0.00012U	0.00012U	NOT SAMPLED	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U
Toxaphene	0.003(F)	0.0024U	0.0024U	NOT SAMPLED	0.0024U	0.0024U	0.0024U	0.0024U	0.0024U	0.0024U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C04P2 / 16975 / 11/19/91 / 12/24/91	06C05 / 16976 / 11/19/91 / 12/24/91	06C06 / 16977 / 11/19/91 / 12/24/91	06C06P2 / 16989 / 11/20/91 / 12/26/91	06C07 / 16979 / 11/20/91 / 12/24/91	06C08 / 08234 / 11/28/90	06C08P2 / 08235 / 11/28/90
PESTICIDES/PCBs	MCL							
A-BHC	---	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U
a-CHLORDANE	0.002(F)	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U	0.000006J
A-Endosulfan	---	0.00014U	0.00014U	0.00014U	0.00014U	0.00014U	0.00014U	0.00014U
Aldrin	---	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U
B-BHC	---	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U
B-Endosulfan	---	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U
D-BHC	---	0.000090U	0.000090U	0.000090U	0.000090U	0.000090U	0.000090U	0.000090U
Dieldrin	---	0.000020U	0.000020U	0.000020U	0.000020U	0.000020U	0.000020U	0.000020U
Disulfoton	---	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U
Endosulfan sulfate	---	0.00066U	0.00066U	0.00066U	0.00066U	0.00066U	0.00066U	0.00066U
Endrin	0.002(P)	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U
Endrin Aldehyde	---	0.00023U	0.00023U	0.00023U	0.00023U	0.00023U	0.00023U	0.00023U
Ethyl Parathion	---	0.00060U	0.00060U	0.00060U	0.00060U	0.00060U	0.00060U	0.00060U
Famphur	---	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U
G-BHC	---	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U
g-CHLORDANE	0.002(F)	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U
Heptachlor	0.0004(F)	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U	0.000001BJ	0.000007BJ
Heptachlor Epoxide	0.0002(F)	0.00083U	0.00083U	0.00083U	0.00083U	0.00083U	0.00083U	0.00083U
KEPONE	---	0.0060U	0.0060U	0.0060U	0.0060U	0.0060U	0.0060U	0.0060U
Methoxychlor	0.04(F)	0.0018U	0.0018U	0.0018U	0.0018U	0.0018U	0.0018U	0.0018U
Methyl Parathion	---	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U
PCB-1016	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1221	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1232	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1242	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1248	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1254	0.0005(F)	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U
PCB-1260	0.0005(F)	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U
Phorate	---	0.00040U	0.00040U	0.00040U	0.00040U	0.00040U	0.00040U	0.00040U
PPDDD	---	0.00011U	0.00011U	0.00011U	0.00011U	0.00011U	0.00011U	0.00011U
PPDDE	---	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U
PPDDT	---	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U
Toxaphene	0.003(F)	0.0024U	0.0024U	0.0024U	0.0024U	0.0024U	0.0024U	0.0024U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB1 / 08244 / 11/28/90 / 11/15/91	R1 / 08245 / 11/28/90 / 12/03/91	R2 / 08336 / 11/29/90 / 11/25/91	R3 / 08347 / 11/29/90 / 12/03/91	R4 / 17100 / 11/20/91 / 12/03/91	06-01A / 08344 / 11/29/90	06-01B / 17096 / 11/20/91 / 11/27/91	06-06 / 08248 / 11/28/90 / 11/27/91	06-07 / 08249 / 11/28/90 / 11/27/91
VOLATILE ORGANICS	MCL									
Acetone	---	0.0018BJ	0.100U	0.014BJ	0.0036BJ	0.007BJ	0.0021BJ	NOT SAMPLED	0.100U	0.100U
Benzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Bromodichloromethane	0.1(L)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Bromoform	0.1(L)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Bromomethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U
Carbon Tetrachloride	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Carbondisulfide	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Chlorobenzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Chloroethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U
Chloroform	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Chloromethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U
cis-1,2-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
cis-1,3-Dichloropropene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Dibromochloromethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Ethylbenzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Methylene Chloride	0.005(P)	0.0043BJ	0.0057B	0.050B	0.0058B	0.006B	0.021B	NOT SAMPLED	0.0084B	0.0038BJ
Styrene	0.1(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Tetrachloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Toluene	1(F)	0.0088	0.005U	0.0089	0.018	0.004J	0.005U	NOT SAMPLED	0.005U	0.005U
Trans-1,2-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Trans-1,3-Dichloropropene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Trichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
T-Xylene	10(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Vinyl Acetate	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Vinyl Chloride	0.002(F)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U
1,1-Dichloroethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
1,1-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
1,1,1-Trichloroethane	0.2(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
1,1,2-Trichloroethane	0.005(P)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
1,1,2,2-Tetrachloroethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
1,2-Dichloroethane	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
1,2-Dichloropropane	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
2-Butanone	---	0.0040J	0.0053J	0.0056J	0.0022J	0.10U	0.10U	NOT SAMPLED	0.10U	0.10U
2-Hexanone	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
4-Methyl-2-Pentanone	---	0.005U	0.0005J	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06-12	06C01	06C01P2	06C01P3	06C02	06C02P2	06C03	06C03P2	06C04
	Lab Sample No:	08345	08342	17076	08343	17078	17079	17080	17081	17082
	Date Sampled:	11/29/90	11/29/90	11/20/91	11/29/90	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91
	Date Analyzed:	11/26/91		11/26/91	11/27/91	11/27/91	11/27/91	11/27/91	11/27/91	11/27/91
VOLATILE ORGANICS	MCL									
Acetone	---	0.004BJ	NOT SAMPLED	0.006BJ	0.015BJ	0.020BJ	0.010BJ	0.012BJ	0.007BJ	0.011BJ
Benzene	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromodichloromethane	0.1(L)	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromoform	0.1(L)	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromomethane	---	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Carbon Tetrachloride	0.005(F)	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Carbondisulfide	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chlorobenzene	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chloroethane	---	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Chloroform	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chloromethane	---	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
cis-1,2-Dichloroethene	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
cis-1,3-Dichloropropene	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Dibromochloromethane	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Ethylbenzene	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Methylene Chloride	0.005(P)	0.010B	NOT SAMPLED	0.020B	0.010B	0.016B	0.016B	0.010B	0.007B	0.002BJ
Styrene	0.1(F)	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Tetrachloroethene	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Toluene	1(F)	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trans-1,2-Dichloroethene	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trans-1,3-Dichloropropene	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trichloroethene	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
T-Xylene	10(F)	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Vinyl Acetate	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Vinyl Chloride	0.002(F)	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,1-Dichloroethane	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1-Dichloroethene	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,1-Trichloroethane	0.2(F)	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,2-Trichloroethane	0.005(P)	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,2,2-Tetrachloroethane	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,2-Dichloroethane	0.005(F)	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,2-Dichloropropane	0.005(F)	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
2-Butanone	---	0.10U	NOT SAMPLED	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U
2-Hexanone	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
4-Methyl-2-Pentanone	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C04P2 / 17084 / 11/19/91 / 11/27/91	06C05 / 17085 / 11/19/91 / 11/27/91	06C06 / 17086 / 11/19/91 / 11/27/91	06C06P2 / 17087 / 11/19/91 / 11/27/91	06C07 / 17097 / 11/20/91 / 11/27/91	06C08 / 08246 / 11/28/90 / 11/27/91	06C08P2 / 08247 / 11/28/90
VOLATILE ORGANICS	MCL							
Acetone	---	0.006BJ	0.006BJ	0.004BJ	0.003BJ	0.022BJ	0.100U	0.100U
Benzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromodichloromethane	0.1(L)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromoform	0.1(L)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromomethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Carbon Tetrachloride	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Carbondisulfide	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chlorobenzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chloroethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Chloroform	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chloromethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
cis-1,2-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
cis-1,3-Dichloropropene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Dibromochloromethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Ethylbenzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Methylene Chloride	0.005(P)	0.009B	0.012B	0.010B	0.007B	0.009B	0.034B	0.014B
Styrene	0.1(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Tetrachloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Toluene	1(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trans-1,2-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trans-1,3-Dichloropropene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
T-Xylene	10(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Vinyl Acetate	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Vinyl Chloride	0.002(F)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,1-Dichloroethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,1-Trichloroethane	0.2(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,2-Trichloroethane	0.005(P)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,2,2-Tetrachloroethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,2-Dichloroethane	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,2-Dichloropropane	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
2-Butanone	---	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U
2-Hexanone	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
4-Methyl-2-Pentanone	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.0004J

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB1	R2	R3	R4	06-14A	06-15	06-16	06-17	06-18
	Lab Sample No:		08322	08333			08416	08417	08418	08419
	Date Sampled:		11/28/90	11/29/90			11/30/90	11/30/90	11/30/90	11/30/90
BNA	MCL									
Acenaphthene	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Acenaphthylene	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Aniline	---	NOT SAMPLED	0.020U	0.020U	NOT SAMPLED	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U
Anthracene	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Benzidine	---	NOT SAMPLED	0.050U	0.050U	NOT SAMPLED	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U
Benzoic Acid	---	NOT SAMPLED	0.050U	0.050U	NOT SAMPLED	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U
Benzo(a)Anthracene	0.0001(P)	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Benzo(a)Pyrene	0.0002(P)	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Benzo(b)Fluoranthene	0.0002(P)	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Benzo(G,H,I)Perylene	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Benzo(k)Fluoranthene	0.0002(P)	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Benzyl Alcohol	---	NOT SAMPLED	0.020U	0.020U	NOT SAMPLED	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U
Bis(2-Chloroethoxy)Methane	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Bis(2-Chloroethyl)Ether	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Bis(2-Chloroisopropyl)Ether	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Bis(2-Ethylhexyl)Phthalate	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Butylbenzylphthalate	0.1(P)	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Chrysene	0.0002(P)	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Dibenzofuran	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Dibenzo(A,H)Anthracene	0.0003(P)	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Dibutylphthalate	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Diethyl Phthalate	---	NOT SAMPLED	0.010U	0.002J	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Dimethyl Phthalate	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Di-N-Octylphthalate	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Fluoranthene	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Fluorene	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Hexachlorobenzene	0.001(P)	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Hexachlorobutadiene	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Hexachlorocyclopentadiene	0.05(P)	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Hexachloroethane	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Indeno(1,2,3-C,D)Pyrene	0.0004(P)	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Isophorone	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Naphthalene	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Nitrobenzene	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
N-Nitrosodimethylamine	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
N-Nitroso-Di-N-Propylamine	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
N-Nitrosodiphenyl Amine	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Pentachlorophenol	0.001(F)	NOT SAMPLED	0.050U	0.050U	NOT SAMPLED	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U
Phenanthrene	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

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SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06-19	06-20 08420 11/30/90	06-21 08421 11/30/90	06-22 08422 11/30/90	06-23 08423 11/30/90	06C09 08424 11/30/90	06C10	06C10P2	06C11
BNA	MCL									
Acenaphthene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Acenaphthylene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Aniline	---	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Anthracene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Benzidine	---	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Benzoic Acid	---	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Benzo(a)Anthracene	0.0001(P)	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Benzo(a)Pyrene	0.0002(P)	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Benzo(b)Fluoranthene	0.0002(P)	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Benzo(G,H,I)Perylene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Benzo(k)Fluoranthene	0.0002(P)	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Benzyl Alcohol	---	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Bis(2-Chloroethoxy)Methane	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Bis(2-Chloroethyl)Ether	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Bis(2-Chloroisopropyl)Ether	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Bis(2-Ethylhexyl)Phthalate	---	NOT SAMPLED	0.010U	0.003J	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Butylbenzylphthalate	0.1(P)	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Chrysene	0.0002(P)	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Dibenzofuran	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Dibenzo(A,H)Anthracene	0.0003(P)	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Dibutylphthalate	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Diethyl Phthalate	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Dimethyl Phthalate	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Di-N-Octylphthalate	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Fluoranthene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Fluorene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Hexachlorobenzene	0.001(P)	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Hexachlorobutadiene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Hexachlorocyclopentadiene	0.05(P)	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Hexachloroethane	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Indeno(1,2,3-C,D)Pyrene	0.0004(P)	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Isophorone	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Naphthalene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Nitrobenzene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
N-Nitrosodimethylamine	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
N-Nitroso-Di-N-Propylamine	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
N-Nitrosodiphenyl Amine	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Pentachlorophenol	0.001(F)	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Phenanthrene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: Lab Sample No: Date Sampled: Date Analyzed:	06C11P2	06C12	06C12P2	06C13 08425 11/30/90	06C13P2 08426 11/30/90	06C14 08327 11/29/90	06C14P2 08323 11/29/90	06C14P3	06C15 08324 11/29/90
BNA	MCL									
Acenaphthene	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Acenaphthylene	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Aniline	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U
Anthracene	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Benzidine	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	0.050U
Benzoic Acid	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	0.050U
Benzo(a)Anthracene	0.0001(P)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Benzo(a)Pyrene	0.0002(P)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Benzo(b)Fluoranthene	0.0002(P)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Benzo(G,H,I)Perylene	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Benzo(k)Fluoranthene	0.0002(P)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Benzyl Alcohol	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U
Bis(2-Chloroethoxy)Methane	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Bis(2-Chloroethyl)Ether	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Bis(2-Chloroisopropyl)Ether	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Bis(2-Ethylhexyl)Phthalate	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Butylbenzylphthalate	0.1(P)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Chrysene	0.0002(P)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Dibenzofuran	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Dibenzo(A,H)Anthracene	0.0003(P)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Dibutylphthalate	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Diethyl Phthalate	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Dimethyl Phthalate	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Di-N-Octylphthalate	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.003J	0.010U	0.010U	NOT SAMPLED	0.010U
Fluoranthene	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Fluorene	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Hexachlorobenzene	0.001(P)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Hexachlorobutadiene	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Hexachlorocyclopentadiene	0.05(P)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Hexachloroethane	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Indeno(1,2,3-C,D)Pyrene	0.0004(P)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Isophorone	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Naphthalene	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Nitrobenzene	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
N-Nitrosodimethylamine	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
N-Nitroso-Di-N-Propylamine	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
N-Nitrosodiphenyl Amine	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Pentachlorophenol	0.001(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	0.050U
Phenanthrene	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C15P2 08326 11/29/90	06C16 08332 11/29/90	06C16P2 08334 11/29/90	06C16P3 08335 11/29/90	06C17 08427 11/30/90	06C18 08428 11/30/90	06C18P2 08429 11/30/90	06C19P4 08325 11/29/90	06C20P4 08430 11/30/90
BNA	MCL									
Acenaphthene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Acenaphthylene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Aniline	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
Anthracene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzidine	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Benzoic Acid	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Benzo(a)Anthracene	0.0001(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(a)Pyrene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(b)Fluoranthene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(G,H,I)Perylene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(k)Fluoranthene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzyl Alcohol	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
Bis(2-Chloroethoxy)Methane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Chloroethyl)Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Chloroisopropyl)Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Ethylhexyl)Phthalate	---	0.010U	0.010U	0.004J	0.010U	0.010U	0.010U	0.050	0.010U	0.033
Butylbenzylphthalate	0.1(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Chrysene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibenzofuran	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibenzo(A,H)Anthracene	0.0003(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibutylphthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.001J	0.010U	0.010U	0.010U
Diethyl Phthalate	---	0.010U	0.003J	0.010U	0.010U	0.010U	0.010U	0.003BJ	0.010U	0.003BJ
Dimethyl Phthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Di-N-Octylphthalate	---	0.010U	0.010U	0.010U	0.010U	0.005J	0.004J	0.010U	0.010U	0.010U
Fluoranthene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Fluorene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorobenzene	0.001(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorobutadiene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorocyclopentadiene	0.05(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachloroethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Indeno(1,2,3-C,D)Pyrene	0.0004(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Isophorone	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Naphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Nitrobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitrosodimethylamine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitroso-Di-N-Propylamine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitrosodiphenyl Amine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Pentachlorophenol	0.001(F)	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Phenanthrene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: Lab Sample No: Date Sampled: Date Analyzed:	FB1	R2 08322 11/28/90	R3 08333 11/29/90	R4	06-14A	06-15 08416 11/30/90	06-16 08417 11/30/90	06-17 08418 11/30/90	06-18 08419 11/30/90
BNA	MCL									
Phenol	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Pyrene	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
1,2-Dichlorobenzene	0.6(L)	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
1,2-Diphenylhydrazine	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
1,2,4-Trichlorobenzene	0.07(P)	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
1,3-Dichlorobenzene	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
1,4-Dichlorobenzene	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
2-Chloronaphthalene	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
2-Chlorophenol	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
2-Methyl-4,6-Dinotrophenol	---	NOT SAMPLED	0.050U	0.050U	NOT SAMPLED	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U
2-Methylnaphthalene	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
2-Methylphenol	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
2-Nitroaniline	---	NOT SAMPLED	0.050U	0.050U	NOT SAMPLED	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U
2-Nitrophenol	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
2,4-Dichlorophenol	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
2,4-Dimethylphenol	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
2,4-Dinitrophenol	---	NOT SAMPLED	0.050U	0.050U	NOT SAMPLED	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U
2,4-Dinitrotoluene	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
2,4,5-Trichlorophenol	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
2,4,6-Trichlorophenol	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
2,6-Dinitrotoluene	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
3-Nitroaniline	---	NOT SAMPLED	0.050U	0.050U	NOT SAMPLED	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U
3,3'Dichlorobenzidine	---	NOT SAMPLED	0.020U	0.020U	NOT SAMPLED	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U
4-Bromophenyl Ether	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
4-Chloro-3-Methylphenol	---	NOT SAMPLED	0.020U	0.020U	NOT SAMPLED	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U
4-Chloroaniline	---	NOT SAMPLED	0.020U	0.020U	NOT SAMPLED	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U
4-Chlorophenyl Phenyl Ether	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
4-Methylphenol	---	NOT SAMPLED	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
4-Nitroaniline	---	NOT SAMPLED	0.050U	0.050U	NOT SAMPLED	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U
4-Nitrophenol	---	NOT SAMPLED	0.050U	0.050U	NOT SAMPLED	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected. J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: Lab Sample No: Date Sampled: Date Analyzed:	06-19	06-20 08420 11/30/90	06-21 08421 11/30/90	06-22 08422 11/30/90	06-23 08423 11/30/90	06C09 08424 11/30/90	06C10	06C10P2	06C11
BNA	MCL									
Phenol	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Pyrene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
1,2-Dichlorobenzene	0.6(L)	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
1,2-Diphenylhydrazine	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
1,2,4-Trichlorobenzene	0.07(P)	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
1,3-Dichlorobenzene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
1,4-Dichlorobenzene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
2-Chloronaphthalene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
2-Chlorophenol	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
2-Methyl-4,6-Dinotrophenol	---	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
2-Methylnaphthalene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
2-Methylphenol	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
2-Nitroaniline	---	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
2-Nitrophenol	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
2,4-Dichlorophenol	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
2,4-Dimethylphenol	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
2,4-Dinitrophenol	---	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
2,4-Dinitrotoluene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
2,4,5-Trichlorophenol	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
2,4,6-Trichlorophenol	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
2,6-Dinitrotoluene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
3-Nitroaniline	---	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
3,3'Dichlorobenzidine	---	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
4-Bromophenyl Ether	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
4-Chloro-3-Methylphenol	---	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
4-Chloroaniline	---	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
4-Chlorophenyl Phenyl Ether	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
4-Methylphenol	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
4-Nitroaniline	---	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
4-Nitrophenol	---	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: Lab Sample No: Date Sampled: Date Analyzed:	06C11P2	06C12	06C12P2	06C13 08425 11/30/90	06C13P2 08426 11/30/90	06C14 08327 11/29/90	06C14P2 08323 11/29/90	06C14P3	06C15 08324 11/29/90
BNA	MCL									
Phenol	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Pyrene	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
1,2-Dichlorobenzene	0.6(L)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
1,2-Diphenylhydrazine	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
1,2,4-Trichlorobenzene	0.07(P)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
1,3-Dichlorobenzene	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
1,4-Dichlorobenzene	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
2-Chloronaphthalene	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
2-Chlorophenol	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
2-Methyl-4,6-Dinotrophenol	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	0.050U
2-Methylnaphthalene	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
2-Methylphenol	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
2-Nitroaniline	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	0.050U
2-Nitrophenol	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
2,4-Dichlorophenol	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
2,4-Dimethylphenol	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
2,4-Dinitrophenol	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	0.050U
2,4-Dinitrotoluene	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
2,4,5-Trichlorophenol	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
2,4,6-Trichlorophenol	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
2,6-Dinitrotoluene	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
3-Nitroaniline	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	0.050U
3,3'Dichlorobenzidine	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U
4-Bromophenyl Ether	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
4-Chloro-3-Methylphenol	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U
4-Chloroaniline	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U
4-Chlorophenyl Phenyl Ether	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
4-Methylphenol	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
4-Nitroaniline	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	0.050U
4-Nitrophenol	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	0.050U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C15P2 / 08326 / 11/29/90	06C16 / 08332 / 11/29/90	06C16P2 / 08334 / 11/29/90	06C16P3 / 08335 / 11/29/90	06C17 / 08427 / 11/30/90	06C18 / 08428 / 11/30/90	06C18P2 / 08429 / 11/30/90	06C19P4 / 08325 / 11/29/90	06C20P4 / 08430 / 11/30/90
BNA	MCL									
Phenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Pyrene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2-Dichlorobenzene	0.6(L)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2-Diphenylhydrazine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2,4-Trichlorobenzene	0.07(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,3-Dichlorobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,4-Dichlorobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Chloronaphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Chlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Methyl-4,6-Dinotrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2-Methylnaphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Methylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2-Nitrophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dimethylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dinitrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2,4-Dinitrotoluene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4,5-Trichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4,6-Trichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,6-Dinitrotoluene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
3-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
3,3'Dichlorobenzidine	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Bromophenyl Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Chloro-3-Methylphenol	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Chloroaniline	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Chlorophenyl Phenyl Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Methylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
4-Nitrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB1	R2	R3	R4	06-14A	06-15	06-16	06-17	06-18
	Lab Sample No:		08294	08305	08399		08384	08385	08386	08387
	Date Sampled:		11/29/90	11/29/90	11/30/90		11/30/90	11/30/90	11/30/90	11/30/90
EXPLOSIVES	MCL									
DNB	---	NOT SAMPLED	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U
HMX	---	NOT SAMPLED	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U
RDX	---	NOT SAMPLED	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U
TETRYL	---	NOT SAMPLED	0.050U	0.050U	0.050U	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U
TNB	---	NOT SAMPLED	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U
TNT	---	NOT SAMPLED	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U	0.020U	0.020U	0.014J
2,4-DNT	---	NOT SAMPLED	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06-19	06-20	06-21	06-22	06-23	06C09	06C10	06C10P2	06C11
	Lab Sample No:		08388	08389	08390	08391	08392			
	Date Sampled:		11/30/90	11/30/90	11/30/90	11/30/90	11/30/90			
EXPLOSIVES	MCL									
DNB	---	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	NOT SAMPLED	NOT SAMPL
HMX	---	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	NOT SAMPLED	NOT SAMPL
RDX	---	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	NOT SAMPLED	NOT SAMPL
TETRYL	---	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPL
TNB	---	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	NOT SAMPLED	NOT SAMPL
TNT	---	NOT SAMPLED	0.020U	0.020U	0.148	0.020U	0.020U	NOT SAMPLED	NOT SAMPLED	NOT SAMPL
2,4-DNT	---	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	NOT SAMPLED	NOT SAMPL

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
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IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C11P2	06C12	06C12P2	06C13 08393 11/30/90	06C13P2 08394 11/30/90	06C14 08299 11/29/90	06C14P2 08295 11/29/90	06C14P3	06C15 08296 11/29/90
EXPLOSIVES	MCL									
DNB	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U
HMX	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U
RDX	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U
TETRYL	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	0.050U
TNB	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U
TNT	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U
2,4-DNT	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C15P2 08298 11/29/90	06C16 08304 11/29/90	06C16P2 08306 11/29/90	06C16P3 08307 11/29/90	06C17 08395 11/30/90	06C18 08396 11/30/90	06C18P2 08397 11/30/90	06C19P4 08297 11/29/90	06C20P4 08398 11/30/90
EXPLOSIVES	MCL									
DNB	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
HMX	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
RDX	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TETRYL	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
TNB	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TNT	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
2,4-DNT	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U

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IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round I Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB1	R2	R3	R4	06-14A	06-15	06-16	06-17	06-18
	Lab Sample No:		08308	08319	08415		08400	08401	08402	08403
	Date Sampled:		11/29/90	11/29/90	11/30/90		11/30/90	11/30/90	11/30/90	11/30/90
HERBICIDES	MCL									
2,4-D	0.07(F)	NOT SAMPLED	0.012U	0.012U	0.012U	NOT SAMPLED	0.012U	0.012U	0.012U	0.012U
2,4,5-T	---	NOT SAMPLED	0.0020U	0.0020U	0.0020U	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0020U
2,4,5-TP	0.05(F)	NOT SAMPLED	0.0025B	0.0026B	0.0028B	NOT SAMPLED	0.0023B	0.0026B	0.0022B	0.0028B
Dinoseb	0.007(P)	NOT SAMPLED	0.00070U	0.00070U	0.00070U	NOT SAMPLED	0.00070U	0.00070U	0.00070U	0.00070U

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB1	R2	R3	R4	06-14A	06-15	06-16	06-17	06-18
	Lab Sample No:		08280	08291	08383		08368	08369	08370	08371
	Date Sampled:		11/29/90	11/29/90	11/30/90		11/30/90	11/30/90	11/30/90	11/30/90
CYANIDE and SULFIDE	MCL									
Cyanide	0.2(P)	NOT SAMPLED	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Sulfide	---	NOT SAMPLED	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06-19	06-20	06-21	06-22	06-23	06C09	06C10	06C10P2	06C11
	Lab Sample No:		08404	08405	08406	08407	08408			
	Date Sampled:		11/30/90	11/30/90	11/30/90	11/30/90	11/30/90			
HERBICIDES	MCL									
2,4-D	0.07(F)	NOT SAMPLED	0.012U	0.012U	0.012U	0.012U	0.012U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
2,4,5-T	---	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
2,4,5-TP	0.05(F)	NOT SAMPLED	0.0028B	0.0025B	0.0027B	0.0023B	0.0027B	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Dinoseb	0.007(P)	NOT SAMPLED	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06-19	06-20 / 08372 / 11/30/90	06-21 / 08373 / 11/30/90	06-22 / 08374 / 11/30/90	06-23 / 08375 / 11/30/90	06C09 / 08376 / 11/30/90	06C10	06C10P2	06C11
CYANIDE and SULFIDE	MCL									
Cyanide	0.2(P)	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Sulfide	---	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C11P2	06C12	06C12P2	06C13 / 08409 / 11/30/90	06C13P2 / 08410 / 11/30/90	06C14 / 08313 / 11/29/90	06C14P2 / 08309 / 11/29/90	06C14P3	06C15 / 08310 / 11/29/90
HERBICIDES	MCL									
2,4-D	0.07(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.012U	0.012U	0.012U	0.012U	NOT SAMPLED	0.012U
2,4,5-T	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0020U	NOT SAMPLED	0.0020U
2,4,5-TP	0.05(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0024B	0.0019B	0.0014B	0.0026B	NOT SAMPLED	0.0020B
Dinoseb	0.007(P)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.00070U	0.00070U	0.00070U	0.00070U	NOT SAMPLED	0.00070U

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C11P2	06C12	06C12P2	06C13 / 08377 / 11/30/90	06C13P2 / 08378 / 11/30/90	06C14 / 08285 / 11/29/90	06C14P2 / 08281 / 11/29/90	06C14P3	06C15 / 08282 / 11/29/90
CYANIDE and SULFIDE	MCL									
Cyanide	0.2(P)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Sulfide	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.020U	0.023	0.020U	0.020U	NOT SAMPLED	0.020U

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IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C15P2 08312 11/29/90	06C16 08318 11/29/90	06C16P2 08320 11/29/90	06C16P3 08321 11/29/90	06C17 08411 11/30/90	06C18 08412 11/30/90	06C18P2 08413 11/30/90	06C19P4 08311 11/29/90	06C20P4 08414 11/30/90
HERBICIDES	MCL									
2,4-D	0.07(F)	0.012U	0.012U	0.012U	0.012U	0.012U	0.012U	0.012U	0.012U	0.012U
2,4,5-T	---	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
2,4,5-TP	0.05(F)	0.0026B	0.0024B	0.0026B	0.0026B	0.0032B	0.0027B	0.0038B	0.0024B	0.0019B
Dinoseb	0.007(P)	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C15P2 08284 11/29/90	06C16 08290 11/29/90	06C16P2 08292 11/29/90	06C16P3 08293 11/29/90	06C17 08379 11/30/90	06C18 08380 11/30/90	06C18P2 08381 11/30/90	06C19P4 08283 11/29/90	06C20P4 08382 11/30/90
CYANIDE and SULFIDE	MCL									
Cyanide	0.2(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Sulfide	---	0.020U	0.020U	0.020	0.020U	0.037	0.044	0.020U	0.020U	0.041

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: Lab Sample No: Date Sampled: Date Analyzed:	FB1	R2 08267 11/29/90	R3 08277 11/29/90	R4 08367 11/30/90	06-14A	06-15 08352 11/30/90	06-16 08353 11/30/90	06-17 08354 11/30/90	06-18 08355 11/30/90
METALS	MCL									
Aluminum	---	NOT SAMPLED	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Antimony	0.01(P)	NOT SAMPLED	0.0030U	0.0069B	0.0048B	NOT SAMPLED	0.0043B	0.0107B	0.0058B	0.0078B
Arsenic	0.05(F)	NOT SAMPLED	0.0020U	0.0020U	0.0020U	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0020U
Barium	2.0(F)	NOT SAMPLED	0.010U	0.010U	0.010U	NOT SAMPLED	0.066B	0.013B	0.071B	0.024B
Beryllium	0.001(P)	NOT SAMPLED	0.002U	0.002U	0.002U	NOT SAMPLED	0.002U	0.002U	0.002U	0.002U
Cadmium	0.005(F)	NOT SAMPLED	0.004U	0.004U	0.004U	NOT SAMPLED	0.004U	0.004U	0.004U	0.004U
Calcium	---	NOT SAMPLED	0.050U	0.082B	0.070B	NOT SAMPLED	37.4	30.6	18.1	35.9
Chromium	0.1(F)	NOT SAMPLED	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.016	0.010U
Cobalt	---	NOT SAMPLED	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005B	0.005B	0.007B
Copper	1.3(F)	NOT SAMPLED	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U
Iron	---	NOT SAMPLED	0.010U	0.010U	0.053B	NOT SAMPLED	0.010U	0.010U	0.132	0.010U
Lead	0.015(F)	NOT SAMPLED	0.0010U	0.0010U	0.0010U	NOT SAMPLED	0.0010U	0.0010U	0.0389	0.0010U
Magnesium	---	NOT SAMPLED	0.100U	0.100U	0.100U	NOT SAMPLED	9.62	7.49	7.78	3.48
Manganese	---	NOT SAMPLED	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.099	0.051	0.006B
Mercury	0.002(F)	NOT SAMPLED	0.0002U	0.0002U	0.0002U	NOT SAMPLED	0.0002U	0.0002U	0.0002U	0.0002U
Nickel	0.1(P)	NOT SAMPLED	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.027B	0.005B
Potassium	---	NOT SAMPLED	1.00U	1.00U	1.00U	NOT SAMPLED	1.00U	1.00U	3.88B	1.00U
Selenium	0.05(F)	NOT SAMPLED	0.0020U	0.0020U	0.0020U	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0020U
Silver	---	NOT SAMPLED	0.0010U	0.0010U	0.0010U	NOT SAMPLED	0.0010U	0.0010U	0.0010U	0.0010U
Sodium	---	NOT SAMPLED	0.060B	0.379B	0.064B	NOT SAMPLED	2.26B	8.14	2.36B	16.4
Thallium	0.002(P)	NOT SAMPLED	0.0020U	0.0020U	0.0020U	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0020U
Tin	---	NOT SAMPLED	0.046	0.020U	0.020U	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U
Vanadium	---	NOT SAMPLED	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U
Zinc	---	NOT SAMPLED	0.020	0.005U	0.005U	NOT SAMPLED	0.018B	0.035	0.027	0.036

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B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06-19	06-20	06-21	06-22	06-23	06C09	06C10	06C10P2	06C11
	Lab Sample No:		08356	08357	08358	08359	08360			
	Date Sampled:		11/30/90	11/30/90	11/30/90	11/30/90	11/30/90			
METALS	MCL									
Aluminum	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Antimony	0.01(P)	NOT SAMPLED	0.0130B	0.0083B	0.0058B	0.0072B	0.0050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Arsenic	0.05(F)	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Barium	2.0(F)	NOT SAMPLED	0.025B	0.012B	0.019B	0.015B	0.046B	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Beryllium	0.001(P)	NOT SAMPLED	0.002U	0.002U	0.002U	0.002U	0.002U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Cadmium	0.005(F)	NOT SAMPLED	0.004U	0.004U	0.004U	0.004U	0.004U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Calcium	---	NOT SAMPLED	48.2	199	60.5	29.7	36.3	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Chromium	0.1(F)	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Cobalt	---	NOT SAMPLED	0.008B	0.011B	0.005U	0.005U	0.006B	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Copper	1.3(F)	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Iron	---	NOT SAMPLED	0.010U	0.119	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Lead	0.015(F)	NOT SAMPLED	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Magnesium	---	NOT SAMPLED	12.2	85.3	9.95	8.18	4.68B	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Manganese	---	NOT SAMPLED	0.006B	0.095	0.005U	0.007B	0.091	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Mercury	0.002(F)	NOT SAMPLED	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Nickel	0.1(P)	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Potassium	---	NOT SAMPLED	1.00U	4.06B	1.00U	1.00U	1.00U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Selenium	0.05(F)	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Silver	---	NOT SAMPLED	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Sodium	---	NOT SAMPLED	31.1	23.1	4.23B	5.05	17.3	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Thallium	0.002(P)	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Tin	---	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Vanadium	---	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Zinc	---	NOT SAMPLED	0.005U	0.005U	0.005U	0.005B	0.005U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED

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B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: Lab Sample No: Date Sampled: Date Analyzed:	06C11P2	06C12	06C12P2	06C13 08361 11/30/90	06C13P2 08362 11/30/90	06C14 08272 11/29/90	06C14P2 08268 11/29/90	06C14P3	06C15 08269 11/29/90
METALS	MCL									
Aluminum	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.020B	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Antimony	0.01(P)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0086B	0.0109B	0.0124B	0.0131B	NOT SAMPLED	0.0050U
Arsenic	0.05(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0243	0.0020U	0.0020U	0.0020U	NOT SAMPLED	0.0020U
Barium	2.0(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.069B	0.025B	0.037B	0.026B	NOT SAMPLED	0.026B
Beryllium	0.001(P)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.002U	0.002U	0.002U	0.002U	NOT SAMPLED	0.002U
Cadmium	0.005(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.004U	0.004U	0.004U	0.004U	NOT SAMPLED	0.004U
Calcium	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	24.4	32.6	43.1	9.50	NOT SAMPLED	37.6
Chromium	0.1(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Cobalt	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.014B	0.005B	0.005U	0.005U	NOT SAMPLED	0.007B
Copper	1.3(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.005U	0.005U	0.005U	0.047	NOT SAMPLED	0.005U
Iron	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	7.75	0.030B	0.064B	0.010U	NOT SAMPLED	0.010U
Lead	0.015(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0010U	0.0010U	0.0010U	0.0010U	NOT SAMPLED	0.0010U
Magnesium	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	8.02	7.30	4.96B	2.89B	NOT SAMPLED	11.2
Manganese	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.352	0.052	0.315	0.022	NOT SAMPLED	0.106
Mercury	0.002(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0002U	0.0002U	0.0002U	0.0002U	NOT SAMPLED	0.0002U
Nickel	0.1(P)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U
Potassium	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	1.00U	1.00U	1.00U	1.00U	NOT SAMPLED	1.00U
Selenium	0.05(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0020U	NOT SAMPLED	0.0020U
Silver	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0010U	0.0010U	0.0010UW	0.0010UW	NOT SAMPLED	0.0010UW
Sodium	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	110	21.4	8.37	5.12	NOT SAMPLED	11.3
Thallium	0.002(P)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0020U	NOT SAMPLED	0.0020U
Tin	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.020U	0.020U	0.020U	0.037	NOT SAMPLED	0.020U
Vanadium	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U
Zinc	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.015B	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U

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IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C15P2 08271 11/29/90	06C16 08276 11/29/90	06C16P2 08278 11/29/90	06C16P3 08279 11/29/90	06C17 08363 11/30/90	06C18 08364 11/30/90	06C18P2 08365 11/30/90	06C19P4 08270 11/29/90	06C20P4 08366 11/30/90
METALS	MCL									
Aluminum	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Antimony	0.01(P)	0.0087B	0.0093B	0.0146B	0.0161B	0.0049B	0.0183B	0.0050U	0.0050U	0.0050U
Arsenic	0.05(F)	0.0020U	0.0020U	0.0020U	0.0020UW	0.0020U	0.0032B	0.01099	0.0020U	0.0200
Barium	2.0(F)	0.023B	0.089B	0.079B	0.047B	0.020B	0.152B	0.181B	0.029B	0.171B
Beryllium	0.001(P)	0.002U	0.002U	0.002U	0.002U	0.002U	0.002U	0.002U	0.002U	0.002U
Cadmium	0.005(F)	0.004U	0.004U	0.004U	0.004U	0.004U	0.004U	0.004U	0.004U	0.004U
Calcium	---	15.2	31.0	45.8	72.5	40.7	42.9	37.5	36.1	37.6
Chromium	0.1(F)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Cobalt	---	0.005U	0.015B	0.014B	0.006B	0.006B	0.011B	0.008B	0.005B	0.008B
Copper	1.3(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005B	0.005U	0.005U	0.005U
Iron	---	0.010U	0.056	0.016B	0.048B	0.010U	2.79	70.5	0.010U	70.0
Lead	0.015(F)	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U
Magnesium	---	6.03	13.9	34.9	31.3	5.84	7.66	12.4	11.1	12.3
Manganese	---	0.005U	0.017	0.045	0.034	0.008B	0.153	0.864	0.095	0.866
Mercury	0.002(F)	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U
Nickel	0.1(P)	0.005U	0.005U	0.005U	0.005U	0.005B	0.005U	0.005U	0.005U	0.005U
Potassium	---	1.00U	1.00U	10.6	1.00U	1.00U	1.00U	1.00U	1.00U	1.00U
Selenium	0.05(F)	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
Silver	---	0.0010UW	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010UW	0.0010U
Sodium	---	4.40B	135	34.0	9.41	15.3	43.1	31.6	11.0	31.0
Thallium	0.002(P)	0.0020U	0.0020U	0.0020U	0.0020UW	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
Tin	---	0.031	0.020U	0.030	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
Vanadium	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
Zinc	---	0.041	0.144	0.005U	0.005U	0.015B	0.005U	0.101	0.005U	0.016B

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected B = Value is < CRDL but > detection limit (inorganics)
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IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: Lab Sample No: Date Sampled: Date Analyzed:	FB1	R2 08308 11/29/90	R3 08319 11/29/90	R4 08415 11/30/90	06-14A	06-15 08400 11/30/90	06-16 08401 11/30/90	06-17 08402 11/30/90	06-18 08403 11/30/90
PESTICIDES/PCBs	MCL									
A-BHC	---	NOT SAMPLED	0.00003U	0.00003U	0.00003U	NOT SAMPLED	0.00003U	0.00003U	0.00003U	0.00003U
a-CHLORDANE	0.002(F)	NOT SAMPLED	0.00005U	0.00005U	0.00005U	NOT SAMPLED	0.00005U	0.00005U	0.00005U	0.00005U
A-Endosulfan	---	NOT SAMPLED	0.00014U	0.00014U	0.00014U	NOT SAMPLED	0.00014U	0.00014U	0.00014U	0.00014U
Aldrin	---	NOT SAMPLED	0.00004U	0.00004U	0.00004U	NOT SAMPLED	0.00004U	0.00004U	0.00004U	0.00004U
B-BHC	---	NOT SAMPLED	0.00006U	0.00006U	0.00006U	NOT SAMPLED	0.00006U	0.00006U	0.00006U	0.00006U
B-Endosulfan	---	NOT SAMPLED	0.00004U	0.00004U	0.00004U	NOT SAMPLED	0.00004U	0.00004U	0.00004U	0.00004U
D-BHC	---	NOT SAMPLED	0.00009U	0.00009U	0.00009U	NOT SAMPLED	0.00009U	0.00009U	0.00009U	0.00009U
Dieldrin	---	NOT SAMPLED	0.00002U	0.00002U	0.00002U	NOT SAMPLED	0.00002U	0.00002U	0.00002U	0.00002U
Disulfoton	---	NOT SAMPLED	0.0007U	0.0007U	0.0007U	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U
Endosulfan sulfate	---	NOT SAMPLED	0.0007U	0.0007U	0.0007U	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U
Endrin	0.002(P)	NOT SAMPLED	0.00006U	0.00006U	0.00006U	NOT SAMPLED	0.00006U	0.00006U	0.00006U	0.00006U
Endrin Aldehyde	---	NOT SAMPLED	0.0002U	0.0002U	0.0002U	NOT SAMPLED	0.0002U	0.0002U	0.0002U	0.0002U
Ethyl Parathion	---	NOT SAMPLED	0.0006U	0.0006U	0.0006U	NOT SAMPLED	0.0006U	0.0006U	0.0006U	0.0006U
Famphur	---	NOT SAMPLED	0.0012U	0.0012U	0.0012U	NOT SAMPLED	0.0012U	0.0012U	0.0012U	0.0012U
G-BHC	---	NOT SAMPLED	0.00004U	0.00004U	0.00004U	NOT SAMPLED	0.00004U	0.00004U	0.00004U	0.00004U
g-CHLORDANE	0.002(F)	NOT SAMPLED	0.00005U	0.00005U	0.00005U	NOT SAMPLED	0.00005U	0.00005U	0.00005U	0.00005U
Heptachlor	0.0004(F)	NOT SAMPLED	0.00003U	0.00003U	0.00003U	NOT SAMPLED	0.000001BJ	0.00003U	0.00002BJ	0.00003U
Heptachlor Epoxide	0.0002(F)	NOT SAMPLED	0.0009U	0.0009U	0.0009U	NOT SAMPLED	0.0009U	0.0009U	0.0009U	0.0009U
KEPONE	---	NOT SAMPLED	0.00012U	0.00012U	0.00012U	NOT SAMPLED	0.00012U	0.00012U	0.00012U	0.00012U
Methoxychlor	0.04(F)	NOT SAMPLED	0.00003J	0.0018U	0.0018U	NOT SAMPLED	0.0018U	0.0018U	0.0018U	0.0018U
Methyl Parathion	---	NOT SAMPLED	0.0012U	0.0012U	0.0012U	NOT SAMPLED	0.0012U	0.0012U	0.0012U	0.0012U
PCB-1016	0.0005(F)	NOT SAMPLED	0.0007U	0.0007U	0.0007U	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1221	0.0005(F)	NOT SAMPLED	0.0007U	0.0007U	0.0007U	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1232	0.0005(F)	NOT SAMPLED	0.0007U	0.0007U	0.0007U	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1242	0.0005(F)	NOT SAMPLED	0.0007U	0.0007U	0.0007U	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1248	0.0005(F)	NOT SAMPLED	0.0007U	0.0007U	0.0007U	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1254	0.0005(F)	NOT SAMPLED	0.0013U	0.0013U	0.0013U	NOT SAMPLED	0.0013U	0.0013U	0.0013U	0.0013U
PCB-1260	0.0005(F)	NOT SAMPLED	0.0013U	0.0013U	0.0013U	NOT SAMPLED	0.0013U	0.0013U	0.0013U	0.0013U
Phorate	---	NOT SAMPLED	0.0004U	0.0004U	0.0004U	NOT SAMPLED	0.0004U	0.0004U	0.0004U	0.0004U
PPDDD	---	NOT SAMPLED	0.00011U	0.00011U	0.00011U	NOT SAMPLED	0.00011U	0.00011U	0.00011U	0.00011U
PPDDE	---	NOT SAMPLED	0.00004U	0.00004U	0.00004U	NOT SAMPLED	0.00004U	0.00004U	0.00004U	0.00004U
PPDDT	---	NOT SAMPLED	0.00012U	0.00012U	0.00012U	NOT SAMPLED	0.00012U	0.00012U	0.00012U	0.00012U
Toxaphene	0.003(F)	NOT SAMPLED	0.0025U	0.0025U	0.0025U	NOT SAMPLED	0.0025U	0.0025U	0.0025U	0.0025U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06-19	06-20	06-21	06-22	06-23	06C09	06C10	06C10P2	06C11
	Lab Sample No:		08404	08405	08406	08407	08408			
	Date Sampled:		11/30/90	11/30/90	11/30/90	11/30/90	11/30/90			
PESTICIDES/PCBs	MCL									
A-BHC	---	NOT SAMPLED	0.00003U	0.00003U	0.00003U	0.00003U	0.00003U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
a-CHLORDANE	0.002(F)	NOT SAMPLED	0.00005U	0.00005U	0.00005U	0.00005U	0.00005U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
A-Endosulfan	---	NOT SAMPLED	0.00014U	0.00014U	0.00014U	0.00014U	0.00014U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Aldrin	---	NOT SAMPLED	0.00004U	0.00004U	0.00004U	0.00004U	0.00004U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
B-BHC	---	NOT SAMPLED	0.00006U	0.00006U	0.00006U	0.00006U	0.00006U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
B-Endosulfan	---	NOT SAMPLED	0.00004U	0.00004U	0.00004U	0.00004U	0.00004U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
D-BHC	---	NOT SAMPLED	0.00009U	0.00009U	0.00009U	0.00009U	0.00009U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Dieldrin	---	NOT SAMPLED	0.00002U	0.00002U	0.00002U	0.00002U	0.00002U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Disulfoton	---	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Endosulfan sulfate	---	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Endrin	0.002(P)	NOT SAMPLED	0.00006U	0.00006U	0.00006U	0.00006U	0.00006U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Endrin Aldehyde	---	NOT SAMPLED	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Ethyl Parathion	---	NOT SAMPLED	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Famphur	---	NOT SAMPLED	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
G-BHC	---	NOT SAMPLED	0.00004U	0.00004U	0.00004U	0.00004U	0.00004U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
g-CHLORDANE	0.002(F)	NOT SAMPLED	0.00005U	0.00005U	0.00005U	0.00005U	0.00005U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Heptachlor	0.0004(F)	NOT SAMPLED	0.00003U	0.00003U	0.00003U	0.000001BJ	0.00003U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Heptachlor Epoxide	0.0002(F)	NOT SAMPLED	0.0009U	0.0009U	0.0009U	0.0009U	0.0009U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
KEPONE	---	NOT SAMPLED	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Methoxychlor	0.04(F)	NOT SAMPLED	0.0018U	0.0018U	0.0018U	0.0018U	0.0018U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Methyl Parathion	---	NOT SAMPLED	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
PCB-1016	0.0005(F)	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
PCB-1221	0.0005(F)	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
PCB-1232	0.0005(F)	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
PCB-1242	0.0005(F)	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
PCB-1248	0.0005(F)	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
PCB-1254	0.0005(F)	NOT SAMPLED	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
PCB-1260	0.0005(F)	NOT SAMPLED	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Phorate	---	NOT SAMPLED	0.0004U	0.0004U	0.0004U	0.0004U	0.0004U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
PPDDD	---	NOT SAMPLED	0.00011U	0.00011U	0.00011U	0.00011U	0.00011U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
PPDDE	---	NOT SAMPLED	0.00004U	0.00004U	0.00004U	0.00004U	0.00004U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
PPDDT	---	NOT SAMPLED	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Toxaphene	0.003(F)	NOT SAMPLED	0.0025U	0.0025U	0.0025U	0.0025U	0.0025U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: Lab Sample No: Date Sampled: Date Analyzed:	06C11P2	06C12	06C12P2	06C13 08409 11/30/90	06C13P2 08410 11/30/90	06C14 08313 11/29/90	06C14P2 08309 11/29/90	06C14P3	06C15 08310 11/29/90
PESTICIDES/PCBs	MCL									
A-BHC	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.00003U	0.00003U	0.00003U	0.00003U	NOT SAMPLED	0.00003U
a-CHLORDANE	0.002(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.00005U	0.00005U	0.00005U	0.00005U	NOT SAMPLED	0.00005U
A-Endosulfan	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.00014U	0.00014U	0.00014U	0.00014U	NOT SAMPLED	0.00014U
Aldrin	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.00004U	0.00004U	0.00004U	0.00004U	NOT SAMPLED	0.00004U
B-BHC	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.00006U	0.00006U	0.00006U	0.00006U	NOT SAMPLED	0.00006U
B-Endosulfan	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.00004U	0.00004U	0.00004U	0.00004U	NOT SAMPLED	0.00004U
D-BHC	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.00009U	0.00009U	0.00009U	0.00009U	NOT SAMPLED	0.00009U
Dieldrin	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.00002U	0.00002U	0.00002U	0.00002U	NOT SAMPLED	0.00002U
Disulfoton	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U	NOT SAMPLED	0.0007U
Endosulfan sulfate	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U	NOT SAMPLED	0.0007U
Endrin	0.002(P)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.00006U	0.00006U	0.00006U	0.00006U	NOT SAMPLED	0.00006U
Endrin Aldehyde	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0002U	0.0002U	0.0002U	0.0002U	NOT SAMPLED	0.0002U
Ethyl Parathion	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0006U	0.0006U	0.0006U	0.0006U	NOT SAMPLED	0.0006U
Famphur	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0012U	0.0012U	0.0012U	0.0012U	NOT SAMPLED	0.0012U
G-BHC	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.00004U	0.00004U	0.00004U	0.00004U	NOT SAMPLED	0.00004U
g-CHLORDANE	0.002(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.00005U	0.00005U	0.00005U	0.00005U	NOT SAMPLED	0.00005U
Heptachlor	0.0004(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.00003U	0.00003U	0.00003U	0.00003U	NOT SAMPLED	0.000001B
Heptachlor Epoxide	0.0002(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0009U	0.0009U	0.0009U	0.0009U	NOT SAMPLED	0.0009U
KEPONE	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.00012U	0.00012U	0.00012U	0.00012U	NOT SAMPLED	0.00012U
Methoxychlor	0.04(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0018U	0.0018U	0.00003J	0.0018U	NOT SAMPLED	0.0018U
Methyl Parathion	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0012U	0.0012U	0.0012U	0.0012U	NOT SAMPLED	0.0012U
PCB-1016	0.0005(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U	NOT SAMPLED	0.0007U
PCB-1221	0.0005(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U	NOT SAMPLED	0.0007U
PCB-1232	0.0005(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U	NOT SAMPLED	0.0007U
PCB-1242	0.0005(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U	NOT SAMPLED	0.0007U
PCB-1248	0.0005(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U	NOT SAMPLED	0.0007U
PCB-1254	0.0005(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0013U	0.0013U	0.0013U	0.0013U	NOT SAMPLED	0.0013U
PCB-1260	0.0005(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0013U	0.0013U	0.0013U	0.0013U	NOT SAMPLED	0.0013U
Phorate	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0004U	0.0004U	0.0004U	0.0004U	NOT SAMPLED	0.0004U
PPDDD	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.00011U	0.00011U	0.00011U	0.00011U	NOT SAMPLED	0.00011U
PPDDE	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.00004U	0.00004U	0.00004U	0.00004U	NOT SAMPLED	0.00004U
PPDDT	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.00012U	0.00012U	0.00012U	0.00012U	NOT SAMPLED	0.00012U
Toxaphene	0.003(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0025U	0.0025U	0.0025U	0.0025U	NOT SAMPLED	0.0025U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C15P2 / 08312 / 11/29/90	06C16 / 08318 / 11/29/90	06C16P2 / 08320 / 11/29/90	06C16P3 / 08321 / 11/29/90	06C17 / 08411 / 11/30/90	06C18 / 08412 / 11/30/90	06C18P2 / 08413 / 11/30/90	06C19P4 / 08311 / 11/29/90	06C20P4 / 08414 / 11/30/90
PESTICIDES/PCBs	MCL									
A-BHC	---	0.00003U	0.00003U	0.00003U	0.00003U	0.00003U	0.00003U	0.00003U	0.00003U	0.00003U
a-CHLORDANE	0.002(F)	0.00005U	0.00005U	0.00005U	0.00005U	0.00005U	0.00005U	0.00005U	0.00005U	0.00005U
A-Endosulfan	---	0.00014U	0.00014U	0.00014U	0.00014U	0.00014U	0.00014U	0.00014U	0.00014U	0.00014U
Aldrin	---	0.00004U	0.00004U	0.00004U	0.00004U	0.00004U	0.00004U	0.00004U	0.00004U	0.00004U
B-BHC	---	0.00006U	0.00006U	0.00006U	0.00006U	0.00006U	0.00006U	0.00006U	0.00006U	0.00006U
B-Endosulfan	---	0.00004U	0.00004U	0.00004U	0.00004U	0.00004U	0.00004U	0.00004U	0.00004U	0.00004U
D-BHC	---	0.00009U	0.00009U	0.00009U	0.00009U	0.00009U	0.00009U	0.00009U	0.00009U	0.00009U
Dieldrin	---	0.00002U	0.00002U	0.00002U	0.00002U	0.00002U	0.00002U	0.00002U	0.00002U	0.00002U
Disulfoton	---	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
Endosulfan sulfate	---	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
Endrin	0.002(P)	0.00006U	0.00006U	0.00006U	0.00006U	0.00006U	0.00006U	0.00006U	0.00006U	0.00006U
Endrin Aldehyde	---	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U
Ethyl Parathion	---	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U
Famphur	---	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U
G-BHC	---	0.00004U	0.00004U	0.00004U	0.00004U	0.00004U	0.00004U	0.00004U	0.00004U	0.00004U
g-CHLORDANE	0.002(F)	0.00005U	0.00005U	0.00005U	0.00005U	0.00005U	0.00005U	0.00005U	0.00005U	0.00005U
Heptachlor	0.0004(F)	0.00003U	0.00003U	0.00003U	0.000001B	0.000018J	0.00003U	0.00003U	0.00001BJ	0.00003U
Heptachlor Epoxide	0.0002(F)	0.0009U	0.0009U	0.0009U	0.0009U	0.0009U	0.0009U	0.0009U	0.0009U	0.0009U
KEPONE	---	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U
Methoxychlor	0.04(F)	0.00004J	0.0018U	0.0018U	0.0018U	0.0018U	0.0018U	0.00003J	0.0018U	0.0018U
Methyl Parathion	---	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U
PCB-1016	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1221	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1232	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1242	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1248	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1254	0.0005(F)	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U
PCB-1260	0.0005(F)	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U
Phorate	---	0.0004U	0.0004U	0.0004U	0.0004U	0.0004U	0.0004U	0.0004U	0.0004U	0.0004U
PPDDD	---	0.00011U	0.00011U	0.00011U	0.00011U	0.00011U	0.00011U	0.00011U	0.00011U	0.00011U
PPDDE	---	0.00004U	0.00004U	0.00004U	0.00004U	0.00004U	0.00004U	0.00004U	0.00004U	0.00004U
PPDDT	---	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U
Toxaphene	0.003(F)	0.0025U	0.0025U	0.0025U	0.0025U	0.0025U	0.0025U	0.0025U	0.0025U	0.0025U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB1	R2 08336 11/29/90	R3 08347 11/29/90	R4 08447 11/30/90	06-14A	06-15 08432 11/30/90	06-16 08433 11/30/90	06-17 08434 11/30/90	06-18 08435 11/30/90
VOLATILE ORGANICS	MCL									
Acetone	---	NOT SAMPLED	0.014BJ	0.0036BJ	0.013BJ	NOT SAMPLED	0.0022BJ	0.100U	0.0036BJ	0.0012BJ
Benzene	---	NOT SAMPLED	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U
Bromodichloromethane	0.1(L)	NOT SAMPLED	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U
Bromoform	0.1(L)	NOT SAMPLED	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U
Bromomethane	---	NOT SAMPLED	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Carbon Tetrachloride	0.005(F)	NOT SAMPLED	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U
Carbondisulfide	---	NOT SAMPLED	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U
Chlorobenzene	---	NOT SAMPLED	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U
Chloroethane	---	NOT SAMPLED	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Chloroform	---	NOT SAMPLED	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U
Chloromethane	---	NOT SAMPLED	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
cis-1,2-Dichloroethene	---	NOT SAMPLED	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U
Cis-1,3-Dichloropropene	---	NOT SAMPLED	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U
Dibromochloromethane	---	NOT SAMPLED	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U
Ethylbenzene	---	NOT SAMPLED	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U
Methylene Chloride	0.005(P)	NOT SAMPLED	0.050B	0.0058B	0.0059B	NOT SAMPLED	0.0020BJ	0.0020BJ	0.0014BJ	0.0012BJ
Styrene	0.1(F)	NOT SAMPLED	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U
Tetrachloroethene	---	NOT SAMPLED	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U
Toluene	1(F)	NOT SAMPLED	0.0089	0.018	0.020	NOT SAMPLED	0.0089	0.018	0.020	0.0050U
Trans-1,2-Dichloroethene	---	NOT SAMPLED	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U
Trans-1,3-Dichloropropene	---	NOT SAMPLED	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U
Trichloroethene	---	NOT SAMPLED	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U
T-Xylene	10(F)	NOT SAMPLED	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U
Vinyl Acetate	---	NOT SAMPLED	0.050U	0.050U	0.050U	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U
Vinyl Chloride	0.002(F)	NOT SAMPLED	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
1,1-Dichloroethane	---	NOT SAMPLED	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U
1,1-Dichloroethene	---	NOT SAMPLED	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U
1,1,1-Trichloroethane	0.2(F)	NOT SAMPLED	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U
1,1,2-Trichloroethane	0.005(P)	NOT SAMPLED	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U
1,1,2,2-Tetrachloroethane	---	NOT SAMPLED	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U
1,2-Dichloroethane	0.005(F)	NOT SAMPLED	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U
1,2-Dichloropropane	0.005(F)	NOT SAMPLED	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U
2-Butanone	---	NOT SAMPLED	0.0056J	0.0022J	0.0032J	NOT SAMPLED	0.100U	0.100U	0.100U	0.100U
2-Hexanone	---	NOT SAMPLED	0.050U	0.050U	0.050U	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U
4-Methyl-2-Pentanone	---	NOT SAMPLED	0.050U	0.050U	0.050U	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06-19	06-20	06-21	06-22	06-23	06C09	06C10	06C10P2	06C11
	Lab Sample No:		08436	08437	08438	08439	08440			
	Date Sampled:		11/30/90	11/30/90	11/30/90	11/30/90	11/30/90			
VOLATILE ORGANICS	MCL									
Acetone	---	NOT SAMPLED	0.100U	0.010BJ	0.020BJ	0.100U	0.100U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Benzene	---	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Bromodichloromethane	0.1(L)	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Bromoform	0.1(L)	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Bromomethane	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Carbon Tetrachloride	0.005(F)	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Carbondisulfide	---	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Chlorobenzene	---	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Chloroethane	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Chloroform	---	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Chloromethane	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
cis-1,2-Dichloroethene	---	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Cis-1,3-Dichloropropene	---	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Dibromochloromethane	---	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Ethylbenzene	---	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Methylene Chloride	0.005(P)	NOT SAMPLED	0.0010BJ	0.0033BJ	0.092B	0.062B	0.031B	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Styrene	0.1(F)	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Tetrachloroethene	---	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Toluene	1(F)	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Trans-1,2-Dichloroethene	---	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Trans-1,3-Dichloropropene	---	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Trichloroethene	---	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
T-Xylene	10(F)	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Vinyl Acetate	---	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
Vinyl Chloride	0.002(F)	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
1,1-Dichloroethane	---	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
1,1-Dichloroethene	---	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
1,1,1-Trichloroethane	0.2(F)	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
1,1,2-Trichloroethane	0.005(P)	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
1,1,2,2-Tetrachloroethane	---	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
1,2-Dichloroethane	0.005(F)	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
1,2-Dichloropropane	0.005(F)	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
2-Butanone	---	NOT SAMPLED	0.100U	0.100U	0.100U	0.100U	0.100U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
2-Hexanone	---	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
4-Methyl-2-Pentanone	---	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: Lab Sample No: Date Sampled: Date Analyzed:	06C11P2	06C12	06C12P2	06C13 08441 11/30/90	06C13P2 08442 11/30/90	06C14 08341 11/29/90	06C14P2 08337 11/29/90	06C14P3	06C15 08338 11/29/90
VOLATILE ORGANICS	MCL									
Acetone	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0043BJ	0.0094BJ	0.012BJ	0.0078BJ	NOT SAMPLED	0.0044BJ
Benzene	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U
Bromodichloromethane	0.1(L)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U
Bromoform	0.1(L)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U
Bromomethane	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Carbon Tetrachloride	0.005(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U
Carbondisulfide	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U
Chlorobenzene	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U
Chloroethane	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
Chloroform	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U
Chloromethane	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
cis-1,2-Dichloroethene	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U
Cis-1,3-Dichloropropene	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U
Dibromochloromethane	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U
Ethylbenzene	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U
Methylene Chloride	0.005(P)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.014B	0.010B	0.0072B	0.054B	NOT SAMPLED	0.033B
Styrene	0.1(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U
Tetrachloroethene	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U
Toluene	1(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U
Trans-1,2-Dichloroethene	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U
Trans-1,3-Dichloropropene	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U
Trichloroethene	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U
T-Xylene	10(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U
Vinyl Acetate	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	0.050U
Vinyl Chloride	0.002(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U
1,1-Dichloroethane	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U
1,1-Dichloroethene	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U
1,1,1-Trichloroethane	0.2(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U
1,1,2-Trichloroethane	0.005(P)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U
1,1,2,2-Tetrachloroethane	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0050U	0.0050U	0.0061J	0.0050U	NOT SAMPLED	0.0050U
1,2-Dichloroethane	0.005(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U
1,2-Dichloropropane	0.005(F)	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.0050U	0.0050U	0.0050U	0.0050U	NOT SAMPLED	0.0050U
2-Butanone	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.100U	0.100U	0.100U	0.100U	NOT SAMPLED	0.100U
2-Hexanone	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	0.050U
4-Methyl-2-Pentanone	---	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	0.050U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 1 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C15P2 08340 11/29/90	06C16 08346 11/29/90	06C16P2 08348 11/29/90	06C16P3 08349 11/29/90	06C17 08443 11/30/90	06C18 08444 11/30/90	06C18P2 08445 11/30/90	06C19P4 08339 11/29/90	06C20P4 08446 11/30/90
VOLATILE ORGANICS	MCL									
Acetone	---	0.0091BJ	0.0020BJ	0.100U	0.0016BJ	0.0043BJ	0.0058BJ	0.100U	0.014BJ	0.100U
Benzene	---	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U
Bromodichloromethane	0.1(L)	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U
Bromoform	0.1(L)	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U
Bromomethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Carbon Tetrachloride	0.005(F)	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U
Carbondisulfide	---	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U
Chlorobenzene	---	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U
Chloroethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Chloroform	---	0.0050U	0.0050U	0.0014J	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U
Chloromethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
cis-1,2-Dichloroethene	---	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U
Cis-1,3-Dichloropropene	---	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U
Dibromochloromethane	---	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U
Ethylbenzene	---	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U
Methylene Chloride	0.005(P)	0.0083B	0.035B	0.0087B	0.0069B	0.0065B	0.021B	0.0033BJ	0.054B	0.0059B
Styrene	0.1(F)	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U
Tetrachloroethene	---	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U
Toluene	1(F)	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U
Trans-1,2-Dichloroethene	---	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U
Trans-1,3-Dichloropropene	---	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U
Trichloroethene	---	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U
T-Xylene	10(F)	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U
Vinyl Acetate	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Vinyl Chloride	0.002(F)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,1-Dichloroethane	---	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U
1,1-Dichloroethene	---	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U
1,1,1-Trichloroethane	0.2(F)	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U
1,1,2-Trichloroethane	0.005(P)	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U
1,1,2,2-Tetrachloroethane	---	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U
1,2-Dichloroethane	0.005(F)	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U
1,2-Dichloropropane	0.005(F)	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U	0.0050U
2-Butanone	---	0.100U	0.100U	0.100U	0.100U	0.100U	0.100U	0.100U	0.100U	0.100U
2-Hexanone	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
4-Methyl-2-Pentanone	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: Lab Sample No: Date Sampled: Date Analyzed:	FB3	R3E	R4E	06-01A	06-01B	06-06	06-07	06-12	06C01 12446 05/31/91 06/06/91
BNA	MCL									
Acenaphthene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
Acenaphthylene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
Aniline	---	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.020U
Anthracene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
Benzidine	---	0.050U	0.050U	0.050U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.050U
Benzoic Acid	---	0.050U	0.050U	0.050U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.050U
Benzo(a)Anthracene	0.0001(P)	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
Benzo(a)Pyrene	0.0002(P)	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
Benzo(b)Fluoranthene	0.0002(P)	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
Benzo(G,H,I)Perylene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
Benzo(k)Fluoranthene	0.0002(P)	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
Benzyl Alcohol	---	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.020U
Bis(2-Chloroethoxy)Methane	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
Bis(2-Chloroethyl)Ether	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
Bis(2-Chloroisopropyl)Ether	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
Bis(2-Ethylhexyl)Phthalate	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
Butylbenzylphthalate	0.1(P)	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
Chrysene	0.0002(P)	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
Dibenzofuran	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
Dibenzo(A,H)Anthracene	0.0003(P)	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
Dibutylphthalate	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.0023BJ
Diethyl Phthalate	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.021B
Dimethyl Phthalate	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
Di-N-Octylphthalate	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.0045J
Fluoranthene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
Fluorene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
Hexachlorobenzene	0.001(P)	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
Hexachlorobutadiene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
Hexachlorocyclopentadiene	0.05(P)	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
Hexachloroethane	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
Indeno(1,2,3-C,D)Pyrene	0.0004(P)	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
Isophorone	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
Naphthalene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
Nitrobenzene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
N-Nitrosodimethylamine	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
N-Nitroso-Di-N-Propylamine	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
N-Nitrosodiphenyl Amine	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
Pentachlorophenol	0.001(F)	0.050U	0.050U	0.050U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.050U
Phenanthrene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: Lab Sample No: Date Sampled: Date Analyzed:	FB3	R3E	R4E	06-01A	06-01B	06-06	06-07	06-12	06C01 12446 05/31/91 06/06/91
BNA	MCL									
Phenol	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
Pyrene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
1,2-Dichlorobenzene	0.6(L)	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
1,2-Diphenylhydrazine	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
1,2,4-Trichlorobenzene	0.07(P)	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
1,3-Dichlorobenzene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
1,4-Dichlorobenzene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
2-Chloronaphthalene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
2-Chlorophenol	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
2-Methyl-4,6-Dinotrophenol	---	0.050U	0.050U	0.050U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.050U
2-Methylnaphthalene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
2-Methylphenol	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
2-Nitroaniline	---	0.050U	0.050U	0.050U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.050U
2-Nitrophenol	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
2,4-Dichlorophenol	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
2,4-Dimethylphenol	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
2,4-Dinitrophenol	---	0.050U	0.050U	0.050U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.050U
2,4-Dinitrotoluene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
2,4,5-Trichlorophenol	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
2,4,6-Trichlorophenol	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
2,6-Dinitrotoluene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
3-Nitroaniline	---	0.050U	0.050U	0.050U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.050U
3,3'Dichlorobenzidine	---	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.020U
4-Bromophenyl Ether	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
4-Chloro-3-Methylphenol	---	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.020U
4-Chloroaniline	---	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.020U
4-Chlorophenyl Phenyl Ether	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
4-Methylphenol	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.010U
4-Nitroaniline	---	0.050U	0.050U	0.050U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.050U
4-Nitrophenol	---	0.050U	0.050U	0.050U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.050U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C01P2	06C01P3	06C02	06C02P2	06C03	06C03P2	06C04	06C04P2	06C05
	Lab Sample No:			12684	12685	12686	12687	12688	12689	12690
	Date Sampled:			06/04/91	06/04/91	06/05/91	06/05/91	06/05/91	06/05/91	06/05/91
	Date Analyzed:			06/10/91	06/10/91	06/10/91	06/10/91	06/10/91	06/10/91	06/10/91
BNA	MCL									
Acenaphthene	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Acenaphthylene	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Aniline	---	NOT SAMPLED	NO SAMPLE	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
Anthracene	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzidine	---	NOT SAMPLED	NO SAMPLE	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Benzoic Acid	---	NOT SAMPLED	NO SAMPLE	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Benzo(a)Anthracene	0.0001(P)	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(a)Pyrene	0.0002(P)	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(b)Fluoranthene	0.0002(P)	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(G,H,I)Perylene	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(k)Fluoranthene	0.0002(P)	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzyl Alcohol	---	NOT SAMPLED	NO SAMPLE	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
Bis(2-Chloroethoxy)Methane	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Chloroethyl)Ether	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Chloroisopropyl)Ether	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Ethylhexyl)Phthalate	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Butylbenzylphthalate	0.1(P)	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Chrysene	0.0002(P)	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibenzofuran	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibenzo(A,H)Anthracene	0.0003(P)	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibutylphthalate	---	NOT SAMPLED	NO SAMPLE	0.0012J	0.010U	0.010U	0.010U	0.010U	0.0013J	0.010U
Diethyl Phthalate	---	NOT SAMPLED	NO SAMPLE	0.0041BJ	0.0038BJ	0.0038J	0.0037BJ	0.0035BJ	0.0040BJ	0.0032BJ
Dimethyl Phthalate	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Di-N-Octylphthalate	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Fluoranthene	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Fluorene	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorobenzene	0.001(P)	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorobutadiene	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorocyclopentadiene	0.05(P)	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachloroethane	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Indeno(1,2,3-C,D)Pyrene	0.0004(P)	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Isophorone	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Naphthalene	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Nitrobenzene	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitrosodimethylamine	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitroso-Di-N-Propylamine	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitrosodiphenyl Amine	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Pentachlorophenol	0.001(F)	NOT SAMPLED	NO SAMPLE	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Phenanthrene	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	06C01P2	06C01P3	06C02	06C02P2	06C03	06C03P2	06C04	06C04P2	06C05
	Lab Sample No:			12684	12685	12686	12687	12688	12689	12690
	Date Sampled:			06/04/91	06/04/91	06/05/91	06/05/91	06/05/91	06/05/91	06/05/91
	Date Analyzed:			06/10/91	06/10/91	06/10/91	06/10/91	06/10/91	06/10/91	06/01/91
BNA	MCL									
Phenol	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Pyrene	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2-Dichlorobenzene	0.6(L)	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2-Diphenylhydrazine	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2,4-Trichlorobenzene	0.07(P)	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,3-Dichlorobenzene	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,4-Dichlorobenzene	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Chloronaphthalene	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Chlorophenol	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Methyl-4,6-Dinotrophenol	---	NOT SAMPLED	NO SAMPLE	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2-Methylnaphthalene	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Methylphenol	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Nitroaniline	---	NOT SAMPLED	NO SAMPLE	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2-Nitrophenol	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dichlorophenol	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dimethylphenol	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dinitrophenol	---	NOT SAMPLED	NO SAMPLE	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2,4-Dinitrotoluene	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4,5-Trichlorophenol	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4,6-Trichlorophenol	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,6-Dinitrotoluene	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
3-Nitroaniline	---	NOT SAMPLED	NO SAMPLE	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
3,3'Dichlorobenzidine	---	NOT SAMPLED	NO SAMPLE	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Bromophenyl Ether	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Chloro-3-Methylphenol	---	NOT SAMPLED	NO SAMPLE	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Chloroaniline	---	NOT SAMPLED	NO SAMPLE	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Chlorophenyl Phenyl Ether	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Methylphenol	---	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Nitroaniline	---	NOT SAMPLED	NO SAMPLE	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
4-Nitrophenol	---	NOT SAMPLED	NO SAMPLE	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
ROUND 2 GROUNDWATER SAMPLES
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C06 / 12821 / 06/05/91 / 06/15/91	06C06P2 / 12691 / 06/05/91 / 06/10/91	06C07 / 12822 / 06/05/91 / 06/15/91	06C08 / 12444 / 05/31/91 / 06/06/91	06C08P2 / 12445 / 05/31/91 / 06/06/91
BNA	MCL					
Acenaphthene	---	0.010U	0.010U	0.010U	0.010U	0.010U
Acenaphthylene	---	0.010U	0.010U	0.010U	0.010U	0.010U
Aniline	---	0.020U	0.020U	0.020U	0.020U	0.020U
Anthracene	---	0.010U	0.010U	0.010U	0.010U	0.010U
Benzidine	---	0.050U	0.050U	0.050U	0.050U	0.050U
Benzoic Acid	---	0.050U	0.050U	0.050U	0.050U	0.050U
Benzo(a)Anthracene	0.0001(P)	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(a)Pyrene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(b)Fluoranthene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(G,H,I)Perylene	---	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(k)Fluoranthene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U
Benzyl Alcohol	---	0.020U	0.020U	0.020U	0.020U	0.020U
Bis(2-Chloroethoxy)Methane	---	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Chloroethyl)Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Chloroisopropyl)Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Ethylhexyl)Phthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U
Butylbenzylphthalate	0.1(P)	0.010U	0.010U	0.010U	0.010U	0.010U
Chrysene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U
Dibenzofuran	---	0.010U	0.010U	0.010U	0.010U	0.010U
Dibenzo(A,H)Anthracene	0.0003(P)	0.010U	0.010U	0.010U	0.010U	0.010U
Dibutylphthalate	---	0.010U	0.010U	0.010U	0.010U	0.0026BJ
Diethyl Phthalate	---	0.010U	0.0030BJ	0.010U	0.0016BJ	0.023B
Dimethyl Phthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U
Di-N-Octylphthalate	---	0.0022J	0.010U	0.010U	0.010U	0.010U
Fluoranthene	---	0.010U	0.010U	0.010U	0.010U	0.010U
Fluorene	---	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorobenzene	0.001(P)	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorobutadiene	---	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorocyclopentadiene	0.05(P)	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachloroethane	---	0.010U	0.010U	0.010U	0.010U	0.010U
Indeno(1,2,3-C,D)Pyrene	0.0004(P)	0.010U	0.010U	0.010U	0.010U	0.010U
Isophorone	---	0.010U	0.010U	0.010U	0.010U	0.010U
Naphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U
Nitrobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitrosodimethylamine	---	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitroso-Di-N-Propylamine	---	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitrosodiphenyl Amine	---	0.010U	0.010U	0.010U	0.010U	0.010U
Pentachlorophenol	0.001(F)	0.050U	0.050U	0.050U	0.050U	0.050U
Phenanthrene	---	0.010U	0.010U	0.010U	0.010U	0.010U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C06 / 12821 / 06/05/91 / 06/15/91	06C06P2 / 12691 / 06/05/91 / 06/10/91	06C07 / 12822 / 06/05/91 / 06/15/91	06C08 / 12444 / 05/31/91 / 06/06/91	06C08P2 / 12445 / 05/31/91 / 06/06/91
BNA	MCL					
Phenol	---	0.010U	0.010U	0.010U	0.010U	0.010U
Pyrene	---	0.010U	0.010U	0.010U	0.010U	0.010U
1,2-Dichlorobenzene	0.6(L)	0.010U	0.010U	0.010U	0.010U	0.010U
1,2-Diphenylhydrazine	---	0.010U	0.010U	0.010U	0.010U	0.010U
1,2,4-Trichlorobenzene	0.07(P)	0.010U	0.010U	0.010U	0.010U	0.010U
1,3-Dichlorobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U
1,4-Dichlorobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U
2-Chloronaphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U
2-Chlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U
2-Methyl-4,6-Dinotrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U
2-Methylnaphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U
2-Methylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U
2-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U
2-Nitrophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dimethylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dinitrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U
2,4-Dinitrotoluene	---	0.010U	0.010U	0.010U	0.010U	0.010U
2,4,5-Trichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U
2,4,6-Trichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U
2,6-Dinitrotoluene	---	0.010U	0.010U	0.010U	0.010U	0.010U
3-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U
3,3'Dichlorobenzidine	---	0.020U	0.020U	0.020U	0.020U	0.020U
4-Bromophenyl Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U
4-Chloro-3-Methylphenol	---	0.020U	0.020U	0.020U	0.020U	0.020U
4-Chloroaniline	---	0.020U	0.020U	0.020U	0.020U	0.020U
4-Chlorophenyl Phenyl Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U
4-Methylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U
4-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U
4-Nitrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB3	R3E	R4E	06-01A	06-01B	06-06	06-07	06-12	06C01 / 12426 / 06/02/91 / 06/04/91
EXPLOSIVES	MCL									
DNB	---	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.020U
HMX	---	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.020U
RDX	---	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.020U
TETRYL	---	0.050U	0.050U	0.050U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.050U
TNB	---	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.020U
TNT	---	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.020U
2,4-DNT	---	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.020U

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C01P2	06C01P3	06C02 / 12668 / 06/04/91 / 06/06/91	06C02P2 / 12669 / 06/04/91 / 06/06/91	06C03 / 12670 / 06/05/91 / 06/06/91	06C03P2 / 12671 / 06/05/91 / 06/06/91	06C04 / 12672 / 06/05/91 / 06/06/91	06C04P2 / 12673 / 06/05/91 / 06/06/91	06C05 / 12674 / 06/05/91 / 06/06/91
EXPLOSIVES	MCL									
DNB	---	NOT SAMPLED	NO SAMPLE	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
HMX	---	NOT SAMPLED	NO SAMPLE	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
RDX	---	NOT SAMPLED	NOSAMPLE	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TETRYL	---	NOT SAMPLED	NO SAMPLE	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
TNB	---	NOT SAMPLED	NO SAMPLE	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TNT	---	NOT SAMPLED	NOSAMPLE	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
2,4-DNT	---	NOT SAMPLED	NO SAMPLE	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C11P2 / 16928 / 11/18/91 / 11/22/91	06C12 / 16930 / 11/19/91 / 11/22/91	06C12P2 / 16931 / 11/19/91 / 11/22/91	06C13 / 16810 / 11/18/91 / 11/20/91	06C13P2 / 16811 / 11/18/91 / 11/20/91	06C14 / 16686 / 11/16/91 / 11/19/91	06C14P2 / 16687 / 11/16/91 / 11/19/91	06C15 / 16688 / 11/16/91 / 11/19/91	06C15P2 / 16689 / 11/16/91 / 11/19/91
EXPLOSIVES	MCL									
DNB	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
HMX	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
RDX	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TETRYL	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
TNB	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TNT	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
2,4-DNT	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
2,6-DNT	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C16 / 16690 / 11/16/91 / 11/19/91	06C16P2 / 16691 / 11/16/91 / 11/19/91	06C16P3 / 16692 / 11/16/91 / 11/19/91	06C17 / 16814 / 11/18/91 / 11/20/91	06C18 / 16932 / 11/19/91 / 11/22/91	06C18P2 / 16933 / 11/19/91 / 11/22/91
EXPLOSIVES	MCL						
DNB	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
HMX	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
RDX	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TETRYL	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
TNB	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TNT	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
2,4-DNT	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
2,6-DNT	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB3	R1E	R2E	R3E	06-14A	06-15	06-16	06-17	06-18
	Lab Sample No:	16217	16937	16937	16805			16936		15815
	Date Sampled:	11/13/91	11/16/91	11/18/91	11/19/91	11/14/91	11/15/91	11/19/91	11/16/91	11/18/91
	Date Analyzed:	11/15/91	11/19/91	11/19/91	11/20/91			11/22/91		11/20/91
EXPLOSIVES	MCL									
DNB	---	0.020U	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	0.020U	NO SAMPLE	0.020U
HMX	---	0.020U	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	0.020U	NO SAMPLE	0.020U
RDX	---	0.020U	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	0.020U	NO SAMPLE	0.020U
TETRYL	---	0.050U	0.050U	0.050U	0.050U	NO SAMPLE	NOT SAMPLED	0.050U	NO SAMPLE	0.050U
TNB	---	0.020U	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	0.020U	NO SAMPLE	0.020U
TNT	---	0.020U	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	0.020U	NO SAMPLE	0.016J
2,4-DNT	---	0.020U	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	0.020U	NO SAMPLE	0.020U
2,6-DNT	---	0.020U	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	0.020U	NO SAMPLE	0.020U

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06-19	06-20	06-21	06-22	06-23	06C09	06C10	06C10P2	06C11
	Lab Sample No:	16816	16817		16818	16819	16806	16807	16808	16927
	Date Sampled:	11/18/91	11/18/91	11/20/91	11/18/91	11/18/91	11/18/91	11/18/91	11/18/91	11/18/91
	Date Analyzed:	11/20/91	11/20/91		11/20/91	11/20/91	11/20/91	11/20/91	11/20/91	11/22/91
EXPLOSIVES	MCL									
DNB	---	0.020U	0.020U	NO SAMPLE	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
HMX	---	0.020U	0.020U	NO SAMPLE	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
RDX	---	0.020U	0.035	NO SAMPLE	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TETRYL	---	0.050U	0.050U	NO SAMPLE	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
TNB	---	0.020U	0.020U	NO SAMPLE	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TNT	---	0.020U	0.020U	NO SAMPLE	0.098	0.020U	0.020U	0.020U	0.020U	0.020U
2,4-DNT	---	0.020U	0.020U	NO SAMPLE	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
2,6-DNT	---	0.020U	0.020U	NO SAMPLE	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C16 / 16706 / 11/16/91 / 12/03/91	06C16P2 / 16707 / 11/16/91 / 12/03/91	06C16P3 / 16708 / 11/16/91 / 12/03/91	06C17 / 16829 / 11/18/91 / 12/06/91	06C18 / 16959 / 11/19/91 / 12/12/91	06C18P2 / 16960 / 11/19/91 / 12/12/91
BNA	MCL						
Phenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Pyrene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2-Dichlorobenzene	0.6(L)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2-Diphenylhydrazine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2,4-Trichlorobenzene	0.07(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,3-Dichlorobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,4-Dichlorobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Chloronaphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Chlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Methyl-4,6-Dinotrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2-Methylnaphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Methylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2-Nitrophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dimethylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dinitrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2,4-Dinitrotoluene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4,5-Trichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4,6-Trichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,6-Dinitrotoluene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
3-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
3,3'Dichlorobenzidine	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Bromophenyl Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Chloro-3-Methylphenol	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Chloroaniline	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Chlorophenyl Phenyl Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Methylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
4-Nitrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C16 / 16706 / 11/16/91 / 12/03/91	06C16P2 / 16707 / 11/16/91 / 12/03/91	06C16P3 / 16708 / 11/16/91 / 12/03/91	06C17 / 16829 / 11/18/91 / 12/06/91	06C18 / 16959 / 11/19/91 / 12/12/91	06C18P2 / 16960 / 11/19/91 / 12/12/91
BNA	MCL						
Acenaphthene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Acenaphthylene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Aniline	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
Anthracene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzidine	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Benzoic Acid	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Benzo(a)Anthracene	0.0001(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(a)Pyrene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(b)Fluoranthene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(G,H,I)Perylene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(k)Fluoranthene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzyl Alcohol	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
Bis(2-Chloroethoxy)Methane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Chloroethyl)Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Chloroisopropyl)Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Ethylhexyl)Phthalate	---	0.010U	0.0009J	0.0007J	0.010U	0.010U	0.010U
Butylbenzylphthalate	0.1(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Chrysene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibenzofuran	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibenzo(A,H)Anthracene	0.0003(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibutylphthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Diethyl Phthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dimethyl Phthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Di-N-Octylphthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Fluoranthene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Fluorene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorobenzene	0.001(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorobutadiene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorocyclopentadiene	0.05(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachloroethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Indeno(1,2,3-C,D)Pyrene	0.0004(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Isophorone	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Naphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Nitrobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitrosodimethylamine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitroso-Di-N-Propylamine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitrosodiphenyl Amine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Pentachlorophenol	0.001(F)	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Phenanthrene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C11P2 / 16955 / 11/18/91 / 12/11/91	06C12 / 16957 / 11/19/91 / 12/12/91	06C12P2 / 16958 / 11/19/91 / 12/12/91	06C13 / 16825 / 11/18/91 / 12/06/91	06C13P2 / 16826 / 11/18/91 / 12/06/91	06C14 / 16702 / 11/16/91 / 12/02/91	06C14P2 / 16703 / 11/16/91 / 12/03/91	06C15 / 16704 / 11/16/91 / 12/03/91	06C15P2 / 16705 / 11/16/91 / 12/03/91
BNA	MCL									
Phenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Pyrene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2-Dichlorobenzene	0.6(L)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2-Diphenylhydrazine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2,4-Trichlorobenzene	0.07(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,3-Dichlorobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,4-Dichlorobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Chloronaphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Chlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Methyl-4,6-Dinotrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2-Methylnaphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Methylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2-Nitrophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dimethylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dinitrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2,4-Dinitrotoluene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4,5-Trichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4,6-Trichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,6-Dinitrotoluene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
3-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
3,3'Dichlorobenzidine	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Bromophenyl Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Chloro-3-Methylphenol	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Chloroaniline	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Chlorophenyl Phenyl Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Methylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
4-Nitrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C11P2 / 16955 / 11/18/91 / 12/11/91	06C12 / 16957 / 11/19/91 / 12/12/91	06C12P2 / 16958 / 11/19/91 / 12/12/91	06C13 / 16825 / 11/18/91 / 12/06/91	06C13P2 / 16826 / 11/18/91 / 12/06/91	06C14 / 16702 / 11/16/91 / 12/02/91	06C14P2 / 16703 / 11/16/91 / 12/03/91	06C15 / 16704 / 11/16/91 / 12/03/91	06C15P2 / 16705 / 11/16/91 / 12/03/91
BNA	MCL									
Acenaphthene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Acenaphthylene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Aniline	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
Anthracene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzidine	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Benzoic Acid	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Benzo(a)Anthracene	0.0001(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(a)Pyrene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(b)Fluoranthene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(G,H,I)Perylene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(k)Fluoranthene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzyl Alcohol	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
Bis(2-Chloroethoxy)Methane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Chloroethyl)Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Chloroisopropyl)Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Ethylhexyl)Phthalate	---	0.010U	0.0008BJ	0.0007BJ	0.010U	0.0036J	0.010U	0.0015J	0.0031J	0.0007BJ
Butylbenzylphthalate	0.1(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Chrysene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibenzofuran	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibenzo(A,H)Anthracene	0.0003(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibutylphthalate	---	0.010U	0.010U	0.010U	0.0006BJ	0.010U	0.010U	0.0006BJ	0.010U	0.010U
Diethyl Phthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dimethyl Phthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Di-N-Octylphthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Fluoranthene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Fluorene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorobenzene	0.001(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorobutadiene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorocyclopentadiene	0.05(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachloroethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Indeno(1,2,3-C,D)Pyrene	0.0004(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Isophorone	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Naphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Nitrobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitrosodimethylamine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitroso-Di-N-Propylamine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitrosodiphenyl Amine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Pentachlorophenol	0.001(F)	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Phenanthrene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06-19 / 16831 / 11/18/91 / 12/09/91	06-20 / 16832 / 11/18/91 / 12/09/91	06-21 / 11/20/91	06-22 / 16833 / 11/18/91 / 12/09/91	06-23 / 16834 / 11/18/91 / 12/09/91	06C09 / 16821 / 11/18/91 / 12/04/91	06C10 / 16822 / 11/18/91 / 12/05/91	06C10P2 / 16823 / 11/18/91 / 12/05/91	06C11 / 16954 / 11/18/91 / 12/11/91
BNA	MCL									
Phenol	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Pyrene	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2-Dichlorobenzene	0.6(L)	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2-Diphenylhydrazine	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2,4-Trichlorobenzene	0.07(P)	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,3-Dichlorobenzene	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,4-Dichlorobenzene	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Chloronaphthalene	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Chlorophenol	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Methyl-4,6-Dinotrophenol	---	0.050U	0.050U	NO SAMPLE	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2-Methylnaphthalene	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Methylphenol	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Nitroaniline	---	0.050U	0.050U	NO SAMPLE	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2-Nitrophenol	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dichlorophenol	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dimethylphenol	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dinitrophenol	---	0.050U	0.050U	NO SAMPLE	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2,4-Dinitrotoluene	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4,5-Trichlorophenol	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4,6-Trichlorophenol	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,6-Dinitrotoluene	---	0.010U	0.0029J	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
3-Nitroaniline	---	0.050U	0.050U	NO SAMPLE	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
3,3'Dichlorobenzidine	---	0.020U	0.020U	NO SAMPLE	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Bromophenyl Ether	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Chloro-3-Methylphenol	---	0.020U	0.020U	NO SAMPLE	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Chloroaniline	---	0.020U	0.020U	NO SAMPLE	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Chlorophenyl Phenyl Ether	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Methylphenol	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Nitroaniline	---	0.050U	0.050U	NO SAMPLE	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
4-Nitrophenol	---	0.050U	0.050U	NO SAMPLE	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06-19 / 16831 / 11/18/91 / 12/09/91	06-20 / 16832 / 11/18/91 / 12/09/91	06-21 / 11/20/91	06-22 / 16833 / 11/18/91 / 12/09/91	06-23 / 16834 / 11/18/91 / 12/09/91	06C09 / 16821 / 11/18/91 / 12/04/91	06C10 / 16822 / 11/18/91 / 12/05/91	06C10P2 / 16823 / 11/18/91 / 12/05/91	06C11 / 16954 / 11/18/91 / 12/11/91
BNA	MCL									
Acenaphthene	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Acenaphthylene	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Aniline	---	0.020U	0.020U	NO SAMPLE	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
Anthracene	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzidine	---	0.050U	0.050U	NO SAMPLE	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Benzoic Acid	---	0.050U	0.050U	NO SAMPLE	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Benzo(a)Anthracene	0.0001(P)	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(a)Pyrene	0.0002(P)	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(b)Fluoranthene	0.0002(P)	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(G,H,I)Perylene	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(k)Fluoranthene	0.0002(P)	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzyl Alcohol	---	0.020U	0.020U	NO SAMPLE	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
Bis(2-Chloroethoxy)Methane	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Chloroethyl)Ether	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Chloroisopropyl)Ether	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Ethylhexyl)Phthalate	---	0.0077BJ	0.0009BJ	NO SAMPLE	0.0023BJ	0.0010BJ	0.010U	0.0033BJ	0.0009BJ	0.010U
Butylbenzylphthalate	0.1(P)	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Chrysene	0.0002(P)	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibenzofuran	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibenzo(A,H)Anthracene	0.0003(P)	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibutylphthalate	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Diethyl Phthalate	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dimethyl Phthalate	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Di-N-Octylphthalate	---	0.010U	0.010U	NO SAMPLE	0.0006J	0.010U	0.010U	0.010U	0.010U	0.010U
Fluoranthene	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Fluorene	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorobenzene	0.001(P)	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorobutadiene	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorocyclopentadiene	0.05(P)	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachloroethane	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Indeno(1,2,3-C,D)Pyrene	0.0004(P)	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Isophorone	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Naphthalene	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Nitrobenzene	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitrosodimethylamine	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitroso-Di-N-Propylamine	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitrosodiphenyl Amine	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Pentachlorophenol	0.001(F)	0.050U	0.050U	NO SAMPLE	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Phenanthrene	---	0.010U	0.010U	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB3 / 16230 / 11/13/91 / 11/26/91	R1E / 16700 / 11/16/91 / 12/02/91	R2E / 16701 / 11/19/91 / 12/04/91	R3E / 16820 / 11/19/91 / 12/04/91	06-14A / 16828 / 11/18/91 / 12/06/91	06-15 / 11/15/91	06-16 / 16963 / 11/19/91 / 12/11/91	06-17 / 11/16/91	06-18 / 16830 / 11/18/91 / 12/06/91
BNA	MCL									
Phenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
Pyrene	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
1,2-Dichlorobenzene	0.6(L)	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
1,2-Diphenylhydrazine	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
1,2,4-Trichlorobenzene	0.07(P)	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
1,3-Dichlorobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
1,4-Dichlorobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
2-Chloronaphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
2-Chlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
2-Methyl-4,6-Dinotrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	0.050U	NO SAMPLE	0.050U
2-Methylnaphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
2-Methylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
2-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	0.050U	NO SAMPLE	0.050U
2-Nitrophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
2,4-Dichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
2,4-Dimethylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
2,4-Dinitrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	0.050U	NO SAMPLE	0.050U
2,4-Dinitrotoluene	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
2,4,5-Trichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
2,4,6-Trichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
2,6-Dinitrotoluene	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
3-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	0.050U	NO SAMPLE	0.050U
3,3'Dichlorobenzidine	---	0.020U	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U	NO SAMPLE	0.020U
4-Bromophenyl Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
4-Chloro-3-Methylphenol	---	0.020U	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U	NO SAMPLE	0.020U
4-Chloroaniline	---	0.020U	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U	NO SAMPLE	0.020U
4-Chlorophenyl Phenyl Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
4-Methylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
4-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	0.050U	NO SAMPLE	0.050U
4-Nitrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	0.050U	NO SAMPLE	0.050U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB3 / 16230 / 11/13/91 / 11/26/91	R1E / 16700 / 11/16/91 / 12/02/91	R2E / 16701 / 11/19/91 / 12/04/91	R3E / 16820 / 11/19/91 / 12/04/91	06-14A / 16828 / 11/18/91 / 12/06/91	06-15 / 11/15/91	06-16 / 16963 / 11/19/91 / 12/11/91	06-17 / 11/16/91	06-18 / 16830 / 11/18/91 / 12/06/91
BNA	MCL									
Acenaphthene	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
Acenaphthylene	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
Aniline	---	0.020U	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U	NO SAMPLE	0.020U
Anthracene	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
Benzidine	---	0.050U	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	0.050U	NO SAMPLE	0.050U
Benzoic Acid	---	0.050U	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	0.050U	NO SAMPLE	0.050U
Benzo(a)Anthracene	0.0001(P)	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
Benzo(a)Pyrene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
Benzo(b)Fluoranthene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
Benzo(G,H,I)Perylene	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
Benzo(k)Fluoranthene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
Benzyl Alcohol	---	0.020U	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U	NO SAMPLE	0.020U
Bis(2-Chloroethoxy)Methane	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
Bis(2-Chloroethyl)Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
Bis(2-Chloroisopropyl)Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
Bis(2-Ethylhexyl)Phthalate	---	0.010U	0.010U	0.010U	0.0021BJ	0.010U	NOT SAMPLED	0.0025BJ	NO SAMPLE	0.0014J
Butylbenzylphthalate	0.1(P)	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
Chrysene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
Dibenzofuran	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
Dibenzo(A,H)Anthracene	0.0003(P)	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
Dibutylphthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
Diethyl Phthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
Dimethyl Phthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
Di-N-Octylphthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
Fluoranthene	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
Fluorene	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
Hexachlorobenzene	0.001(P)	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
Hexachlorobutadiene	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
Hexachlorocyclopentadiene	0.05(P)	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
Hexachloroethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
Indeno(1,2,3-C,D)Pyrene	0.0004(P)	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
Isophorone	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
Naphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
Nitrobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
N-Nitrosodimethylamine	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
N-Nitroso-Di-N-Propylamine	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
N-Nitrosodiphenyl Amine	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U
Pentachlorophenol	0.001(F)	0.050U	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	0.050U	NO SAMPLE	0.050U
Phenanthrene	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	NO SAMPLE	0.010U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C05 / 17084 / 11/19/91 / 11/27/91	06C06 / 17085 / 11/19/91 / 11/27/91	06C06P2 / 17086 / 11/19/91 / 11/27/91	06C07 / 17087 / 11/19/91 / 11/27/91	06C08 / 17097 / 11/20/91 / 11/27/91	06C08P2 / 17089 / 11/20/91 / 11/27/91
VOLATILE ORGANICS	MCL						
Acetone	---	0.006BJ	0.006BJ	0.004BJ	0.003BJ	0.022BJ	0.006BJ
Benzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromodichloromethane	0.1(L)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromoform	0.1(L)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromomethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Carbon Tetrachloride	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Carbondisulfide	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chlorobenzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chloroethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Chloroform	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chloromethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
cis-1,2-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
cis-1,3-Dichloropropene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Dibromochloromethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Ethylbenzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Methylene Chloride	0.005(P)	0.009B	0.012B	0.010B	0.007B	0.009B	0.019B
Styrene	0.1(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Tetrachloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Toluene	1(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trans-1,2-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trans-1,3-Dichloropropene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
T-Xylene	10(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Vinyl Acetate	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Vinyl Chloride	0.002(F)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,1-Dichloroethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,1-Trichloroethane	0.2(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,2-Trichloroethane	0.005(P)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,2,2-Tetrachloroethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,2-Dichloroethane	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,2-Dichloropropane	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
2-Butanone	---	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U
2-Hexanone	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
4-Methyl-2-Pentanone	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C01 / 17075 / 11/20/91 / 11/26/91	06C01P2 / 11/15/91	06C01P3 / 17076 / 11/20/91 / 11/26/91	06C02 / 17077 / 11/19/91 / 11/27/91	06C02P2 / 17078 / 11/19/91 / 11/27/91	06C03 / 17079 / 11/19/91 / 11/27/91	06C03P2 / 17080 / 11/19/91 / 11/27/91	06C04 / 17081 / 11/19/91 / 11/27/91	06C04P2 / 17082 / 11/19/91 / 11/27/91
VOLATILE ORGANICS	MCL									
Acetone	---	0.004BJ	NOT SAMPLED	0.006BJ	0.015BJ	0.020BJ	0.010BJ	0.012BJ	0.007BJ	0.011BJ
Benzene	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromodichloromethane	0.1(L)	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromoform	0.1(L)	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromomethane	---	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Carbon Tetrachloride	0.005(F)	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Carbondisulfide	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chlorobenzene	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chloroethane	---	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Chloroform	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chloromethane	---	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
cis-1,2-Dichloroethene	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
cis-1,3-Dichloropropene	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Dibromochloromethane	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Ethylbenzene	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Methylene Chloride	0.005(P)	0.010B	NOT SAMPLED	0.020B	0.010B	0.016B	0.016B	0.010B	0.007B	0.002BJ
Styrene	0.1(F)	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Tetrachloroethene	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Toluene	1(F)	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trans-1,2-Dichloroethene	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trans-1,3-Dichloropropene	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trichloroethene	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
T-Xylene	10(F)	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Vinyl Acetate	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Vinyl Chloride	0.002(F)	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,1-Dichloroethane	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1-Dichloroethene	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,1-Trichloroethane	0.2(F)	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,2-Trichloroethane	0.005(P)	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,2,2-Tetrachloroethane	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,2-Dichloroethane	0.005(F)	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,2-Dichloropropane	0.005(F)	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
2-Butanone	---	0.10U	NOT SAMPLED	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U
2-Hexanone	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
4-Methyl-2-Pentanone	---	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB3 / 16295 / 11/13/91 / 11/15/91	TRIP BLANK / 17101 / 11/14/91 / 12/03/91	R3E / 16893 / 11/19/91 / 11/25/91	R4E / 17099 / 11/20/91 / 12/03/91	06-01A / 17100 / 11/20/91 / 12/03/91	06-01B / 11/15/91	06-06 / 17096 / 11/20/91 / 11/27/91	06-07 / 17088 / 11/20/91 / 11/27/91	06-12 / 17091 / 11/20/91 / 11/27/91
VOLATILE ORGANICS	MCL									
Acetone	---	0.0047BJ	0.007BJ	0.020BJ	0.005BJ	0.007BJ	NOT SAMPLED	0.008BJ	0.002BJ	0.003BJ
Benzene	---	0.005U	0.005U	0.005U	0.005U	0.005R	NOT SAMPLED	0.005U	0.005U	0.005U
Bromodichloromethane	0.1(L)	0.005U	0.005U	0.005U	0.005U	0.005R	NOT SAMPLED	0.005U	0.005U	0.005U
Bromoform	0.1(L)	0.005U	0.005U	0.005U	0.005U	0.005R	NOT SAMPLED	0.005U	0.005U	0.005U
Bromomethane	---	0.010U	0.010U	0.010U	0.010U	0.010R	NOT SAMPLED	0.010U	0.010U	0.010U
Carbon Tetrachloride	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005R	NOT SAMPLED	0.005U	0.005U	0.005U
Carbondisulfide	---	0.005U	0.005U	0.005U	0.005U	0.005R	NOT SAMPLED	0.005U	0.005U	0.005U
Chlorobenzene	---	0.005U	0.005U	0.005U	0.005U	0.005R	NOT SAMPLED	0.005U	0.005U	0.005U
Chloroethane	---	0.010U	0.010U	0.010U	0.010U	0.010R	NOT SAMPLED	0.010U	0.010U	0.010U
Chloroform	---	0.005U	0.005U	0.005U	0.005U	0.005R	NOT SAMPLED	0.005U	0.005U	0.005U
Chloromethane	---	0.010U	0.010U	0.010U	0.010U	0.010R	NOT SAMPLED	0.010U	0.010U	0.010U
cis-1,2-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005R	NOT SAMPLED	0.005U	0.005U	0.005U
cis-1,3-Dichloropropene	---	0.005U	0.005U	0.005U	0.005U	0.005R	NOT SAMPLED	0.005U	0.005U	0.005U
Dibromochloromethane	---	0.005U	0.005U	0.005U	0.005U	0.005R	NOT SAMPLED	0.005U	0.005U	0.005U
Ethylbenzene	---	0.005U	0.005U	0.005U	0.005U	0.005R	NOT SAMPLED	0.005U	0.005U	0.005U
Methylene Chloride	0.005(P)	0.014B	0.005B	0.011B	0.006B	0.006BJ	NOT SAMPLED	0.008B	0.013B	0.004BJ
Styrene	0.1(F)	0.005U	0.005U	0.005U	0.005U	0.005R	NOT SAMPLED	0.005U	0.005U	0.005U
Tetrachloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005R	NOT SAMPLED	0.005U	0.005U	0.005U
Toluene	1(F)	0.005U	0.005U	0.004J	0.004J	0.004R	NOT SAMPLED	0.005U	0.005U	0.005U
Trans-1,2-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005R	NOT SAMPLED	0.005U	0.005U	0.005U
Trans-1,3-Dichloropropene	---	0.005U	0.005U	0.005U	0.005U	0.005R	NOT SAMPLED	0.005U	0.005U	0.005U
Trichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005R	NOT SAMPLED	0.005U	0.005U	0.005U
T-Xylene	10(F)	0.002J	0.005U	0.002J	0.005U	0.005R	NOT SAMPLED	0.005U	0.005U	0.005U
Vinyl Acetate	---	0.005U	0.005U	0.005U	0.005U	0.005R	NOT SAMPLED	0.005U	0.005U	0.005U
Vinyl Chloride	0.002(F)	0.010U	0.010U	0.010U	0.010U	0.010R	NOT SAMPLED	0.010U	0.010U	0.010U
1,1-Dichloroethane	---	0.005U	0.005U	0.005U	0.005U	0.005R	NOT SAMPLED	0.005U	0.005U	0.005U
1,1-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005R	NOT SAMPLED	0.005U	0.005U	0.005U
1,1,1-Trichloroethane	0.2(F)	0.005U	0.005U	0.005U	0.005U	0.005R	NOT SAMPLED	0.005U	0.005U	0.005U
1,1,2-Trichloroethane	0.005(P)	0.005U	0.005U	0.005U	0.005U	0.005R	NOT SAMPLED	0.005U	0.005U	0.005U
1,1,2,2-Tetrachloroethane	---	0.005U	0.005U	0.005U	0.005U	0.005R	NOT SAMPLED	0.005U	0.005U	0.005U
1,2-Dichloroethane	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005R	NOT SAMPLED	0.005U	0.005U	0.005U
1,2-Dichloropropane	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005R	NOT SAMPLED	0.005U	0.005U	0.005U
2-Butanone	---	0.10U	0.10U	0.002J	0.10U	0.10R	NOT SAMPLED	0.10U	0.10U	0.10U
2-Hexanone	---	0.005U	0.005U	0.005U	0.005U	0.005R	NOT SAMPLED	0.005U	0.005U	0.005U
4-Methyl-2-Pentanone	---	0.005U	0.005U	0.005U	0.005U	0.005R	NOT SAMPLED	0.005U	0.005U	0.005U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics) R = unreliable

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C06 / 16975 / 11/19/91 / 12/24/91	06C06P2 / 16976 / 11/19/91 / 12/24/91	06C07 / 16977 / 11/19/91 / 12/24/91	06C08 / 16989 / 11/20/91 / 12/26/91	06C08P2 / 16979 / 11/20/91 / 12/24/91
PESTICIDES/PCBs	MCL					
A-BHC	---	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U
a-CHLORDANE	0.002(F)	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U
A-Endosulfan	---	0.00014U	0.00014U	0.00014U	0.00014U	0.00014U
Aldrin	---	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U
B-BHC	---	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U
B-Endosulfan	---	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U
D-BHC	---	0.000090U	0.000090U	0.000090U	0.000090U	0.000090U
Dieldrin	---	0.000020U	0.000020U	0.000020U	0.000020U	0.000020U
Disulfoton	---	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U
Endosulfan sulfate	---	0.00066U	0.00066U	0.00066U	0.00066U	0.00066U
Endrin	0.002(P)	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U
Endrin Aldehyde	---	0.00023U	0.00023U	0.00023U	0.00023U	0.00023U
Ethyl Parathion	---	0.00060U	0.00060U	0.00060U	0.00060U	0.00060U
Famphur	---	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U
G-BHC	---	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U
g-CHLORDANE	0.002(F)	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U
Heptachlor	0.0004(F)	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U
Heptachlor Epoxide	0.0002(F)	0.00083U	0.00083U	0.00083U	0.00083U	0.00083U
KEPONE	---	0.0060U	0.0060U	0.0060U	0.0060U	0.0060U
Methoxychlor	0.04(F)	0.0018U	0.0018U	0.0018U	0.0018U	0.0018U
Methyl Parathion	---	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U
PCB-1016	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1221	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1232	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1242	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1248	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1254	0.0005(F)	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U
PCB-1260	0.0005(F)	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U
Phorate	---	0.00040U	0.00040U	0.00040U	0.00040U	0.00040U
PPDDD	---	0.00011U	0.00011U	0.00011U	0.00011U	0.00011U
PPDDE	---	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U
PPDDT	---	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U
Toxaphene	0.003(F)	0.0024U	0.0024U	0.0024U	0.0024U	0.0024U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C01P2	06C01P3	06C02	06C02P2	06C03	06C03P2	06C04	06C04P2	06C05
	Lab Sample No:		16966	16967	16968	16969	16970	16971	16972	16974
	Date Sampled:	11/20/91	11/20/91	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91
	Date Analyzed:		12/19/91	12/19/91	12/19/91	12/19/91	12/19/91	12/19/91	12/19/91	12/24/91
PESTICIDES/PCBs	MCL									
A-BHC	---	NOT SAMPLED	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U
a-CHLORDANE	0.002(F)	NOT SAMPLED	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U
A-Endosulfan	---	NOT SAMPLED	0.00014U	0.00014U	0.00014U	0.00014U	0.00014U	0.00014U	0.00014U	0.00014U
Aldrin	---	NOT SAMPLED	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U
B-BHC	---	NOT SAMPLED	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U
B-Endosulfan	---	NOT SAMPLED	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U
D-BHC	---	NOT SAMPLED	0.000090U	0.000090U	0.000090U	0.000090U	0.000090U	0.000090U	0.000090U	0.000090U
Dieldrin	---	NOT SAMPLED	0.000020U	0.000020U	0.000020U	0.000020U	0.000020U	0.000020U	0.000020U	0.000020U
Disulfoton	---	NOT SAMPLED	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U
Endosulfan sulfate	---	NOT SAMPLED	0.00066U	0.00066U	0.00066U	0.00066U	0.00066U	0.00066U	0.00066U	0.00066U
Endrin	0.002(P)	NOT SAMPLED	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U
Endrin Aldehyde	---	NOT SAMPLED	0.00023U	0.00023U	0.00023U	0.00023U	0.00023U	0.00023U	0.00023U	0.00023U
Ethyl Parathion	---	NOT SAMPLED	0.00060U	0.00060U	0.00060U	0.00060U	0.00060U	0.00060U	0.00060U	0.00060U
Famphur	---	NOT SAMPLED	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U
G-BHC	---	NOT SAMPLED	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U
g-CHLORDANE	0.002(F)	NOT SAMPLED	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U
Heptachlor	0.0004(F)	NOT SAMPLED	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U
Heptachlor Epoxide	0.0002(F)	NOT SAMPLED	0.00083U	0.00083U	0.00083U	0.00083U	0.00083U	0.00083U	0.00083U	0.00083U
KEPONE	---	NOT SAMPLED	0.0060U	0.0060U	0.0060U	0.0060U	0.0060U	0.0060U	0.0060U	0.0060U
Methoxychlor	0.04(F)	NOT SAMPLED	0.0018U	0.0018U	0.0018U	0.0018U	0.0018U	0.0018U	0.0018U	0.0018U
Methyl Parathion	---	NOT SAMPLED	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U
PCB-1016	0.0005(F)	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1221	0.0005(F)	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1232	0.0005(F)	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1242	0.0005(F)	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1248	0.0005(F)	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1254	0.0005(F)	NOT SAMPLED	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U
PCB-1260	0.0005(F)	NOT SAMPLED	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U
Phorate	---	NOT SAMPLED	0.00040U	0.00040U	0.00040U	0.00040U	0.00040U	0.00040U	0.00040U	0.00040U
PPDDD	---	NOT SAMPLED	0.00011U	0.00011U	0.00011U	0.00011U	0.00011U	0.00011U	0.00011U	0.00011U
PPDDE	---	NOT SAMPLED	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U
PPDDT	---	NOT SAMPLED	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U
Toxaphene	0.003(F)	NOT SAMPLED	0.0024U	0.0024U	0.0024U	0.0024U	0.0024U	0.0024U	0.0024U	0.0024U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB3 / 16243 / 11/13/91 / 12/19/91	R3E / 16835 / 11/19/91 / 12/19/91	R4E / 16991 / 11/20/91 / 12/26/91	06-01A / 11/20/91	06-01B / 11/20/91	06-06 / 16988 / 11/20/91 / 12/26/91	06-07 / 16978 / 11/20/91 / 12/24/91	06-12 / 16983 / 11/20/91 / 12/24/91	06C01 / 16965 / 11/20/91 / 12/19/91
PESTICIDES/PCBs	MCL									
A-BHC	---	0.000030U	0.000030U	0.000030U	NO SAMPLE	NOT SAMPLED	0.000030U	0.000030U	0.000030U	0.000030U
a-CHLORDANE	0.002(F)	0.000050U	0.000050U	0.000050U	NO SAMPLE	NOT SAMPLED	0.000050U	0.000050U	0.000050U	0.000050U
A-Endosulfan	---	0.00014U	0.00014U	0.00014U	NO SAMPLE	NOT SAMPLED	0.00014U	0.00014U	0.00014U	0.00014U
Aldrin	---	0.000040U	0.000040U	0.000040U	NO SAMPLE	NOT SAMPLED	0.000040U	0.000040U	0.000040U	0.000040U
B-BHC	---	0.000060U	0.000060U	0.000060U	NO SAMPLE	NOT SAMPLED	0.000060U	0.000060U	0.000060U	0.000060U
B-Endosulfan	---	0.000040U	0.000040U	0.000040U	NO SAMPLE	NOT SAMPLED	0.000040U	0.000040U	0.000040U	0.000040U
D-BHC	---	0.000090U	0.000090U	0.000090U	NO SAMPLE	NOT SAMPLED	0.000090U	0.000090U	0.000090U	0.000090U
Dieldrin	---	0.000020U	0.000020U	0.000020U	NO SAMPLE	NOT SAMPLED	0.000020U	0.000020U	0.000020U	0.000020U
Disulfoton	---	0.00070U	0.00070U	0.00070U	NO SAMPLE	NOT SAMPLED	0.00070U	0.00070U	0.00070U	0.00070U
Endosulfan sulfate	---	0.00066U	0.00066U	0.00066U	NO SAMPLE	NOT SAMPLED	0.00066U	0.00066U	0.00066U	0.00066U
Endrin	0.002(P)	0.000060U	0.000060U	0.000060U	NO SAMPLE	NOT SAMPLED	0.000060U	0.000060U	0.000060U	0.000060U
Endrin Aldehyde	---	0.00023U	0.00023U	0.00023U	NO SAMPLE	NOT SAMPLED	0.00023U	0.00023U	0.00023U	0.00023U
Ethyl Parathion	---	0.00060U	0.00060U	0.00060U	NO SAMPLE	NOT SAMPLED	0.00060U	0.00060U	0.00060U	0.00060U
Famphur	---	0.0012U	0.0012U	0.0012U	NO SAMPLE	NOT SAMPLED	0.0012U	0.0012U	0.0012U	0.0012U
G-BHC	---	0.000040U	0.000040U	0.000040U	NO SAMPLE	NOT SAMPLED	0.000040U	0.000040U	0.000040U	0.000040U
g-CHLORDANE	0.002(F)	0.000050U	0.000050U	0.000050U	NO SAMPLE	NOT SAMPLED	0.000050U	0.000050U	0.000050U	0.000050U
Heptachlor	0.0004(F)	0.000030U	0.000030U	0.000030U	NO SAMPLE	NOT SAMPLED	0.000030U	0.000030U	0.000030U	0.000030U
Heptachlor Epoxide	0.0002(F)	0.00083U	0.00083U	0.00083U	NO SAMPLE	NOT SAMPLED	0.00083U	0.00083U	0.00083U	0.00083U
KEPONE	---	0.0060U	0.0060U	0.0060U	NO SAMPLE	NOT SAMPLED	0.0060U	0.0060U	0.0060U	0.0060U
Methoxychlor	0.04(F)	0.0018U	0.0018U	0.0018U	NO SAMPLE	NOT SAMPLED	0.0018U	0.0018U	0.0018U	0.0018U
Methyl Parathion	---	0.0012U	0.0012U	0.0012U	NO SAMPLE	NOT SAMPLED	0.0012U	0.0012U	0.0012U	0.0012U
PCB-1016	0.0005(F)	0.0007U	0.0007U	0.0007U	NO SAMPLE	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1221	0.0005(F)	0.0007U	0.0007U	0.0007U	NO SAMPLE	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1232	0.0005(F)	0.0007U	0.0007U	0.0007U	NO SAMPLE	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1242	0.0005(F)	0.0007U	0.0007U	0.0007U	NO SAMPLE	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1248	0.0005(F)	0.0007U	0.0007U	0.0007U	NO SAMPLE	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1254	0.0005(F)	0.0013U	0.0013U	0.0013U	NO SAMPLE	NOT SAMPLED	0.0013U	0.0013U	0.0013U	0.0013U
PCB-1260	0.0005(F)	0.0013U	0.0013U	0.0013U	NO SAMPLE	NOT SAMPLED	0.0013U	0.0013U	0.0013U	0.0013U
Phorate	---	0.00040U	0.00040U	0.00040U	NO SAMPLE	NOT SAMPLED	0.00040U	0.00040U	0.00040U	0.00040U
PPDDD	---	0.00011U	0.00011U	0.00011U	NO SAMPLE	NOT SAMPLED	0.00011U	0.00011U	0.00011U	0.00011U
PPDDE	---	0.000040U	0.000040U	0.000040U	NO SAMPLE	NOT SAMPLED	0.000040U	0.000040U	0.000040U	0.000040U
PPDDT	---	0.00012U	0.00012U	0.00012U	NO SAMPLE	NOT SAMPLED	0.00012U	0.00012U	0.00012U	0.00012U
Toxaphene	0.003(F)	0.0024U	0.0024U	0.0024U	NO SAMPLE	NOT SAMPLED	0.0024U	0.0024U	0.0024U	0.0024U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C06 / 17029 / 11/19/91 / 02/02/92	06C06P2 / 17030 / 11/19/91 / 02/02/92	06C07 / 17031 / 11/19/91 / 02/02/92	06C08 / 17043 / 11/20/91 / 02/02/92	06C08P2 / 17033 / 11/20/91 / 02/02/92
METALS	MCL					
Aluminum	---	0.010U	0.010U	0.010U	0.096BN	0.225
Antimony	0.01(P)	0.0049B	0.0080B	0.0097B	0.0048B	0.0068B
Arsenic	0.05(F)	0.0020U	0.0020U	0.0020U	00079B	0.0020U
Barium	2.0(F)	0.045B	0.014B	0.212	0.011B	0.027B
Beryllium	0.001(P)	0.001U	0.001U	0.001U	0.001U	0.001U
Cadmium	0.005(F)	0.00020U	0.00020U	0.00020U	0.00020U	0.00020U
Calcium	---	11.0	7.92	6.94	2.03B	1.04
Chromium	0.1(F)	0.005U	0.005U	0.005U	0.005U	0.005U
Cobalt	---	0.027B	0.010U	0.020B	0.045B	0.010U
Copper	1.3(F)	0.005U	0.043	0.021B	0.005U	0.033
Iron	---	0.038B	0.041B	0.022B	0.013B	0.578
Lead	0.015(F)	0.0010U	0.0010U	0.0010U	0.0010U	0.0026B
Magnesium	---	6.79	4.02B	6.99	0.199B	5.92
Manganese	---	0.075	0.017	0.010B	0.005U	0.647
Mercury	0.002(F)	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U
Nickel	0.1(P)	0.005U	0.007B	0.005U	0.0078N	0.030B
Potassium	---	2.08B	1.18B	3.10B	3.50B	2.76B
Selenium	0.05(F)	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
Silver	---	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U
Sodium	---	172	12.1	163	196	6.73
Thallium	0.002(P)	0.0020U	0.0020U	0.0020UW	0.0020U	0.0020U
Tin	---	0.050U	0.050U	0.050U	0.050U	0.050U
Vanadium	---	0.010U	0.010U	0.010U	0.013B	0.010U
Zinc	---	0.005UN	0.005UN	0.005U	0.005U	0.034

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected B = Value is < CRDL but > detection limit (inorganics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	06C01P2	06C01P3	06C02	06C02P2	06C03	06C03P2	06C04	06C04P2	06C05
	Lab Sample No:		17020	17021	17022	17023	17024	17025	17026	17028
	Date Sampled:	11/20/91	11/20/91	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91
	Date Analyzed:		02/02/92	02/02/92	02/02/92	02/02/92	02/02/92	02/02/92	02/02/92	02/02/92
METALS	MCL									
Aluminum	---	NOT SAMPLED	0.010U	0.011B	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Antimony	0.01(P)	NOT SAMPLED	0.0080B	0.0089B	0.0033B	0.0030U	0.0084B	0.0034B	0.0199B	0.0030UW
Arsenic	0.05(F)	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0107	0.0020U	0.0020U	0.0020U	0.0020U
Barium	2.0(F)	NOT SAMPLED	0.016B	0.110B	0.026B	0.084B	0.081B	0.145B	0.022B	0.054B
Beryllium	0.001(P)	NOT SAMPLED	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U
Cadmium	0.005(F)	NOT SAMPLED	0.00020U	0.00020U	0.00020U	0.00020U	0.00020U	0.00020U	0.00027B	0.00020U
Calcium	---	NOT SAMPLED	237	63.7	49.5	52.9	70.8	68.7	66.8	11.5
Chromium	0.1(F)	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Cobalt	---	NOT SAMPLED	0.045B	0.010U	0.010U	0.012B	0.014B	0.019B	0.031B	0.041B
Copper	1.3(F)	NOT SAMPLED	0.030	0.012B	0.005U	0.005U	0.028	0.005U	0.085	0.005U
Iron	---	NOT SAMPLED	0.500	1.99	0.010U	7.09	0.028B	1.41	0.064B	0.035B
Lead	0.015(F)	NOT SAMPLED	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U
Magnesium	---	NOT SAMPLED	203	13.0	34.6	11.7	17.4	21.9	42.7	3.14
Manganese	---	NOT SAMPLED	1.05	0.160	0.036	0.405	0.009B	0.151	0.069	0.010B
Mercury	0.002(F)	NOT SAMPLED	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U
Nickel	0.1(P)	NOT SAMPLED	0.112	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Potassium	---	NOT SAMPLED	6.41	1.24B	1.48B	1.12	1.80	2.42B	3.67B	1.24B
Selenium	0.05(F)	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
Silver	---	NOT SAMPLED	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U
Sodium	---	NOT SAMPLED	65.1	25.5	5.43	19.5	17.8	43.8	112	176
Thallium	0.002(P)	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
Tin	---	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Vanadium	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Zinc	---	NOT SAMPLED	0.067	0.005U	0.005U	0.005UN	0.005UN	0.005UN	0.005UN	0.005UN

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected B = Value is < CRDL but > detection limit (inorganics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB3 / 16269 / 11/13/91 / 11/26/91	R3E / 16863 / 11/19/91 / 01/09/92	R4E / 17045 / 11/20/91 / 02/02/92	06-01A / 17046 / 11/20/91 / 02/02/92	06-01B / 11/20/91	06-06 / 17042 / 11/20/91 / 02/02/92	06-07 / 17032 / 11/20/91 / 02/02/92	06-12 / 17037 / 11/20/91 / 02/02/92	06C01 / 17019 / 11/20/91 / 02/02/92
METALS	MCL									
Aluminum	---	0.010U	0.010U	0.010UN	0.010UN	NOT SAMPLED	0.010UN	139	0.010U	0.010U
Antimony	0.01(P)	0.0159B	0.0154B	0.0116B	0.0138B	NOT SAMPLED	0.0088B	0.00828W	0.0030U	0.0044B
Arsenic	0.05(F)	0.0020U	0.0020U	0.0020U	0.0020U	NOT SAMPLED	0.0020U	0.0020B	0.0020U	0.0020U
Barium	2.0(F)	0.010U	0.010U	0.010U	0.014B	NOT SAMPLED	0.010U	0.010U	0.010B	0.100
Beryllium	0.001(P)	0.0010U	0.0010U	0.0010U	0.0010U	NOT SAMPLED	0.003B	0.012	0.001B	0.001U
Cadmium	0.005(F)	0.004U	0.00020U	0.00020U	0.00020U	NOT SAMPLED	0.00344B	0.0102	0.00020U	0.00020U
Calcium	---	0.158B	0.245B	0.302B	135	NOT SAMPLED	357	302	439	50.0
Chromium	0.1(F)	0.005BN	0.005U	0.005U	0.005U	NOT SAMPLED	0.009B	0.022	0.005U	0.005U
Cobalt	---	0.010U	0.010U	0.015B	0.039B	NOT SAMPLED	0.428	0.665	0.077	0.012B
Copper	1.3(F)	0.020B	0.062	0.036	0.030	NOT SAMPLED	0.040	0.050	0.005U	0.005U
Iron	---	0.010U	0.010U	0.010U	0.020B	NOT SAMPLED	8.72	84.2	0.013B	0.012B
Lead	0.015(F)	0.0010U	0.0010U	0.0010U	0.0010U	NOT SAMPLED	0.0068	0.0010U	0.0010UW	0.0010U
Magnesium	---	0.200U	0.100U	0.133B	96.5	NOT SAMPLED	343	222	306	11.6
Manganese	---	0.007B	0.007B	0.011B	0.055	NOT SAMPLED	48.1	12.7	9.49	0.062
Mercury	0.002(F)	0.0002U	0.0002U	0.0002U	0.0002U	NOT SAMPLED	0.0002U	0.0002U	0.0002U	0.0002U
Nickel	0.1(P)	0.005U	0.005U	0.005UN	0.005UN	NOT SAMPLED	1.26	2.00	0.287	0.005U
Potassium	---	1.00U	0.208B	0.318B	3.31B	NOT SAMPLED	12.1	2.86B	10.7	1.05B
Selenium	0.05(F)	0.0020U	0.0020U	0.0020U	0.0020U	NOT SAMPLED	0.0020U	0.0020UW	0.0020U	0.0020U
Silver	---	0.0010U	0.0010U	0.0010UW	0.0010U	NOT SAMPLED	0.0010U	0.0010U	0.0010U	0.0010U
Sodium	---	0.215B	0.549B	0.333B	141	NOT SAMPLED	55.7	71.0	37.9	14.9
Thallium	0.002(P)	0.0020U	0.0020U	0.0020U	0.0020UW	NOT SAMPLED	0.0020UW	0.0020U	0.0020UW	0.0020U
Tin	---	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U
Vanadium	---	0.010U	0.014B	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Zinc	---	0.005U	0.006B	0.005U	0.005U	NOT SAMPLED	1.44	2.74	0.050U	0.050U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected B = Value is < CRDL but > detection limit (inorganics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	06C01P2	06C01P3	06C02	06C02P2	06C03	06C03P2	06C04	06C04P2	06C05
	Lab Sample No:		17048	17049	17050	17051	17052	17053	17054	17056
	Date Sampled:	11/20/91	11/20/91	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91
	Date Anal. (Cn):		11/25/91	11/25/91	11/25/91	11/25/91	11/25/91	11/25/91	11/25/91	11/25/91
	Date Anal. (S):		11/22/91	11/22/91	11/22/91	11/22/91	11/22/91	11/22/91	11/22/91	11/22/91
CYANIDE and SULFIDE	MCL									
Cyanide	0.2(P)	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Sulfide	---	NOT SAMPLED	0.020U	0.020U	0.020U	0.029	0.020U	0.020U	0.020U	0.020U

Analyte	Well No:	06C06	06C06P2	06C07	06C08	06C08P2
	Lab Sample No:	17002	17003	17004	17016	17006
	Date Sampled:	11/19/91	11/19/91	11/19/91	11/20/91	11/20/91
	Date Analyzed:	12/31/91	01/06/92	01/06/92	01/06/92	01/06/92
HERBICIDES	MCL					
2,4-D	0.07(F)	0.012U	0.012U	0.012U	0.012U	0.012U
2,4,5-T	---	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
2,4,5-TP	0.05(F)	0.0017U	0.00044BJ	0.00031BJ	0.0017U	0.00044BJ
Dinoseb	0.007(P)	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U

Analyte	Well No:	06C06	06C06P2	06C07	06C08	06C08P2
	Lab Sample No:	17057	17058	17059	17071	17061
	Date Sampled:	11/19/91	11/19/91	11/19/91	11/20/91	11/20/91
	Date Anal. (Cn):	11/25/91	11/25/91	11/25/91	11/25/91	11/25/91
	Date Anal. (S):	11/22/91	11/22/91	11/22/91	11/22/91	11/22/91
CYANIDE and SULFIDE	MCL					
Cyanide	0.2(P)	0.005U	0.005U	0.005U	0.005U	0.005U
Sulfide	---	0.156	0.020U	0.020U	0.025	0.020U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	FB3	R3E	R4E	06-01A	06-01B	06-06	06-07	06-12	06C01
	Lab Sample No:	16256	16805	17018			17015	17005	17010	16992
	Date Sampled:	11/13/91	11/19/91	11/20/91	11/20/91	11/20/91	11/20/91	11/20/91	11/20/91	11/20/91
	Date Analyzed:	12/31/91	12/31/91	01/06/92			01/06/92	01/06/92	01/06/92	12/31/91
HERBICIDES	MCL									
2,4-D	0.07(F)	0.012U	0.012U	0.012U	NO SAMPLE	NOT SAMPLED	0.012U	0.012U	0.012U	0.012U
2,4,5-T	---	0.0020U	0.0020U	0.0020U	NO SAMPLE	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0020U
2,4,5-TP	0.05(F)	0.0017U	0.0017U	0.0017U	NO SAMPLE	NOT SAMPLED	0.0017U	0.0017U	0.0017U	0.0017U
Dinoseb	0.007(P)	0.00070U	0.00070U	0.00070U	NO SAMPLE	NOT SAMPLED	0.00070U	0.00070U	0.00070U	0.00070U

Analyte	Well No:	FB3	R3E	R4E	06-01A	06-01B	06-06	06-07	06-12	06C01
	Lab Sample No:	16282	16878	17073	17074		17070	17060	17065	17047
	Date Sampled:	11/13/91	11/19/91	11/20/91	11/20/91	11/20/91	11/20/91	11/20/91	11/20/91	11/20/91
	Date Anal. (Cn):	11/21/91	11/26/91	11/25/91	11/25/91		11/25/91	11/25/91	11/25/91	11/25/91
	Date Anal. (S):	11/19/91	11/22/91	11/22/91	11/22/91		11/22/91	11/22/91	11/22/91	11/22/91
CYANIDE and SULFIDE	MCL									
Cyanide	0.2(P)	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U
Sulfide	---	0.020U	0.020U	0.020U	0.026	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U

Analyte	Well No:	06C01P2	06C01P3	06C02	06C02P2	06C03	06C03P2	06C04	06C04P2	06C05
	Lab Sample No:		16993	16994	16995	16996	16997	16998	16999	17001
	Date Sampled:	11/20/91	11/20/91	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91
	Date Analyzed:		12/31/91	12/31/91	12/31/91	12/31/91	12/31/91	12/31/91	12/31/91	12/31/91
HERBICIDES	MCL									
2,4-D	0.07(F)	NOT SAMPLED	0.012U	0.012U	0.012U	0.012U	0.012U	0.012U	0.012U	0.012U
2,4,5-T	---	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
2,4,5-TP	0.05(F)	NOT SAMPLED	0.0017U	0.00024J	0.00035J	0.0017U	0.00034J	0.00040J	0.00040J	0.00034J
Dinoseb	0.007(P)	NOT SAMPLED	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Dye Burial Ground Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	06C06	06C06P2	06C07	06C08	06C08P2
	Lab Sample No:	16921	16922	16923	16935	16925
	Date Sampled:	11/19/91	11/19/91	11/19/91	11/20/91	11/20/91
	Date Analyzed:	11/22/91	11/22/91	11/22/91	11/22/91	11/22/91
EXPLOSIVES	MCL					
DNB	---	0.020U	0.020U	0.020U	0.020U	0.020U
HMX	---	0.020U	0.020U	0.020U	0.020U	0.020U
RDX	---	0.020U	0.020U	0.020U	0.020U	0.020U
TETRYL	---	0.050U	0.050U	0.050U	0.050U	0.050U
TNB	---	0.020U	0.020U	0.020U	0.020U	0.020U
TNT	---	0.020U	0.020U	0.020U	0.020U	0.020U
2,4-DNT	---	0.020U	0.020U	0.020U	0.020U	0.020U
2,6-DNT	---	0.020U	0.020U	0.020U	0.020U	0.020U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	FB3	R3E	R4E	06-01A	06-01B	06-06	06-07	06-12	06C01
	Lab Sample No:	16217	16805	16937			16934	16924	16929	16911
	Date Sampled:	11/13/91	11/19/91	11/20/91	11/20/91	11/20/91	11/20/91	11/20/91	11/20/91	11/20/91
	Date Analyzed:	11/15/91	11/20/91	11/22/91			11/22/91	11/22/91	11/22/91	11/22/91
EXPLOSIVES	MCL									
DNB	---	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U
HMX	---	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U
RDX	---	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U
TETRYL	---	0.050U	0.050U	0.050U	NO SAMPLE	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U
TNB	---	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U
TNT	---	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U
2,4-DNT	---	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U
2,6-DNT	---	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U

Analyte	Well No:	06C01P2	06C01P3	06C02	06C02P2	06C03	06C03P2	06C04	06C04P2	06C05
	Lab Sample No:		16912	16913	16914	16915	16916	16917	16918	16920
	Date Sampled:	11/20/91	11/20/91	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91
	Date Analyzed:		11/22/91	11/22/91	11/22/91	11/22/91	11/22/91	11/22/91	11/22/91	11/22/91
EXPLOSIVES	MCL									
DNB	---	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
HMX	---	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
RDX	---	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TETRYL	---	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
TNB	---	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TNT	---	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
2,4-DNT	---	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
2,6-DNT	---	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	06C06	06C06P2	06C07	06C08	06C08P2
	Lab Sample No:	16948	16949	16950	16962	16952
	Date Sampled:	11/19/91	11/19/91	11/19/91	11/20/91	11/20/91
	Date Analyzed:	12/11/91	12/11/91	12/11/91	12/12/91	12/11/91
BNA	MCL					
Phenol	---	0.010U	0.010U	0.010U	0.010U	0.010U
Pyrene	---	0.010U	0.010U	0.010U	0.010U	0.010U
1,2-Dichlorobenzene	0.6(L)	0.010U	0.010U	0.010U	0.010U	0.010U
1,2-Diphenylhydrazine	---	0.010U	0.010U	0.010U	0.010U	0.010U
1,2,4-Trichlorobenzene	0.07(P)	0.010U	0.010U	0.010U	0.010U	0.010U
1,3-Dichlorobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U
1,4-Dichlorobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U
2-Chloronaphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U
2-Chlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U
2-Methyl-4,6-Dinotrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U
2-Methylnaphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U
2-Methylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U
2-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U
2-Nitrophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dimethylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dinitrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U
2,4-Dinitrotoluene	---	0.010U	0.010U	0.010U	0.010U	0.010U
2,4,5-Trichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U
2,4,6-Trichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U
2,6-Dinitrotoluene	---	0.010U	0.010U	0.010U	0.010U	0.010U
3-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U
3,3'Dichlorobenzidine	---	0.020U	0.020U	0.020U	0.020U	0.020U
4-Bromophenyl Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U
4-Chloro-3-Methylphenol	---	0.020U	0.020U	0.020U	0.020U	0.020U
4-Chloroaniline	---	0.020U	0.020U	0.020U	0.020U	0.020U
4-Chlorophenyl Phenyl Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U
4-Methylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U
4-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U
4-Nitrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C06 / 16948 / 11/19/91 / 12/11/91	06C06P2 / 16949 / 11/19/91 / 12/11/91	06C07 / 16950 / 11/19/91 / 12/11/91	06C08 / 16962 / 11/20/91 / 12/12/91	06C08P2 / 16952 / 11/20/91 / 12/11/91
BNA	MCL					
Acenaphthene	---	0.010U	0.010U	0.010U	0.010U	0.010U
Acenaphthylene	---	0.010U	0.010U	0.010U	0.010U	0.010U
Aniline	---	0.020U	0.020U	0.020U	0.020U	0.020U
Anthracene	---	0.010U	0.010U	0.010U	0.010U	0.010U
Benzidine	---	0.050U	0.050U	0.050U	0.050U	0.050U
Benzoic Acid	---	0.050U	0.050U	0.050U	0.050U	0.050U
Benzo(a)Anthracene	0.0001(P)	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(a)Pyrene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(b)Fluoranthene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(G,H,I)Perylene	---	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(k)Fluoranthene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U
Benzyl Alcohol	---	0.020U	0.020U	0.020U	0.020U	0.020U
Bis(2-Chloroethoxy)Methane	---	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Chloroethyl)Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Chloroisopropyl)Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Ethylhexyl)Phthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U
Butylbenzylphthalate	0.1(P)	0.010U	0.010U	0.010U	0.010U	0.010U
Chrysene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U
Dibenzofuran	---	0.010U	0.010U	0.010U	0.010U	0.010U
Dibenzo(A,H)Anthracene	0.0003(P)	0.010U	0.010U	0.010U	0.010U	0.010U
Dibutylphthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U
Diethyl Phthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U
Dimethyl Phthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U
Di-N-Octylphthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U
Fluoranthene	---	0.010U	0.010U	0.010U	0.010U	0.010U
Fluorene	---	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorobenzene	0.001(P)	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorobutadiene	---	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorocyclopentadiene	0.05(P)	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachloroethane	---	0.010U	0.010U	0.010U	0.010U	0.010U
Indeno(1,2,3-C,D)Pyrene	0.0004(P)	0.010U	0.010U	0.010U	0.010U	0.010U
Isophorone	---	0.010U	0.010U	0.010U	0.010U	0.010U
Naphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U
Nitrobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitrosodimethylamine	---	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitroso-Di-N-Propylamine	---	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitrosodiphenyl Amine	---	0.010U	0.010U	0.010U	0.010U	0.010U
Pentachlorophenol	0.001(F)	0.050U	0.050U	0.050U	0.050U	0.050U
Phenanthrene	---	0.010U	0.010U	0.010U	0.010U	0.010U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	06C01P2	06C01P3	06C02	06C02P2	06C03	06C03P2	06C04	06C04P2	06C05
	Lab Sample No:		16939	16940	16941	16942	16943	16944	16945	16947
	Date Sampled:	11/20/91	11/20/91	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91
	Date Analyzed:		12/10/91	12/10/91	12/10/91	12/10/91	12/10/91	12/10/91	12/10/91	12/10/91
BNA	MCL									
Phenol	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Pyrene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2-Dichlorobenzene	0.6(L)	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2-Diphenylhydrazine	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2,4-Trichlorobenzene	0.07(P)	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,3-Dichlorobenzene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,4-Dichlorobenzene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Chloronaphthalene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Chlorophenol	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Methyl-4,6-Dinotrophenol	---	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2-Methylnaphthalene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Methylphenol	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Nitroaniline	---	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2-Nitrophenol	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dichlorophenol	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dimethylphenol	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dinitrophenol	---	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2,4-Dinitrotoluene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4,5-Trichlorophenol	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4,6-Trichlorophenol	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,6-Dinitrotoluene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
3-Nitroaniline	---	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
3,3'Dichlorobenzidine	---	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Bromophenyl Ether	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Chloro-3-Methylphenol	---	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Chloroaniline	---	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Chlorophenyl Phenyl Ether	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Methylphenol	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Nitroaniline	---	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
4-Nitrophenol	---	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C01P2	06C01P3	06C02	06C02P2	06C03	06C03P2	06C04	06C04P2	06C05
	Lab Sample No:		16939	16940	16941	16942	16943	16944	16945	16947
	Date Sampled:	11/20/91	11/20/91	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91
	Date Analyzed:		12/10/91	12/10/91	12/10/91	12/10/91	12/10/91	12/10/91	12/10/91	12/10/91
BNA	MCL									
Acenaphthene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Acenaphthylene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Aniline	---	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
Anthracene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzidine	---	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Benzoic Acid	---	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Benzo(a)Anthracene	0.0001(P)	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(a)Pyrene	0.0002(P)	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(b)Fluoranthene	0.0002(P)	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(G,H,I)Perylene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(k)Fluoranthene	0.0002(P)	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzyl Alcohol	---	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
Bis(2-Chloroethoxy)Methane	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Chloroethyl)Ether	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Chloroisopropyl)Ether	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Ethylhexyl)Phthalate	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Butylbenzylphthalate	0.1(P)	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Chrysene	0.0002(P)	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibenzofuran	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibenzo(A,H)Anthracene	0.0003(P)	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibutylphthalate	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Diethyl Phthalate	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dimethyl Phthalate	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Di-N-Octylphthalate	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Fluoranthene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Fluorene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorobenzene	0.001(P)	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorobutadiene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorocyclopentadiene	0.05(P)	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachloroethane	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Indeno(1,2,3-C,D)Pyrene	0.0004(P)	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Isophorone	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Naphthalene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Nitrobenzene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitrosodimethylamine	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitroso-Di-N-Propylamine	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitrosodiphenyl Amine	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Pentachlorophenol	0.001(F)	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Phenanthrene	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	F83	R3E	R4E	06-01A	06-01B	06-06	06-07	06-12	06C01
	Lab Sample No:	16230	16805	16964			16961	16951	16956	16938
	Date Sampled:	11/13/91	11/19/91	11/20/91	11/20/91	11/20/91	11/20/91	11/20/91	11/20/91	11/20/91
	Date Analyzed:	11/26/92	11/20/91	12/12/91			12/12/91	12/11/91	12/11/91	12/10/91
BNA	MCL									
Phenol	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Pyrene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
1,2-Dichlorobenzene	0.6(L)	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
1,2-Diphenylhydrazine	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
1,2,4-Trichlorobenzene	0.07(P)	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
1,3-Dichlorobenzene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
1,4-Dichlorobenzene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
2-Chloronaphthalene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
2-Chlorophenol	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
2-Methyl-4,6-Dinotrophenol	---	0.050U	0.050U	0.050U	NO SAMPLE	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U
2-Methylnaphthalene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
2-Methylphenol	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
2-Nitroaniline	---	0.050U	0.050U	0.050U	NO SAMPLE	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U
2-Nitrophenol	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
2,4-Dichlorophenol	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
2,4-Dimethylphenol	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
2,4-Dinitrophenol	---	0.050U	0.050U	0.050U	NO SAMPLE	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U
2,4-Dinitrotoluene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
2,4,5-Trichlorophenol	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
2,4,6-Trichlorophenol	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
2,6-Dinitrotoluene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
3-Nitroaniline	---	0.050U	0.050U	0.050U	NO SAMPLE	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U
3,3'Dichlorobenzidine	---	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U
4-Bromophenyl Ether	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
4-Chloro-3-Methylphenol	---	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U
4-Chloroaniline	---	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U
4-Chlorophenyl Phenyl Ether	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
4-Methylphenol	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
4-Nitroaniline	---	0.050U	0.050U	0.050U	NO SAMPLE	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U
4-Nitrophenol	---	0.050U	0.050U	0.050U	NO SAMPLE	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB3 / 16230 / 11/13/91 / 11/26/92	R3E / 16805 / 11/19/91 / 11/20/91	R4E / 16964 / 11/20/91 / 12/12/91	06-01A / 11/20/91	06-01B / 11/20/91	06-06 / 16961 / 11/20/91 / 12/12/91	06-07 / 16951 / 11/20/91 / 12/11/91	06-12 / 16956 / 11/20/91 / 12/11/91	06C01 / 16938 / 11/20/91 / 12/10/91
BNA	MCL									
Acenaphthene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Acenaphthylene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Aniline	---	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U
Anthracene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Benzidine	---	0.050U	0.050U	0.050U	NO SAMPLE	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U
Benzoic Acid	---	0.050U	0.050U	0.050U	NO SAMPLE	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U
Benzo(a)Anthracene	0.0001(P)	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Benzo(a)Pyrene	0.0002(P)	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Benzo(b)Fluoranthene	0.0002(P)	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Benzo(G,H,I)Perylene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Benzo(k)Fluoranthene	0.0002(P)	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Benzyl Alcohol	---	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U
Bis(2-Chloroethoxy)Methane	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Bis(2-Chloroethyl)Ether	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Bis(2-Chloroisopropyl)Ether	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Bis(2-Ethylhexyl)Phthalate	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.0064BJ	0.010U	0.010U	0.010U
Butylbenzylphthalate	0.1(P)	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Chrysene	0.0002(P)	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Dibenzofuran	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Dibenzo(A,H)Anthracene	0.0003(P)	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Dibutylphthalate	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Diethyl Phthalate	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Dimethyl Phthalate	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Di-N-Octylphthalate	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Fluoranthene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Fluorene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Hexachlorobenzene	0.001(P)	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Hexachlorobutadiene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Hexachlorocyclopentadiene	0.05(P)	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Hexachloroethane	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Indeno(1,2,3-C,D)Pyrene	0.0004(P)	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Isophorone	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Naphthalene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Nitrobenzene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
N-Nitrosodimethylamine	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
N-Nitroso-Di-N-Propylamine	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
N-Nitrosodiphenyl Amine	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U
Pentachlorophenol	0.001(F)	0.050U	0.050U	0.050U	NO SAMPLE	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U
Phenanthrene	---	0.010U	0.010U	0.010U	NO SAMPLE	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C15P2 / 12495 / 06/01/91 / 06/10/91	06C16 / 12496 / 06/01/91 / 06/10/91	06C16P2 / 12497 / 06/01/91 / 06/10/91	06C16P3 / 12498 / 06/01/91 / 06/10/91	06C17 / 12563 / 06/03/91 / 06/15/91	06C18 / 12745 / 06/05/91 / 06/22/91	06C18P2 / 12746 / 06/05/91 / 06/22/91
VOLATILE ORGANICS	MCL							
Acetone	---	0.0053BJ	0.0031BJ	0.0052BJ	0.0028BJ	0.10U	<0.10U	<0.10U
Benzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	<0.005U	<0.005U
Bromodichloromethane	0.1(L)	0.005U	0.005U	0.005U	0.005U	0.005U	<0.005U	<0.005U
Bromoform	0.1(L)	0.005U	0.005U	0.005U	0.005U	0.005U	<0.005U	<0.005U
Bromomethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	<0.010U	<0.010U
Carbon Tetrachloride	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	<0.005U	<0.005U
Carbondisulfide	---	0.005U	0.005U	0.005U	0.005U	0.005U	<0.005U	<0.005U
Chlorobenzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	<0.005U	<0.005U
Chloroethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	<0.010U	<0.010U
Chloroform	---	0.005U	0.005U	0.005U	0.005U	0.005U	<0.005U	<0.005U
Chloromethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	<0.010U	<0.010U
cis-1,2-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	<0.005U	<0.005U
cis-1,3-Dichloropropene	---	0.005U	0.005U	0.005U	0.005U	0.005U	<0.005U	<0.005U
Dibromochloromethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	<0.005U	<0.005U
Ethylbenzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	<0.005U	<0.005U
Methylene Chloride	0.005(P)	0.0065B	0.0045BJ	0.0045BJ	0.0025BJ	0.0019BJ	0.0012BJ	0.0045BJ
Styrene	0.1(F)	0.005U	0.005U	0.005U	0.005U	0.005U	<0.005U	<0.005U
Tetrachloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	<0.005U	<0.005U
Toluene	1(F)	0.005U	0.005U	0.005U	0.005U	0.005U	<0.005U	<0.005U
Trans-1,2-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	<0.005U	<0.005U
Trans-1,3-Dichloropropene	---	0.005U	0.005U	0.005U	0.005U	0.005U	<0.005U	<0.005U
Trichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	<0.005U	<0.005U
T-Xylene	10(F)	0.005U	0.005U	0.005U	0.005U	0.005U	<0.005U	<0.005U
Vinyl Acetate	---	0.005U	0.005U	0.005U	0.005U	0.005U	<0.005U	<0.005U
Vinyl Chloride	0.002(F)	0.010U	0.010U	0.010U	0.010U	0.010U	<0.010U	<0.010U
1,1-Dichloroethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	<0.005U	<0.005U
1,1-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	<0.005U	<0.005U
1,1,1-Trichloroethane	0.2(F)	0.005U	0.005U	0.005U	0.005U	0.005U	<0.005U	<0.005U
1,1,2-Trichloroethane	0.005(P)	0.005U	0.005U	0.005U	0.005U	0.005U	<0.005U	<0.005U
1,1,2,2-Tetrachloroethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	<0.005U	<0.005U
1,2-Dichloroethane	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	<0.005U	<0.005U
1,2-Dichloropropane	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	<0.005U	<0.005U
2-Butanone	---	0.10U	0.10U	0.10U	0.10U	0.10U	<0.10	<0.10
2-Hexanone	---	0.005U	0.005U	0.005U	0.005U	0.005U	<0.005U	<0.005U
4-Methyl-2-Pentanone	---	0.005U	0.005U	0.005U	0.005U	0.005U	<0.005U	<0.005U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C11 / 12742 / 06/04/91 / 06/22/91	06C11P2 / 12743 / 06/04/91 / 06/22/91	06C12 / 12555 / 06/04/91 / 06/15/91	06C12P2 / 12556 / 06/04/91 / 06/15/91	06C13 / 12557 / 06/03/91 / 06/15/91	06C13P2 / 12558 / 06/03/91 / 06/15/91	06C14 / 12492 / 06/01/91 / 06/10/91	06C14P2 / 12493 / 06/01/91 / 06/10/91	06C15 / 12494 / 06/01/91 / 06/10/91
VOLATILE ORGANICS	MCL									
Acetone	---	0.037BJ	0.013J	0.0099BJ	0.0043BJ	0.0097BJ	0.0053BJ	0.048BJ	0.0028BJ	0.012BJ
Benzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromodichloromethane	0.1(L)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromoform	0.1(L)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromomethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Carbon Tetrachloride	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Carbondisulfide	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chlorobenzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chloroethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Chloroform	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chloromethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
cis-1,2-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
cis-1,3-Dichloropropene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Dibromochloromethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Ethylbenzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Methylene Chloride	0.005(P)	0.0044BJ	0.0025BJ	0.0048BJ	0.0024BJ	0.0044BJ	0.0075B	0.0026BJ	0.0048BJ	0.0064B
Styrene	0.1(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Tetrachloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Toluene	1(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trans-1,2-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trans-1,3-Dichloropropene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
T-Xylene	10(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Vinyl Acetate	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Vinyl Chloride	0.002(F)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,1-Dichloroethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,1-Trichloroethane	0.2(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,2-Trichloroethane	0.005(P)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,2,2-Tetrachloroethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,2-Dichloroethane	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,2-Dichloropropane	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
2-Butanone	---	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U
2-Hexanone	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
4-Methyl-2-Pentanone	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	06-18	06-19	06-20	06-21	06-22	06-23	06C09	06C10	06C10P2
	Lab Sample No:	12564	12565	12566	12499	12567	12568	12553	12740	12741
	Date Sampled:	06/03/91	06/04/91	06/03/91	06/02/91	06/03/91	06/03/91	06/03/91	06/04/91	06/04/91
	Date Analyzed:	06/15/91	06/15/91	06/15/91	06/10/91	06/15/91	06/15/91	06/15/91	06/22/91	06/22/91
VOLATILE ORGANICS	MCL									
Acetone	---	0.10U	0.10U	0.10U	0.0076BJ	0.012J	0.10U	0.0023BJ	0.10U	0.014BJ
Benzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromodichloromethane	0.1(L)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromoform	0.1(L)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromomethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Carbon Tetrachloride	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Carbondisulfide	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chlorobenzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chloroethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Chloroform	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chloromethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
cis-1,2-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
cis-1,3-Dichloropropene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Dibromochloromethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Ethylbenzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Methylene Chloride	0.005(P)	0.0025BJ	0.002BJ	0.0017BJ	0.0033BJ	0.0039BJ	0.002BJ	0.0030BJ	0.0026BJ	0.0058B
Styrene	0.1(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Tetrachloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Toluene	1(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trans-1,2-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trans-1,3-Dichloropropene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
T-Xylene	10(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Vinyl Acetate	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Vinyl Chloride	0.002(F)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,1-Dichloroethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,1-Trichloroethane	0.2(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,2-Trichloroethane	0.005(P)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,2,2-Tetrachloroethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,2-Dichloroethane	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,2-Dichloropropane	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
2-Butanone	---	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U
2-Hexanone	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
4-Methyl-2-Pentanone	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: Lab Sample No: Date Sampled: Date Analyzed:	FB3	TRIP BLANK	R1E	R2E	R3E	06-14A 12744 06/05/91 06/22/91	06-15 12560 06/03/91 06/15/91	06-16 12561 06/03/91 06/15/91	06-17 12562 06/03/91 06/15/91
VOLATILE ORGANICS	MCL									
Acetone	---	0.0047BJ	0.007BJ	0.017BJ	0.016BJ	0.020BJ	0.10U	0.10U	0.10U	0.10U
Benzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromodichloromethane	0.1(L)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromoform	0.1(L)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromomethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Carbon Tetrachloride	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Carbondisulfide	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chlorobenzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chloroethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Chloroform	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chloromethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
cis-1,2-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
cis-1,3-Dichloropropene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Dibromochloromethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Ethylbenzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Methylene Chloride	0.005(P)	0.014B	0.004BJ	0.012B	0.007B	0.011B	0.0023BJ	0.0042BJ	0.0041BJ	0.0026BJ
Styrene	0.1(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Tetrachloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Toluene	1(F)	0.005U	0.005U	0.002J	0.005U	0.004J	0.005U	0.005U	0.005U	0.005U
Trans-1,2-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trans-1,3-Dichloropropene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
T-Xylene	10(F)	0.005U	0.005U	0.002J	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Vinyl Acetate	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Vinyl Chloride	0.002(F)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,1-Dichloroethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,1-Trichloroethane	0.2(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,2-Trichloroethane	0.005(P)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,2,2-Tetrachloroethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,2-Dichloroethane	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,2-Dichloropropane	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
2-Butanone	---	0.10U	0.10U	0.10U	0.003J	0.002J	0.10U	0.10U	0.10U	0.10U
2-Hexanone	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
4-Methyl-2-Pentanone	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C16 / 12457 / 06/02/91 / 07/06/91	06C16P2 / 12458 / 06/02/91 / 07/06/91	06C16P3 / 12459 / 06/02/91 / 07/06/91	06C17 / 12612 / 06/03/91 / 07/02/91	06C18 / 12713 / 06/04/91 / 07/10/91	06C18P2 / 12714 / 06/04/91 / 07/10/91
PESTICIDES/PCBs	MCL						
A-BHC	---	0.000029U	0.000029U	0.000029U	0.000029U	0.000029U	0.000029U
a-CHLORDANE	0.002(F)	0.000007J	0.000048U	0.000049U	0.000048U	0.000048U	0.000048U
A-Endosulfan	---	0.00013U	0.00013U	0.00014U	0.00013U	0.00013U	0.00013U
Aldrin	---	0.000038U	0.000038U	0.000039U	0.000038U	0.000038U	0.000038U
B-BHC	---	0.000058U	0.000058U	0.000058U	0.000058U	0.000057U	0.000058U
B-Endosulfan	---	0.000038U	0.000038U	0.000039U	0.000038U	0.000038U	0.000038U
D-BHC	---	0.000087U	0.000087U	0.000087U	0.000087U	0.000086U	0.000087U
Dieldrin	---	0.000019U	0.000019U	0.000019U	0.000019U	0.000019U	0.000019U
Disulfoton	---	0.00067U	0.00067U	0.00068U	0.00067U	0.00067U	0.00067U
Endosulfan sulfate	---	0.00063U	0.00063U	0.00064U	0.00063U	0.00063U	0.00063U
Endrin	0.002(P)	0.000058U	0.000058U	0.000058U	0.000058U	0.000057U	0.000058U
Endrin Aldehyde	---	0.00022U	0.00022U	0.00022U	0.00022U	0.00022U	0.00022U
Ethyl Parathion	---	0.00058U	0.00058U	0.00058U	0.00058U	0.00057U	0.00058U
Famphur	---	0.0012U	0.0012U	0.0012U	0.0012U	0.0011U	0.0012U
G-BHC	---	0.000038U	0.000038U	0.000039U	0.000038U	0.000038U	0.000038U
g-CHLORDANE	0.002(F)	0.000048U	0.000048U	0.000049U	0.000048U	0.000048U	0.000048U
Heptachlor	0.0004(F)	0.000029U	0.000029U	0.000029U	0.000098J	0.000005BJ	0.000004BJ
Heptachlor Epoxide	0.0002(F)	0.00080U	0.00080U	0.00081U	0.00080U	0.00079U	0.00080U
KEPONE	---	0.0058U	0.0058U	0.0058U	0.0058U	0.0057U	0.0058U
Methoxychlor	0.04(F)	0.0017U	0.0017U	0.0017U	0.0017U	0.0017U	0.0017U
Methyl Parathion	---	0.0012U	0.0006U	0.0012U	0.0012U	0.0011U	0.0012U
PCB-1016	0.0005(F)	0.0007U	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U
PCB-1221	0.0005(F)	0.0007U	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U
PCB-1232	0.0005(F)	0.0007U	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U
PCB-1242	0.0005(F)	0.0007U	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U
PCB-1248	0.0005(F)	0.0007U	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U
PCB-1254	0.0005(F)	0.000208J	0.0012U	0.000158J	0.0012U	0.0012U	0.0012U
PCB-1260	0.0005(F)	0.0012U	0.0012U	0.0013U	0.0012U	0.0012U	0.0012U
Phorate	---	0.00038U	0.00038U	0.00039U	0.00038U	0.00038U	0.00038U
PPDDD	---	0.00011U	0.00011U	0.00011U	0.00011U	0.00010U	0.00011U
PPDDE	---	0.000038U	0.000038U	0.000039U	0.000038U	0.000038U	0.000038U
PPDDT	---	0.00012U	0.00012U	0.00012U	0.00012U	0.00011U	0.00012U
Toxaphene	0.003(F)	0.0023U	0.0023U	0.0023U	0.0023U	0.0023U	0.0023U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C11P2 / 12711 / 06/04/91 / 07/10/91	06C12 / 12605 / 06/04/91 / 07/02/91	06C12P2 / 12606 / 06/04/91 / 07/02/91	06C13 / 12607 / 06/03/91 / 07/02/91	06C13P2 / 12608 / 06/03/91 / 07/02/91	06C14 / 12453 / 06/01/91 / 07/06/91	06C14P2 / 12454 / 06/01/91 / 07/06/91	06C15 / 12455 / 06/02/91 / 07/06/91	06C15P2 / 12456 / 06/02/91 / 07/06/91
PESTICIDES/PCBs	MCL									
A-BHC	---	0.000029U	0.000029U	0.000029U	0.000029U	0.000029U	0.000029U	0.000029U	0.000029U	0.000029U
a-CHLORDANE	0.002(F)	0.000049U	0.000049U	0.000049U	0.000049U	0.000048U	0.000011U	0.000013U	0.000010J	0.000049U
A-Endosulfan	---	0.00014U	0.00014U	0.00014U	0.00014U	0.00013U	0.00014U	0.00013U	0.00014U	0.00014U
Aldrin	---	0.000039U	0.000039U	0.000039U	0.000039U	0.000038U	0.000039U	0.000038U	0.000039U	0.000039U
B-BHC	---	0.000059U	0.000058U	0.000058U	0.000058U	0.000058U	0.000058U	0.000058U	0.000058U	0.000058U
B-Endosulfan	---	0.000039U	0.000039U	0.000039U	0.000039U	0.000038U	0.000039U	0.000038U	0.000039U	0.000039U
D-BHC	---	0.000088U	0.000088U	0.000087U	0.000087U	0.000087U	0.000087U	0.000087U	0.000087U	0.000087U
Dieldrin	---	0.000020U	0.000020U	0.000019U	0.000019U	0.000019U	0.000019U	0.000019U	0.000020U	0.000019U
Disulfoton	---	0.00069U	0.00069U	0.00068U	0.00068U	0.00067U	0.00068U	0.00067U	0.00068U	0.00068U
Endosulfan sulfate	---	0.00065U	0.00065U	0.00064U	0.00064U	0.00063U	0.00064U	0.00063U	0.00064U	0.00064U
Endrin	0.002(P)	0.000059U	0.000059U	0.000058U	0.000058U	0.000058U	0.000058U	0.000058U	0.000058U	0.000058U
Endrin Aldehyde	---	0.00023U	0.00023U	0.00022U	0.00022U	0.00022U	0.00022U	0.00022U	0.00022U	0.00022U
Ethyl Parathion	---	0.00060U	0.00059U	0.00058U	0.00058U	0.00058U	0.00058U	0.00058U	0.00058U	0.00058U
Famphur	---	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U
G-BHC	---	0.000039U	0.000039U	0.000039U	0.000039U	0.000039U	0.000039U	0.000038U	0.000039U	0.000039U
g-CHLORDANE	0.002(F)	0.000049U	0.000049U	0.000049U	0.000049U	0.000048U	0.000049U	0.000048U	0.000049U	0.000049U
Heptachlor	0.0004(F)	0.000029U	0.000029U	0.000029U	0.000029U	0.000029U	0.000025J	0.000029J	0.000030U	0.000029U
Heptachlor Epoxide	0.0002(F)	0.00081U	0.00081U	0.00081U	0.00081U	0.00080U	0.00089U	0.00081U	0.00081U	0.00081U
KEPONE	---	0.0059U	0.0059U	0.0058U	0.0058U	0.0058U	0.0058U	0.0058U	0.0058U	0.0058U
Methoxychlor	0.04(F)	0.0017U	0.0017U	0.0017U	0.0017U	0.0017U	0.0017U	0.0017U	0.0017U	0.0017U
Methyl Parathion	---	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U
PCB-1016	0.0005(F)	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U
PCB-1221	0.0005(F)	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U
PCB-1232	0.0005(F)	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U
PCB-1242	0.0005(F)	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U
PCB-1248	0.0005(F)	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U	0.0006U
PCB-1254	0.0005(F)	0.0013U	0.00030BJ	0.000458J	0.00029BJ	0.000328J	0.00020BJ	0.000268J	0.000138J	0.000238J
PCB-1260	0.0005(F)	0.0013U	0.0013U	0.0013U	0.0013U	0.0012U	0.0013U	0.0012U	0.0013U	0.0013U
Phorate	---	0.00039U	0.00039U	0.00039U	0.00039U	0.00038U	0.00039U	0.00038U	0.00039U	0.00039U
PPDDD	---	0.00011U	0.00011U	0.00011U	0.00011U	0.00011U	0.00012U	0.00011U	0.00011U	0.00011U
PPDDE	---	0.000039U	0.000039U	0.000039U	0.000039U	0.000038U	0.000039U	0.000038U	0.000040U	0.000039U
PPDDT	---	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U
Toxaphene	0.003(F)	0.0024U	0.0024U	0.0023U	0.0023U	0.0023U	0.0023U	0.0023U	0.0023U	0.0023U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06-19 / 12614 / 06/03/91 / 07/02/91	06-20 / 12615 / 06/03/91 / 07/02/91	06-21 / 12460 / 06/02/91 / 07/06/91	06-22 / 12616 / 06/03/91 / 07/02/91	06-23 / 12617 / 06/03/91 / 07/02/91	06C09 / 12604 / 06/03/91 / 07/02/91	06C10 / 12708 / 06/04/92 / 07/10/91	06C10P2 / 12709 / 06/04/91 / 07/10/91	06C11 / 12710 / 06/04/91 / 07/10/91
PESTICIDES/PCBs	MCL									
A-BHC	---	0.000031U	0.000029U	0.000029U	0.000029U	0.000029U	0.000029U	0.000029U	0.000029U	0.000029U
a-CHLORDANE	0.002(F)	0.000052U	0.000048U	0.000049U	0.000048U	0.000049U	0.000048U	0.000048U	0.000048U	0.000048U
A-Endosulfan	---	0.00015U	0.00013U	0.00014U	0.00013U	0.00014U	0.00013U	0.00013U	0.00013U	0.00013U
Aldrin	---	0.00042U	0.000038U	0.000039U	0.000039U	0.000039U	0.000038U	0.000038U	0.000038U	0.000038U
B-BHC	---	0.000063U	0.000057U	0.000058U	0.000057U	0.000058U	0.000058U	0.000057U	0.000058U	0.000057U
B-Endosulfan	---	0.000042U	0.000038U	0.000039U	0.000039U	0.000039U	0.000038U	0.000038U	0.000038U	0.000038U
D-BHC	---	0.000094U	0.000086U	0.000087U	0.000086U	0.000087U	0.000087U	0.000086U	0.000087U	0.000086U
Dieldrin	---	0.000021U	0.000019U	0.000020U	0.000019U	0.000019U	0.000019U	0.000019U	0.000019U	0.000019U
Disulfoton	---	0.00073U	0.00067U	0.00068U	0.00067U	0.00068U	0.00067U	0.00067U	0.00067U	0.00067U
Endosulfan sulfate	---	0.00069U	0.00063U	0.00064U	0.00063U	0.00064U	0.00063U	0.00063U	0.00063U	0.00063U
Endrin	0.002(P)	0.000063U	0.000057U	0.000058U	0.000057U	0.000058U	0.000058U	0.000057U	0.000058U	0.000057U
Endrin Aldehyde	---	0.00024U	0.00022U	0.00022U	0.00022U	0.00022U	0.00022U	0.00022U	0.00022U	0.00022U
Ethyl Parathion	---	0.00062U	0.00057U	0.00058U	0.00057U	0.00058U	0.00058U	0.00057U	0.00057U	0.00057U
Famphur	---	0.0012U	0.0011U	0.0012U	0.0011U	0.0012U	0.0012U	0.0011U	0.0012U	0.0011U
G-BHC	---	0.000042U	0.000038U	0.000039U	0.000038U	0.000039U	0.000038U	0.000038U	0.000038U	0.000038U
g-CHLORDANE	0.002(F)	0.000052U	0.000048U	0.000049U	0.000048U	0.000049U	0.000048U	0.000048U	0.000048U	0.000048U
Heptachlor	0.0004(F)	0.000031U	0.000013BJ	0.000012U	0.000029U	0.000017BJ	0.000029U	0.000029U	0.000029U	0.000029U
Heptachlor Epoxide	0.0002(F)	0.00086U	0.00079U	0.00081U	0.00079U	0.00081U	0.00080U	0.00079U	0.00080U	0.00079U
KEPONE	---	0.0062U	0.0057U	0.0058U	0.0057U	0.0058U	0.0058U	0.0057U	0.0058U	0.0057U
Methoxychlor	0.04(F)	0.0018U	0.0017U	0.0017U	0.0017U	0.0017U	0.0017U	0.0017U	0.0017U	0.0017U
Methyl Parathion	---	0.0012U	0.0011U	0.0012U	0.0011U	0.0012U	0.0012U	0.0011U	0.0011U	0.0012U
PCB-1016	0.0005(F)	0.0007U	0.0006U	0.0006U	0.0006U	0.0007U	0.0006U	0.0006U	0.0006U	0.0006U
PCB-1221	0.0005(F)	0.0007U	0.0006U	0.0006U	0.0006U	0.0007U	0.0006U	0.0006U	0.0006U	0.0006U
PCB-1232	0.0005(F)	0.0007U	0.0006U	0.0006U	0.0006U	0.0007U	0.0006U	0.0006U	0.0006U	0.0006U
PCB-1242	0.0005(F)	0.0007U	0.0006U	0.0006U	0.0006U	0.0007U	0.0006U	0.0006U	0.0006U	0.0006U
PCB-1248	0.0005(F)	0.0007U	0.0006U	0.0006U	0.0006U	0.0007U	0.0006U	0.0006U	0.0006U	0.0006U
PCB-1254	0.0005(F)	0.0014U	0.0012U	0.0012U	0.0013U	0.0013U	0.00047BJ	0.0012U	0.0012U	0.0012U
PCB-1260	0.0005(F)	0.0014U	0.0012U	0.0012U	0.0013U	0.0013U	0.0012U	0.0012U	0.0012U	0.0012U
Phorate	---	0.00042U	0.00038U	0.00038U	0.00039U	0.00040U	0.00038U	0.00038U	0.00038U	0.00038U
PPDDD	---	0.00011U	0.00011U	0.00010U	0.00011U	0.00011U	0.00011U	0.00010U	0.00011U	0.00010U
PPDDE	---	0.000042U	0.000038U	0.000038U	0.000039U	0.000040U	0.000038U	0.000038U	0.000038U	0.000038U
PPDDT	---	0.00013U	0.00011U	<.00011U	0.00012U	0.00012U	0.00012U	0.00011U	0.00012U	0.00011U
Toxaphene	0.003(F)	0.0025U	0.0023U	0.0023U	0.0023U	0.0024U	0.0023U	0.0023U	0.0023U	0.0023U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	06C16	06C16P2	06C16P3	06C17	06C18	06C18P2
	Lab Sample No:	12517	12518	12519	12644	12764	12765
	Date Sampled:	06/02/91	06/02/91	06/02/91	06/03/91	06/04/91	06/04/91
	Date Analyzed:	06/17/91	07/17/91	07/17/91	06/11/91	06/28/91	06/28/91
METALS	MCL						
Aluminum	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Antimony	0.01(P)	0.0153B	0.0096B	0.0142B	0.0101B	0.0180B	0.0150B
Arsenic	0.05(F)	0.0020U	0.0020U	0.0020U	0.0020U	0.0030B	0.0156B
Barium	2.0(F)	0.025B	0.066B	0.043B	0.019B	0.117BN	0.123BN
Beryllium	0.001(P)	0.001U	0.0010U	0.001U	0.001U	0.001U	0.002B
Cadmium	0.005(F)	0.004U	0.004U	0.004UN	0.004UN	0.004U	0.004U
Calcium	---	18.6	84.2	72.8	44.8	43.6	32.6
Chromium	0.1(F)	0.005U	0.005U	0.005U	0.005U	0.005B	0.007B
Cobalt	---	0.006U	0.006U	0.006U	0.006U	0.006U	0.006U
Copper	1.3(F)	0.005U	0.006B	0.005U	0.005U	0.005U	0.010B
Iron	---	0.027B	0.357	0.010B	0.010U	51.2	0.068B
Lead	0.015(F)	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U
Magnesium	---	9.56	57.4	41.7	6.09	8.27	10.9
Manganese	---	0.014BN	0.150N	0.009BN	0.007B	0.158B	0.552
Mercury	0.002(F)	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U
Nickel	0.1(P)	0.005B	0.005B	0.005U	0.005U	0.0010U	0.0010U
Potassium	---	1.76B	8.19	1.90B	1.00U	1.58B	2.84
Selenium	0.05(F)	0.0020U	0.0020U	0.0020U	0.0029B	0.0020U	0.0020U
Silver	---	0.0010U	0.0010U	0.0010UW	0.0010UW	0.0010U	0.0010U
Sodium	---	145	50.8	7.80	14.4	44.5	31.0
Thallium	0.002(P)	0.0020UW	0.0080	0.0080U	0.0020U	0.0080U	0.0080U
Tin	---	0.035U	0.035U	0.035U	0.035U	0.035U	0.035U
Vanadium	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Zinc	---	0.006U	0.006U	0.006U	0.009B	0.008B	0.016B

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected B = Value is < CRDL but > detection limit (inorganics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: Lab Sample No: Date Sampled: Date Analyzed:	FB3	R1E	R2E	R3E	06-14A 12712 06/04/91 07/10/91	06-15 12609 06/03/91 07/02/91	06-16 12610 06/03/91 07/02/91	06-17 12611 06/03/91 07/02/91	06-18 12613 06/03/91 07/02/91
PESTICIDES/PCBs	MCL									
A-BHC	---	0.000030U	0.000030U	0.000030U	0.000030U	0.000032U	0.000029U	0.000030U	0.000031U	0.000029U
a-CHLORDANE	0.002(F)	0.000050U	0.000050U	0.000050U	0.000050U	0.000053U	0.000049U	0.000050U	0.000052U	0.000048U
A-Endosulfan	---	0.00014U	0.00014U	0.00014U	0.00014U	0.00015U	0.00014U	0.00014U	0.00014U	0.00013U
Aldrin	---	0.000040U	0.000040U	0.000040U	0.000040U	0.000043U	0.000039U	0.000040U	0.000041U	0.000038U
B-BHC	---	0.000060U	0.000060U	0.000060U	0.000060U	0.000064U	0.000058U	0.00059U	0.00062U	0.00057U
B-Endosulfan	---	0.000040U	0.000040U	0.000040U	0.000040U	0.000043U	0.000039U	0.000040U	0.000041U	0.000038U
D-BHC	---	0.000090U	0.000090U	0.000090U	0.000090U	0.000096U	0.000087U	0.000089U	0.000093U	0.000086U
Dieldrin	---	0.000020U	0.000020U	0.000020U	0.000020U	0.000021U	0.000019U	0.000020U	0.000021U	0.000019U
Disulfoton	---	0.00070U	0.00070U	0.00070U	0.00070U	0.00074U	0.00068U	0.00068U	0.0069U	0.00067U
Endosulfan sulfate	---	0.00066U	0.00066U	0.00066U	0.00066U	0.00070U	0.00064U	0.00065U	0.00068U	0.00063U
Endrin	0.002(P)	0.000060U	0.000060U	0.000060U	0.000060U	0.000064U	0.000058U	0.000059U	0.000062U	0.000057U
Endrin Aldehyde	---	0.00023U	0.00023U	0.00023U	0.00023U	0.00024U	0.00022U	0.00023U	0.00024U	0.00022U
Ethyl Parathion	---	0.00060U	0.00060U	0.00060U	0.00060U	0.00064U	0.00058U	0.00059U	0.00062U	0.00057U
Famphur	---	0.0012U	0.0012U	0.0012U	0.0012U	0.0013U	0.0012U	0.0012U	0.0012U	0.0011U
G-BHC	---	0.000040U	0.000040U	0.000040U	0.000040U	0.000043U	0.000039U	0.000040U	0.000041U	0.000038U
g-CHLORDANE	0.002(F)	0.000050U	0.000050U	0.000050U	0.000050U	0.000053U	0.000049U	0.000050U	0.000052U	0.000048U
Heptachlor	0.0004(F)	0.000030U	0.000030U	0.000030U	0.000030U	0.000032U	0.000029U	0.000017J	0.000031U	0.000029U
Heptachlor Epoxide	0.0002(F)	0.00083U	0.00083U	0.00083U	0.00083U	0.00088U	0.00081U	0.00082U	0.00086U	0.00079U
KEPONE	---	0.0060U	0.0060U	0.0060U	0.0060U	0.0064U	0.0058U	0.0059U	0.0062U	0.0057U
Methoxychlor	0.04(F)	0.0018U	0.0018U	0.0018U	0.0018U	0.0019U	0.0017U	0.0017U	0.0018U	0.0017U
Methyl Parathion	---	0.0012U	0.0012U	0.0012U	0.0012U	0.0013U	0.0012U	0.0012U	0.0012U	0.0011U
PCB-1016	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0006U	0.0006U	0.0006U	0.0006U
PCB-1221	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0006U	0.0006U	0.0006U	0.0006U
PCB-1232	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0006U	0.0006U	0.0006U	0.0006U
PCB-1242	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0006U	0.0006U	0.0006U	0.0006U
PCB-1248	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0006U	0.0006U	0.0006U	0.0006U
PCB-1254	0.0005(F)	0.0013U	0.0013U	0.0013U	0.0013U	0.0014U	0.00028BJ	0.000198J	0.000548J	0.0012U
PCB-1260	0.0005(F)	0.0013U	0.0013U	0.0013U	0.0013U	0.0014U	0.0013U	0.0013U	0.0013U	0.0012U
Phorate	---	0.00040U	0.00040U	0.00040U	0.00040U	0.00042U	0.00039U	0.00040U	0.00040U	0.00038U
PPDDD	---	0.00011U	0.00011U	0.00011U	0.00011U	0.00012U	0.00011U	0.00011U	0.00011U	0.00010U
PPDDE	---	0.000040U	0.000040U	0.000040U	0.000040U	0.000043U	0.000039U	0.000040U	0.000041U	0.000038U
PPDDT	---	0.00012U	0.00012U	0.00012U	0.00012U	0.00013U	0.00012U	0.00012U	0.00012U	0.00011U
Toxaphene	0.003(F)	0.0024U	0.0024U	0.0024U	0.0024U	0.0026U	0.0023U	0.0024U	0.0025U	0.0023U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	06-19	06-20	06-21	06-22	06-23	06C09	06C10	06C10P2	06C11
	Lab Sample No:	12646	12647		12648	12649	12636	12759	12760	12761
	Date Sampled:	06/04/91	06/03/91		06/03/91	06/03/91	06/03/91	06/04/91	06/04/91	06/04/91
	Date Analyzed:	06/11/91	06/11/91		06/11/91	06/11/91	06/11/91	06/28/91	06/28/91	06/28/91
METALS	MCL									
Aluminum	---	0.0010U	0.0010U	NOT SAMPLED	0.0010U	0.010U	0.010U	0.010U	0.010U	0.010U
Antimony	0.01(P)	0.0067B	0.0143B	NOT SAMPLED	0.0131B	0.019B	0.0133B	0.0053B	0.0209B	0.0190B
Arsenic	0.05(F)	0.0020U	0.0020U	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0074B	0.0020U	0.0020U
Barium	2.0(F)	0.142B	0.025B	NOT SAMPLED	0.027B	0.011B	0.033B	0.048BN	0.051BN	0.135
Beryllium	0.001(P)	0.001U	0.001U	NOT SAMPLED	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U
Cadmium	0.005(F)	0.004UN	0.004U	NOT SAMPLED	0.004U	0.004U	0.004UN	0.004U	0.004U	0.004U
Calcium	---	83.5	49.7	NOT SAMPLED	70.8	24.7	32.7	88.7	103	72.8
Chromium	0.1(F)	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.006B	0.006B	0.005B
Cobalt	---	0.014B	0.010B	NOT SAMPLED	0.006U	0.006U	0.009B	0.006U	0.006U	0.006U
Copper	1.3(F)	0.005U	0.005U	NOT SAMPLED	0.006B	0.021B	0.0121B	0.005U	0.020B	0.014B
Iron	---	0.131	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.050B	0.426
Lead	0.015(F)	0.0010U	0.0010U	NOT SAMPLED	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010UW
Magnesium	---	11.9	12.9	NOT SAMPLED	11.3	7.49	4.34B	8.78	20.4	9.92
Manganese	---	0.640	0.005U	NOT SAMPLED	0.005B	0.030	0.065	0.089	0.006B	0.145
Mercury	0.002(F)	0.0002U	0.0002U	NOT SAMPLED	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U
Nickel	0.1(P)	0.010B	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.011B	0.005U	0.005U
Potassium	---	4.78B	1.00U	NOT SAMPLED	1.00U	1.00U	1.00U	1.52B	1.00U	1.04B
Selenium	0.05(F)	0.0020U	0.0020U	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
Silver	---	0.0010U	0.0010U	NOT SAMPLED	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U
Sodium	---	20.0	34.5	NOT SAMPLED	3.82	4.95B	17.3	5.57	5.84	13.0
Thallium	0.002(P)	0.0020U	0.0020U	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0080U	0.0080U	0.0080U
Tin	---	0.035U	0.035U	NOT SAMPLED	0.035U	0.035U	0.035U	0.035U	0.035U	0.035U
Vanadium	---	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Zinc	---	0.008B	0.006U	NOT SAMPLED	0.006U	0.010B	0.769	0.006U	0.007B	0.007B

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected B = Value is < CRDL but > detection limit (inorganics)
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IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	06C16	06C16P2	06C16P3	06C17	06C18	06C18P2
	Lab Sample No:	12476	12477	12478	12628	12729	12730
	Date Sampled:	06/02/91	06/02/91	06/02/91	06/03/91	06/04/91	06/04/91
	Date Analyzed:	07/23/91	07/23/91	07/23/91	07/23/91	07/23/91	07/23/91
HERBICIDES	MCL						
2,4-D	0.07(F)	0.011U	0.012U	0.012U	0.012U	0.012U	0.012U
2,4,5-T	---	0.0019U	0.0019U	0.0019U	0.0020U	0.0020U	0.0019U
2,4,5-TP	0.05(F)	0.0016U	0.0016U	0.0017U	0.0017U	0.0017U	0.00049J
Dinoseb	0.007(P)	0.00067Utd	0.00067U	0.00068U	0.00069U	0.00069U	0.00067U

Analyte	Well No:	06C16	06C16P2	06C16P3	06C17	06C18	06C18P2
	Lab Sample No:	12537	12538	12539	12660	12780	12781
	Date Sampled:	06/02/91	06/02/91	06/02/91	06/03/91	06/04/91	06/04/91
	Date Anal. (Cn):	06/11/91	06/11/91	06/11/91	06/11/91	06/13/91	06/13/91
	Date Anal. (S):	06/04/91	06/04/91	06/04/91	06/05/91	06/13/91	06/13/91
CYANIDE and SULFIDE	MCL						
Cyanide	0.2(P)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Sulfide	---	0.031	0.035	0.023	0.020U	0.020U	0.020U

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IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C11P2	06C12	06C12P2	06C13	06C13P2	06C14	06C14P2	06C15	06C15P2
	Lab Sample No:	12762	12637	12638	12639	12640	12513	12514	12515	12516
	Date Sampled:	06/04/91	06/04/91	06/04/91	06/04/91	06/04/91	06/01/91	06/01/91	06/01/91	06/01/91
	Date Analyzed:	06/28/91	06/11/91	06/11/91	06/11/91	06/11/91	06/17/91	06/17/91	06/17/91	06/17/91
METALS	MCL									
Aluminum	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Antimony	0.01(P)	0.0193B	0.0090B	0.0103B	0.0173B	0.0139B	0.0094B	0.0061B	0.0147B	0.0170B
Arsenic	0.05(F)	0.0020U	0.0020U	0.0020U	0.0020U	0.0280	0.0020U	0.0020U	0.0020U	0.0020U
Barium	2.0(F)	0.016BN	0.065B	0.021B	0.018B	0.076B	0.010U	0.032B	0.023B	0.025B
Beryllium	0.001(P)	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U
Cadmium	0.005(F)	0.004U	0.004UN	0.004UN	0.004UN	0.004UN	0.008	0.0040U	0.0040U	0.0040U
Calcium	---	64.2	82.1	104	28.6	33.3	50.8	7.45	47.1	13.8
Chromium	0.1(F)	0.005B	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Cobalt	---	0.006U	0.006U	0.016B	0.006U	0.011B	0.006U	0.006U	0.006U	0.006U
Copper	1.3(F)	0.006U	0.011B	0.013B	0.027	0.005U	0.005U	0.005U	0.005U	0.007B
Iron	---	0.005U	0.464	0.010U	0.010U	11.5	0.228	0.071B	0.010U	0.012B
Lead	0.015(F)	0.0010U	0.0010B	0.0010U	0.0010U	0.0010UW	0.0010U	0.0010U	0.0010U	0.0011B
Magnesium	---	11.1	12.5	22.5	6.57	9.85	5.18	2.251	13.2	6.19
Manganese	---	0.078	0.253	0.063	0.014B	0.388	0.145N	0.118N	0.0088N	0.0078N
Mercury	0.002(F)	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U
Nickel	0.1(P)	0.005U	0.005B	0.010B	0.005U	0.005U	0.005B	0.013B	0.008B	0.006B
Potassium	---	1.00U	1.05B	4.04	1.00U	1.00U	1.0U	1.0U	1.46B	1.35B
Selenium	0.05(F)	0.0020U	0.0020U	0.0029B	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
Silver	---	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U
Sodium	---	2.41B	7.49	8.52	19.4	80.5	8.18	3.97B	11.6	3.84B
Thallium	0.002(P)	0.0080U	0.0020U	0.0020U	0.0020U	0.0020U	0.0080U	0.0080U	0.0080U	0.0080U
Tin	---	0.035U	0.035U	0.035U	0.035U	0.035U	0.035U	0.035U	0.035U	0.035U
Vanadium	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Zinc	---	0.007B	0.006U	0.039	0.006U	0.008B	0.023	0.006B	0.007B	0.006B

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected B = Value is < CRDL but > detection limit (inorganics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB3	R1E	R2E	R3E	06-14A	06-15	06-16	06-17	06-18
	Lab Sample No:					12728	12625	12626	12627	12629
	Date Sampled:					06/04/91	06/03/91	06/03/91	06/03/91	06/03/91
	Date Analyzed:					07/23/91	07/23/91	07/23/91	07/23/91	07/23/91
HERBICIDES	MCL									
2,4-D	0.07(F)	0.012U	0.012U	0.012U	0.012U	0.012U	0.012U	0.013U	0.012U	0.012U
2,4,5-T	---	0.0020U	0.0020U	0.0020U	0.0020U	0.0019U	0.0019U	0.0022U	0.0021U	0.0020U
2,4,5-TP	0.05(F)	0.0017U	0.0017U	0.0017U	0.0017U	0.0017U	0.0017U	0.0018U	0.0018U	0.0017U
Dinoseb	0.007(P)	0.00070U	0.00070U	0.00070U	0.00070U	0.00068U	0.00068U	0.00075U	0.00072U	0.00069U

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Anal. (Cn): / Date Anal. (S):	FB3	R1E	R2E	R3E	06-14A	06-15	06-16	06-17	06-18
	Lab Sample No:	16282	16766	16767	16878	12779	12657	12658	12659	12661
	Date Sampled:						06/03/91	06/03/91	06/03/91	06/03/91
	Date Anal. (Cn):						06/11/91	06/11/91	06/11/91	06/11/91
	Date Anal. (S):						06/05/91	06/05/91	06/05/91	06/05/91
CYANIDE and SULFIDE	MCL									
Cyanide	0.2(P)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Sulfide	---	0.020U	0.020U	0.020U	0.020	0.020U	0.020U	0.023	0.020U	0.020U

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06-19	06-20	06-21	06-22	06-23	06C09	06C10	06C10P2	06C11
	Lab Sample No:	12630	12631	12479	12632	16862	12620	12724	12725	12726
	Date Sampled:	06/04/91	06/04/91	06/02/91	06/03/91	06/03/91	06/03/91	06/04/91	06/04/91	06/04/91
	Date Analyzed:	07/23/91	07/23/91	07/23/91	07/23/91	07/23/91	07/23/91	07/23/91	07/23/91	07/23/91
HERBICIDES	MCL									
2,4-D	0.07(F)	0.021U	0.012U	0.012U	0.012U	0.011U	0.012U	0.012U	0.012U	0.012U
2,4,5-T	---	0.0035U	0.0020U	0.0019U	0.0019U	0.0019U	0.0019U	0.0019U	0.0019U	0.0019U
2,4,5-TP	0.05(F)	0.0030U	0.0017U	0.0017U	0.0017U	0.0016U	0.0016U	0.0016U	0.0016U	0.0016U
Dinoseb	0.007(P)	0.0012U	0.00070U	0.00068U	0.00068U	0.00067U	0.00067U	0.00067U	0.00067U	0.00067U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
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IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB3	R1E	R2E	R3E	06-14A 12763 06/04/91 06/28/91	06-15 12641 06/03/91 06/11/91	06-16 12642 06/03/91 06/11/91	06-17 12643 06/03/91 06/11/91	06-18 12645 06/03/91 06/11/91
METALS	MCL									
Aluminum	---	0.010U	0.010U	0.010U	0.010U	0.016B	0.0010U	0.0010U	0.0010U	0.0010U
Antimony	0.01(P)	0.0159B	0.00099B	0.0030U	0.0154B	0.0106	0.0198B	0.0137B	0.0191B	0.0176B
Arsenic	0.05(F)	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
Barium	2.0(F)	0.010U	0.010U	0.010U	0.010U	0.081BN	0.091B	0.011B	0.058B	0.019B
Beryllium	0.001(P)	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U
Cadmium	0.005(F)	0.004U	0.004U	0.004U	0.00020U	0.004U	0.004UN	0.004UN	0.004UN	0.004UN
Calcium	---	0.158B	0.226B	0.200U	0.245B	55.0	38.9	28.7	24.8	31.8
Chromium	0.1(F)	0.005BN	0.005U	0.005U	0.005U	0.006B	0.005U	0.005U	0.005U	0.005U
Cobalt	---	0.010U	0.010U	0.010U	0.010U	0.006U	0.006U	0.006B	0.006U	0.006U
Copper	1.3(F)	0.020B	0.040	0.005U	0.062	0.005U	0.005U	0.016B	0.005U	0.005U
Iron	---	0.010U	0.010UN	0.010UN	0.010U	3.04	0.010U	0.010U	0.010U	0.010U
Lead	0.015(F)	0.0010U	0.0010U	0.0010U	0.0010U	0.0012BW	0.0010U	0.0010U	0.0010UW	0.0010U
Magnesium	---	0.200U	0.105B	0.100U	0.100U	12.7	12.0	7.40	9.09	8.10
Manganese	---	0.007B	0.006B	0.005U	0.007B	0.005U	0.009B	0.014B	0.044	0.006B
Mercury	0.002(F)	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U
Nickel	0.1(P)	0.005U	0.005U	0.005U	0.005U	0.005U	0.007B	0.005U	0.014B	0.005U
Potassium	---	1.00U	0.335B	0.200U	0.208B	1.93B	2.16B	1.00	3.07B	1.00U
Selenium	0.05(F)	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
Silver	---	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010UW	0.0010UW	0.0010U
Sodium	---	0.215B	0.308B	0.100U	0.549B	3.56B	1.90B	8.26	1.91B	15.6
Thallium	0.002(P)	0.0020U	0.0020UW	0.0020U	0.0020U	0.0080U	0.0020U	0.0020U	0.0020U	0.0020U
Tin	---	0.050U	0.050U	0.050U	0.050U	0.035U	0.035U	0.035U	0.035U	0.035U
Vanadium	---	0.010U	0.010U	0.010U	0.014B	0.005U	0.005U	0.005U	0.005U	0.005U
Zinc	---	0.005U	0.005B	0.005U	0.006B	0.016B	0.021	0.012B	0.019B	0.006U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected B = Value is < CRDL but > detection limit (inorganics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB3	R1E	R2E	R3E	06-14A	06-15	06-16	06-17	06-18
	Lab Sample No:					12680	12577	12578	12579	12581
	Date Sampled:					06/05/91	06/03/91	06/03/91	06/03/91	06/03/91
	Date Analyzed:					06/06/91	06/05/91	06/05/91	06/05/91	06/05/91
EXPLOSIVES	MCL									
DNB	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
HMX	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
RDX	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TETRYL	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
TNB	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TNT	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	.015J
2,4-DNT	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06-19	06-20	06-21	06-22	06-23	06C09	06C10	06C10P2	06C11
	Lab Sample No:	12582	12583	12421	12584	12585	12572	12676	12677	12678
	Date Sampled:	06/04/91	06/03/91	06/02/91	06/03/91	06/03/91	06/03/91	06/05/91	06/05/91	06/05/91
	Date Analyzed:	06/05/91	06/05/91	06/04/91	06/05/91	06/05/91	06/05/91	06/06/91	06/06/91	06/06/91
EXPLOSIVES	MCL									
DNB	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
HMX	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.019J	0.020U	0.020U	0.020U
RDX	---	0.020U	0.035	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TETRYL	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
TNB	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TNT	---	0.020U	0.020U	0.020U	0.131	0.020U	0.020U	0.020U	0.020U	0.020U
2,4-DNT	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	06-19	06-20	06-21	06-22	06-23	06C09	06C10	06C10P2	06C11
	Lab Sample No:	12662	12663	12540	12664	12665	12652	12775	12776	12777
	Date Sampled:	06/03/91	06/03/91	06/02/91	06/03/91	06/03/91	06/03/91	06/04/91	06/04/91	06/04/91
	Date Anal. (Cn):	06/11/91	06/11/91	06/11/91	06/11/91	06/11/91	06/11/91	06/13/91	06/13/91	06/13/91
	Date Anal. (S):	06/05/91	06/05/91	06/04/91	06/05/91	06/05/91	06/05/91	06/13/91	06/13/91	06/13/91
CYANIDE and SULFIDE	MCL									
Cyanide	0.2(P)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Sulfide	---	0.020U	0.020U	0.020U	0.020U	0.037	0.020U	0.030	0.020U	0.020U

Analyte	Well No:	06C11P2	06C12	06C12P2	06C13	06C13P2	06C14	06C14P2	06C15	06C15P2
	Lab Sample No:	12727	12621	12622	12623	12624	12472	12473	12474	12475
	Date Sampled:	06/04/91	06/04/91	06/04/91	06/03/91	06/03/91	06/01/91	06/01/91	06/02/91	06/02/91
	Date Analyzed:	07/23/91	07/23/91	07/23/91	07/23/91	07/23/91	07/23/91	07/23/91	07/23/91	07/23/91
HERBICIDES	MCL									
2,4-D	0.07(F)	0.012U	0.012U	0.012U	0.012U	0.012U	0.011U	0.012U	0.012U	0.012U
2,4,5-T	---	0.0019U	0.0019U	0.0019U	0.0019U	0.0019U	0.0019U	0.0019U	0.0019U	0.0019U
2,4,5-TP	0.05(F)	0.0017U	0.0017U	0.00039J	0.0017U	0.0017U	0.0016U	0.0003J	0.0017U	0.00029J
Dinoseb	0.007(P)	0.00068U	0.00068U	0.00068U	0.00068U	0.00067U	0.00067U	0.00067U	0.00068U	0.00067U

Analyte	Well No:	06C11P2	06C12	06C12P2	06C13	06C13P2	06C14	06C14P2	06C15	06C15P2
	Lab Sample No:	12778	12653	12654	12655	12656	12533	12534	12535	12536
	Date Sampled:	06/04/91	06/04/91	06/04/91	06/03/91	06/03/91	06/01/91	06/01/91	06/02/91	06/02/91
	Date Anal. (Cn):	06/11/91	06/11/91	06/11/91	06/11/91	06/11/91	06/11/91	06/11/91	06/11/91	06/11/91
	Date Anal. (S):	06/13/91	06/05/91	06/05/91	06/05/91	06/05/91	06/04/91	06/04/91	06/04/91	06/04/91
CYANIDE and SULFIDE	MCL									
Cyanide	0.2(P)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Sulfide	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.033	0.020U	0.020U	0.022

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C16 / 12438 / 06/02/91 / 06/06/91	06C16P2 / 12439 / 06/02/91 / 06/06/91	06C16P3 / 12440 / 06/02/91 / 06/06/91	06C17 / 12596 / 06/03/91 / 06/11/91	06C18 / 12697 / 06/04/91 / 06/10/91	06C18P2 / 12698 / 06/04/91 / 06/10/91
BNA	MCL						
Acenaphthene	---	0.010U	0.010U	0.010U	0.010U	0.010U	<0.010
Acenaphthylene	---	0.010U	0.010U	0.010U	0.010U	0.010U	<0.010
Aniline	---	0.020U	0.020U	0.020U	0.020U	0.020U	<0.020
Anthracene	---	0.010U	0.010U	0.010U	0.010U	0.010U	<0.010
Benzidine	---	0.050U	0.050U	0.050U	0.050U	0.050U	<0.050
Benzoic Acid	---	0.050U	0.050U	0.050U	0.050U	0.050U	<0.050
Benzo(a)Anthracene	0.0001(P)	0.010U	0.010U	0.010U	0.010U	0.010U	<0.010
Benzo(a)Pyrene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	<0.010
Benzo(b)Fluoranthene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	<0.010
Benzo(G,H,I)Perylene	---	0.010U	0.010U	0.010U	0.010U	0.010U	<0.010
Benzo(k)Fluoranthene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	<0.010
Benzyl Alcohol	---	0.020U	0.020U	0.020U	0.020U	0.020U	<0.020
Bis(2-Chloroethoxy)Methane	---	0.010U	0.010U	0.010U	0.010U	0.010U	<0.010
Bis(2-Chloroethyl)Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	<0.010
Bis(2-Chloroisopropyl)Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	<0.010
Bis(2-Ethylhexyl)Phthalate	---	0.010U	0.0015BJ	0.010U	0.010U	0.010U	0.001BJ
Butylbenzylphthalate	0.1(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Chrysene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibenzofuran	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibenzo(A,H)Anthracene	0.0003(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibutylphthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Diethyl Phthalate	---	0.0021BJ	0.0020BJ	0.0020BJ	0.010U	0.010U	0.010U
Dimethyl Phthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Di-N-Octylphthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Fluoranthene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Fluorene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorobenzene	0.001(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorobutadiene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorocyclopentadiene	0.05(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachloroethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Indeno(1,2,3-C,D)Pyrene	0.0004(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Isophorone	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Naphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Nitrobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitrosodimethylamine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitroso-Di-N-Propylamine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitrosodiphenyl Amine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Pentachlorophenol	0.001(F)	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Phenanthrene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Dye Burial Ground Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C11P2 / 12679 / 06/05/91 / 06/06/91	06C12 / 12573 / 06/03/91 / 06/05/91	06C12P2 / 12574 / 06/03/91 / 06/05/91	06C13 / 12575 / 06/03/91 / 06/05/91	06C13P2 / 12576 / 06/03/91 / 06/05/91	06C14 / 12414 / 06/01/91 / 06/04/91	06C14P2 / 12415 / 06/01/91 / 06/04/91	06C15 / 12416 / 06/02/91 / 06/04/91	06C15P2 / 12417 / 06/02/91 / 06/04/91
EXPLOSIVES	MCL									
DNB	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
HMX	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
RDX	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TETRYL	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
TNB	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TNT	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.012J	0.020U
2,4-DNT	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C16 / 12418 / 06/02/91 / 06/04/91	06C16P2 / 12419 / 06/02/91 / 06/04/91	06C16P3 / 12420 / 06/02/91 / 06/04/91	06C17 / 12680 / 06/03/91 / 06/05/91	06C18 / 12681 / 06/05/91 / 06/06/91	06C18P2 / 12682 / 06/05/91 / 06/06/91
EXPLOSIVES	MCL						
DNB	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
HMX	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
RDX	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TETRYL	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
TNB	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TNT	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
2,4-DNT	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C11P2 / 12695 / 06/04/91 / 06/10/91	06C12 / 12589 / 06/04/91 / 06/11/91	06C12P2 / 12590 / 06/04/91 / 06/11/91	06C13 / 12591 / 06/03/91 / 06/11/91	06C13P2 / 12592 / 06/03/91 / 06/11/91	06C14 / 12434 / 06/01/91 / 06/06/91	06C14P2 / 12435 / 06/01/91 / 06/06/91	06C15 / 12436 / 06/02/91 / 06/06/91	06C15P2 / 12437 / 06/02/91 / 06/06/91
BNA	MCL									
Acenaphthene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Acenaphthylene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Aniline	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
Anthracene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzidine	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Benzoic Acid	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Benzo(a)Anthracene	0.0001(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(a)Pyrene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(b)Fluoranthene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(G,H,I)Perylene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(k)Fluoranthene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzyl Alcohol	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
Bis(2-Chloroethoxy)Methane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Chloroethyl)Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Chloroisopropyl)Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Ethylhexyl)Phthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Butylbenzylphthalate	0.1(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Chrysene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibenzofuran	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibenzo(A,H)Anthracene	0.0003(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibutylphthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.0026BJ	0.0030BJ	0.0060BJ	0.010U
Diethyl Phthalate	---	0.010U	0.0016BJ	0.0016BJ	0.0014BJ	0.0013BJ	0.030B	0.028B	0.026B	0.0022BJ
Dimethyl Phthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Di-N-Octylphthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Fluoranthene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Fluorene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorobenzene	0.001(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorobutadiene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorocyclopentadiene	0.05(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachloroethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Indeno(1,2,3-C,D)Pyrene	0.0004(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Isophorone	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Naphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Nitrobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitrosodimethylamine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitroso-Di-N-Propylamine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitrosodiphenyl Amine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Pentachlorophenol	0.001(F)	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Phenanthrene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C16 / 12438 / 06/02/91 / 06/06/91	06C16P2 / 12439 / 06/02/91 / 06/06/91	06C16P3 / 12440 / 06/02/91 / 06/06/91	06C17 / 12596 / 06/03/91 / 06/11/91	06C18 / 12697 / 06/04/91 / 06/10/91	06C18P2 / 12698 / 06/04/91 / 06/10/91
BNA	MCL						
Phenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Pyrene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2-Dichlorobenzene	0.6(L)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2-Diphenylhydrazine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2,4-Trichlorobenzene	0.07(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,3-Dichlorobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,4-Dichlorobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Chloronaphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Chlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Methyl-4,6-Dinotrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2-Methylnaphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Methylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2-Nitrophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dimethylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dinitrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2,4-Dinitrotoluene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4,5-Trichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4,6-Trichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,6-Dinitrotoluene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
3-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
3,3'Dichlorobenzidine	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Bromophenyl Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Chloro-3-Methylphenol	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Chloroaniline	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Chlorophenyl Phenyl Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Methylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
4-Nitrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	06-19	06-20	06-21	06-22	06-23	06C09	06C10	06C10P2	06C11
	Lab Sample No:	12598	12599	12441	12600	12601	12588	12692	12693	12694
	Date Sampled:	06/03/91	06/03/91	06/02/91	06/03/91	06/03/91	06/03/91	06/04/91	06/04/91	06/04/91
	Date Analyzed:	06/11/91	06/11/91	06/06/91	06/11/91	06/11/91	06/11/91	06/10/91	06/10/91	06/10/91
BNA	MCL									
Acenaphthene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Acenaphthylene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Aniline	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
Anthracene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzidine	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Benzoic Acid	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Benzo(a)Anthracene	0.0001(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(a)Pyrene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(b)Fluoranthene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(G,H,I)Perylene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(k)Fluoranthene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzyl Alcohol	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
Bis(2-Chloroethoxy)Methane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Chloroethyl)Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Chloroisopropyl)Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Ethylhexyl)Phthalate	---	0.0099J	0.010U	0.0011BJ	0.010U	0.010U	0.010U	0.010U	0.0054J	0.010U
Butylbenzylphthalate	0.1(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Chrysene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibenzofuran	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibenzo(A,H)Anthracene	0.0003(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibutylphthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Diethyl Phthalate	---	0.010U	0.010U	0.0021BJ	0.010U	0.010U	0.0015BJ	0.010U	0.010U	0.010U
Dimethyl Phthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Di-N-Octylphthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Fluoranthene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Fluorene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorobenzene	0.001(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorobutadiene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorocyclopentadiene	0.05(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachloroethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Indeno(1,2,3-C,D)Pyrene	0.0004(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Isophorone	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Naphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Nitrobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitrosodimethylamine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitroso-Di-N-Propylamine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitrosodiphenyl Amine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Pentachlorophenol	0.001(F)	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Phenanthrene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C11P2 / 12695 / 06/04/91 / 06/10/91	06C12 / 12589 / 06/04/91 / 06/11/91	06C12P2 / 12590 / 06/04/91 / 06/11/91	06C13 / 12591 / 06/03/91 / 06/11/91	06C13P2 / 12592 / 06/03/91 / 06/11/91	06C14 / 12434 / 06/01/91 / 06/06/91	06C14P2 / 12435 / 06/01/91 / 06/06/91	06C15 / 12436 / 06/02/91 / 06/06/91	06C15P2 / 12437 / 06/02/91 / 06/06/91
BNA	MCL									
Phenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Pyrene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2-Dichlorobenzene	0.6(L)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2-Diphenylhydrazine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2,4-Trichlorobenzene	0.07(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,3-Dichlorobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,4-Dichlorobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Chloronaphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Chlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Methyl-4,6-Dinotrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2-Methylnaphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Methylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2-Nitrophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dimethylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dinitrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2,4-Dinitrotoluene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4,5-Trichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4,6-Trichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,6-Dinitrotoluene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
3-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
3,3'Dichlorobenzidine	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Bromophenyl Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Chloro-3-Methylphenol	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Chloroaniline	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Chlorophenyl Phenyl Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Methylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
4-Nitrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB3	R1E	R2E	R3E	06-14A 12696 06/04/91 06/10/91	06-15 12593 06/03/91 06/11/91	06-16 12594 06/03/91 06/11/91	06-17 12595 06/03/91 06/11/91	06-18 12597 06/03/91 06/11/91
BNA	MCL									
Acenaphthene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Acenaphthylene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Aniline	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
Anthracene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzidine	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Benzoic Acid	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Benzo(a)Anthracene	0.0001(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(a)Pyrene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(b)Fluoranthene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(G,H,I)Perylene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzo(k)Fluoranthene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Benzyl Alcohol	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
Bis(2-Chloroethoxy)Methane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Chloroethyl)Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Chloroisopropyl)Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Bis(2-Ethylhexyl)Phthalate	---	0.010U	0.010U	0.010U	0.0021BJ	0.010U	0.010U	0.010U	0.010U	0.010U
Butylbenzylphthalate	0.1(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Chrysene	0.0002(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibenzofuran	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibenzo(A,H)Anthracene	0.0003(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Dibutylphthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.0018J	0.010U	0.010U	0.010U
Diethyl Phthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.0054BJ	0.0014BJ	0.010U	0.010U
Dimethyl Phthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Di-N-Octylphthalate	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Fluoranthene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Fluorene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorobenzene	0.001(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorobutadiene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachlorocyclopentadiene	0.05(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Hexachloroethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Indeno(1,2,3-C,D)Pyrene	0.0004(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Isophorone	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Naphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Nitrobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitrosodimethylamine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitroso-Di-N-Propylamine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
N-Nitrosodiphenyl Amine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Pentachlorophenol	0.001(F)	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Phenanthrene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06-19 / 12598 / 06/03/91 / 06/11/91	06-20 / 12599 / 06/03/91 / 06/11/91	06-21 / 12441 / 06/02/91 / 06/06/91	06-22 / 12600 / 06/03/91 / 06/11/91	06-23 / 12601 / 06/03/91 / 06/11/91	06C09 / 12588 / 06/03/91 / 06/11/91	06C10 / 12692 / 06/04/91 / 06/10/91	06C10P2 / 12693 / 06/04/91 / 06/10/91	06C11 / 12694 / 06/04/91 / 06/10/91
BNA	MCL									
Phenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Pyrene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2-Dichlorobenzene	0.6(L)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2-Diphenylhydrazine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2,4-Trichlorobenzene	0.07(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,3-Dichlorobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,4-Dichlorobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Chloronaphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Chlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Methyl-4,6-Dinotrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2-Methylnaphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Methylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2-Nitrophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dimethylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dinitrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2,4-Dinitrotoluene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4,5-Trichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4,6-Trichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,6-Dinitrotoluene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
3-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
3,3'Dichlorobenzidine	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Bromophenyl Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Chloro-3-Methylphenol	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Chloroaniline	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Chlorophenyl Phenyl Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Methylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
4-Nitrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
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IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	06C01	06C01P2	06C01P3	06C02	06C02P2	06C03	06C03P2	06C04	06C04P2
	Lab Sample No:	12504			12732	12733	12734	12735	12736	12737
	Date Sampled:	05/31/91			06/04/91	06/04/91	06/04/91	06/04/91	06/04/91	06/04/91
	Date Analyzed:	06/10/91			06/22/91	06/22/91	06/22/91	06/22/91	06/22/91	06/22/91
VOLATILE ORGANICS	MCL									
Acetone	---	0.0041BJ	NOT SAMPLED	NO SAMPLE	0.10U	0.10U	0.0062BJ	0.0075BJ	0.0096BJ	0.10U
Benzene	---	0.005U	NOT SAMPLED	NO SAMPLE	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromodichloromethane	0.1(L)	0.005U	NOT SAMPLED	NO SAMPLE	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromoform	0.1(L)	0.005U	NOT SAMPLED	NO SAMPLE	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromomethane	---	0.010U	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Carbon Tetrachloride	0.005(F)	0.005U	NOT SAMPLED	NO SAMPLE	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Carbondisulfide	---	0.005U	NOT SAMPLED	NO SAMPLE	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chlorobenzene	---	0.005U	NOT SAMPLED	NO SAMPLE	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chloroethane	---	0.010U	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Chloroform	---	0.005U	NOT SAMPLED	NO SAMPLE	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chloromethane	---	0.010U	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
cis-1,2-Dichloroethene	---	0.005U	NOT SAMPLED	NO SAMPLE	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
cis-1,3-Dichloropropene	---	0.005U	NOT SAMPLED	NO SAMPLE	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Dibromochloromethane	---	0.005U	NOT SAMPLED	NO SAMPLE	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Ethylbenzene	---	0.005U	NOT SAMPLED	NO SAMPLE	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Methylene Chloride	0.005(P)	0.0064B	NOT SAMPLED	NO SAMPLE	0.0015BJ	0.0016BJ	0.0090B	0.0065B	0.014B	0.026B
Styrene	0.1(F)	0.005U	NOT SAMPLED	NO SAMPLE	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Tetrachloroethene	---	0.005U	NOT SAMPLED	NO SAMPLE	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Toluene	1(F)	0.005U	NOT SAMPLED	NO SAMPLE	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trans-1,2-Dichloroethene	---	0.005U	NOT SAMPLED	NO SAMPLE	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trans-1,3-Dichloropropene	---	0.005U	NOT SAMPLED	NO SAMPLE	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trichloroethene	---	0.005U	NOT SAMPLED	NO SAMPLE	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
T-Xylene	10(F)	0.005U	NOT SAMPLED	NO SAMPLE	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Vinyl Acetate	---	0.005U	NOT SAMPLED	NO SAMPLE	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Vinyl Chloride	0.002(F)	0.010U	NOT SAMPLED	NO SAMPLE	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,1-Dichloroethane	---	0.005U	NOT SAMPLED	NO SAMPLE	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1-Dichloroethene	---	0.005U	NOT SAMPLED	NO SAMPLE	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,1-Trichloroethane	0.2(F)	0.005U	NOT SAMPLED	NO SAMPLE	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,2-Trichloroethane	0.005(P)	0.005U	NOT SAMPLED	NO SAMPLE	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,2,2-Tetrachloroethane	---	0.005U	NOT SAMPLED	NO SAMPLE	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,2-Dichloroethane	0.005(F)	0.005U	NOT SAMPLED	NO SAMPLE	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,2-Dichloropropane	0.005(F)	0.005U	NOT SAMPLED	NO SAMPLE	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
2-Butanone	---	0.10	NOT SAMPLED	NO SAMPLE	0.10	0.10	0.10	0.10	0.10	0.10
2-Hexanone	---	0.005U	NOT SAMPLED	NO SAMPLE	<0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
4-Methyl-2-Pentanone	---	0.005U	NOT SAMPLED	NO SAMPLE	<0.005U	0.005U	0.005U	0.005U	0.005U	0.005U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: Lab Sample No: Date Sampled: Date Analyzed:	FB3	R1E	R2E	R3E	06-14A 12696 06/04/91 06/10/91	06-15 12593 06/03/91 06/11/91	06-16 12594 06/03/91 06/11/91	06-17 12595 06/03/91 06/11/91	06-18 12597 06/03/91 06/11/91
BNA	MCL									
Phenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Pyrene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2-Dichlorobenzene	0.6(L)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2-Diphenylhydrazine	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,2,4-Trichlorobenzene	0.07(P)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,3-Dichlorobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,4-Dichlorobenzene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Chloronaphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Chlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Methyl-4,6-Dinotrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2-Methylnaphthalene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Methylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2-Nitrophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dimethylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4-Dinitrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
2,4-Dinitrotoluene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4,5-Trichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,4,6-Trichlorophenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
2,6-Dinitrotoluene	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
3-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
3,3'Dichlorobenzidine	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Bromophenyl Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Chloro-3-Methylphenol	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Chloroaniline	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
4-Chlorophenyl Phenyl Ether	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Methylphenol	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
4-Nitroaniline	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
4-Nitrophenol	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
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Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	06C06	06C06P2	06C07	06C08	06C08P2
	Lab Sample No:	12834		12835	12463	12464
	Date Sampled:	06/05/91		06/05/91	05/31/91	05/31/91
	Date Analyzed:	07/10/91		07/10/91	07/06/91	07/06/91
PESTICIDES/PCBs	MCL					
A-BHC	---	0.000030U	NO SAMPLE	0.000029U	0.000030U	0.000030U
a-CHLORDANE	0.002(F)	0.000050U	NO SAMPLE	0.000048U	0.000050U	0.000051U
A-Endosulfan	---	0.00014U	NO SAMPLE	0.00013U	0.00014U	0.00014U
Aldrin	---	0.000040U	NO SAMPLE	0.000038U	0.000040U	0.000040U
B-BHC	---	0.000060U	NO SAMPLE	0.000058U	0.000059U	0.000061U
B-Endosulfan	---	0.000040U	NO SAMPLE	0.000038U	0.000040U	0.000040U
D-BHC	---	0.000090U	NO SAMPLE	0.000087U	0.000089U	0.000091U
Dieldrin	---	0.000020U	NO SAMPLE	0.000019U	0.000020U	0.000020U
Disulfoton	---	0.00069U	NO SAMPLE	0.00067U	0.00069U	0.00071U
Endosulfan sulfate	---	0.00066U	NO SAMPLE	0.00063U	0.00065U	0.00067U
Endrin	0.002(P)	0.000066U	NO SAMPLE	0.000058U	0.000059U	0.000061U
Endrin Aldehyde	---	0.00023U	NO SAMPLE	0.00022U	0.00023U	0.00023U
Ethyl Parathion	---	0.00060U	NO SAMPLE	0.00058U	0.00059U	0.00061U
Famphur	---	0.0012U	NO SAMPLE	0.0012U	0.0012U	0.0012U
G-BHC	---	0.000040U	NO SAMPLE	0.000038U	0.000040U	0.000040U
g-CHLORDANE	0.002(F)	0.000050U	NO SAMPLE	0.000048U	0.000050U	0.000050U
Heptachlor	0.0004(F)	0.000011J	NO SAMPLE	0.000029U	0.000030U	0.000030U
Heptachlor Epoxide	0.0002(F)	0.00083U	NO SAMPLE	0.000080U	0.00082U	0.00084U
KEPONE	---	0.0060U	NO SAMPLE	0.0058U	0.0058U	0.0058U
Methoxychlor	0.04(F)	0.0018U	NO SAMPLE	0.0017U	0.0017U	0.0018U
Methyl Parathion	---	0.0012U	NO SAMPLE	0.0012U	0.0012U	0.0012U
PCB-1016	0.0005(F)	0.0007U	NO SAMPLE	0.0006U	0.0006U	0.0007U
PCB-1221	0.0005(F)	0.0007U	NO SAMPLE	0.0006U	0.0006U	0.0007U
PCB-1232	0.0005(F)	0.0007U	NO SAMPLE	0.0006U	0.0006U	0.0007U
PCB-1242	0.0005(F)	0.0007U	NO SAMPLE	0.0006U	0.0006U	0.0007U
PCB-1248	0.0005(F)	0.0007U	NO SAMPLE	0.0006U	0.0006U	0.0007U
PCB-1254	0.0005(F)	0.0013U	NO SAMPLE	0.0012U	0.0013U	0.0013U
PCB-1260	0.0005(F)	0.0013U	NO SAMPLE	0.0012U	0.000438J	0.0013U
Phorate	---	0.00040U	NO SAMPLE	0.00038U	0.00040U	0.00040U
PPDDD	---	0.00011U	NO SAMPLE	0.00011U	0.00011U	0.00011U
PPDDE	---	0.000040U	NO SAMPLE	0.000038U	0.000040U	0.000040U
PPDDT	---	0.00012U	NO SAMPLE	0.00012U	0.00012U	0.00012U
Toxaphene	0.003(F)	0.0024U	NO SAMPLE	0.0023U	0.0024U	0.0024U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C05 / 12738 / 06/04/91 / 06/22/91	06C06 / 12861 / 06/05/91 / 06/19/91	06C06P2 / 12739 / 06/04/91 / 06/22/91	06C07 / 12862 / 06/05/91 / 06/19/91	06C08 / 12502 / 05/31/91 / 06/10/91	06C08P2 / 12503 / 05/31/91 / 06/10/91
VOLATILE ORGANICS	MCL						
Acetone	---	0.10U	0.0083BJ	0.025BJ	0.0034BJ	0.0042BJ	0.0067BJ
Benzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromodichloromethane	0.1(L)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromoform	0.1(L)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromomethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Carbon Tetrachloride	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Carbondisulfide	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chlorobenzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chloroethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Chloroform	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chloromethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
cis-1,2-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
cis-1,3-Dichloropropene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Dibromochloromethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Ethylbenzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Methylene Chloride	0.005(P)	0.0097B	0.0022BJ	0.0072B	0.0015BJ	0.0084B	0.0075B
Styrene	0.1(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Tetrachloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Toluene	1(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trans-1,2-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trans-1,3-Dichloropropene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
T-Xylene	10(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.0018J
Vinyl Acetate	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Vinyl Chloride	0.002(F)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,1-Dichloroethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,1-Trichloroethane	0.2(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,2-Trichloroethane	0.005(P)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,2,2-Tetrachloroethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,2-Dichloroethane	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,2-Dichloropropane	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
2-Butanone	---	0.10	0.10	0.10	0.10	0.10	0.10
2-Hexanone	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
4-Methyl-2-Pentanone	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB3	R3E	R4E	06-01A	06-01B	06-06 / 16988 / 11/20/91 / 12/26/91	06-07 / 16978 / 11/20/91 / 12/24/91	06-12 / 16983 / 11/20/91 / 12/24/91	06C01 / 12456 / 05/31/91 / 07/06/91
PESTICIDES/PCBs	MCL									
A-BHC	---	0.000030U	0.000030U	0.000030U	NO SAMPLE	NOT SAMPLED	0.000046U	0.000030U	0.000030U	0.000029U
a-CHLORDANE	0.002(F)	0.000050U	0.000050U	0.000050U	NO SAMPLE	NOT SAMPLED	0.000077U	0.000050U	0.000050U	0.000049U
A-Endosulfan	---	0.00014U	0.00014U	0.00014U	NO SAMPLE	NOT SAMPLED	0.00022U	0.00014U	0.00014U	0.00014U
Aldrin	---	0.000040U	0.000040U	0.000040U	NO SAMPLE	NOT SAMPLED	0.000062U	0.000040U	0.000040U	0.000039U
B-BHC	---	0.000060U	0.000060U	0.000060U	NO SAMPLE	NOT SAMPLED	0.000092U	0.000060U	0.000060U	0.000059U
B-Endosulfan	---	0.000040U	0.000040U	0.000040U	NO SAMPLE	NOT SAMPLED	0.000062U	0.000040U	0.000040U	0.000039U
D-BHC	---	0.000090U	0.000090U	0.000090U	NO SAMPLE	NOT SAMPLED	0.00014U	0.000091U	0.000090U	0.000088U
Dieldrin	---	0.000020U	0.000020U	0.000020U	NO SAMPLE	NOT SAMPLED	0.000031U	0.000020U	0.000020U	0.000020U
Disulfoton	---	0.00070U	0.00070U	0.00070U	NO SAMPLE	NOT SAMPLED	0.0011U	0.00070U	0.00070U	0.00069U
Endosulfan sulfate	---	0.00066U	0.00066U	0.00066U	NO SAMPLE	NOT SAMPLED	0.0010U	0.00066U	0.00066U	0.00065U
Endrin	0.002(P)	0.000060U	0.000060U	0.000060U	NO SAMPLE	NOT SAMPLED	0.00092U	0.000060U	0.000060U	0.000059U
Endrin Aldehyde	---	0.00023U	0.00023U	0.00023U	NO SAMPLE	NOT SAMPLED	0.00035U	0.00023U	0.00023U	0.00023U
Ethyl Parathion	---	0.00060U	0.00060U	0.00060U	NO SAMPLE	NOT SAMPLED	0.00092U	0.00060U	0.00060U	0.00061U
Famphur	---	0.0012U	0.0012U	0.0012U	NO SAMPLE	NOT SAMPLED	0.0019U	0.0012U	0.0012U	0.0012U
G-BHC	---	0.000040U	0.000040U	0.000040U	NO SAMPLE	NOT SAMPLED	0.000062U	0.000040U	0.000040U	0.000039U
g-CHLORDANE	0.002(F)	0.000050U	0.000050U	0.000050U	NO SAMPLE	NOT SAMPLED	0.000077U	0.000050U	0.000050U	0.000049U
Heptachlor	0.0004(F)	0.000030U	0.000030U	0.000030U	NO SAMPLE	NOT SAMPLED	0.000046U	0.000030U	0.000030U	0.000030U
Heptachlor Epoxide	0.0002(F)	0.00083U	0.00083U	0.00083U	NO SAMPLE	NOT SAMPLED	0.0013U	0.00083U	0.00083U	0.00083U
KEPONE	---	0.0060U	0.0060U	0.0060U	NO SAMPLE	NOT SAMPLED	0.0092U	0.0060U	0.0060U	0.00059U
Methoxychlor	0.04(F)	0.0018U	0.0018U	0.0018U	NO SAMPLE	NOT SAMPLED	0.0027U	0.0018U	0.0018U	0.0018U
Methyl Parathion	---	0.0012U	0.0012U	0.0012U	NO SAMPLE	NOT SAMPLED	0.0018U	0.0012U	0.0012U	0.0012U
PCB-1016	0.0005(F)	0.0007U	0.0007U	0.0007U	NO SAMPLE	NOT SAMPLED	0.0010U	0.0007U	0.0007U	0.0006U
PCB-1221	0.0005(F)	0.0007U	0.0007U	0.0007U	NO SAMPLE	NOT SAMPLED	0.0010U	0.0007U	0.0007U	0.0006U
PCB-1232	0.0005(F)	0.0007U	0.0007U	0.0007U	NO SAMPLE	NOT SAMPLED	0.0010U	0.0007U	0.0007U	0.0006U
PCB-1242	0.0005(F)	0.0007U	0.0007U	0.0007U	NO SAMPLE	NOT SAMPLED	0.0010U	0.0007U	0.0007U	0.0006U
PCB-1248	0.0005(F)	0.0007U	0.0007U	0.0007U	NO SAMPLE	NOT SAMPLED	0.0010U	0.0007U	0.0007U	0.0006U
PCB-1254	0.0005(F)	0.0013U	0.0013U	0.0013U	NO SAMPLE	NOT SAMPLED	0.0020U	0.0013U	0.0013U	0.000228J
PCB-1260	0.0005(F)	0.0013U	0.0013U	0.0013U	NO SAMPLE	NOT SAMPLED	0.0020U	0.0013U	0.0013U	0.0013U
Phorate	---	0.00040U	0.00040U	0.00040U	NO SAMPLE	NOT SAMPLED	0.00062U	0.00040U	0.00040U	0.00039U
PPDDD	---	0.00011U	0.00011U	0.00011U	NO SAMPLE	NOT SAMPLED	0.00017U	0.00011U	0.00011U	0.00011U
PPDDE	---	0.000040U	0.000040U	0.000040U	NO SAMPLE	NOT SAMPLED	0.000062U	0.000040U	0.000040U	0.000039U
PPDDT	---	0.00012U	0.00012U	0.00012U	NO SAMPLE	NOT SAMPLED	0.00018U	0.00012U	0.00012U	0.00012U
Toxaphene	0.003(F)	0.0024U	0.0024U	0.0024U	NO SAMPLE	NOT SAMPLED	0.0037U	0.0024U	0.0024U	0.0024U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: Lab Sample No: Date Sampled: Date Analyzed:	FB3	TRIP BLANK	R3E	R4E	06-01A 12384 05/30/91 06/10/91	06-01B 11/15/91	06-06 12379 05/30/91 06/10/91	06-07 12380 05/30/91 06/10/91	06-12 12381 05/30/91 06/10/91
VOLATILE ORGANICS	MCL									
Acetone	---	0.0047BJ	0.007BJ	0.020BJ	0.005BJ	0.0037BJ	NOT SAMPLED	0.019BJ	0.0049BJ	0.0039BJ
Benzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U
Bromodichloromethane	0.1(L)	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U
Bromoform	0.1(L)	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U
Bromomethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U
Carbon Tetrachloride	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U
Carbondisulfide	---	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U
Chlorobenzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U
Chloroethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U
Chloroform	---	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U
Chloromethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U
cis-1,2-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U
cis-1,3-Dichloropropene	---	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U
Dibromochloromethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U
Ethylbenzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U
Methylene Chloride	0.005(P)	0.014B	0.005B	0.011B	0.006B	0.0008BJ	NOT SAMPLED	0.0045BJ	0.0017BJ	0.0023BJ
Styrene	0.1(F)	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U
Tetrachloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U
Toluene	1(F)	0.005U	0.005U	0.004J	0.004J	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U
Trans-1,2-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U
Trans-1,3-Dichloropropene	---	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U
Trichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U
T-Xylene	10(F)	0.002J	0.005U	0.002J	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U
Vinyl Acetate	---	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U
Vinyl Chloride	0.002(F)	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U
1,1-Dichloroethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U
1,1-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U
1,1,1-Trichloroethane	0.2(F)	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U
1,1,2-Trichloroethane	0.005(P)	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U
1,1,2,2-Tetrachloroethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U
1,2-Dichloroethane	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U
1,2-Dichloropropane	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U
2-Butanone	---	0.10U	0.10U	0.002J	0.10U	0.10U	NOT SAMPLED	0.10U	0.10U	0.10U
2-Hexanone	---	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U
4-Methyl-2-Pentanone	---	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics).
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	06C01P2	06C01P3	06C02	06C02P2	06C03	06C03P2	06C04	06C04P2	06C05
	Lab Sample No:		12400	12751	12752	12753	12754	12755	12756	12757
	Date Sampled:		05/31/91	06/04/91	06/04/91	06/04/91	06/05/91	06/05/91	06/05/91	06/05/91
	Date Analyzed:		06/10/91	06/27/91	06/27/91	06/27/91	06/27/91	06/27/91	06/27/91	06/27/91
METALS	MCL									
Aluminum	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Antimony	0.01(P)	NOT SAMPLED	0.0081B	0.0143B	0.0137B	0.0127B	0.0113B	0.0129B	0.0123B	0.0156B
Arsenic	0.05(F)	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0123	0.0020U	0.0020U	0.0020UW	0.0020U
Barium	2.0(F)	NOT SAMPLED	0.016B	0.108BN	0.011BN	0.075BN	0.049BN	0.132BN	0.010UN	0.057BN
Beryllium	0.001(P)	NOT SAMPLED	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U
Cadmium	0.005(F)	NOT SAMPLED	0.00020U	0.004U	0.004U	0.004U	0.004U	0.004U	0.004U	0.004U
Calcium	---	NOT SAMPLED	259	80.5	59.2	55.0	72.8	74.3	66.3	11.6
Chromium	0.1(F)	NOT SAMPLED	0.005U	0.005U	0.005U	0.005B	0.005U	0.005U	0.005U	0.005U
Cobalt	---	NOT SAMPLED	0.048B	0.006U	0.016B	0.008B	0.009B	0.010B	0.013B	0.016B
Copper	1.3(F)	NOT SAMPLED	0.005U	0.005U	0.005U	0.005B	0.005U	0.005U	0.005B	0.008B
Iron	---	NOT SAMPLED	1.20	1.89	0.010U	7.21	0.014B	1.17	0.010U	0.010U
Lead	0.015(F)	NOT SAMPLED	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U
Magnesium	---	NOT SAMPLED	225	16.3	39.5	11.4	17.6	22.0	47.2	3.33B
Manganese	---	NOT SAMPLED	1.29	0.141	0.019	0.364	0.028	0.108	0.049	0.009B
Mercury	0.002(F)	NOT SAMPLED	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U
Nickel	0.1(P)	NOT SAMPLED	0.101	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Potassium	---	NOT SAMPLED	15.8	1.53B	1.73B	1.23B	1.62B	2.67B	3.23B	1.16B
Selenium	0.05(F)	NOT SAMPLED	0.0028B	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
Silver	---	NOT SAMPLED	0.0010U	0.0010U	0.0010U	0.0010UW	0.0010U	0.0010UW	0.0010UW	0.0010UW
Sodium	---	NOT SAMPLED	69.8	17.7	5.27	18.7	15.2	38.7	87.2	153
Thallium	0.002(P)	NOT SAMPLED	0.0020U	0.0080U	0.0080U	0.0080U	0.0080U	0.0080U	0.0080U	0.0080U
Tin	---	NOT SAMPLED	0.035U	0.035U	0.035U	0.035U	0.035U	0.035U	0.035U	0.035U
Vanadium	---	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Zinc	---	NOT SAMPLED	0.030	0.006U	0.006U	0.007B	0.006U	0.006U	0.006U	0.006U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected B = Value is < CRDL but > detection limit (inorganics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C01P2	06C01P3	06C02	06C02P2	06C03	06C03P2	06C04	06C04P2	06C05
	Lab Sample No:			12700	12701	12702	12703	12704	12705	12706
	Date Sampled:			06/05/91	06/05/91	06/05/91	06/05/91	06/05/91	06/05/91	06/05/91
	Date Analyzed:			07/10/91	07/10/91	07/10/91	07/10/91	07/10/91	07/10/91	07/10/91
PESTICIDES/PCBs	MCL									
A-BHC	---	NOT SAMPLED	NO SAMPLE	0.000029U	0.000029U	0.000029U	0.000030U	0.000029U	0.000029U	0.000029U
a-CHLORDANE	0.002(F)	NOT SAMPLED	NO SAMPLE	0.000049U	0.000048U	0.000049U	0.000050U	0.000049U	0.000049U	0.000048U
A-Endosulfan	---	NOT SAMPLED	NO SAMPLE	0.00014U	0.00013U	0.00014U	0.00014U	0.00014U	0.00014U	0.00013U
Aldrin	---	NOT SAMPLED	NO SAMPLE	0.000038U	0.000038U	0.000038U	0.000040U	0.000039U	0.000039U	0.000038U
B-BHC	---	NOT SAMPLED	NO SAMPLE	0.000058U	0.000058U	0.000058U	0.000060U	0.000058U	0.000058U	0.000057U
B-Endosulfan	---	NOT SAMPLED	NO SAMPLE	0.000039U	0.000038U	0.000039U	0.000040U	0.000039U	0.000039U	0.000038U
D-BHC	---	NOT SAMPLED	NO SAMPLE	0.000087U	0.000087U	0.000087U	0.000090U	0.000089U	0.000089U	0.000086U
Dieldrin	---	NOT SAMPLED	NO SAMPLE	0.000019U	0.000019U	0.000019U	0.000020U	0.000019U	0.000019U	0.000019U
Disulfoton	---	NOT SAMPLED	NO SAMPLE	0.00068U	0.00067U	0.00068U	0.00070U	0.00068U	0.00068U	0.00067U
Endosulfan sulfate	---	NOT SAMPLED	NO SAMPLE	0.00064U	0.00063U	0.00064U	0.00066U	0.00064U	0.00064U	0.00063U
Endrin	0.002(P)	NOT SAMPLED	NO SAMPLE	0.000058U	0.000058U	0.000058U	0.000060U	0.000058U	0.000058U	0.000057U
Endrin Aldehyde	---	NOT SAMPLED	NO SAMPLE	0.00022U	0.00022U	0.00022U	0.00023U	0.00022U	0.00022U	0.00022U
Ethyl Parathion	---	NOT SAMPLED	NO SAMPLE	0.00058U	0.00058U	0.00058U	0.00060U	0.00058U	0.00058U	0.00057U
Famphur	---	NOT SAMPLED	NO SAMPLE	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0011U
G-BHC	---	NOT SAMPLED	NO SAMPLE	0.000039U	0.000038U	0.000039U	0.000040U	0.000039U	0.000039U	0.000038U
g-CHLORDANE	0.002(F)	NOT SAMPLED	NO SAMPLE	0.000049U	0.000048U	0.000049U	0.000050U	0.000049U	0.000049U	0.000048U
Heptachlor	0.0004(F)	NOT SAMPLED	NO SAMPLE	0.000011BJ	0.000009BJ	0.000029U	0.000009BJ	0.000029U	0.000029U	0.000029U
Heptachlor Epoxide	0.0002(F)	NOT SAMPLED	NO SAMPLE	0.00081U	0.00080U	0.00081U	0.00083U	0.00081U	0.00081U	0.00079U
KEPONE	---	NOT SAMPLED	NO SAMPLE	0.0058U	0.0058U	0.0058U	0.0060U	0.0058U	0.0058U	0.0057U
Methoxychlor	0.04(F)	NOT SAMPLED	NO SAMPLE	0.0017U	0.0017U	0.0017U	0.0018U	0.0017U	0.0017U	0.0017U
Methyl Parathion	---	NOT SAMPLED	NO SAMPLE	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0011U
PCB-1016	0.0005(F)	NOT SAMPLED	NO SAMPLE	0.0006U	0.0006U	0.0006U	0.0007U	0.0006U	0.0006U	0.0006U
PCB-1221	0.0005(F)	NOT SAMPLED	NO SAMPLE	0.0006U	0.0006U	0.0006U	0.0007U	0.0006U	0.0006U	0.0006U
PCB-1232	0.0005(F)	NOT SAMPLED	NO SAMPLE	0.0006U	0.0006U	0.0006U	0.0007U	0.0006U	0.0006U	0.0006U
PCB-1242	0.0005(F)	NOT SAMPLED	NO SAMPLE	0.0006U	0.0006U	0.0006U	0.0007U	0.0006U	0.0006U	0.0006U
PCB-1248	0.0005(F)	NOT SAMPLED	NO SAMPLE	0.0006U	0.0006U	0.0006U	0.0007U	0.0006U	0.0006U	0.0006U
PCB-1254	0.0005(F)	NOT SAMPLED	NO SAMPLE	0.0013U	0.0012U	0.0013U	0.0013U	0.0013U	0.0013U	0.0012U
PCB-1260	0.0005(F)	NOT SAMPLED	NO SAMPLE	0.0013U	0.0012U	0.0013U	0.0013U	0.0013U	0.0013U	0.0012U
Phorate	---	NOT SAMPLED	NO SAMPLE	0.00039U	0.00038U	0.00039U	0.00040U	0.000039U	0.000039U	0.000038U
PPDDD	---	NOT SAMPLED	NO SAMPLE	0.00011U	0.00011U	0.00011U	0.00011U	0.00011U	0.00011U	0.00010U
PPDDE	---	NOT SAMPLED	NO SAMPLE	0.000039U	0.000038U	0.000039U	0.000040U	0.000039U	0.000039U	0.000039U
PPDDT	---	NOT SAMPLED	NO SAMPLE	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U	0.00011U
Toxaphene	0.003(F)	NOT SAMPLED	NO SAMPLE	0.0023U	0.00023U	0.0023U	0.0024U	0.0023U	0.0023U	0.0023U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	06C01P2	06C01P3	06C02	06C02P2	06C03	06C03P2	06C04	06C04P2	06C05
	Lab Sample No:			12767	12768	12769	12770	12771	12772	12773
	Date Sampled:			06/04/91	06/04/91	06/05/91	06/05/91	06/05/91	06/05/91	06/05/91
	Date Anal. (Cn):			06/13/91	06/13/91	06/13/91	06/13/91	06/13/91	06/13/91	06/13/91
	Date Anal. (S):			06/13/91	06/13/91	06/13/91	06/13/91	06/13/91	06/13/91	06/13/91
CYANIDE and SULFIDE	MCL									
Cyanide	0.2(P)	NOT SAMPLED	NO SAMPLE	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Sulfide	---	NOT SAMPLED	NO SAMPLE	0.020U	0.020U	0.029	0.020U	0.020U	0.023	0.020U

Analyte	Well No:	06C06	06C06P2	06C07	06C08	06C08P2
	Lab Sample No:	12847	12723	12848	12482	12483
	Date Sampled:	06/05/91	06/05/91	06/05/91	05/31/91	05/31/91
	Date Analyzed:	07/23/91	07/23/91	07/23/91	07/23/91	07/23/91
HERBICIDES	MCL					
2,4-D	0.07(F)	0.012U	0.012U	0.012U	0.012U	0.012U
2,4,5-T	---	0.0019U	0.0019U	0.0019U	0.0019U	0.0020U
2,4,5-TP	0.05(F)	0.0016U	0.0017U	0.0016U	0.0016U	0.00043J
Dinoseb	0.007(P)	0.00067U	0.00068U	0.00067U	0.00067U	0.00069U

Analyte	Well No:	06C06	06C06P2	06C07	06C08	06C08P2
	Lab Sample No:	12890	12774	12891	12543	12544
	Date Sampled:	06/05/91	06/05/91	06/05/91	05/31/91	05/31/91
	Date Anal. (Cn):	06/14/91	06/13/91	06/14/91	06/11/91	06/11/91
	Date Anal. (S):	06/10/91	06/13/91	06/10/91	06/04/91	06/04/91
CYANIDE and SULFIDE	MCL					
Cyanide	0.2(P)	0.005U	0.005U	0.005U	0.005U	0.005U
Sulfide	---	0.020U	0.020U	0.020U	0.065	0.020U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
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IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C06	06C06P2	06C07	06C08	06C08P2
	Lab Sample No:	12876	12758	12877	12523	12524
	Date Sampled:	06/05/91	06/05/91	06/05/91	05/31/91	05/31/91
	Date Analyzed:	07/11/91	06/27/91	07/11/91	60/17/91	06/17/91
METALS	MCL					
Aluminum	---	0.013B	0.010U	0.010U	0.107B	0.206
Antimony	0.01(P)	0.0036	0.0187B	0.0116B	0.0206B	0.0178B
Arsenic	0.05(F)	0.0020U	0.0020U	0.002U	0.0059B	0.0020U
Barium	2.0(F)	0.014B	0.019BN	0.212	0.010B	0.010B
Beryllium	0.001(P)	0.001U	0.001U	0.001U	0.001U	0.001U
Cadmium	0.005(F)	0.004U	0.004UN	0.004U	0.004UN	0.0040UN
Calcium	---	12.1	12.6	5.60	1.23B	9.50
Chromium	0.1(F)	0.005U	0.05B	0.005U	0.005U	0.005U
Cobalt	---	0.006UN	0.016B	0.006UN	0.006U	0.0060U
Copper	1.3(F)	0.005U	0.012B	0.022B	0.017B	0.018B
Iron	---	0.010U	0.022B	0.010U	0.142	15.5
Lead	0.015(F)	0.0010U	0.0013B	0.0010U	0.0010UW	0.0010U
Magnesium	---	4.85B	7.36	5.86	0.150U	5.74
Manganese	---	0.025	0.125	0.007B	0.010BN	1.98
Mercury	0.002(F)	0.0002U	0.0020U	0.0002U	0.0002U	0.0020U
Nickel	0.1(P)	0.005U	0.005U	0.005U	0.005U	0.026B
Potassium	---	1.02B	2.11	2.32B	3.46B	1.98
Selenium	0.05(F)	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
Silver	---	0.0010U	0.0010UN	0.0010U	0.0010UW	0.0010U
Sodium	---	9.87	136	150	177	4.68B
Thallium	0.002(P)	0.0080U	0.0080U	0.0080U	0.0080U	0.0080U
Tin	---	0.035U	0.035U	0.035U	0.035U	0.035U
Vanadium	---	0.005UN	0.005U	0.005UN	0.005U	0.005U
Zinc	---	0.006U	0.006U	0.006U	0.070	0.046

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected B = Value is < CRDL but > detection limit (inorganics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Dye Burial Ground Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C06 / 12808 / 06/05/91 / 06/08/91	06C06P2 / 12675 / 06/05/91 / 06/06/91	06C07 / 12809 / 06/05/91 / 06/08/91	06C08 / 12424 / 06/02/91 / 06/04/91	06C08P2 / 12425 / 06/02/91 / 06/04/91
EXPLOSIVES	MCL					
DNB	---	0.020U	0.020U	0.020U	0.020U	0.020U
HMX	---	0.020U	0.020U	0.020U	0.020U	0.020U
RDX	---	0.020U	0.020U	0.020U	0.020U	0.020U
TETRYL	---	0.050U	0.050U	0.050U	0.050U	0.050U
TNB	---	0.020U	0.020U	0.020U	0.020U	0.020U
TNT	---	0.020U	0.020U	0.020U	0.020U	0.020U
2,4-DNT	---	0.020U	0.020U	0.020U	0.020U	0.020U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB3	R3E	R4E	06-01A 12399 05/31/91 06/10/91	06-01B	06-06 12394 05/30/91 06/10/91	06-07 12395 05/30/91 06/10/91	06-12 12396 05/30/91 06/10/91	06C01 12525 05/31/91 06/17/91
METALS	MCL									
Aluminum	---	0.010U	0.010U	0.010UN	0.010U	NOT SAMPLED	0.010U	78.6	0.010U	0.020B
Antimony	0.01(P)	0.0159B	0.0154B	0.0116B	0.0144B	NOT SAMPLED	0.0078B	0.0184BW	0.0144B	0.0066B
Arsenic	0.05(F)	0.0020U	0.0020U	0.0020U	0.0020U	NOT SAMPLED	0.0020U	0.0066B	0.0020U	0.0020U
Barium	2.0(F)	0.010U	0.010U	0.010U	0.017B	NOT SAMPLED	0.015B	0.010U	0.017B	0.120B
Beryllium	0.001(P)	0.0010U	0.001U	0.001U	0.001U	NOT SAMPLED	0.001U	0.014	0.001U	0.001U
Cadmium	0.005(F)	0.004U	0.00020U	0.00020U	0.004UN	NOT SAMPLED	0.004U	0.008	0.004U	0.0040UN
Calcium	---	0.158B	0.245B	0.302B	107	NOT SAMPLED	590	204	591	49.8
Chromium	0.1(F)	0.0058N	0.005U	0.005U	0.005U	NOT SAMPLED	0.007B	0.016	0.005U	0.005U
Cobalt	---	0.010U	0.010U	0.015B	0.015B	NOT SAMPLED	0.323	0.466	0.064	0.006U
Copper	1.3(F)	0.020B	0.062	0.036	0.019B	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U
Iron	---	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	4.16	50.1	0.55B	0.045B
Lead	0.015(F)	0.0010U	0.0010U	0.0010U	0.0010U	NOT SAMPLED	0.0010U	0.0027B	0.0010U	0.0010U
Magnesium	---	0.200U	0.100U	0.133B	75.8	NOT SAMPLED	422	168	386	10.3
Manganese	---	0.007B	0.007B	0.011B	0.095	NOT SAMPLED	41.8	10.4	16.5	2.44B
Mercury	0.002(F)	0.0002U	0.0002	0.0002U	0.0002U	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0002U
Nickel	0.1(P)	0.005U	0.005U	0.005UN	0.010B	NOT SAMPLED	1.02	1.59	0.345	0.006B
Potassium	---	1.00U	0.208B	0.318B	1.36B	NOT SAMPLED	9.62	1.81B	8.47	2.44B
Selenium	0.05(F)	0.0020U	0.0020U	0.0020U	0.0020U	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0020U
Silver	---	0.0010U	0.0010U	0.0010UW	0.0010U	NOT SAMPLED	0.0010U	0.0010U	0.0010U	0.0010U
Sodium	---	0.215B	0.549B	0.333B	108	NOT SAMPLED	66.8	52.8	40.4	12.7
Thallium	0.002(P)	0.0020U	0.0020U	0.0020U	0.0080U	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0080U
Tin	---	0.050U	0.050U	0.050U	0.035U	NOT SAMPLED	0.035U	0.035U	0.035U	0.035U
Vanadium	---	0.010U	0.014B	0.010U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U
Zinc	---	0.005U	0.006B	0.005U	0.006U	NOT SAMPLED	0.778	2.61	0.130	0.020

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected B = Value is < CRDL but > detection limit (inorganics)
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IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	FB3	R3E	R4E	06-01A	06-01B	06-06	06-07	06-12	06C01
	Lab Sample No:				12377		12372	12373	12374	12484
	Date Sampled:				05/31/91		05/30/91	05/30/91	05/30/91	05/31/91
	Date Analyzed:				07/23/91		07/23/91	07/23/91	07/23/91	07/23/91
HERBICIDES	MCL									
2,4-D	0.07(F)	0.012U	0.012U	0.012U	0.022U	NOT SAMPLED	0.012U	0.012U	0.012U	0.012U
2,4,5-T	---	0.0020U	0.0020U	0.0020U	0.0036U	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0019U
2,4,5-TP	0.05(F)	0.0017U	0.0017U	0.0018U	0.0031U	NOT SAMPLED	0.0017U	0.0017U	0.0017U	0.0016U
Dinoseb	0.007(P)	0.00070U	0.00070U	0.00070U	0.0013U	NOT SAMPLED	0.00069U	0.00071U	0.00069U	0.00067U

Analyte	Well No:	FB3	R3E	R4E	06-01A	06-01B	06-06	06-07	06-12	06C01
	Lab Sample No:				12392		12387	12388	12389	12545
	Date Sampled:				05/30/91		05/30/91	05/30/91	05/30/91	05/31/91
	Date Anal. (Cn):				06/11/91		06/11/91	06/11/91	06/11/91	06/11/91
	Date Anal. (S):				06/02/91		06/02/91	06/02/91	06/02/91	06/04/91
CYANIDE and SULFIDE	MCL									
Cyanide	0.2(P)	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U
Sulfide	---	0.020U	0.020	0.020U	0.020U	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U

Analyte	Well No:	06C01P2	06C01P3	06C02	06C02P2	06C03	06C03P2	06C04	06C04P2	06C05
	Lab Sample No:			12716	12717	12718	12719	12720	12721	12722
	Date Sampled:			06/04/91	06/04/91	06/04/91	06/05/91	06/05/91	06/05/91	06/05/91
	Date Analyzed:			07/23/91	07/23/91	07/23/91	07/23/91	07/23/91	07/23/91	07/23/91
HERBICIDES	MCL									
2,4-D	0.07(F)	NOT SAMPLED	NO SAMPLE	0.012U	0.012U	0.012U	0.012U	0.012U	0.012U	0.012U
2,4,5-T	---	NOT SAMPLED	NO SAMPLE	0.0019U	0.0019U	0.0020U	0.0020U	0.0020U	0.0019U	0.0019U
2,4,5-TP	0.05(F)	NOT SAMPLED	NO SAMPLE	0.0017U	0.0017U	0.0017U	0.0017U	0.00041J	0.0017U	0.0017U
Dinoseb	0.007(P)	NOT SAMPLED	NO SAMPLE	0.00068U	0.00068U	0.00069U	0.00070U	0.00070U	0.00068U	0.00068U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB3	R1E	R2E	R3E	06-14A	06-15	06-16	06-17	06-18
	Lab Sample No:	16256	16732	16733	16805	16857		17017		16830
	Date Sampled:	11/13/91	11/16/91	11/18/91	11/19/91	11/18/91	11/15/91	11/19/91	11/16/91	11/18/91
	Date Analyzed:	12/31/91	12/31/91	12/31/91	12/31/91	12/31/91		01/06/92		12/31/91
HERBICIDES	MCL									
2,4-D	0.07(F)	0.012U	0.012U	0.012U	0.012U	0.012U	NOT SAMPLED	0.012U	NO SAMPLE	0.012U
2,4,5-T	---	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	NOT SAMPLED	0.0020U	NO SAMPLE	0.0020U
2,4,5-TP	0.05(F)	0.0017U	0.0017U	0.0017U	0.0017U	0.0017U	NOT SAMPLED	0.0017U	NO SAMPLE	0.0017U
Dinoseb	0.007(P)	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	NOT SAMPLED	0.00070U	NO SAMPLE	0.00070U

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Anal. (Cn): / Date Anal. (S):	FB3	R1E	R2E	R3E	06-14A	06-15	06-16	06-17	06-18
	Lab Sample No:	16282	16766	16767	16878	16886		17072		16888
	Date Sampled:	11/13/91	11/16/91	11/18/91	11/19/91	11/18/91	11/15/91	11/19/91	11/16/91	11/18/91
	Date Anal. (Cn):	11/21/91	11/22/91	11/22/91	11/26/91	11/26/91		11/25/91		11/26/91
	Date Anal. (S):	11/19/91	11/19/91	11/19/91	11/22/91	11/22/91		11/22/91		11/22/91
CYANIDE and SULFIDE	MCL									
Cyanide	0.2(P)	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	NO SAMPLE	0.005U
Sulfide	---	0.020U	0.020U	0.020U	0.020U	0.020U	NOT SAMPLED	0.020U	NO SAMPLE	0.020U

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06-19	06-20	06-21	06-22	06-23	06C09	06C10	06C10P2	06C11
	Lab Sample No:		16860		16861	16862	16850	16851	16852	16954
	Date Sampled:	11/18/91	11/18/91	11/20/91	11/18/91	11/18/91	11/18/91	11/18/91	11/18/91	11/18/91
	Date Analyzed:		12/31/91		12/31/91	12/31/91	12/31/91	12/31/91	12/31/91	12/11/91
HERBICIDES	MCL									
2,4-D	0.07(F)	NO SAMPLE	0.012U	NOT SAMPLED	0.012U	0.012U	0.012U	0.012U	0.012U	0.012U
2,4,5-T	---	NO SAMPLE	0.0020U	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
2,4,5-TP	0.05(F)	NO SAMPLE	0.0017U	NOT SAMPLED	0.0017U	0.0017U	0.0017U	0.0017U	0.0017U	0.0017U
Dinoseb	0.007(P)	NO SAMPLE	0.00070U	NOT SAMPLED	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U

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IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	06-19	06-20	06-21	06-22	06-23	06C09	06C10	06C10P2	06C11
	Lab Sample No:	16889	16890		16891	16892	16879	16880	16881	17063
	Date Sampled:	11/18/91	11/18/91	11/20/91	11/18/91	11/18/91	11/18/91	11/18/91	11/18/91	11/18/91
	Date Anal. (Cn):	11/26/91	11/26/91		11/26/91	11/26/91	11/26/91	11/26/91	11/26/91	11/25/91
	Date Anal. (S):	11/22/91	11/22/91		11/22/91	11/22/91	11/22/91	11/22/91	11/22/91	11/22/91
CYANIDE and SULFIDE	MCL									
Cyanide	0.2(P)	0.005U	0.0055B	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Sulfide	---	0.020U	0.020U	NOT SAMPLED	0.042	0.020U	0.020U	0.053	0.020U	0.020U

Analyte	Well No:	06C11P2	06C12	06C12P2	06C13	06C13P2	06C14	06C14P2	06C15	06C15P2
	Lab Sample No:	16955	16957	16958	16854	16855	16734	16735	16736	16737
	Date Sampled:	11/18/91	11/19/91	11/19/91	11/18/91	11/18/91	11/16/91	11/16/91	11/16/91	11/16/91
	Date Analyzed:	12/11/91	12/12/91	12/12/91	12/31/91	12/31/91	12/31/91	12/31/91	12/31/91	12/31/91
HERBICIDES	MCL									
2,4-D	0.07(F)	0.012U	0.012U	0.012U	0.012U	0.012U	0.012U	0.012U	0.012U	0.012U
2,4,5-T	---	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.00031J	0.0020U
2,4,5-TP	0.05(F)	0.0017U	0.0017U	0.0017U	0.00037J	0.0017U	0.0017U	0.0017U	0.0017U	0.00037J
Dinoseb	0.007(P)	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U

Analyte	Well No:	06C11P2	06C12	06C12P2	06C13	06C13P2	06C14	06C14P2	06C15	06C15P2
	Lab Sample No:	17064	17066	17067	16883	16884	16768	16769	16770	16771
	Date Sampled:	11/18/91	11/19/91	11/19/91	11/18/91	11/18/91	11/16/91	11/16/91	11/16/91	11/16/91
	Date Anal. (Cn):	11/25/91	11/25/91	11/25/91	11/26/91	11/26/91	11/22/91	11/22/91	11/22/91	11/22/91
	Date Anal. (S):	11/22/91	11/22/91	11/22/91	11/22/91	11/22/91	11/19/91	11/19/91	11/19/91	11/19/91
CYANIDE and SULFIDE	MCL									
Cyanide	0.2(P)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Sulfide	---	0.020U	0.020U	0.020U	0.020U	0.036	0.055	0.045	0.020U	0.040

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IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	06C16	06C16P2	06C16P3	06C17	06C18	06C18P2
	Lab Sample No:	16738	16739	16740	16858	16959	16960
	Date Sampled:	11/16/91	11/16/91	11/16/91	11/18/91	11/19/91	11/19/91
	Date Analyzed:	12/31/91	12/31/91	12/31/91	12/31/91	12/12/91	12/12/91
HERBICIDES	MCL						
2,4-D	0.07(F)	0.012U	0.012U	0.012U	0.012U	0.012U	0.012U
2,4,5-T	---	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
2,4,5-TP	0.05(F)	0.0017U	0.0017U	0.0017U	0.0017U	0.0017U	0.0017U
Dinoseb	0.007(P)	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U

Analyte	Well No:	06C16	06C16P2	06C16P3	06C17	06C18	06C18P2
	Lab Sample No:	16772	16773	16774	16887	17068	17069
	Date Sampled:	11/16/91	11/16/91	11/16/91	11/18/91	11/19/91	11/19/91
	Date Anal. (Cn):	11/22/91	11/22/91	11/22/91	11/26/91	11/25/91	11/25/91
	Date Anal. (S):	11/19/91	11/19/91	11/19/91	11/22/91	11/22/91	11/22/91
CYANIDE and SULFIDE	MCL						
Cyanide	0.2(P)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Sulfide	---	0.040	0.039	0.020U	0.020U	0.020U	0.062

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IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB3 / 16269 / 11/13/91 / 11/26/91	R1E / 16748 / 11/16/91 / 12/14/91	R2E / 16749 / 11/19/91 / 12/14/91	R3E / 16863 / 11/19/91 / 01/09/92	06-14A / 16871 / 11/18/91 / 01/09/92	06-15 / 11/15/91	06-16 / 17044 / 11/19/91 / 02/02/92	06-17 / 16764 / 11/16/91 / 12/15/91	06-18 / 16873 / 11/18/91 / 01/09/92
METALS	MCL									
Aluminum	---	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010UN	0.295	0.010U
Antimony	0.01(P)	0.0159B	0.00099B	0.0030U	0.0154B	0.0120B	NOT SAMPLED	0.0119B	0.0149B	0.0213B
Arsenic	0.05(F)	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	NOT SAMPLED	0.0020U	0.0020U	0.0020U
Barium	2.0(F)	0.010U	0.010U	0.010U	0.010U	0.098B	NOT SAMPLED	0.010U	0.034B	0.018B
Beryllium	0.001(P)	0.001U	0.001U	0.001U	0.001U	0.001U	NOT SAMPLED	0.001U	0.001U	0.001U
Cadmium	0.005(F)	0.004U	0.004U	0.004U	0.004U	0.004U	NOT SAMPLED	0.004U	0.004U	0.004U
Calcium	---	0.158B	0.226B	0.200U	0.245B	55.7	NOT SAMPLED	33.9	14.3	42.1
Chromium	0.1(F)	0.005BN	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U
Cobalt	---	0.010U	0.010U	0.010U	0.010U	0.016B	NOT SAMPLED	0.020B	0.010U	0.010B
Copper	1.3(F)	0.020B	0.040	0.005U	0.062	0.021B	NOT SAMPLED	0.015B	0.028	0.072
Iron	---	0.010U	0.010UN	0.010UN	0.010U	0.037B	NOT SAMPLED	0.010U	0.95B	0.010U
Lead	0.015(F)	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	NOT SAMPLED	0.0010U	0.0010U	0.0010U
Magnesium	---	0.200U	0.105B	0.200U	0.200U	11.1	NOT SAMPLED	7.00	5.32	10.9
Manganese	---	0.007B	0.006B	0.005U	0.007B	0.029	NOT SAMPLED	0.10B	0.038	0.010B
Mercury	0.002(F)	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	NOT SAMPLED	0.0002U	0.0002U	0.0002U
Nickel	0.1(P)	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.016	0.005U
Potassium	---	0.200U	0.335B	0.200U	0.208B	1.44B	NOT SAMPLED	0.420B	4.38B	0.570
Selenium	0.05(F)	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	NOT SAMPLED	0.0020U	0.0020U	0.0020U
Silver	---	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	NOT SAMPLED	0.0010UW	0.0010U	0.0010UW
Sodium	---	0.215B	0.308B	0.100U	0.549B	4.25B	NOT SAMPLED	7.59	2.65B	15.9
Thallium	0.002(P)	0.0020U	0.0020UW	0.0020U	0.0020U	0.0020U	NOT SAMPLED	0.0020BW	0.0020U	0.0020U
Tin	---	0.050U	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	0.050U	0.050U	0.050U
Vanadium	---	0.010U	0.010U	0.010U	0.014B	0.026B	NOT SAMPLED	0.013B	0.010U	0.010U
Zinc	---	0.005U	0.005B	0.005U	0.006B	0.005U	NOT SAMPLED	0.005U	0.019B	0.005U

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IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06-19	06-20	06-21	06-22	06-23	06C09	06C10	06C10P2	06C11
	Lab Sample No:	16874	16875		16876	16877	16864	16865	16866	17035
	Date Sampled:	11/18/91	11/18/91	11/20/91	11/18/91	11/18/91	11/18/91	11/18/91	11/18/91	11/18/91
	Date Analyzed:	01/09/92	01/09/92		01/09/92	01/09/92	01/09/92	01/09/92	01/09/92	02/02/92
METALS	MCL									
Aluminum	---	0.010U	0.010U	NOT SAMPLED	0.010U	0.069B	0.010U	0 010U	0.010U	0.169B
Antimony	0.01(P)	0.0122B	0.0146B	NOT SAMPLED	0.0196B	0.0198B	0.0083B	0.0030U	0.0183B	0.0226B
Arsenic	0.05(F)	0.0020U	0.0020U	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0020U	0.0020B	0.0047B
Barium	2.0(F)	0.186B	0.024B	NOT SAMPLED	0.034B	0.065B	0.024B	0.028B	0.035B	0.031B
Beryllium	0.001(P)	0.001U	0.001U	NOT SAMPLED	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U
Cadmium	0.005(F)	0.00020U	0.00020U	NOT SAMPLED	0.00020U	0.00020U	0.00020U	0.00123B	0.0020U	0.00020U
Calcium	---	94.9	56.7	NOT SAMPLED	74.3	51.3	31.8	82.3	90.1	12.2
Chromium	0.1(F)	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.006B	0.005U	0.005U
Cobalt	---	0.024B	0.030B	NOT SAMPLED	0.026B	0.010U	0.025B	0.011B	0.025B	0.027B
Copper	1.3(F)	0.019B	0.033	NOT SAMPLED	0.054	0.089	0.005U	0.005U	0.051	0.063
Iron	---	3.80	0.010U	NOT SAMPLED	0.010U	0.084B	0.010U	0.597	0.010U	0.618
Lead	0.015(F)	0.0010U	0.0010U	NOT SAMPLED	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U
Magnesium	---	16.9	14.9	NOT SAMPLED	14.3	14.7	4.22B	8.50	17.8	2.10B
Manganese	---	0.677	0.011B	NOT SAMPLED	0.040	0.204	0.068	0.079	0.012B	0.015B
Mercury	0.002(F)	0.0002U	0.0002U	NOT SAMPLED	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002U
Nickel	0.1(P)	0.005U	0.006B	NOT SAMPLED	0.005U	0.112	0.005U	0.005U	0.005U	0.005U
Potassium	---	4.90B	1.32B	NOT SAMPLED	1.40B	0.562B	1.04B	0.830B	0.732B	0.798B
Selenium	0.05(F)	0.0020U	0.0020U	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
Silver	---	0.0010UW	0.0010UW	NOT SAMPLED	0.0010UW	0.0010U	0.0010U	0.0010U	0 0010U	0.0010U
Sodium	---	35.2	35.1	NOT SAMPLED	4.19B	5.57	20.0	4.52B	4.54	213
Thallium	0.002(P)	0.0020UW	0.0020UW	NOT SAMPLED	0.0020U	0.0020U	0.0020UW	0.0020U	0.0020U	0.0020U
Tin	---	0.050U	0.050U	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Vanadium	---	0.011B	0.017B	NOT SAMPLED	0.011B	0.015B	0.010U	0.010U	0.017B	0.010U
Zinc	---	0.041	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U

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IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C11P2	06C12	06C12P2	06C13	06C13P2	06C14	06C14P2	06C15	06C15P2
	Lab Sample No:	17036	17038	17039	16868	16869	16750	16751	16752	16753
	Date Sampled:	11/18/91	11/19/91	11/19/91	11/18/91	11/18/91	11/16/91	11/16/91	11/16/91	11/16/91
	Date Analyzed:	02/02/92	02/02/92	02/02/92	01/09/92	01/09/92	12/14/91	12/14/91	12/14/91	12/14/91
METALS	MCL									
Aluminum	---	0.010U	0.010U	0.010UN	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Antimony	0.01(P)	0.0076B	0.0084B	0.0076B	0.0037B	0.0031B	0.0134B	0.0120B	0.0090B	0.0141B
Arsenic	0.05(F)	0.0020U	0.0020U	0.0020U	0.0020U	0.0270	0.0020U	0.0020U	0.0020U	0.0020U
Barium	2.0(F)	0.044B	0.060B	0.017B	0.010B	0.070B	0.039B	0.029U	0.023B	0.019B
Beryllium	0.001(P)	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U
Cadmium	0.005(F)	0.00020U	0.00020U	0.00020U	0.00020U	0.00020U	0.004U	0.004U	0.004U	0.004U
Calcium	---	59.0	70.3	63.6	27.4	37.6	54.1	9.58	46.9	16.2
Chromium	0.1(F)	0.005U	0.005U	0.005U	0.005U	0.005B	0.005U	0.005U	0.005U	0.005U
Cobalt	---	0.010U	0.015B	0.019B	0.028	0.041B	0.010U	0.010U	0.010U	0.010U
Copper	1.3(F)	0.011B	0.021B	0.021B	0.005U	0.005U	0.044	0.050	0.022B	0.032
Iron	---	0.143	0.512	0.0010U	0.010U	13.0	0.209N	0.010UN	0.010UN	0.010UN
Lead	0.015(F)	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U
Magnesium	---	10.6	12.7	17.2	6.38	10.4	6.74	3.19B	14.1	5.60
Manganese	---	0.130	0.240	0.038	0.006B	0.414	0.238	0.018	0.009B	0.006B
Mercury	0.002(F)	0.0002U	0.0002U	0.0002U	0.0002	0.002	0.0002U	0.0002U	0.0002U	0.0002U
Nickel	0.1(P)	0.005U	0.005U	0.005U	0.005U	0.005U	006B	0.005B	0.005U	0.005U
Potassium	---	0.542B	1.24B	3.15B	0.859B	1.02B	1.03B	0.433B	1.48B	1.58B
Selenium	0.05(F)	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
Silver	---	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U
Sodium	---	2.77B	7.68	8.13	17.6	74.4	12.3	6.63	15.6	8.61
Thallium	0.002(P)	0.0020U	0.0020U	0.0020U	0.0020UW	0.0020UW	0.0020UW	0.0020UW	0.0020U	0.0020U
Tin	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Vanadium	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Zinc	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.010B	0.028	0.007B	0.005B

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected B = Value is < CRDL but > detection limit (inorganics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	06C16	06C16P2	06C16P3	06C17	06C18	06C18P2
	Lab Sample No:	16754	16755	16756	16872	17040	17041
	Date Sampled:	11/16/91	11/16/91	11/16/91	11/18/91	11/19/91	11/19/91
	Date Analyzed:	12/14/91	12/14/91	12/14/91	01/09/92	02/02/92	02/02/92
METALS	MCL						
Aluminum	---	0.010U	0.010U	0.010U	0.010U	0.010UN	0.010UN
Antimony	0.01(P)	0.0129B	0.0141B	0.0110B	0.0092B	0.0063B	0.0086B
Arsenic	0.05(F)	0.0020U	0.0020U	0.0020B	0.0020U	0.0036B	0.0124
Barium	2.0(F)	0.100B	0.050B	0.052B	0.016B	0.129B	0.087B
Beryllium	0.001(P)	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U
Cadmium	0.005(F)	0.004U	0.004U	0.004U	0.004U	0.00020U	0.00020U
Calcium	---	8.65	84.9	61.4	42.2	40.2	39.9
Chromium	0.1(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Cobalt	---	0.018B	0.012B	0.010U	0.010U	0.050	0.025B
Copper	1.3(F)	0.039	0.032	0.037	0.031	0.009B	0.039
Iron	---	0.010UN	0.303N	0.020BN	0.010U	3.52	20.3
Lead	0.015(F)	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U
Magnesium	---	4.06B	50.9	22.0	6.68	7.73	8.83
Manganese	---	0.010B	0.110	0.073	0.009B	0.133	0.349
Mercury	0.002(F)	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U
Nickel	0.1(P)	0.005U	0.005U	0.005U	0.112	0.005U	0.005U
Potassium	---	1.49B	6.14	2.37B	0.702B	1.06B	0.908B
Selenium	0.05(F)	0.0020U	0.0020UW	0.0020U	0.0020U	0.0020U	0.0020U
Silver	---	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U
Sodium	---	174	49.2	10.3	12.8	48.3	25.0
Thallium	0.002(P)	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
Tin	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Vanadium	---	0.010U	0.010U	0.010U	0.010U	0.015B	0.010B
Zinc	---	0.007B	0.005U	0.005B	0.005U	0.005U	0.005U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected B = Value is < CRDL but > detection limit (inorganics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB3 / 16243 / 11/13/91 / 12/19/91	R1E / 16716 / 11/16/91 / 12/16/91	R2E / 16717 / 11/19/91 / 12/16/91	R3E / 16835 / 11/19/91 / 12/19/91	06-14A / 16843 / 11/18/91 / 12/19/91	06-15 / 11/15/91	06-16 / 16990 / 11/19/91 / 12/26/91	06-17 / 11/16/91	06-18 / 16845 / 11/18/91 / 12/19/91
PESTICIDES/PCBs	MCL									
A-BHC	---	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U	NOT SAMPLED	0.000030U	NO SAMPLE	0.000030U
a-CHLORDANE	0.002(F)	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U	NOT SAMPLED	0.000050U	NO SAMPLE	0.000050U
A-Endosulfan	---	0.00014U	0.00014U	0.00014U	0.00014U	0.00014U	NOT SAMPLED	0.00014U	NO SAMPLE	0.00014U
Aldrin	---	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	NOT SAMPLED	0.000040U	NO SAMPLE	0.000040U
B-BHC	---	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U	NOT SAMPLED	0.000060U	NO SAMPLE	0.000060U
B-Endosulfan	---	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	NOT SAMPLED	0.000040U	NO SAMPLE	0.000040U
D-BHC	---	0.000090U	0.000090U	0.000090U	0.000090U	0.000090U	NOT SAMPLED	0.000090U	NO SAMPLE	0.000090U
Dieldrin	---	0.000020U	0.000020U	0.000020U	0.000020U	0.000020U	NOT SAMPLED	0.000020U	NO SAMPLE	0.000020U
Disulfoton	---	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	NOT SAMPLED	0.00070U	NO SAMPLE	0.00070U
Endosulfan sulfate	---	0.00066U	0.00066U	0.00066U	0.00066U	0.00066U	NOT SAMPLED	0.00066U	NO SAMPLE	0.00066U
Endrin	0.002(P)	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U	NOT SAMPLED	0.000060U	NO SAMPLE	0.000060U
Endrin Aldehyde	---	0.00023U	0.00023U	0.00023U	0.00023U	0.00023U	NOT SAMPLED	0.00023U	NO SAMPLE	0.00023U
Ethyl Parathion	---	0.00060U	0.00060U	0.00060U	0.00060U	0.00060U	NOT SAMPLED	0.00060U	NO SAMPLE	0.00060U
Famphur	---	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	NOT SAMPLED	0.0012U	NO SAMPLE	0.0012U
G-BHC	---	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	NOT SAMPLED	0.000040U	NO SAMPLE	0.000040U
g-CHLORDANE	0.002(F)	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U	NOT SAMPLED	0.000050U	NO SAMPLE	0.000050U
Heptachlor	0.0004(F)	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U	NOT SAMPLED	0.000013UJ	NO SAMPLE	0.000030U
Heptachlor Epoxide	0.0002(F)	0.00083U	0.00083U	0.00083U	0.00083U	0.00083U	NOT SAMPLED	0.00083U	NO SAMPLE	0.00083U
KEPONE	---	0.0060U	0.0060U	0.0060U	0.0060U	0.0060U	NOT SAMPLED	0.0060U	NO SAMPLE	0.0060U
Methoxychlor	0.04(F)	0.0018U	0.0018U	0.0018U	0.0018U	0.0018U	NOT SAMPLED	0.0018U	NO SAMPLE	0.0018U
Methyl Parathion	---	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	NOT SAMPLED	0.0012U	NO SAMPLE	0.0012U
PCB-1016	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	NOT SAMPLED	0.0007U	NO SAMPLE	0.0007U
PCB-1221	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	NOT SAMPLED	0.0007U	NO SAMPLE	0.0007U
PCB-1232	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	NOT SAMPLED	0.0007U	NO SAMPLE	0.0007U
PCB-1242	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	NOT SAMPLED	0.0007U	NO SAMPLE	0.0007U
PCB-1248	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	NOT SAMPLED	0.0007U	NO SAMPLE	0.0007U
PCB-1254	0.0005(F)	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	NOT SAMPLED	0.0013U	NO SAMPLE	0.0013U
PCB-1260	0.0005(F)	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	NOT SAMPLED	0.0013U	NO SAMPLE	0.0013U
Phorate	---	0.00040U	0.00040U	0.00040U	0.00040U	0.00040U	NOT SAMPLED	0.00040U	NO SAMPLE	0.00040U
PPDDD	---	0.00011U	0.00011U	0.00011U	0.00011U	0.00011U	NOT SAMPLED	0.00011U	NO SAMPLE	0.00011U
PPDDE	---	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	NOT SAMPLED	0.000040U	NO SAMPLE	0.000040U
PPDDT	---	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U	NOT SAMPLED	0.00012U	NO SAMPLE	0.00012U
Toxaphene	0.003(F)	0.0024U	0.0024U	0.0024U	0.0024U	0.0024U	NOT SAMPLED	0.0024U	NO SAMPLE	0.0024U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06-19	06-20	06-21	06-22	06-23	06C09	06C10	06C10P2	06C11
	Lab Sample No:		16846		16847	16848	16836	16837	16838	16981
	Date Sampled:	11/18/91	11/18/91	11/20/91	11/18/91	11/18/91	11/18/91	11/18/91	11/18/91	11/18/91
	Date Analyzed:		12/19/91		12/19/91	12/19/91	12/19/91	12/19/91	12/19/91	12/24/91
PESTICIDES/PCBs	MCL									
A-BHC	---	NO SAMPLE	0.000030U	NOT SAMPLED	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U
a-CHLORDANE	0.002(F)	NO SAMPLE	0.000050U	NOT SAMPLED	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U
A-Endosulfan	---	NO SAMPLE	0.00014U	NOT SAMPLED	0.00014U	0.00014U	0.00014U	0.00014U	0.00014U	0.00014U
Aldrin	---	NO SAMPLE	0.000040U	NOT SAMPLED	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U
B-BHC	---	NO SAMPLE	0.000060U	NOT SAMPLED	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U
B-Endosulfan	---	NO SAMPLE	0.000040U	NOT SAMPLED	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U
D-BHC	---	NO SAMPLE	0.000090U	NOT SAMPLED	0.000090U	0.000090U	0.000090U	0.000090U	0.000090U	0.000090U
Dieldrin	---	NO SAMPLE	0.000020U	NOT SAMPLED	0.000020U	0.000020U	0.000020U	0.000020U	0.000020U	0.000020U
Disulfoton	---	NO SAMPLE	0.00070U	NOT SAMPLED	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U
Endosulfan sulfate	---	NO SAMPLE	0.00066U	NOT SAMPLED	0.00066U	0.00066U	0.00066U	0.00066U	0.00066U	0.00066U
Endrin	0.002(P)	NO SAMPLE	0.000060U	NOT SAMPLED	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U
Endrin Aldehyde	---	NO SAMPLE	0.00023U	NOT SAMPLED	0.00023U	0.00023U	0.00023U	0.00023U	0.00023U	0.00023U
Ethyl Parathion	---	NO SAMPLE	0.00060U	NOT SAMPLED	0.00060U	0.00060U	0.00060U	0.00060U	0.00060U	0.00060U
Famphur	---	NO SAMPLE	0.0012U	NOT SAMPLED	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U
G-BHC	---	NO SAMPLE	0.000040U	NOT SAMPLED	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U
g-CHLORDANE	0.002(F)	NO SAMPLE	0.000050U	NOT SAMPLED	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U
Heptachlor	0.0004(F)	NO SAMPLE	0.000030U	NOT SAMPLED	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U
Heptachlor Epoxide	0.0002(F)	NO SAMPLE	0.00083U	NOT SAMPLED	0.00083U	0.00083U	0.00083U	0.00083U	0.00083U	0.00083U
KEPONE	---	NO SAMPLE	0.0060U	NOT SAMPLED	0.0060U	0.0060U	0.0060U	0.0060U	0.0060U	0.0060U
Methoxychlor	0.04(F)	NO SAMPLE	0.0018U	NOT SAMPLED	0.0018U	0.0018U	0.0018U	0.0018U	0.0018U	0.0018U
Methyl Parathion	---	NO SAMPLE	0.0012U	NOT SAMPLED	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U
PCB-1016	0.0005(F)	NO SAMPLE	0.0007U	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1221	0.0005(F)	NO SAMPLE	0.0007U	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1232	0.0005(F)	NO SAMPLE	0.0007U	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1242	0.0005(F)	NO SAMPLE	0.0007U	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1248	0.0005(F)	NO SAMPLE	0.0007U	NOT SAMPLED	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1254	0.0005(F)	NO SAMPLE	0.0013U	NOT SAMPLED	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U
PCB-1260	0.0005(F)	NO SAMPLE	0.0013U	NOT SAMPLED	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U
Phorate	---	NO SAMPLE	0.00040U	NOT SAMPLED	0.00040U	0.00040U	0.00040U	0.00040U	0.00040U	0.00040U
PPDDD	---	NO SAMPLE	0.00011U	NOT SAMPLED	0.00011U	0.00011U	0.00011U	0.00011U	0.00011U	0.00011U
PPDDE	---	NO SAMPLE	0.000040U	NOT SAMPLED	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U
PPDDT	---	NO SAMPLE	0.00012U	NOT SAMPLED	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U
Toxaphene	0.003(F)	NO SAMPLE	0.0024U	NOT SAMPLED	0.0024U	0.0024U	0.0024U	0.0024U	0.0024U	0.0024U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C11P2 / 16982 / 11/18/91 / 12/24/91	06C12 / 16984 / 11/19/91 / 12/26/91	06C12P2 / 16985 / 11/19/91 / 12/26/91	06C13 / 16840 / 11/18/91 / 12/19/91	06C13P2 / 16841 / 11/18/91 / 12/19/91	06C14 / 16718 / 11/16/91 / 12/16/91	06C14P2 / 16719 / 11/16/91 / 12/16/91	06C15 / 16720 / 11/16/91 / 12/16/91	06C15P2 / 16721 / 11/16/91 / 12/16/91
PESTICIDES/PCBs	MCL									
A-BHC	---	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U
a-CHLORDANE	0.002(F)	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U
A-Endosulfan	---	0.00014U	0.00014U	0.00014U	0.00014U	0.00014U	0.00014U	0.00014U	0.00014U	0.00014U
Aldrin	---	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U
B-BHC	---	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U
B-Endosulfan	---	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U
D-BHC	---	0.000090U	0.000090U	0.000090U	0.000090U	0.000090U	0.000090U	0.000090U	0.000090U	0.000090U
Dieldrin	---	0.000020U	0.000020U	0.000020U	0.000020U	0.000020U	0.000020U	0.000020U	0.000020U	0.000020U
Disulfoton	---	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U
Endosulfan sulfate	---	0.00066U	0.00066U	0.00066U	0.00066U	0.00066U	0.00066U	0.00066U	0.00066U	0.00066U
Endrin	0.002(P)	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U
Endrin Aldehyde	---	0.00023U	0.00023U	0.00023U	0.00023U	0.00023U	0.00023U	0.00023U	0.00023U	0.00023U
Ethyl Parathion	---	0.00060U	0.00060U	0.00060U	0.00060U	0.00060U	0.00060U	0.00060U	0.00060U	0.00060U
Famphur	---	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U
G-BHC	---	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U
g-CHLORDANE	0.002(F)	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U
Heptachlor	0.0004(F)	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U
Heptachlor Epoxide	0.0002(F)	0.00083U	0.00083U	0.00083U	0.00083U	0.00083U	0.00083U	0.00083U	0.00083U	0.00083U
KEPONE	---	0.0060U	0.0060U	0.0060U	0.0060U	0.0060U	0.0060U	0.0060U	0.0060U	0.0060U
Methoxychlor	0.04(F)	0.0018U	0.0018U	0.0018U	0.0018U	0.0018U	0.0018U	0.0018U	0.0018U	0.0018U
Methyl Parathion	---	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U
PCB-1016	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1221	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1232	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1242	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1248	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1254	0.0005(F)	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U
PCB-1260	0.0005(F)	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U
Phorate	---	0.00040U	0.00040U	0.00040U	0.00040U	0.00040U	0.00040U	0.00040U	0.00040U	0.00040U
PPDDD	---	0.00011U	0.00011U	0.00011U	0.00011U	0.00011U	0.00011U	0.00011U	0.00011U	0.00011U
PPDDE	---	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U
PPDDT	---	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U
Toxaphene	0.003(F)	0.0024U	0.0024U	0.0024U	0.0024U	0.0024U	0.0024U	0.0024U	0.0024U	0.0024U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C16 / 16722 / 11/16/91 / 12/16/91	06C16P2 / 16723 / 11/16/91 / 12/16/91	06C16P3 / 16724 / 11/16/91 / 12/16/91	06C17 / 16829 / 11/18/91 / 12/19/91	06C18 / 16986 / 11/19/91 / 12/26/91	06C18P2 / 16987 / 11/19/91 / 12/26/91
PESTICIDES/PCBs	MCL						
A-BHC	---	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U
a-CHLORDANE	0.002(F)	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U
A-Endosulfan	---	0.00014U	0.00014U	0.00014U	0.00014U	0.00014U	0.00014U
Aldrin	---	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U
B-BHC	---	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U
B-Endosulfan	---	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U
D-BHC	---	0.000090U	0.000090U	0.000090U	0.000090U	0.000090U	0.000090U
Dieldrin	---	0.000020U	0.000020U	0.000020U	0.000020U	0.000020U	0.000020U
Disulfoton	---	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U	0.00070U
Endosulfan sulfate	---	0.00066U	0.00066U	0.00066U	0.00066U	0.00066U	0.00066U
Endrin	0.002(P)	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U	0.000060U
Endrin Aldehyde	---	0.00023U	0.00023U	0.00023U	0.00023U	0.00023U	0.00023U
Ethyl Parathion	---	0.00060U	0.00060U	0.00060U	0.00060U	0.00060U	0.00060U
Famphur	---	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U
G-BHC	---	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U
g-CHLORDANE	0.002(F)	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U	0.000050U
Heptachlor	0.0004(F)	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U	0.000030U
Heptachlor Epoxide	0.0002(F)	0.00083U	0.00083U	0.00083U	0.00083U	0.00083U	0.00083U
KEPONE	---	0.0060U	0.0060U	0.0060U	0.0060U	0.0060U	0.0060U
Methoxychlor	0.04(F)	0.0018U	0.0018U	0.0018U	0.0018U	0.0018U	0.0018U
Methyl Parathion	---	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U	0.0012U
PCB-1016	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1221	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1232	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1242	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1248	0.0005(F)	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U	0.0007U
PCB-1254	0.0005(F)	0.0013U	0.00055J	0.0013U	0.0013U	0.0013U	0.0013U
PCB-1260	0.0005(F)	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U	0.0013U
Phorate	---	0.00040U	0.00040U	0.00040U	0.00040U	0.00040U	0.00040U
PPDDD	---	0.00011U	0.00011U	0.00011U	0.00011U	0.00011U	0.00011U
PPDDE	---	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U	0.000040U
PPDDT	---	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U	0.00012U
Toxaphene	0.003(F)	0.0024U	0.0024U	0.0024U	0.0024U	0.0024U	0.0024U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	F83	TRIP BLANK	R1E	R2E	R3E	06-14A	06-15	06-16	06-17
	Lab Sample No:	16295	16910	16784	16785	16893	16903		17098	16800
	Date Sampled:	11/13/91	11/14/91	11/16/91	11/19/91	11/19/91	11/18/91	11/15/91	11/19/91	11/16/91
	Date Analyzed:	11/15/91	11/26/91	11/21/91	11/21/91	11/25/91	11/26/91		12/03/91	11/22/91
VOLATILE ORGANICS	MCL									
Acetone	---	0.0047BJ	0.007BJ	0.017BJ	0.016BJ	0.020BJ	0.023BJ	NOT SAMPLED	0.007BJ	0.008BJ
Benzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Bromodichloromethane	0.1(L)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Bromoform	0.1(L)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Bromomethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U
Carbon Tetrachloride	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Carbondisulfide	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Chlorobenzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Chloroethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U
Chloroform	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Chloromethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U
cis-1,2-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
cis-1,3-Dichloropropene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Dibromochloromethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Ethylbenzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Methylene Chloride	0.005(P)	0.014B	0.004BJ	0.012B	0.007B	0.011B	0.007B	NOT SAMPLED	0.004BJ	0.005B
Styrene	0.1(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Tetrachloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Toluene	1(F)	0.005U	0.005U	0.002J	0.002J	0.004J	0.004J	NOT SAMPLED	0.005U	0.005U
Trans-1,2-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Trans-1,3-Dichloropropene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Trichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
T-Xylene	10(F)	0.005U	0.005U	0.002J	0.002J	0.002J	0.005U	NOT SAMPLED	0.005U	0.005U
Vinyl Acetate	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
Vinyl Chloride	0.002(F)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U
1,1-Dichloroethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
1,1-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
1,1,1-Trichloroethane	0.2(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
1,1,2-Trichloroethane	0.005(P)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
1,1,2,2-Tetrachloroethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
1,2-Dichloroethane	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
1,2-Dichloropropane	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
2-Butanone	---	0.10U	0.10U	0.10U	0.003J	0.002J	0.10U	NOT SAMPLED	0.10U	0.10U
2-Hexanone	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U
4-Methyl-2-Pentanone	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06-18 / 16905 / 11/18/91 / 11/26/91	06-19 / 16906 / 11/18/91 / 11/26/91	06-20 / 16907 / 11/18/91 / 11/26/91	06-21 / 11/20/91	06-22 / 16908 / 11/18/91 / 11/26/91	06-23 / 16909 / 11/18/91 / 11/26/91	06C09 / 16894 / 11/18/91 / 11/25/91	06C10 / 16895 / 11/18/91 / 11/25/91	06C10P2 / 16896 / 11/18/91 / 11/25/91
VOLATILE ORGANICS	MCL									
Acetone	---	0.018BJ	0.012BJ	0.015BJ	NOT SAMPLED	0.011BJ	0.009BJ	0.016BJ	0.022BJ	0.006BJ
Benzene	---	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U
Bromodichloromethane	0.1(L)	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U
Bromoform	0.1(L)	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U
Bromomethane	---	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U
Carbon Tetrachloride	0.005(F)	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U
Carbondisulfide	---	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U
Chlorobenzene	---	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U
Chloroethane	---	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U
Chloroform	---	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U
Chloromethane	---	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U
cis-1,2-Dichloroethene	---	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U
cis-1,3-Dichloropropene	---	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U
Dibromochloromethane	---	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U
Ethylbenzene	---	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U
Methylene Chloride	0.005(P)	0.007B	0.005B	0.005B	NOT SAMPLED	0.005B	0.006B	0.011B	0.011B	0.012B
Styrene	0.1(F)	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U
Tetrachloroethene	---	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U
Toluene	1(F)	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U
Trans-1,2-Dichloroethene	---	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U
Trans-1,3-Dichloropropene	---	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U
Trichloroethene	---	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U
T-Xylene	10(F)	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U
Vinyl Acetate	---	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U
Vinyl Chloride	0.002(F)	0.010U	0.010U	0.010U	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U
1,1-Dichloroethane	---	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U
1,1-Dichloroethene	---	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,1-Trichloroethane	0.2(F)	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,2-Trichloroethane	0.005(P)	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,2,2-Tetrachloroethane	---	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U
1,2-Dichloroethane	0.005(F)	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U
1,2-Dichloropropane	0.005(F)	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U
2-Butanone	---	0.10U	0.10U	0.10U	NOT SAMPLED	0.10U	0.10U	0.10U	0.10U	0.10U
2-Hexanone	---	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U
4-Methyl-2-Pentanone	---	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	06C11	06C11P2	06C12	06C12P2	06C13	06C13P2	06C14	06C14P2	06C15
	Lab Sample No:	16898	16899	17092	17093	16900	16901	16786	16787	16788
	Date Sampled:	11/18/91	11/18/91	11/19/91	11/19/91	11/18/91	11/18/91	11/16/91	11/16/91	11/16/91
	Date Analyzed:	11/25/91	11/25/91	11/27/91	11/27/91	11/25/91	11/25/91	11/21/91	11/21/91	11/21/91
VOLATILE ORGANICS	MCL									
Acetone	---	0.034BJ	0.017BJ	0.004BJ	0.003BJ	0.008BJ	0.030BJ	0.013BJ	0.10U	0.10U
Benzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromodichloromethane	0.1(L)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromoform	0.1(L)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromomethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Carbon Tetrachloride	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Carbondisulfide	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chlorobenzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chloroethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Chloroform	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chloromethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
cis-1,2-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
cis-1,3-Dichloropropene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Dibromochloromethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Ethylbenzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Methylene Chloride	0.005(P)	0.009B	0.011B	0.002BJ	0.002BJ	0.007B	0.008B	0.007B	0.006B	0.005B
Styrene	0.1(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Tetrachloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Toluene	1(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trans-1,2-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trans-1,3-Dichloropropene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
T-Xylene	10(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Vinyl Acetate	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Vinyl Chloride	0.002(F)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,1-Dichloroethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,1-Trichloroethane	0.2(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,2-Trichloroethane	0.005(P)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,2,2-Tetrachloroethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,2-Dichloroethane	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,2-Dichloropropane	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
2-Butanone	---	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U
2-Hexanone	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
4-Methyl-2-Pentanone	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 3 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C15P2 / 16789 / 11/16/91 / 11/21/91	06C16 / 16790 / 11/16/91 / 11/21/91	06C16P2 / 16791 / 11/16/91 / 11/21/91	06C16P3 / 16792 / 11/16/91 / 11/21/91	06C17 / 16904 / 11/18/91 / 11/26/91	06C18 / 17094 / 11/19/91 / 11/27/91	06C18P2 / 17095 / 11/19/91 / 11/27/91
VOLATILE ORGANICS	MCL							
Acetone	---	0.007BJ	0.10U	0.008BJ	0.010BJ	0.038BJ	0.006BJ	0.007BJ
Benzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromodichloromethane	0.1(L)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromoform	0.1(L)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Bromomethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Carbon Tetrachloride	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Carbondisulfide	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chlorobenzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chloroethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Chloroform	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Chloromethane	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
cis-1,2-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
cis-1,3-Dichloropropene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Dibromochloromethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Ethylbenzene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Methylene Chloride	0.005(P)	0.009B	0.007B	0.007B	0.011B	0.009B	0.002BJ	0.013B
Styrene	0.1(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Tetrachloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Toluene	1(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trans-1,2-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trans-1,3-Dichloropropene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Trichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
T-Xylene	10(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Vinyl Acetate	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Vinyl Chloride	0.002(F)	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
1,1-Dichloroethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1-Dichloroethene	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,1-Trichloroethane	0.2(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,2-Trichloroethane	0.005(P)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,1,2,2-Tetrachloroethane	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,2-Dichloroethane	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
1,2-Dichloropropane	0.005(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
2-Butanone	---	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U	0.10U
2-Hexanone	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
4-Methyl-2-Pentanone	---	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U

MCL = Final (F) or Proposed (P) or Listed (L) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	F83	R3E	R4E	06-01A	06-01B	06-06	06-07	06-12	06C01
	Lab Sample No:				19535		19536	19537	19538	19533
	Date Sampled:				03/31/92		03/31/92	03/31/92	03/31/92	03/31/92
	Date Anal. (Cn):				04/07/92		04/07/92	04/07/92	04/07/92	04/07/92
	Date Anal. (S):				04/02/92		04/02/92	04/02/92	04/02/92	04/02/92
CYANIDE and SULFIDE	MCL									
Cyanide	0.2(P)	0.005U	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U
Sulfide	---	0.020U	0.020	0.020U	0.020U	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U

Analyte	Well No:	06C01P2	06C01P3	06C02	06C02P2	06C03	06C03P2	06C04	06C04P2	06C05
	Lab Sample No:		19534	19673	19674	19675	19676	19677	19678	19679
	Date Sampled:		03/31/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92
	Date Anal. (Cn):		04/07/92	04/08/92	04/08/92	04/08/92	04/08/92	04/08/92	04/08/92	04/08/92
	Date Anal. (S):		04/03/92	04/03/92	04/03/92	04/03/92	04/03/92	04/03/92	04/03/92	04/03/92
CYANIDE and SULFIDE	MCL									
Cyanide	0.2(P)	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Sulfide	---	NOT SAMPLED	0.020U	0.020	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U

Analyte	Well No:	06C06	06C06P2	06C07	06C08	06C08P2
	Lab Sample No:	19680	19681	19682	19538	19539
	Date Sampled:	04/02/92	04/02/92	04/02/92	03/31/92	03/31/92
	Date Anal. (Cn):	04/08/92	04/08/92	04/08/92	04/07/92	04/07/92
	Date Anal. (S):	04/03/92	04/03/92	04/03/92	04/02/92	04/02/92
Cyanide	0.2(P)	0.005U	0.005U	0.005U	0.005U	0.005U
Sulfide	---	0.020U	0.020	0.020U	0.020U	0.020U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB3	R3E	R4E	06-01A	06-01B	06-06	06-07	06-12	06C01 / 12426 / 06/02/91 / 06/04/91
EXPLOSIVES	MCL									
DNB	---	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.020U
HMX	---	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.020U
RDX	---	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.020U
TETRYL	---	0.050U	0.050U	0.050U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.050U
TNB	---	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.020U
TNT	---	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.020U
2,4-DNT	---	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.020U
2,6-DNT	---	0.020U	0.020U	0.020U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.020U

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C01P2	06C01P3	06C02 / 12668 / 06/04/91 / 06/06/91	06C02P2 / 12669 / 06/04/91 / 06/06/91	06C03 / 12670 / 06/05/91 / 06/06/91	06C03P2 / 12671 / 06/05/91 / 06/06/91	06C04 / 12672 / 06/05/91 / 06/06/91	06C04P2 / 12673 / 06/05/91 / 06/06/91	06C05 / 12674 / 06/05/91 / 06/06/91
EXPLOSIVES	MCL									
DNB	---	NOT SAMPLED	NO SAMPLE	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
HMX	---	NOT SAMPLED	NO SAMPLE	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
RDX	---	NOT SAMPLED	NO SAMPLE	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TETRYL	---	NOT SAMPLED	NO SAMPLE	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
TNB	---	NOT SAMPLED	NO SAMPLE	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TNT	---	NOT SAMPLED	NO SAMPLE	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
2,4-DNT	---	NOT SAMPLED	NO SAMPLE	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
2,6-DNT	---	NOT SAMPLED	NO SAMPLE	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C06	06C06P2	06C07	06C08	06C08P2
	Lab Sample No:	12808	12675	12809	12424	12425
	Date Sampled:	06/05/91	06/05/91	06/05/91	06/02/91	06/02/91
	Date Analyzed:	06/08/91	06/06/91	06/08/91	06/04/91	06/04/91
EXPLOSIVES	MCL					
DNB	---	0.020U	0.020U	0.020U	0.020U	0.020U
HMX	---	0.020U	0.020U	0.020U	0.020U	0.020U
RDX	---	0.020U	0.020U	0.020U	0.020U	0.020U
TETRYL	---	0.050U	0.050U	0.050U	0.050U	0.050U
TNB	---	0.020U	0.020U	0.020U	0.020U	0.020U
TNT	---	0.020U	0.020U	0.020U	0.020U	0.020U
2,4-DNT	---	0.020U	0.020U	0.020U	0.020U	0.020U
2,6-DNT	---	0.020U	0.020U	0.020U	0.020U	0.020U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: Lab Sample No: Date Sampled: Date Analyzed:	F83	R3E	R4E	06-01A 19526 03/31/92 09/01/92	06-01B	06-06 19527 03/31/92 09/01/92	06-07 19528 03/31/92 09/01/92	06-12 19531 03/31/92 09/01/92	06C01 19524 03/31/92 09/01/92
METALS	MCL									
Aluminum	---	0.010U	0.010U	0.010UN	0.030U	NOT SAMPLED	1.72	76.1	0.030U	0.030U
Antimony	0.01(P)	0.0159B	0.0154B	0.0116B	0.0040B	NOT SAMPLED	0.0030U	0.0030U	0.0030U	0.0030U
Arsenic	0.05(F)	0.0020U	0.0020U	0.0020U	0.0020U	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0020U
Barium	2.0(F)	0.010U	0.010U	0.010U	0.020U	NOT SAMPLED	0.020U	0.020U	0.020U	0.108B
Beryllium	0.001(P)	0.0010U	0.001U	0.001U	0.001UN	NOT SAMPLED	0.002BN	0.001UN	0.001B	0.001UN
Cadmium	0.005(F)	0.004U	0.00020U	0.00020U	0.00020U	NOT SAMPLED	0.00020U	0.00020U	0.00066B	0.00020U
Calcium	---	0.158B	0.245B	0.302B	98.2	NOT SAMPLED	421	173	535	54.4
Chromium	0.1(F)	0.005BN	0.005U	0.005U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U
Cobalt	---	0.010U	0.010U	0.015B	0.040B	NOT SAMPLED	0.361	0.388	0.086	0.020U
Copper	1.3(F)	0.020B	0.062	0.036	0.010B	NOT SAMPLED	0.039	0.007B	0.005U	0.019B
Iron	---	0.010U	0.010U	0.010U	0.040U	NOT SAMPLED	7.46	49.2	0.600	0.040U
Lead	0.015(F)	0.0010U	0.0010U	0.0010U	0.0010U	NOT SAMPLED	0.0010U	0.0010U	0.0010U	0.0010U
Magnesium	---	0.200U	0.100U	0.133B	41.1	NOT SAMPLED	365	140	317	10.4
Manganese	---	0.007B	0.007B	0.011B	0.016	NOT SAMPLED	51.1	8.19	11.5	0.111
Mercury	0.002(F)	0.0002U	0.0002	0.0002U	0.0002U	NOT SAMPLED	0.0002U	0.0002U	0.0002U	0.0002U
Nickel	0.1(P)	0.005U	0.005U	0.005UN	0.006B	NOT SAMPLED	1.02	1.12	0.259	0.005U
Potassium	---	1.00U	0.208B	0.318B	1.10B	NOT SAMPLED	11.0	2.03	9.81	1.76B
Selenium	0.05(F)	0.0020U	0.0020U	0.0020U	0.0020U	NOT SAMPLED	0.0020U	0.0020UW	0.0020U	0.0020U
Silver	---	0.0010U	0.0010U	0.0010UW	0.0010UW	NOT SAMPLED	0.0010U	0.0010U	0.0010UW	0.0010U
Sodium	---	0.215B	0.549B	0.333B	74.6	NOT SAMPLED	52.0	51.4	31.7	14.5
Thallium	0.002(P)	0.0020U	0.0020U	0.0020U	0.0020U	NOT SAMPLED	0.0020UW	0.0020UW	0.0020UW	0.0020U
Tin	---	0.050U	0.050U	0.050U	0.050U	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U
Vanadium	---	0.010U	0.014B	0.010U	0.010U	NOT SAMPLED	0.010U	0.014B	0.019B	0.010U
Zinc	---	0.005U	0.006B	0.005U	0.010U	NOT SAMPLED	1.17	1.82	1.35	0.010U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected B = Value is < CRDL but > detection limit (inorganics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	06C01P2	06C01P3	06C02	06C02P2	06C03	06C03P2	06C04	06C04P2	06C05
	Lab Sample No:		19525	19653	19654	19655	19656	19657	19658	19659
	Date Sampled:		03/31/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92
	Date Analyzed:		09/01/92	09/16/92	09/16/92	09/16/92	09/16/92	09/16/92	09/16/92	09/16/92
METALS	MCL									
Aluminum	---	NOT SAMPLED	0.030U	0.030U	0.030U	0.030U	0.030U	0.030U	0.030U	0.030U
Antimony	0.01(P)	NOT SAMPLED	0.0030U	0.031B	0.0030U	0.0030U	0.0030U	0.0030U	0.0030U	0.0030B
Arsenic	0.05(F)	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0119	0.0020U	0.0020U	0.0020U	0.0020U
Barium	2.0(F)	NOT SAMPLED	0.020U	0.020UN	0.110BN	0.082BN	0.054BN	0.131BN	0.026BN	0.063BN
Beryllium	0.001(P)	NOT SAMPLED	0.001BN	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U
Cadmium	0.005(F)	NOT SAMPLED	0.00020U	0.00020U	0.00020U	0.00020U	0.00020U	0.00020U	0.00020U	0.00020U
Calcium	---	NOT SAMPLED	244	0.20U	72.5	55.5	73.1	81.4	76.5	10.7
Chromium	0.1(F)	NOT SAMPLED	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Cobalt	---	NOT SAMPLED	0.052	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
Copper	1.3(F)	NOT SAMPLED	0.054	0.005U	0.005U	0.050U	0.005U	0.005U	0.053	0.005U
Iron	---	NOT SAMPLED	3.62	0.040U	1.88	7.12	0.040U	1.39	0.040U	0.040U
Lead	0.015(F)	NOT SAMPLED	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0018B	0.0010U	0.0010U
Magnesium	---	NOT SAMPLED	210	11.0	33.6	9.84	15.7	18.3	45.7	2.64B
Manganese	---	NOT SAMPLED	1.90	0.136	0.010B	0.383	0.010B	0.126	0.060	0.005B
Mercury	0.002(F)	NOT SAMPLED	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U
Nickel	0.1(P)	NOT SAMPLED	0.108	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Potassium	---	NOT SAMPLED	16.1	1.54B	1.75B	1.17B	1.35B	2.06B	4.50B	1.18B
Selenium	0.05(F)	NOT SAMPLED	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
Silver	---	NOT SAMPLED	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U
Sodium	---	NOT SAMPLED	63.5	24.3	4.31B	17.3	15.0	36.2	82.6	161
Thallium	0.002(P)	NOT SAMPLED	0.0020UW	0.0010U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
Tin	---	NOT SAMPLED	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Vanadium	---	NOT SAMPLED	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Zinc	---	NOT SAMPLED	0.037	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected B = Value is < CRDL but > detection limit (inorganics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C06 / 19660 / 04/02/92 / 09/16/92	06C06P2 / 19661 / 04/02/92 / 09/16/92	06C07 / 19662 / 04/02/92 / 09/16/92	06C08 / 19529 / 03/31/92 / 09/01/92	06C08P2 / 19530 / 03/31/92 / 09/01/92
METALS	MCL					
Aluminum	---	0.030U	0.030U	0.030U	0.154	0.276
Antimony	0.01(P)	0.0030U	0.0030U	0.0030U	0.0030U	0.0030U
Arsenic	0.05(F)	0.0020U	0.0020U	0.0020U	0.0052B	0.020UW
Barium	2.0(F)	0.041B	0.020U	0.21B	0.032B	0.020U
Beryllium	0.001(P)	0.001U	0.001U	0.001U	0.001UN	0.001BN
Cadmium	0.005(F)	0.00020U	0.0022B	0.00020U	0.00020UN	0.00040B
Calcium	---	11.0	8.25	5.45	4.67B	10.0
Chromium	0.1(F)	0.005U	0.005U	0.005U	0.005U	0.005U
Cobalt	---	0.020U	0.020U	0.020U	0.043B	0.036B
Copper	1.3(F)	0.005U	0.050	0.007B	0.013B	0.063
Iron	---	0.315	0.040U	0.040U	0.335	17.1
Lead	0.015(F)	0.0010U	0.0043	0.0010U	0.0010U	0.0010U
Magnesium	---	5.67	3.73B	5.20	0.298B	5.75
Manganese	---	0.120	0.009B	0.005U	0.025	0.683
Mercury	0.002(F)	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U
Nickel	0.1(P)	0.005U	0.005U	0.005U	0.007B	0.0002U
Potassium	---	1.68B	2.24B	2.65B	5.58	2.14B
Selenium	0.05(F)	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
Silver	---	0.0010U	0.0010U	0.0010U	0.0010UW	0.0010U
Sodium	---	148	11.2	149	204	4.69B
Thallium	0.002(P)	0.0020U	0.0020U	0.0020U	0.0020UW	0.0020U
Tin	---	0.050U	0.050U	0.050U	0.050U	0.050U
Vanadium	---	0.010U	0.010U	0.010U	0.010U	0.010U
Zinc	---	0.010U	0.010U	0.010U	0.058	0.026

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected B = Value is < CRDL but > detection limit (inorganics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	FB3	R3E	R4E	06-01A	06-01B	06-06	06-07	06-12	06C01
	Lab Sample No:				19544		19536	19537	19549	19542
	Date Sampled:				03/31/92		03/31/92	03/31/92	03/31/92	03/31/92
	Date Analyzed:				04/23/92		04/23/92	04/23/92	04/23/92	04/23/92
NITRATE and NITRITE	MCL									
NITRATE NITROGEN	0.2(P)	0.005U	0.005U	0.005U	0.399	NOT SAMPLED	0.020U	0.020U	0.020U	0.020U
NITRITE NITROGEN	---	0.020U	0.020U	0.020U	0.005U	NOT SAMPLED	0.005U	0.005U	0.005U	0.006

Analyte	Well No:	06C01P2	06C01P3	06C02	06C02P2	06C03	06C03P2	06C04	06C04P2	06C05
	Lab Sample No:		19543	19693	19694	19695	19696	19697	19698	19699
	Date Sampled:		03/31/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92
	Date Analyzed:		04/23/92	04/23/92	04/23/92	04/23/92	04/23/92	04/23/92	04/23/92	04/23/92
NITRATE and NITRITE	MCL									
NITRATE NITROGEN	0.2(P)	NOT SAMPLED	0.020U	0.025	0.192	0.015	0.019	0.030	0.207	0.026
NITRITE NITROGEN	---	NOT SAMPLED	0.005U	0.005	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U

Analyte	Well No:	06C06	06C06P2	06C07	06C08	06C08P2
	Lab Sample No:	19700	19701	19702	19547	19548
	Date Sampled:	04/02/92	04/02/92	04/02/92	03/31/92	03/31/92
	Date Analyzed:	04/23/92	04/23/92	04/23/92	04/23/92	04/23/92
NITRATE and NITRITE	MCL					
NITRATE NITROGEN	0.2(P)	0.040	0.952	0.020U	0.146	0.020U
NITRITE NITROGEN	---	0.005U	0.005U	0.007	0.030	0.005U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	FB3	R1E	R2E	R3E	06-14A	06-15	06-16	06-17	06-18
	Lab Sample No:					19582	19583	19586	19591	19592
	Date Sampled:					04/01/92	04/01/92	04/01/92	04/01/92	04/01/92
	Date Anal. (Cn):					04/07/92	04/07/92	04/07/92	04/07/92	04/07/92
	Date Anal. (S):					04/02/92	04/02/92	04/02/92	04/02/92	04/02/92
CYANIDE and SULFIDE	MCL									
Cyanide	0.2(P)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Sulfide	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U

Analyte	Well No:	06-19	06-20	06-21	06-22	06-23	06C09	06C10	06C10P2	06C11
	Lab Sample No:	19593	19594	19595	19596	19597	19577	19578	19579	19683
	Date Sampled:	04/01/92	04/01/92	04/01/92	04/01/92	04/01/92	04/01/92	04/01/92	04/01/92	04/02/92
	Date Anal. (Cn):	04/07/92	04/07/92	04/07/92	04/07/92	04/07/92	04/07/92	04/07/92	04/07/92	04/08/92
	Date Anal. (S):	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92	04/03/92
CYANIDE and SULFIDE	MCL									
Cyanide	0.2(P)	0.005U	0.005U	0.005U	0.006B	0.005U	0.005U	0.005U	0.005U	0.005U
Sulfide	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U

Analyte	Well No:	06C11P2	06C12	06C12P2	06C13	06C13P2	06C14	06C14P2	06C15	06C15P2
	Lab Sample No:	19684	19580	19581	19685	19686	19687	19688	19584	19585
	Date Sampled:	04/02/92	04/01/92	04/01/92	04/02/92	04/02/92	04/02/92	04/02/92	04/01/92	04/01/92
	Date Anal. (Cn):	04/08/92	04/07/92	04/07/92	04/08/92	04/08/92	04/08/92	04/08/92	04/07/92	04/07/92
	Date Anal. (S):	04/03/92	04/02/92	04/02/92	04/03/92	04/03/92	04/03/92	04/03/92	04/02/92	04/02/92
CYANIDE and SULFIDE	MCL									
Cyanide	0.2(P)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Sulfide	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	06C16	06C16P2	06C16P3	06C17	06C18	06C18P2
	Lab Sample No:	19587	19588	19589	19590	19690	19691
	Date Sampled:	04/01/92	04/01/92	04/01/92	04/01/92	04/02/92	04/02/92
	Date Anal. (Cn):	04/07/92	04/07/92	04/07/92	04/07/92	04/08/92	04/08/92
	Date Anal. (S):	04/02/92	04/02/92	04/02/92	04/02/92	04/03/92	04/03/92
CYANIDE and SULFIDE	MCL						
Cyanide	0.2(P)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Sulfide	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB3	R1E	R2E	R3E	06-14A	06-15	06-16	06-17	06-18
	Lab Sample No:					19626	19627	19630	19635	19636
	Date Sampled:					04/01/92	04/01/92	04/01/92	04/01/92	04/01/92
	Date Analyzed:					04/02/92	04/02/92	04/02/92	04/02/92	04/02/92
EXPLOSIVES	MCL									
DNB	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
HMX	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
RDX	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TETRYL	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
TNB	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TNT	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.010J	0.020U	0.020U	0.020U
2,4-DNT	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
2,6-DNT	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06-19	06-20	06-21	06-22	06-23	06C09	06C10	06C10P2	06C11
	Lab Sample No:	19637	19638	19639	19640	19641	19621	19622	19623	19643
	Date Sampled:	04/01/92	04/01/92	04/01/92	04/01/92	04/01/92	04/01/92	04/01/92	04/01/92	04/02/92
	Date Analyzed:	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92	04/03/92
EXPLOSIVES	MCL									
DNB	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
HMX	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
RDX	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TETRYL	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
TNB	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TNT	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
2,4-DNT	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
2,6-DNT	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
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IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Dye Burial Ground Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	06C11P2	06C12	06C12P2	06C13	06C13P2	06C14	06C14P2	06C15	06C15P2
	Lab Sample No:	19644	19624	19625	19645	19646	19647	19648	19628	19629
	Date Sampled:	04/02/92	04/01/92	04/01/92	04/02/92	04/02/92	04/02/92	04/02/92	04/01/92	04/01/92
	Date Analyzed:	04/03/92	04/02/92	04/02/92	04/03/92	04/03/92	04/03/92	04/03/92	04/02/92	04/02/92
EXPLOSIVES	MCL									
DNB	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
HMX	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
RDX	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TETRYL	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
TNB	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TNT	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
2,4-DNT	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
2,6-DNT	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U

Analyte	Well No:	06C16	06C16P2	06C16P3	06C17	06C18	06C18P2
	Lab Sample No:	19631	19632	19633	19634	19650	19651
	Date Sampled:	04/01/92	04/01/92	04/01/92	04/01/92	04/02/92	04/02/92
	Date Analyzed:	04/02/92	04/02/92	04/02/92	04/02/92	04/03/92	04/03/92
EXPLOSIVES	MCL						
DNB	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
HMX	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
RDX	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TETRYL	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
TNB	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
TNT	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
2,4-DNT	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
2,6-DNT	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB3	R1E	R2E	R3E	06-14A 19560 04/01/92 09/10/92	06-15 19561 04/01/92 09/10/92	06-16 19564 04/01/92 09/10/92	06-17 19569 04/01/92 09/10/92	06-18 19570 04/01/92 09/10/92
METALS	MCL									
Aluminum	---	0.010U	0.010U	0.010U	0.010U	0.030U	0.030U	0.030U	0.030U	0.030U
Antimony	0.01(P)	0.0159B	0.00099B	0.0030U	0.0154B	0.0030U	0.0030U	0.0030U	0.0030U	0.0030U
Arsenic	0.05(F)	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
Barium	2.0(F)	0.010U	0.010U	0.010U	0.010U	0.102B	0.070B	0.027B	0.080B	0.030B
Beryllium	0.001(P)	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U
Cadmium	0.005(F)	0.004U	0.004U	0.004U	0.00020U	0.00020U	0.00020U	0.00082B	0.00086B	0.00020U
Calcium	---	0.158B	0.226B	0.200U	0.245B	51.0	56.1	22.1	19.3	31.4
Chromium	0.1(F)	0.0058W	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Cobalt	---	0.010U	0.010U	0.010U	0.010U	0.020U	0.020U	0.020U	0.020U	0.020U
Copper	1.3(F)	0.020B	0.040	0.005U	0.062	0.005U	0.005U	0.005U	0.086	0.068
Iron	---	0.010U	0.010UN	0.010UN	0.010U	0.040U	0.040U	0.040U	0.040U	0.040U
Lead	0.015(F)	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U
Magnesium	---	0.200U	0.105B	0.100U	0.100U	9.35	6.92	5.98	8.02	6.81
Manganese	---	0.007B	0.006B	0.005U	0.007B	0.005U	0.005U	0.005U	0.064	0.005U
Mercury	0.002(F)	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U
Nickel	0.1(P)	0.005U	0.005U	0.005U	0.005U	0.006B	0.005U	0.005U	0.019B	0.005U
Potassium	---	1.00U	0.335B	0.200U	0.208B	2.74B	1.68B	0.445B	5.78	2.61B
Selenium	0.05(F)	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
Silver	---	0.0010U	0.0010U	0.0010U	0.0010U	0.0010UW	0.0010U	0.0010U	0.0010U	0.0010UW
Sodium	---	0.215B	0.308B	0.100U	0.549B	3.58B	2.98B	8.69	3.11B	14.4
Thallium	0.002(P)	0.0020U	0.0020UW	0.0020U	0.0020U	0.0020UW	0.0020UW	0.0020UW	0.0020UW	0.0020UW
Tin	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Vanadium	---	0.010U	0.010U	0.010U	0.014B	0.010U	0.010U	0.010U	0.010U	0.010U
Zinc	---	0.005U	0.005B	0.005U	0.006B	0.010B	0.012B	0.010U	0.010U	0.010U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected B = Value is < CRDL but > detection limit (inorganics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06-19 / 19571 / 04/01/92 / 09/16/92	06-20 / 19572 / 04/01/92 / 09/16/92	06-21 / 19573 / 04/01/92 / 09/16/92	06-22 / 19574 / 04/01/92 / 09/16/92	06-23 / 19575 / 04/01/92 / 09/16/92	06C09 / 19555 / 04/01/92 / 9/10/92	06C10 / 19556 / 04/01/92 / 09/10/92	06C10P2 / 19557 / 04/01/92 / 09/10/92	06C11 / 19663 / 04/02/92 / 09/16/92
METALS	MCL									
Aluminum	---	0.030U	0.030U	0.030U	0.030U	0.030U	0.030U	0.030U	0.030U	0.030U
Antimony	0.01(P)	0.0030U	0.0030U	0.0030U	0.0030U	0.0030U	0.0030U	0.0030U	0.0030U	0.0030U
Arsenic	0.05(F)	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.036B
Barium	2.0(F)	0.116B	0.025B	0.020U	0.024B	0.020U	0.031B	0.034B	0.052B	0.115B
Beryllium	0.001(P)	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U
Cadmium	0.005(F)	0.00020U	0.0020U	0.00024B	0.00020U	0.00020U	0.00029B	0.00020U	0.00020U	0.00020U
Calcium	---	76.1	46.5	197	67.4	5.03	32.9	91.0	115	22.0
Chromium	0.1(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Cobalt	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
Copper	1.3(F)	0.075	0.005U	0.005U	0.005U	0.005U	0.005U	0.030	0.009B	0.015B
Iron	---	0.040U	0.040U	0.494	0.040U	0.040U	0.040U	0.940	0.040U	0.040U
Lead	0.015(F)	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U
Magnesium	---	7.45	10.7	86.9	9.87	2.24B	3.84	6.79	16.1	3.86B
Manganese	---	0.006B	0.005U	0.18	0.005U	0.007B	0.063	0.102	0.005U	0.015
Mercury	0.002(F)	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.002U	0.0002U	0.0002U	0.0002U
Nickel	0.1(P)	0.005U	0.182	0.005B	0.005U	0.013B	0.005U	0.005U	0.005U	0.005U
Potassium	---	6.23	0.723B	3.82B	1.06B	0.433B	0.724	1.52B	0.782B	1.72B
Selenium	0.05(F)	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
Silver	---	0.0010UW	0.0010UW	0.0010U	0.0010U	0.0010U	0.0010U	0.0010UW	0.0010UW	0.0010U
Sodium	---	7.24	28.4	20.5	3.36B	3.08B	15.7	4.48B	3.41B	117
Thallium	0.002(P)	0.0020U	0.0020U	0.0020U	0.0020U	0.0020UW	0.0020U	0.0020UW	0.0020UW	0.0020U
Tin	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Vanadium	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Zinc	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected B = Value is < CRDL but > detection limit (inorganics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C11P2 / 19664 / 04/02/92 / 09/17/92	06C12 / 19558 / 04/01/92 / 09/10/92	06C12P2 / 19559 / 04/01/92 / 09/10/92	06C13 / 19665 / 04/02/92 / 09/17/92	06C13P2 / 19666 / 04/02/92 / 09/17/92	06C14 / 19667 / 04/02/92 / 09/17/92	06C14P2 / 19668 / 04/02/92 / 09/17/92	06C15 / 19562 / 04/01/92 / 09/10/92	06C15P2 / 19563 / 04/01/92 / 09/10/92
METALS	MCL									
Aluminum	---	0.030U	0.030U	0.030U	0.030U	0.030U	0.030U	0.030U	0.030U	0.030U
Antimony	0.01(P)	0.0030U	0.0030U	0.0030U	0.0030U	0.0030U	0.0030U	0.0030U	0.0030U	0.0030U
Arsenic	0.05(F)	0.0020U	0.0020U	0.0020U	0.0020U	0.0266	0.0020U	0.0020U	0.0020U	0.0020U
Barium	2.0(F)	0.026B	0.076B	0.022B	0.023B	0.074B	0.040B	0.026B	0.025B	0.024B
Beryllium	0.001(P)	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U	0.001U
Cadmium	0.005(F)	0.00020U	0.00020U	0.00020U	0.00020U	0.00020U	0.00020U	0.0002U	0.00020U	0.00037B
Calcium	---	72.3	98.5	110	28.6	33.9	56.8	7.93	51.9	15.2
Chromium	0.1(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Cobalt	---	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U	0.020U
Copper	1.3(F)	0.005U	0.005U	0.074	0.005U	0.015B	0.005U	0.005U	0.005U	0.005U
Iron	---	0.571	0.771	0.060B	0.040U	10.4	0.31B	0.040U	0.040U	0.040U
Lead	0.015(F)	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U
Magnesium	---	9.77	13.5	20.2	5.96	8.62	6.01	2.94B	13.0	5.76
Manganese	---	0.087	0.294	0.050	0.005U	0.347	0.122	0.008	0.005U	0.005U
Mercury	0.002(F)	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U
Nickel	0.1(P)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Potassium	---	0.632B	1.04B	5.17	0.918B	1.74B	0.644B	0.349	1.16B	1.09B
Selenium	0.05(F)	0.0020U	0.0020UW	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
Silver	---	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U	0.0010U
Sodium	---	1.97B	7.65	8.37	15.4	68.9	9.84	4.04B	10.7	4.06B
Thallium	0.002(P)	0.0020U	0.0020UW	0.0020UW	0.0020U	0.0020U	0.0020U	0.0020U	0.0020UW	0.0020UW
Tin	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Vanadium	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Zinc	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U

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IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C16 / 19565 / 04/01/92 / 09/10/92	06C16P2 / 19566 / 04/01/92 / 09/10/92	06C16P3 / 19567 / 04/01/92 / 09/10/92	06C17 / 19568 / 04/01/92 / 09/10/92	06C18 / 19670 / 04/02/92 / 09/17/92	06C18P2 / 19671 / 04/02/92 / 09/17/92
METALS	MCL						
Aluminum	---	0.030U	0.030U	0.030U	0.030U	0.030U	0.0030U
Antimony	0.01(P)	0.0030U	0.0030U	0.0030U	0.0030U	0.0030U	0.030U
Arsenic	0.05(F)	0.0020U	0.0020U	0.002U	0.0020U	0.0028B	0.0184
Barium	2.0(F)	0.116B	0.040B	0.053B	0.020U	0.124B	0.150B
Beryllium	0.001(P)	0.001U	0.001U	0.0001U	0.001U	0.001U	0.001U
Cadmium	0.005(F)	0.00020U	0.00020U	0.00020U	0.00048B	0.0002U	0.00020U
Calcium	---	7.68	99.5	100	35.9	42.8	38.3
Chromium	0.1(F)	0.005U	0.005U	0.005U	0.005U	0.005U	0.005U
Cobalt	---	0.020U	0.020U	0.020U	0.024B	0.020U	0.020U
Copper	1.3(F)	0.005U	0.005U	0.005U	0.016B	0.0050U	0.005U
Iron	---	0.040U	0.125	0.040U	0.040U	3.13	65.5
Lead	0.015(F)	0.0010U	0.0010U	0.010U	0.0010U	0.0010U	0.0010U
Magnesium	---	3.55B	53.4	29.0	4.86B	7.18	11.7
Manganese	---	0.005U	0.025	0.005B	0.007B	0.125	0.635
Mercury	0.002(F)	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U	0.0002U
Nickel	0.1(P)	0.005U	0.005U	0.005U	0.009B	0.005U	0.005U
Potassium	---	1.32B	4.44B	1.10B	0.892	0.250B	2.43B
Selenium	0.05(F)	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U	0.0020U
Silver	---	0.0010U	0.0010UW	0.0010U	0.0010U	0.0010U	0.0010U
Sodium	---	168	32.2	6.43	9.80	28.5	45.8
Thallium	0.002(P)	0.0020UW	0.0020UW	0.0020U	0.0020UW	0.00020U	0.0020UW
Tin	---	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
Vanadium	---	0.010U	0.010U	0.010U	0.010U	0.010U	0.010U
Zinc	---	0.010U	0.015B	0.010U	0.010U	0.010U	0.010U

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B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Anal. :	FB3	R1E	R2E	R3E	06-14A	06-15	06-16	06-17	06-18
	Lab Sample No:					19604	19605	19608	19613	19614
	Date Sampled:					04/01/92	04/01/92	04/01/92	04/01/92	04/01/92
	Date Anal. :					04/22/92	04/22/92	04/22/92	04/22/92	04/22/92
NITRATE/NITRITE	MCL									
NITRATE NITROGEN	0.2(P)	0.005U	0.005U	0.005U	0.005U	0.089	0.558	0.083	0.602	6.94
NITRITE NITROGEN	---	0.020U	0.020U	0.020U	0.020U	0.005U	0.005U	0.005U	0.005U	0.014

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Anal. :	06-19	06-20	06-21	06-22	06-23	06C09	06C10	06C10P2	06C11
	Lab Sample No:	19615	19616	19617	19618	19619	19599	19600	19579	19703
	Date Sampled:	04/01/92	04/01/92	04/01/92	04/01/92	04/01/92	04/01/92	04/01/92	04/01/92	04/02/92
	Date Anal. :	04/22/92	04/22/92	04/22/92	04/22/92	04/22/92	04/22/92	04/22/92	04/22/92	04/23/92
NITRATE/NITRITE	MCL									
NITRATE NITROGEN	0.2(P)	0.089	18.2	0.020U	3.75	0.246	3.34	0.020U	0.968	0.039
NITRITE NITROGEN	---	0.005U	0.005U	0.010	0.005	0.009	0.005U	0.005U	0.005U	0.005U

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Anal. :	06C11P2	06C12	06C12P2	06C13	06C13P2	06C14	06C14P2	06C15	06C15P2
	Lab Sample No:	19704	19602	19603	19705	19706	19707	19688	19606	19607
	Date Sampled:	04/02/92	04/01/92	04/01/92	04/02/92	04/02/92	04/02/92	04/02/92	04/01/92	04/01/92
	Date Anal. :	04/23/92	04/22/92	04/22/92	04/23/92	04/23/92	04/23/92	04/23/92	04/22/92	04/22/92
NITRATE/NITRITE	MCL									
NITRATE NITROGEN	0.2(P)	0.057	0.020U	0.062	0.020U	0.020U	0.033	0.061	0.186	0.385
NITRITE NITROGEN	---	0.006	0.005U	0.005U	0.010	0.010	0.007	0.005U	0.005U	0.005U

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IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	06C16	06C16P2	06C16P3	06C17	06C18	06C18P2
	Lab Sample No:	19609	19610	19611	19612	19710	19711
	Date Sampled:	04/01/92	04/01/92	04/01/92	04/01/92	04/02/92	04/02/92
	Date Anal. :	04/22/92	04/22/92	04/22/92	04/22/92	04/23/92	04/23/92
NITRATE/NITRITE	MCL						
NITRATE NITROGEN	0.2(P)	0.020U	0.020U	0.020U	0.267	0.041	0.025
NITRITE NITROGEN	---	0.005U	0.005U	0.005U	0.005	0.005U	0.072

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IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 2 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: Lab Sample No: Date Sampled: Date Analyzed:	FB3	R3E	R4E	06-01A	06-01B	06-06	06-07	06-12	06C01 12446 05/31/91 06/06/91
BNA	MCL									
Acenaphthene	---	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010
Acenaphthylene	---	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010
Aniline	---	<0.020	<0.020	<0.020	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.020
Anthracene	---	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010
Benzidine	---	<0.050	<0.050	<0.050	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.050
Benzoic Acid	---	<0.050	<0.050	<0.050	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.050
Benzo(a)Anthracene	0.0001(P)	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010
Benzo(a)Pyrene	0.0002(P)	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010
Benzo(b)Fluoranthene	0.0002(P)	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010
Benzo(G,H,I)Perylene	---	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010
Benzo(k)Fluoranthene	0.0002(P)	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010
Benzyl Alcohol	---	<0.020	<0.020	<0.020	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.020
Bis(2-Chloroethoxy)Methane	---	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010
Bis(2-Chloroethyl)Ether	---	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010
Bis(2-Chloroisopropyl)Ether	---	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010
Bis(2-Ethylhexyl)Phthalate	---	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010
Butylbenzylphthalate	0.1(P)	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010
Chrysene	0.0002(P)	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010
Dibenzofuran	---	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010
Dibenzo(A,H)Anthracene	0.0003(P)	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010
Dibutylphthalate	---	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.0023BJ
Diethyl Phthalate	---	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.021B
Dimethyl Phthalate	---	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010
Di-N-Octylphthalate	---	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	0.0045J
Fluoranthene	---	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010
Fluorene	---	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010
Hexachlorobenzene	0.001(P)	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010
Hexachlorobutadiene	---	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010
Hexachlorocyclopentadiene	0.05(P)	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010
Hexachloroethane	---	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010
Indeno(1,2,3-C,D)Pyrene	0.0004(P)	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010
Isophorone	---	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010
Naphthalene	---	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010
Nitrobenzene	---	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010
N-Nitrosodimethylamine	---	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010
N-Nitroso-DI-N-Propylamine	---	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010
N-Nitrosodiphenyl Amine	---	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010
Pentachlorophenol	0.001(F)	<0.050	<0.050	<0.050	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.050
Phenanthrene	---	<0.010	<0.010	<0.010	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.010

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B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	FB3	R3E	R4E	06-01A	06-01B	06-06	06-07	06-12	06C01
	Lab Sample No:				19535		19536	19537	19538	19533
	Date Sampled:				03/31/92		03/31/92	03/31/92	03/31/92	03/31/92
	Date Anal. (Cn):				04/07/92		04/07/92	04/07/92	04/07/92	04/07/92
	Date Anal. (S):				04/02/92		04/02/92	04/02/92	04/02/92	04/02/92
CYANIDE and SULFIDE	MCL									
Cyanide	0.2(P)	<0.005U	<0.005U	<0.005U	<0.005U	NOT SAMPLED	<0.005U	<0.005U	<0.005U	<0.005U
Sulfide	---	<0.020U	<0.020	<0.020U	<0.020U	NOT SAMPLED	<0.020U	<0.020U	<0.020U	<0.020U

Analyte	Well No:	06C01P2	06C01P3	06C02	06C02P2	06C03	06C03P2	06C04	06C04P2	06C05
	Lab Sample No:		19534	19673	19674	19675	19676	19677	19678	19679
	Date Sampled:		03/31/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92
	Date Anal. (Cn):		04/07/92	04/08/92	04/08/92	04/08/92	04/08/92	04/08/92	04/08/92	04/08/92
	Date Anal. (S):		04/03/92	04/03/92	04/03/92	04/03/92	04/03/92	04/03/92	04/03/92	04/03/92
CYANIDE and SULFIDE	MCL									
Cyanide	0.2(P)	NOT SAMPLED	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U
Sulfide	---	NOT SAMPLED	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U

Analyte	Well No:	06C06	06C06P2	06C07	06C08	06C08P2
	Lab Sample No:	19680	19681	19682	19538	19539
	Date Sampled:	04/02/92	04/02/92	04/02/92	03/31/92	03/31/92
	Date Anal. (Cn):	04/08/92	04/08/92	04/08/92	04/07/92	04/07/92
	Date Anal. (S):	04/03/92	04/03/92	04/03/92	04/02/92	04/02/92
CYANIDE and SULFIDE	MCL					
Cyanide	0.2(P)	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U
Sulfide	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB3	R3E	R4E	06-01A	06-01B	06-06	06-07	06-12	06C01 / 12426 / 06/02/91 / 06/04/91
EXPLOSIVES	MCL									
DNB	---	<0.020U	<0.020U	<0.020U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.020U
HMX	---	<0.020U	<0.020U	<0.020U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.020U
RDX	---	<0.020U	<0.020U	<0.020U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.020U
TETRYL	---	<0.050U	<0.050U	<0.050U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.050U
TNB	---	<0.020U	<0.020U	<0.020U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.020U
TNT	---	<0.020U	<0.020U	<0.020U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.020U
2,4-DNT	---	<0.020U	<0.020U	<0.020U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.020U
2,6-DNT	---	<0.020U	<0.020U	<0.020U	NO SAMPLE	NOT SAMPLED	NO SAMPLE	NO SAMPLE	NO SAMPLE	<0.020U

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C01P2	06C01P3	06C02 / 12668 / 06/04/91 / 06/06/91	06C02P2 / 12669 / 06/04/91 / 06/06/91	06C03 / 12670 / 06/05/91 / 06/06/91	06C03P2 / 12671 / 06/05/91 / 06/06/91	06C04 / 12672 / 06/05/91 / 06/06/91	06C04P2 / 12673 / 06/05/91 / 06/06/91	06C05 / 12674 / 06/05/91 / 06/06/91
EXPLOSIVES	MCL									
DNB	---	NOT SAMPLED	NO SAMPLE	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
HMX	---	NOT SAMPLED	NO SAMPLE	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
RDX	---	NOT SAMPLED	NO SAMPLE	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
TETRYL	---	NOT SAMPLED	NO SAMPLE	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U
TNB	---	NOT SAMPLED	NO SAMPLE	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
TNT	---	NOT SAMPLED	NO SAMPLE	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
2,4-DNT	---	NOT SAMPLED	NO SAMPLE	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
2,6-DNT	---	NOT SAMPLED	NO SAMPLE	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Dye Burial Ground Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C06 / 12808 / 06/05/91 / 06/08/91	06C06P2 / 12675 / 06/05/91 / 06/06/91	06C07 / 12809 / 06/05/91 / 06/08/91	06C08 / 12424 / 06/02/91 / 06/04/91	06C08P2 / 12425 / 06/02/91 / 06/04/91
EXPLOSIVES	MCL					
DNB	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
HMX	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
RDX	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
TETRYL	---	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U
TNB	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
TNT	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
2,4-DNT	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
2,6-DNT	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB3	R3E	R4E	06-01A	06-01B	06-06	06-07	06-12	06C01
					19526		19527	19528	19531	19524
					03/31/92		03/31/92	03/31/92	03/31/92	03/31/92
					09/01/92		09/01/92	09/01/92	09/01/92	09/01/92
METALS	MCL									
Aluminum	---	<0.010U	<0.010U	<0.010UN	<0.030U	NOT SAMPLED	1.72	76.1	<0.030U	<0.030U
Antimony	0.01(P)	0.0159B	0.0154B	0.0116B	0.0040B	NOT SAMPLED	<0.0030U	<0.0030U	<0.0030U	<0.0030U
Arsenic	0.05(F)	<0.0020U	<0.0020U	<0.0020U	<0.0020U	NOT SAMPLED	<0.0020U	<0.0020U	<0.0020U	<0.0020U
Barium	2.0(F)	<0.010U	<0.010U	<0.010U	<0.020U	NOT SAMPLED	<0.020U	<0.020U	<0.020U	0.108B
Beryllium	0.001(P)	<0.0010U	<0.001U	<0.001U	<0.001UN	NOT SAMPLED	0.0028N	<0.001UN	0.001B	<0.001UN
Cadmium	0.005(F)	<0.004U	<0.00020U	<0.00020U	<0.00020U	NOT SAMPLED	<0.00020U	<0.00020U	0.00066B	<0.00020U
Calcium	---	0.158B	0.245B	0.302B	98.2	NOT SAMPLED	421	173	535	54.4
Chromium	0.1(F)	0.005BN	<0.005U	<0.005U	<0.005U	NOT SAMPLED	<0.005U	<0.005U	<0.005U	<0.005U
Cobalt	---	<0.010U	<0.010U	0.015B	0.040B	NOT SAMPLED	0.361	0.388	0.086	<0.020U
Copper	1.3(F)	0.020B	0.062	0.036	0.010B	NOT SAMPLED	0.039	0.007B	<0.005U	0.019B
Iron	---	<0.010U	<0.010U	<0.010U	<0.040U	NOT SAMPLED	7.46	49.2	0.600	<0.040U
Lead	0.015(F)	<0.0010U	<0.0010U	<0.0010U	<0.0010U	NOT SAMPLED	<0.0010U	<0.0010U	<0.0010U	<0.0010U
Magnesium	---	<0.200U	<0.100U	0.133B	41.1	NOT SAMPLED	365	140	317	10.4
Manganese	---	0.007B	0.007B	0.011B	0.016	NOT SAMPLED	51.1	8.19	11.5	0.111
Mercury	0.002(F)	<0.0002U	<0.0002	<0.0002U	<0.0002U	NOT SAMPLED	<0.0002U	<0.0002U	<0.0002U	<0.0002U
Nickel	0.1(P)	<0.005U	<0.005U	<0.005UN	0.006B	NOT SAMPLED	1.02	1.12	0.259	<0.005U
Potassium	---	<1.00U	0.208B	0.318B	1.10B	NOT SAMPLED	11.0	2.03	9.81	1.76B
Selenium	0.05(F)	<0.0020U	<0.0020U	<0.0020U	<0.0020U	NOT SAMPLED	<0.0020U	<0.0020UW	<0.0020U	<0.0020U
Silver	---	<0.0010U	<0.0010U	<0.0010UW	<0.0010UW	NOT SAMPLED	<0.0010U	<0.0010U	<0.0010UW	<0.0010U
Sodium	---	0.215B	0.549B	0.333B	74.6	NOT SAMPLED	52.0	51.4	31.7	14.5
Thallium	0.002(P)	<0.0020U	<0.0020U	<0.0020U	<0.0020U	NOT SAMPLED	<0.0020UW	<0.0020UW	<0.0020UW	<0.0020U
Tin	---	<0.050U	<0.050U	<0.050U	<0.050U	NOT SAMPLED	0.050U	<0.050U	<0.050U	<0.050U
Vanadium	---	<0.010U	0.014B	<0.010U	<0.010U	NOT SAMPLED	<0.010U	0.014B	0.019B	<0.010U
Zinc	---	<0.005U	0.006B	<0.005U	<0.010U	NOT SAMPLED	1.17	1.82	1.35	<0.010U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected B = Value is < CRDL but > detection limit (inorganics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C01P2	06C01P3	06C02	06C02P2	06C03	06C03P2	06C04	06C04P2	06C05
	Lab Sample No:		19525	19653	19654	19655	19656	19657	19658	19659
	Date Sampled:		03/31/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92
	Date Analyzed:		09/01/92	09/16/92	09/16/92	09/16/92	09/16/92	09/16/92	09/16/92	09/16/92
METALS	MCL									
Aluminum	---	NOT SAMPLED	<0.030U	<0.030U	<0.030U	<0.030U	<0.030U	<0.030U	<0.030U	<0.030U
Antimony	0.01(P)	NOT SAMPLED	<0.0030U	0.031B	<0.0030U	<0.0030U	<0.0030U	<0.0030U	<0.0030U	0.0030B
Arsenic	0.05(F)	NOT SAMPLED	<0.0020U	<0.0020U	<0.0020U	0.0119	<0.0020U	<0.0020U	<0.0020U	<0.0020U
Barium	2.0(F)	NOT SAMPLED	<0.020U	<0.020UN	0.110BN	0.082BN	0.054BN	0.131BN	0.026BN	0.063BN
Beryllium	0.001(P)	NOT SAMPLED	0.001BN	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U
Cadmium	0.005(F)	NOT SAMPLED	<0.00020U	<0.00020U	<0.00020U	<0.00020U	<0.00020U	<0.00020U	<0.00020U	<0.00020U
Calcium	---	NOT SAMPLED	244	<0.20U	72.5	55.5	73.1	81.4	76.5	10.7
Chromium	0.1(F)	NOT SAMPLED	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U
Cobalt	---	NOT SAMPLED	0.052	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
Copper	1.3(F)	NOT SAMPLED	0.054	<0.005U	<0.005U	<0.050U	<0.005U	<0.005U	0.053	<0.005U
Iron	---	NOT SAMPLED	3.62	<0.040U	1.88	7.12	<0.040U	1.39	<0.040U	<0.040U
Lead	0.015(F)	NOT SAMPLED	<0.0010U	<0.0010U	<0.0010U	<0.0010U	<0.0010U	0.0018B	<0.0010U	<0.0010U
Magnesium	---	NOT SAMPLED	210	11.0	33.6	9.84	15.7	18.3	45.7	2.64B
Manganese	---	NOT SAMPLED	1.90	0.136	0.010B	0.383	0.010B	0.126	0.060	0.005B
Mercury	0.002(F)	NOT SAMPLED	<0.0002U	<0.0002U	<0.0002U	<0.0002U	<0.0002U	<0.0002U	<0.0002U	<0.0002U
Nickel	0.1(P)	NOT SAMPLED	0.108	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U
Potassium	---	NOT SAMPLED	16.1	1.54B	1.75B	1.17B	1.35B	2.06B	4.50B	1.18B
Selenium	0.05(F)	NOT SAMPLED	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U
Silver	---	NOT SAMPLED	<0.0010U	<0.0010U	<0.0010U	<0.0010U	<0.0010U	<0.0010U	<0.0010U	<0.0010U
Sodium	---	NOT SAMPLED	63.5	24.3	4.31B	17.3	15.0	36.2	82.6	161
Thallium	0.002(P)	NOT SAMPLED	<0.0020UW	<0.0010U	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U
Tin	---	NOT SAMPLED	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U
Vanadium	---	NOT SAMPLED	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U
Zinc	---	NOT SAMPLED	0.037	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected B = Value is < CRDL but > detection limit (inorganics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C06 / 19660 / 04/02/92 / 09/16/92	06C06P2 / 19661 / 04/02/92 / 09/16/92	06C07 / 19662 / 04/02/92 / 09/16/92	06C08 / 19529 / 03/31/92 / 09/01/92	06C08P2 / 19530 / 03/31/92 / 09/01/92
METALS	MCL					
Aluminum	---	<0.030U	<0.030U	<0.030U	0.154	0.276
Antimony	0.01(P)	<0.0030U	<0.0030U	<0.0030U	<0.0030U	0.0030U
Arsenic	0.05(F)	<0.0020U	<0.0020U	<0.0020U	0.0052B	<0.020UW
Barium	2.0(F)	0.041B	<0.020U	0.21B	0.032B	<0.020U
Beryllium	0.001(P)	<0.001U	<0.001U	<0.001U	<0.001UN	0.001BN
Cadmium	0.005(F)	<0.00020U	0.0022B	<0.00020U	<0.00020UN	0.000408
Calcium	---	11.0	8.25	5.45	4.67B	10.0
Chromium	0.1(F)	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U
Cobalt	---	<0.020U	<0.020U	<0.020U	0.043B	0.036B
Copper	1.3(F)	<0.005U	0.050	0.007B	0.013B	0.063
Iron	---	0.315	<0.040U	<0.040U	0.335	17.1
Lead	0.015(F)	<0.0010U	0.0043	<0.0010U	<0.0010U	<0.0010U
Magnesium	---	5.67	3.73B	5.20	0.298B	5.75
Manganese	---	0.120	0.009B	<0.005U	0.025	0.683
Mercury	0.002(F)	<0.0002U	<0.0002U	<0.0002U	<0.0002U	<0.0002U
Nickel	0.1(P)	<0.005U	<0.005U	<0.005U	0.007B	<0.0002U
Potassium	---	1.68B	2.24B	2.65B	5.58	2.14B
Selenium	0.05(F)	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U
Silver	---	<0.0010U	<0.0010U	<0.0010U	<0.0010UW	<0.0010U
Sodium	---	148	11.2	149	204	4.69B
Thallium	0.002(P)	<0.0020U	<0.0020U	<0.0020U	<0.0020UW	<0.0020U
Tin	---	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U
Vanadium	---	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U
Zinc	---	<0.010U	<0.010U	<0.010U	0.058	0.026

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected B = Value is < CRDL but > detection limit (inorganics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	FB3	R3E	R4E	06-01A	06-01B	06-06	06-07	06-12	06C01
	Lab Sample No:				19544		19536	19537	19549	19542
	Date Sampled:				03/31/92		03/31/92	03/31/92	03/31/92	03/31/92
	Date Analyzed:				04/23/92		04/23/92	04/23/92	04/23/92	04/23/92
NITRATE/NITRITE	MCL									
NITRATE NITROGEN	0.2(P)	<0.005U	<0.005U	<0.005U	0.399	NOT SAMPLED	<0.020U	<0.020U	<0.020U	<0.020U
NITRITE NITROGEN	---	<0.020U	<0.020	<0.020U	<0.005U	NOT SAMPLED	<0.005U	<0.005U	<0.005U	0.006

Analyte	Well No:	06C01P2	06C01P3	06C02	06C02P2	06C03	06C03P2	06C04	06C04P2	06C05
	Lab Sample No:		19543	19693	19694	19695	19696	19697	19698	19699
	Date Sampled:		03/31/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92
	Date Analyzed:		04/23/92	04/23/92	04/23/92	04/23/92	04/23/92	04/23/92	04/23/92	04/23/92
NITRATE/NITRITE	MCL									
NITRATE NITROGEN	0.2(P)	NOT SAMPLED	<0.020U	0.025	0.192	0.015	0.019	0.030	0.207	0.026
NITRITE NITROGEN	---	NOT SAMPLED	<0.005U	0.005	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U

Analyte	Well No:	06C06	06C06P2	06C07	06C08	06C08P2
	Lab Sample No:	19700	19701	19702	19547	19548
	Date Sampled:	04/02/92	04/02/92	04/02/92	03/31/92	03/31/92
	Date Analyzed:	04/23/92	04/23/92	04/23/92	04/23/92	04/23/92
NITRATE/NITRITE	MCL					
NITRATE NITROGEN	0.2(P)	0.040	0.952	<0.020U	0.146	<0.020U
NITRITE NITROGEN	---	<0.005U	<0.005U	0.007	0.030	<0.005U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Demolition Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	FB3	R3E	R4E	06-01A	06-01B	06-06	06-07	06-12	06C01
	Lab Sample No:				19544		19536	19537	19549	19542
	Date Sampled:				03/31/92		03/31/92	03/31/92	03/31/92	03/31/92
	Date Analyzed:				04/23/92		04/23/92	04/23/92	04/23/92	04/23/92
NITRATE/NITRITE	MCL									
NITRATE NITROGEN	0.2(P)	<0.005U	<0.005U	<0.005U	0.399	NOT SAMPLED	<0.020U	<0.020U	<0.020U	<0.020U
NITRITE NITROGEN	---	<0.020U	<0.020	<0.020U	<0.005U	NOT SAMPLED	<0.005U	<0.005U	<0.005U	0.006

Analyte	Well No:	06C01P2	06C01P3	06C02	06C02P2	06C03	06C03P2	06C04	06C04P2	06C05
	Lab Sample No:		19543	19693	19694	19695	19696	19697	19698	19699
	Date Sampled:		03/31/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92
	Date Analyzed:		04/23/92	04/23/92	04/23/92	04/23/92	04/23/92	04/23/92	04/23/92	04/23/92
NITRATE/NITRITE	MCL									
NITRATE NITROGEN	0.2(P)	NOT SAMPLED	<0.020U	0.025	0.192	0.015	0.019	0.030	0.207	0.026
NITRITE NITROGEN	---	NOT SAMPLED	<0.005U	0.005	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U

Analyte	Well No:	06C06	06C06P2	06C07	06C08	06C08P2
	Lab Sample No:	19700	19701	19702	19547	19548
	Date Sampled:	04/02/92	04/02/92	04/02/92	03/31/92	03/31/92
	Date Analyzed:	04/23/92	04/23/92	04/23/92	04/23/92	04/23/92
NITRATE/NITRITE	MCL					
NITRATE NITROGEN	0.2(P)	0.040	0.952	<0.020U	0.146	<0.020U
NITRITE NITROGEN	---	<0.005U	<0.005U	0.007	0.030	<0.005U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB3	R1E	R2E	R3E	06-14A	06-15	06-16	06-17	06-18
	Lab Sample No:					19626	19627	19630	19635	19636
	Date Sampled:					04/01/92	04/01/92	04/01/92	04/01/92	04/01/92
	Date Analyzed:					04/02/92	04/02/92	04/02/92	04/02/92	04/02/92
EXPLOSIVES	MCL									
DNB	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
HMX	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
RDX	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
TETRYL	---	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U
TNB	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
TNT	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	0.010J
2,4-DNT	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
2,6-DNT	---					<0.020U	<0.020U	<0.020U	<0.020U	<0.020U

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06-19	06-20	06-21	06-22	06-23	06C09	06C10	06C10P2	06C11
	Lab Sample No:	19637	19638	19639	19640	19641	19621	19622	19623	19643
	Date Sampled:	04/01/92	04/01/92	04/01/92	04/01/92	04/01/92	04/01/92	04/01/92	04/01/92	04/02/92
	Date Analyzed:	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92	04/03/92
EXPLOSIVES	MCL									
DNB	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
HMX	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
RDX	---	<0.020U	<0.020u	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
TETRYL	---	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U
TNB	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
TNT	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
2,4-DNT	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
2,6-DNT	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE Old Rifle Range
Project NWSCC - ~~Dye Burial Ground Site~~
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C11P2 / 19644 / 04/02/92 / 04/03/92	06C12 / 19624 / 04/01/92 / 04/02/92	06C12P2 / 19625 / 04/01/92 / 04/02/92	06C13 / 19645 / 04/02/92 / 04/03/92	06C13P2 / 19646 / 04/02/92 / 04/03/92	06C14 / 19647 / 04/02/92 / 04/03/92	06C14P2 / 19648 / 04/02/92 / 04/03/92	06C15 / 19628 / 04/01/92 / 04/02/92	06C15P2 / 19629 / 04/01/92 / 04/02/92
EXPLOSIVES	MCL									
DNB	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
HMX	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
RDX	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
TETRYL	---	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U
TNB	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
TNT	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
2,4-DNT	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
2,6-DNT	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C16 / 19631 / 04/01/92 / 04/02/92	06C16P2 / 19632 / 04/01/92 / 04/02/92	06C16P3 / 19633 / 04/01/92 / 04/02/92	06C17 / 19634 / 04/01/92 / 04/02/92	06C18 / 19650 / 04/02/92 / 04/03/92	06C18P2 / 19651 / 04/02/92 / 04/03/92
EXPLOSIVES	MCL						
DNB	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
HMX	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
RDX	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
TETRYL	---	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U
TNB	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
TNT	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
2,4-DNT	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
2,6-DNT	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	FB3	R1E	R2E	R3E	06-14A	06-15	06-16	06-17	06-18
	Lab Sample No:					19582	19583	19586	19591	19592
	Date Sampled:					04/01/92	04/01/92	04/01/92	04/01/92	04/01/92
	Date Anal. (Cn):					04/07/92	04/07/92	04/07/92	04/07/92	04/07/92
	Date Anal. (S):					04/02/92	04/02/92	04/02/92	04/02/92	04/02/92
CYANIDE and SULFIDE	MCL									
Cyanide	0.2(P)	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U
Sulfide	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U

Analyte	Well No:	06-19	06-20	06-21	06-22	06-23	06C09	06C10	06C10P2	06C11
	Lab Sample No:	19593	19594	19595	19596	19597	19577	19578	19579	19683
	Date Sampled:	04/01/92	04/01/92	04/01/92	04/01/92	04/01/92	04/01/92	04/01/92	04/01/92	04/02/92
	Date Anal. (Cn):	04/07/92	04/07/92	04/07/92	04/07/92	04/07/92	04/07/92	04/07/92	04/07/92	04/08/92
	Date Anal. (S):	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92	04/02/92	04/03/92
CYANIDE and SULFIDE	MCL									
Cyanide	0.2(P)	<0.005U	<0.005U	<0.005U	0.0068	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U
Sulfide	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U

Analyte	Well No:	06C11P2	06C12	06C12P2	06C13	06C13P2	06C14	06C14P2	06C15	06C15P2
	Lab Sample No:	19684	19580	19581	19685	19686	19687	19688	19584	19585
	Date Sampled:	04/02/92	04/01/92	04/01/92	04/02/92	04/02/92	04/02/92	04/02/92	04/01/92	04/01/92
	Date Anal. (Cn):	04/08/92	04/07/92	04/07/92	04/08/92	04/08/92	04/08/92	04/08/92	04/07/92	04/07/92
	Date Anal. (S):	04/03/92	04/02/92	04/02/92	04/03/92	04/03/92	04/03/92	04/03/92	04/02/92	04/02/92
CYANIDE and SULFIDE	MCL									
Cyanide	0.2(P)	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U
Sulfide	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	06C16	06C16P2	06C16P3	06C17	06C18	06C18P2
	Lab Sample No:	19587	19588	19589	19590	19690	19691
	Date Sampled:	04/01/92	04/01/92	04/01/92	04/01/92	04/02/92	04/02/92
	Date Anal. (Cn):	04/07/92	04/07/92	04/07/92	04/07/92	04/08/92	04/08/92
	Date Anal. (S):	04/02/92	04/02/92	04/02/92	04/02/92	04/03/92	04/03/92
CYANIDE and SULFIDE	MCL						
Cyanide	0.2(P)	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U
Sulfide	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected J = Estimated value < detection limit (organics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	FB3	R1E	R2E	R3E	06-14A 19560 04/01/92 09/10/92	06-15 19561 04/01/92 09/10/92	06-16 19564 04/01/92 09/10/92	06-17 19569 04/01/92 09/10/92	06-18 19570 04/01/92 09/10/92
METALS	MCL									
Aluminum	---	<0.010U	<0.010U	<0.010U	<0.010U	<0.030U	<0.030U	<0.030U	<0.030U	<0.030U
Antimony	0.01(P)	0.0159B	0.000998	<0.0030U	0.0154B	<0.0030U	<0.0030U	<0.0030U	<0.0030U	<0.0030U
Arsenic	0.05(F)	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U
Barium	2.0(F)	<0.010U	<0.010U	<0.010U	<0.010U	0.102B	0.070B	0.027B	0.080B	0.030B
Beryllium	0.001(P)	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U
Cadmium	0.005(F)	<0.004U	<0.004U	<0.004U	<0.00020U	<0.00020U	<0.00020U	0.00082B	0.00086B	<0.00020U
Calcium	---	0.158B	0.226B	<0.200U	0.245B	51.0	56.1	22.1	19.3	31.4
Chromium	0.1(F)	0.0058N	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U
Cobalt	---	<0.010U	<0.010U	<0.010U	<0.010U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
Copper	1.3(F)	0.020B	0.040	<0.005U	0.062	<0.005U	<0.005U	<0.005U	0.086	0.068
Iron	---	<0.010U	<0.010UN	<0.010UN	<0.010U	<0.040U	<0.040U	<0.040U	<0.040U	<0.040U
Lead	0.015(F)	<0.0010U	<0.0010U	<0.0010U	<0.0010U	<0.0010U	<0.0010U	<0.0010U	<0.0010U	<0.0010U
Magnesium	---	<0.200U	0.105B	<0.100U	<0.100U	9.35	6.92	5.98	8.02	6.81
Manganese	---	0.007B	0.006B	<0.005U	0.007B	<0.005U	<0.005U	<0.005U	0.064	<0.005U
Mercury	0.002(F)	<0.0002U	<0.0002U	<0.0002U	<0.0002U	<0.0002U	<0.0002U	<0.0002U	<0.0002U	<0.0002U
Nickel	0.1(P)	<0.005U	<0.005U	<0.005U	<0.005U	0.006B	<0.005U	<0.005U	0.019B	<0.005U
Potassium	---	<1.00U	0.335B	<0.200U	0.208B	2.74B	1.68B	0.445B	5.78	2.61B
Selenium	0.05(F)	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U
Silver	---	<0.0010U	<0.0010U	<0.0010U	<0.0010U	<0.0010UW	<0.0010U	<0.0010U	<0.0010U	<0.0010UW
Sodium	---	0.215B	0.308B	<0.100U	0.549B	3.58B	2.98B	8.69	3.11B	14.4
Thallium	0.002(P)	<0.0020U	<0.0020UW	<0.0020U	<0.0020U	<0.0020UW	<0.0020UW	<0.0020UW	<0.0020UW	<0.0020UW
Tin	---	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U
Vanadium	---	<0.010U	<0.010U	<0.010U	0.014B	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U
Zinc	---	<0.005U	0.005B	<0.005U	0.006B	0.010B	0.012B	<0.010U	<0.010U	<0.010U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected B = Value is < CRDL but > detection limit (inorganics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06-19	06-20	06-21	06-22	06-23	06C09	06C10	06C10P2	06C11
	Lab Sample No:	19571	19572	19573	19574	19575	19555	19556	19557	19663
	Date Sampled:	04/01/92	04/01/92	04/01/92	04/01/92	04/01/92	04/01/92	04/01/92	04/01/92	04/02/92
	Date Analyzed:	09/16/92	09/16/92	09/16/92	09/16/92	09/16/92	9/10/92	09/10/92	09/10/92	09/16/92
METALS	MCL									
Aluminum	---	<0.030U	<0.030U	<0.030U	<0.030U	<0.030U	<0.030U	<0.030U	<0.030U	<0.030U
Antimony	0.01(P)	<0.0030U	<0.0030U	<0.0030U	<0.0030U	<0.0030U	<0.0030U	<0.0030U	<0.0030U	<0.0030U
Arsenic	0.05(F)	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U	0.036B
Barium	2.0(F)	0.116B	0.025B	<0.020U	0.024B	<0.020U	0.031B	0.034B	0.052B	0.115B
Beryllium	0.001(P)	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U
Cadmium	0.005(F)	<0.00020U	<0.0020U	0.00024B	<0.00020U	<0.00020U	0.00029B	<0.00020U	<0.00020U	<0.00020U
Calcium	---	76.1	46.5	197	67.4	5.03	32.9	91.0	115	22.0
Chromium	0.1(F)	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U
Cobalt	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
Copper	1.3(F)	0.075	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	0.030	0.009B	0.015B
Iron	---	<0.040U	<0.040U	0.494	<0.040U	<0.040U	<0.040U	0.940	<0.040U	<0.040U
Lead	0.015(F)	<0.0010U	<0.0010U	<0.0010U	<0.0010U	<0.0010U	<0.0010U	<0.0010U	<0.0010U	<0.0010U
Magnesium	---	7.45	10.7	86.9	9.87	2.24B	3.84	6.79	16.1	3.86B
Manganese	---	0.006B	<0.005U	0.18	<0.005U	0.007B	0.063	0.102	<0.005U	0.015
Mercury	0.002(F)	<0.0002U	<0.0002U	<0.0002U	<0.0002U	<0.0002U	<0.002U	<0.0002U	<0.0002U	<0.0002U
Nickel	0.1(P)	<0.005U	0.182	0.005B	<0.005U	0.013B	<0.005U	<0.005U	<0.005U	<0.005U
Potassium	---	6.23	0.723B	3.82B	1.06B	0.433B	0.724	1.52B	0.782B	1.72B
Selenium	0.05(F)	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U
Silver	---	<0.0010UW	<0.0010UW	<0.0010U	<0.0010U	<0.0010U	<0.0010U	<0.0010UW	<0.0010UW	<0.0010U
Sodium	---	7.24	28.4	20.5	3.36B	3.08B	15.7	4.48B	3.41B	117
Thallium	0.002(P)	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020UW	<0.0020U	<0.0020UW	<0.0020UW	<0.0020U
Tin	---	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U
Vanadium	---	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U
Zinc	---	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected B = Value is < CRDL but > detection limit (inorganics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C11P2 / 19664 / 04/02/92 / 09/17/92	06C12 / 19558 / 04/01/92 / 09/10/92	06C12P2 / 19559 / 04/01/92 / 09/10/92	06C13 / 19665 / 04/02/92 / 09/17/92	06C13P2 / 19666 / 04/02/92 / 09/17/92	06C14 / 19667 / 04/02/92 / 09/17/92	06C14P2 / 19668 / 04/02/92 / 09/17/92	06C15 / 19562 / 04/01/92 / 09/10/92	06C15P2 / 19563 / 04/01/92 / 09/10/92
METALS	MCL									
Aluminum	---	<0.030U	<0.030U	<0.030U	<0.030U	<0.030U	<0.030U	<0.030U	<0.030U	<0.030U
Antimony	0.01(P)	<0.0030U	<0.0030U	<0.0030U	<0.0030U	<0.0030U	<0.0030U	<0.0030U	<0.0030U	<0.0030U
Arsenic	0.05(F)	<0.0020U	<0.0020U	<0.0020U	<0.0020U	0.0266	<0.0020U	<0.0020U	<0.0020U	<0.0020U
Barium	2.0(F)	0.026B	0.076B	0.022B	0.023B	0.074B	0.040B	0.026B	0.025B	0.024B
Beryllium	0.001(P)	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U	<0.001U
Cadmium	0.005(F)	<0.00020U	<0.00020U	<0.00020U	<0.00020U	<0.00020U	<0.00020U	<0.0002U	<0.00020U	0.00037B
Calcium	---	72.3	98.5	110	28.6	33.9	56.8	7.93	51.9	15.2
Chromium	0.1(F)	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U
Cobalt	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U	<0.020U
Copper	1.3(F)	<0.005U	<0.005U	0.074	<0.005U	0.015B	<0.005U	<0.005U	<0.005U	<0.005U
Iron	---	0.571	0.771	0.060B	<0.040U	10.4	0.318	<0.040U	<0.040U	<0.040U
Lead	0.015(F)	<0.0010U	<0.0010U	<0.0010U	<0.0010U	<0.0010U	<0.0010U	<0.0010U	<0.0010U	<0.0010U
Magnesium	---	9.77	13.5	20.2	5.96	8.62	6.01	2.94B	13.0	5.76
Manganese	---	0.087	0.294	0.050	<0.005U	0.347	0.122	0.008	<0.005U	<0.005U
Mercury	0.002(F)	<0.0002U	<0.0002U	<0.0002U	<0.0002U	<0.0002U	<0.0002U	<0.0002U	<0.0002U	<0.0002U
Nickel	0.1(P)	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U	<0.005U
Potassium	---	0.632B	1.04B	5.17	0.918B	1.74B	0.644B	0.349	1.16B	1.09B
Selenium	0.05(F)	<0.0020U	<0.0020UW	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U
Silver	---	<0.0010U	<0.0010U	<0.0010U	<0.0010U	<0.0010U	<0.0010U	<0.0010U	<0.0010U	<0.0010U
Sodium	---	1.97B	7.65	8.37	15.4	68.9	9.84	4.04B	10.7	4.06B
Thallium	0.002(P)	<0.0020U	<0.0020UW	<0.0020UW	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020UW	<0.0020UW
Tin	---	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U
Vanadium	---	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U
Zinc	---	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U

MCL = Final (F) or Proposed (P) drinking water standard U = Parameter undetected B = Value is < CRDL but > detection limit (inorganics)
B = Analyte was found in blank and in sample (organics)

IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No: / Lab Sample No: / Date Sampled: / Date Analyzed:	06C16 / 19565 / 04/01/92 / 09/10/92	06C16P2 / 19566 / 04/01/92 / 09/10/92	06C16P3 / 19567 / 04/01/92 / 09/10/92	06C17 / 19568 / 04/01/92 / 09/10/92	06C18 / 19670 / 04/02/92 / 09/17/92	06C18P2 / 19671 / 04/02/92 / 09/17/92
METALS	MCL						
Aluminum	---	<0.030U	<0.030U	<0.030U	<0.030U	<0.030U	<0.0030U
Antimony	0.01(P)	<0.0030U	<0.0030U	<0.0030U	<0.0030U	<0.0030U	<0.030U
Arsenic	0.05(F)	<0.0020U	<0.0020U	<0.002U	<0.0020U	0.0028B	0.0184
Barium	2.0(F)	0.116B	0.040B	0.053B	<0.020U	0.124B	0.150B
Beryllium	0.001(P)	<0.001U	<0.001U	<0.0001U	<0.001U	<0.001U	<0.001U
Cadmium	0.005(F)	<0.00020U	<0.00020U	<0.00020U	0.00048B	<0.0002U	<0.00020U
Calcium	---	7.68	99.5	100	35.9	42.8	38.3
Chromium	0.1(F)	<0.005U	,0.005U	<0.005U	<0.005U	<0.005U	<0.005U
Cobalt	---	<0.020U	<0.020U	<0.020U	0.024B	<0.020U	<0.020U
Copper	1.3(F)	<0.005U	<0.005U	<0.005U	0.016B	<0.0050U	<0.005U
Iron	---	<0.040U	0.125	<0.040U	<0.040U	3.13	65.5
Lead	0.015(F)	<0.0010U	<0.0010U	<0.010U	<0.0010U	<0.0010U	<0.0010U
Magnesium	---	3.55B	53.4	29.0	4.86B	7.18	11.7
Manganese	---	<0.005U	0.025	0.005B	0.007B	0.125	0.635
Mercury	0.002(F)	<0.0002U	<0.0002U	<0.0002U	<0.0002U	<0.0002U	<0.0002U
Nickel	0.1(P)	<0.005U	<0.005U	<0.005U	0.009B	<0.005U	<0.005U
Potassium	---	1.32B	4.44B	1.10B	0.892	0.250B	2.43B
Selenium	0.05(F)	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U	<0.0020U
Silver	---	<0.0010U	<0.0010UW	<0.0010U	<0.0010U	<0.0010U	<0.0010U
Sodium	---	168	32.2	6.43	9.80	28.5	45.8
Thallium	0.002(P)	<0.0020UW	<0.0020UW	<0.0020U	<0.0020UW	<0.00020U	<0.0020UW
Tin	---	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U	<0.050U
Vanadium	---	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U	<0.010U
Zinc	---	<0.010U	0.015B	<0.010U	<0.010U	<0.010U	<0.010U

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IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	FB3	R1E	R2E	R3E	06-14A	06-15	06-16	06-17	06-18
	Lab Sample No:					19604	19605	19608	19613	19614
	Date Sampled:					04/01/92	04/01/92	04/01/92	04/01/92	04/01/92
	Date Anal. (Cn):					04/22/92	04/22/92	04/22/92	04/22/92	04/22/92
NITRATE/NITRITE	MCL									
NITRATE NITROGEN	0.2(P)	<0.005U	<0.005U	<0.005U	<0.005U	0.089	0.558	0.083	0.602	6.94
NITRITE NITROGEN	---	<0.020U	<0.020U	<0.020U	<0.020U	<0.005U	<0.005U	<0.005U	<0.005U	0.014

Analyte	Well No:	06-19	06-20	06-21	06-22	06-23	06C09	06C10	06C10P2	06C11
	Lab Sample No:	19615	19616	19617	19618	19619	19599	19600	19579	19703
	Date Sampled:	04/01/92	04/01/92	04/01/92	04/01/92	04/01/92	04/01/92	04/01/92	04/01/92	04/02/92
	Date Anal. (Cn):	04/22/92	04/22/92	04/22/92	04/22/92	04/22/92	04/22/92	04/22/92	04/22/92	04/23/92
NITRATE/NITRITE	MCL									
NITRATE NITROGEN	0.2(P)	0.089	18.2	<0.020U	3.75	0.246	3.34	<0.020U	0.968	0.039
NITRITE NITROGEN	---	<0.005U	<0.005U	0.010	0.005	0.009	<0.005U	<0.005U	<0.005U	<0.005U

Analyte	Well No:	06C11P2	06C12	06C12P2	06C13	06C13P2	06C14	06C14P2	06C15	06C15P2
	Lab Sample No:	19704	19602	19603	19705	19706	19707	19688	19606	19607
	Date Sampled:	04/02/92	04/01/92	04/01/92	04/02/92	04/02/92	04/02/92	04/02/92	04/01/92	04/01/92
	Date Anal. (Cn):	04/23/92	04/22/92	04/22/92	04/23/92	04/23/92	04/23/92	04/23/92	04/22/92	04/22/92
NITRATE/NITRITE	MCL									
NITRATE NITROGEN	0.2(P)	0.057	<0.020U	0.062	<0.020U	<0.020U	0.033	0.061	0.186	0.385
NITRITE NITROGEN	---	0.006	<0.005U	<0.005U	0.010	0.010	0.007	<0.005U	<0.005U	<0.005U

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IN5 170 023 498

SUMMARY TABLE
Project NWSCC - Old Rifle Range Site
Round 4 Groundwater Samples
Concentrations in mg/l

Analyte	Well No:	06C16	06C16P2	06C16P3	06C17	06C18	06C18P2
	Lab Sample No:	19609	19610	19611	19612	19710	19711
	Date Sampled:	04/01/92	04/01/92	04/01/92	04/01/92	04/02/92	04/02/92
	Date Anal. (Cn):	04/22/92	04/22/92	04/22/92	04/22/92	04/23/92	04/23/92
NITRATE/NITRITE	MCL						
NITRATE NITROGEN	0.2(P)	<0.020U	<0.020U	<0.020U	0.267	0.041	0.025
NITRITE NITROGEN	---	<0.005U	<0.005U	<0.005U	0.005	<0.005U	0.072

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IN5 170 023 498

Appendix G
Parameters detected in four rounds of sampling at Demolition Area/Old Rifle Range, Nov 1990 to Mar 1992

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCD	UNIT
06-01A	11/27/90	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.05000		mg/l
06-01A	11/27/90	METHYLENE CHLORIDE	B	0.02100	0.00500	mg/l
06-01A	11/27/90	ANTIMONY	B	0.01420	0.01000	mg/l
06-01A	11/27/90	BARIUM	B	0.02000	2.00000	mg/l
06-01A	11/27/90	CALCIUM		114.00000		mg/l
06-01A	11/27/90	COBALT	B	0.01700		mg/l
06-01A	11/27/90	IRON	B	0.02000	0.30000	mg/l
06-01A	11/27/90	MAGNESIUM		86.70000		mg/l
06-01A	11/27/90	MANGANESE		0.04300	0.05000	mg/l
06-01A	11/27/90	SODIUM		117.00000		mg/l
06-01A	06/01/91	METHYLENE CHLORIDE	B	0.00080	0.00500	mg/l
06-01A	06/01/91	ANTIMONY	B	0.01460	0.01000	mg/l
06-01A	06/01/91	COPPER	B	0.01900	1.00000	mg/l
06-01A	06/01/91	NICKEL	B	0.01000	0.10000	mg/l
06-01A	06/01/91	BARIUM	B	0.01200	2.00000	mg/l
06-01A	06/01/91	CALCIUM		107.00000		mg/l
06-01A	06/01/91	COBALT	B	0.01500		mg/l
06-01A	06/01/91	MAGNESIUM		75.80000		mg/l
06-01A	06/01/91	MANGANESE		0.09500	0.05000	mg/l
06-01A	06/01/91	POTASSIUM	B	1.36000		mg/l
06-01A	06/01/91	SODIUM		108.00000		mg/l
06-01A	06/01/91	DIETHYL PHTHALATE	B	0.01100		mg/l
06-01A	06/01/91	DIBUTYLPHTHALATE	B	0.00230		mg/l
06-01A	11/13/91	SULFIDE		0.02600		mg/l
06-01A	11/13/91	METHYLENE CHLORIDE	B	0.00600	0.00500	mg/l
06-01A	11/13/91	ACETONE	B	0.00700		mg/l
06-01A	11/13/91	ANTIMONY	B	0.01380	0.01000	mg/l
06-01A	11/13/91	COPPER		0.03000	1.00000	mg/l
06-01A	11/13/91	BARIUM	B	0.01400	2.00000	mg/l
06-01A	11/13/91	CALCIUM		135.00000		mg/l
06-01A	11/13/91	COBALT	B	0.03900		mg/l
06-01A	11/13/91	IRON	B	0.02000	0.30000	mg/l
06-01A	11/13/91	MAGNESIUM		96.50000		mg/l
06-01A	11/13/91	MANGANESE		0.05500	0.05000	mg/l
06-01A	11/13/91	POTASSIUM	B	3.31000		mg/l
06-01A	11/13/91	SODIUM		141.00000		mg/l
06-01A	03/28/92	NITRATE NITROGEN		0.39900		MG/L
06-01A	03/28/92	ANTIMONY	B	0.00400	0.01000	MG/L
06-01A	03/28/92	COPPER	B	0.01000	1.00000	MG/L
06-01A	03/28/92	NICKEL	B	0.00600	0.10000	MG/L
06-01A	03/28/92	CALCIUM		98.20000		MG/L
06-01A	03/28/92	COBALT	B	0.04000		MG/L
06-01A	03/28/92	MAGNESIUM		41.10000		MG/L
06-01A	03/28/92	MANGANESE		0.01600	0.05000	MG/L
06-01A	03/28/92	POTASSIUM	B	1.10000		MG/L
06-01A	03/28/92	SODIUM		74.60000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06-06	11/27/90	ANTIMONY		0.00940	0.01000	mg/l
06-06	11/27/90	NICKEL		0.95100	0.10000	mg/l
06-06	11/27/90	ZINC		0.52100	5.00000	mg/l
06-06	11/27/90	ALUMINUM		0.11100	0.05000	mg/l
06-06	11/27/90	BARIUM		0.01400	2.00000	mg/l
06-06	11/27/90	CALCIUM		563.00000		mg/l
06-06	11/27/90	COBALT		0.31600		mg/l
06-06	11/27/90	IRON		3.60000	0.30000	mg/l
06-06	11/27/90	MAGNESIUM		438.00000		mg/l
06-06	11/27/90	MANGANESE		37.70000	0.05000	mg/l

06-06	11/27/90	POTASSIUM		10.40000		mg/l
06-06	11/27/90	SODIUM		72.40000		mg/l
06-06	11/27/90	SULFIDE		0.21500		mg/l
06-06	11/27/90	2,4,5-TP	B	0.00240	0.05000	mg/l
06-06	11/27/90	METHYLENE CHLORIDE	B	0.00840	0.00500	mg/l
06-06	06/01/91	METHYLENE CHLORIDE	B	0.00450	0.00500	mg/l
06-06	06/01/91	ACETONE	B	0.01900		mg/l
06-06	06/01/91	ANTIMONY	B	0.00780	0.01000	mg/l
06-06	06/01/91	CHROMIUM	B	0.00700	0.1	mg/l
06-06	06/01/91	NICKEL		1.02000	0.10000	mg/l
06-06	06/01/91	ZINC		0.77800	5.00000	mg/l
06-06	06/01/91	BARIUM	B	0.01500	2.00000	mg/l
06-06	06/01/91	CALCIUM		590.00000		mg/l
06-06	06/01/91	COBALT		0.32300		mg/l
06-06	06/01/91	IRON		4.16000	0.30000	mg/l
06-06	06/01/91	MAGNESIUM		422.00000		mg/l
06-06	06/01/91	MANGANESE		41.80000	0.05000	mg/l
06-06	06/01/91	POTASSIUM		9.62000		mg/l
06-06	06/01/91	SODIUM		66.80000		mg/l
06-06	06/01/91	DIETHYL PHTHALATE	B	0.01300		mg/l
06-06	06/01/91	DIBUTYLPHTHALATE	B	0.00200		mg/l
06-06	11/13/91	METHYLENE CHLORIDE	B	0.00800	0.00500	mg/l
06-06	11/13/91	ACETONE	B	0.00800		mg/l
06-06	11/13/91	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.00640		mg/l
06-06	11/13/91	ANTIMONY	B	0.00880	0.01000	mg/l
06-06	11/13/91	BERYLLIUM	B	0.00300	0.00100	mg/l
06-06	11/13/91	CADMIUM	B	0.00344	0.00500	mg/l
06-06	11/13/91	CHROMIUM	B	0.00900	0.1	mg/l
06-06	11/13/91	COPPER		0.04000	1.00000	mg/l
06-06	11/13/91	LEAD		0.00660	0.01500	mg/l
06-06	11/13/91	NICKEL		1.26000	0.10000	mg/l
06-06	11/13/91	ZINC		1.44000	5.00000	mg/l
06-06	11/13/91	CALCIUM		357.00000		mg/l
06-06	11/13/91	COBALT		0.42800		mg/l
06-06	11/13/91	IRON		8.72000	0.30000	mg/l
06-06	11/13/91	MAGNESIUM		343.00000		mg/l
06-06	11/13/91	MANGANESE		48.10000	0.05000	mg/l
06-06	11/13/91	POTASSIUM		12.10000		mg/l
06-06	11/13/91	SODIUM		55.70000		mg/l
06-06	03/28/92	BERYLLIUM	B	0.00200	0.00100	MG/L
06-06	03/28/92	CADMIUM	B	0.00372	0.00500	MG/L
06-06	03/28/92	COPPER		0.03900	1.00000	MG/L
06-06	03/28/92	NICKEL		1.02000	0.10000	MG/L
06-06	03/28/92	ZINC		1.17000	5.00000	MG/L
06-06	03/28/92	ALUMINUM		1.72000	0.05000	MG/L
06-06	03/28/92	CALCIUM		421.00000		MG/L
06-06	03/28/92	COBALT		0.36100		MG/L
06-06	03/28/92	IRON		7.46000	0.30000	MG/L
06-06	03/28/92	MAGNESIUM		365.00000		MG/L
06-06	03/28/92	MANGANESE		51.10000	0.05000	MG/L
06-06	03/28/92	POTASSIUM		11.00000		MG/L
06-06	03/28/92	SODIUM		52.00000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06-07	11/27/90	ANTIMONY		0.00510	0.01000	mg/l
06-07	11/27/90	ARSENIC		0.00840	0.05000	mg/l
06-07	11/27/90	BERYLLIUM		0.01300	0.00100	mg/l
06-07	11/27/90	CHROMIUM		0.03200	0.1	mg/l
06-07	11/27/90	LEAD		0.00140	0.01500	mg/l
06-07	11/27/90	NICKEL		1.98000	0.10000	mg/l

06-07	11/27/90	THALLIUM		0.00290	0.00200	mg/l
06-07	11/27/90	ZINC		3.00000	5.00000	mg/l
06-07	11/27/90	ALUMINUM		145.00000	0.05000	mg/l
06-07	11/27/90	CALCIUM		275.00000		mg/l
06-07	11/27/90	COBALT		0.57700		mg/l
06-07	11/27/90	IRON		78.50000	0.30000	mg/l
06-07	11/27/90	MAGNESIUM		232.00000		mg/l
06-07	11/27/90	MANGANESE		12.40000	0.05000	mg/l
06-07	11/27/90	POTASSIUM		3.12000		mg/l
06-07	11/27/90	SODIUM		69.80000		mg/l
06-07	11/27/90	TIN		0.04100		mg/l
06-07	11/27/90	2,4,5-TP	B	0.00250	0.05000	mg/l
06-07	06/01/91	METHYLENE CHLORIDE	B	0.00170	0.00500	mg/l
06-07	06/01/91	ACETONE	B	0.00490		mg/l
06-07	06/01/91	ANTIMONY	B	0.01840	0.01000	mg/l
06-07	06/01/91	ARSENIC	B	0.00660	0.05000	mg/l
06-07	06/01/91	BERYLLIUM		0.01400	0.00100	mg/l
06-07	06/01/91	CADMIUM		0.00800	0.00500	mg/l
06-07	06/01/91	CHROMIUM		0.01600	0.1	mg/l
06-07	06/01/91	LEAD	B	0.00270	0.01500	mg/l
06-07	06/01/91	NICKEL		1.59000	0.10000	mg/l
06-07	06/01/91	ZINC		2.61000	5.00000	mg/l
06-07	06/01/91	ALUMINUM		78.60000	0.05000	mg/l
06-07	06/01/91	CALCIUM		204.00000		mg/l
06-07	06/01/91	COBALT		0.46600		mg/l
06-07	06/01/91	IRON		50.10000	0.30000	mg/l
06-07	06/01/91	MAGNESIUM		168.00000		mg/l
06-07	06/01/91	MANGANESE		10.40000	0.05000	mg/l
06-07	06/01/91	POTASSIUM	B	1.81000		mg/l
06-07	06/01/91	SODIUM		52.80000		mg/l
06-07	06/01/91	VANADIUM	B	0.01300		mg/l
06-07	06/01/91	DIETHYL PHTHALATE	B	0.01300		mg/l
06-07	06/01/91	DIBUTYLPHTHALATE	B	0.00200		mg/l
06-07	11/13/91	METHYLENE CHLORIDE	B	0.01300	0.00500	mg/l
06-07	11/13/91	ACETONE	B	0.00200		mg/l
06-07	11/13/91	ANTIMONY	B	0.00820	0.01000	mg/l
06-07	11/13/91	ARSENIC	B	0.00200	0.05000	mg/l
06-07	11/13/91	BERYLLIUM		0.01200	0.00100	mg/l
06-07	11/13/91	CADMIUM		0.01020	0.00500	mg/l
06-07	11/13/91	CHROMIUM		0.02200	0.1	mg/l
06-07	11/13/91	COPPER		0.05000	1.00000	mg/l
06-07	11/13/91	NICKEL		2.00000	0.10000	mg/l
06-07	11/13/91	ZINC		2.74000	5.00000	mg/l
06-07	11/13/91	ALUMINUM		139.00000	0.05000	mg/l
06-07	11/13/91	CALCIUM		302.00000		mg/l
06-07	11/13/91	COBALT		0.66500		mg/l
06-07	11/13/91	IRON		84.20000	0.30000	mg/l
06-07	11/13/91	MAGNESIUM		222.00000		mg/l
06-07	11/13/91	MANGANESE		12.70000	0.05000	mg/l
06-07	11/13/91	POTASSIUM	B	2.86000		mg/l
06-07	11/13/91	SODIUM		71.00000		mg/l
06-07	03/28/92	NITRITE NITROGEN		0.01600		MG/L
06-07	03/28/92	ARSENIC	B	0.00290	0.05000	MG/L
06-07	03/28/92	BERYLLIUM	N	0.01000	0.00100	MG/L
06-07	03/28/92	CADMIUM		0.00827	0.00500	MG/L
06-07	03/28/92	COPPER	B	0.00700	1.00000	MG/L
06-07	03/28/92	NICKEL		1.12000	0.10000	MG/L
06-07	03/28/92	ZINC		1.82000	5.00000	MG/L
06-07	03/28/92	ALUMINUM		76.10000	0.05000	MG/L
06-07	03/28/92	CALCIUM		173.00000		MG/L

06-07	03/28/92	COBALT		0.38800		MG/L
06-07	03/28/92	IRON		49.20000	0.30000	MG/L
06-07	03/28/92	MAGNESIUM		140.00000		MG/L
06-07	03/28/92	MANGANESE		8.19000	0.05000	MG/L
06-07	03/28/92	POTASSIUM	B	2.03000		MG/L
06-07	03/28/92	SODIUM		51.40000		MG/L
06-07	03/28/92	VANADIUM	B	0.01400		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06-12	11/27/90	METHYLENE CHLORIDE	B	0.02300	0.00500	mg/l
06-12	11/27/90	ANTIMONY	B	0.01770	0.01000	mg/l
06-12	11/27/90	NICKEL		0.54300	0.10000	mg/l
06-12	11/27/90	ZINC		0.39200	5.00000	mg/l
06-12	11/27/90	BARIUM	B	0.01300	2.00000	mg/l
06-12	11/27/90	CALCIUM		492.00000		mg/l
06-12	11/27/90	COBALT		0.12000		mg/l
06-12	11/27/90	IRON		0.30500	0.30000	mg/l
06-12	11/27/90	MAGNESIUM		389.00000		mg/l
06-12	11/27/90	MANGANESE		21.90000	0.05000	mg/l
06-12	11/27/90	POTASSIUM		91.00000		mg/l
06-12	11/27/90	SODIUM		41.80000		mg/l
06-12	06/01/91	METHYLENE CHLORIDE	B	0.00230	0.00500	mg/l
06-12	06/01/91	ACETONE	B	0.00390		mg/l
06-12	06/01/91	ANTIMONY	B	0.01440	0.01000	mg/l
06-12	06/01/91	NICKEL		0.34500	0.10000	mg/l
06-12	06/01/91	ZINC		0.13000	5.00000	mg/l
06-12	06/01/91	BARIUM	B	0.01700	2.00000	mg/l
06-12	06/01/91	CALCIUM		591.00000		mg/l
06-12	06/01/91	COBALT		0.06400		mg/l
06-12	06/01/91	IRON		0.55800	0.30000	mg/l
06-12	06/01/91	MAGNESIUM		386.00000		mg/l
06-12	06/01/91	MANGANESE		16.50000	0.05000	mg/l
06-12	06/01/91	POTASSIUM		8.47000		mg/l
06-12	06/01/91	SODIUM		40.40000		mg/l
06-12	06/01/91	DIETHYL PHTHALATE	B	0.01300		mg/l
06-12	06/01/91	DIBUTYLPHTHALATE	B	0.00310		mg/l
06-12	11/13/91	METHYLENE CHLORIDE	B	0.00400	0.00500	mg/l
06-12	11/13/91	ACETONE	B	0.00300		mg/l
06-12	11/13/91	BERYLLIUM	B	0.00100	0.00100	mg/l
06-12	11/13/91	NICKEL		0.28700	0.10000	mg/l
06-12	11/13/91	BARIUM	B	0.01000	2.00000	mg/l
06-12	11/13/91	CALCIUM		439.00000		mg/l
06-12	11/13/91	COBALT		0.07700		mg/l
06-12	11/13/91	IRON	B	0.01300	0.30000	mg/l
06-12	11/13/91	MAGNESIUM		306.00000		mg/l
06-12	11/13/91	MANGANESE		9.49000	0.05000	mg/l
06-12	11/13/91	POTASSIUM		10.70000		mg/l
06-12	11/13/91	SODIUM		37.90000		mg/l
06-12	03/28/92	BERYLLIUM	B	0.00100	0.00100	MG/L
06-12	03/28/92	CADMIUM	B	0.00066	0.00500	MG/L
06-12	03/28/92	NICKEL		0.25900	0.10000	MG/L
06-12	03/28/92	ZINC		1.35000	5.00000	MG/L
06-12	03/28/92	CALCIUM		534.00000		MG/L
06-12	03/28/92	COBALT		0.08600		MG/L
06-12	03/28/92	IRON		0.60000	0.30000	MG/L
06-12	03/28/92	MAGNESIUM		317.00000		MG/L
06-12	03/28/92	MANGANESE		11.50000	0.05000	MG/L
06-12	03/28/92	POTASSIUM		9.81000		MG/L
06-12	03/28/92	SODIUM		31.70000		MG/L
06-12	03/28/92	VANADIUM	B	0.01900		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06-14A	03/16/91	DIETHYL PHTHALATE	B	0.00200		mg/l
06-14A	03/16/91	2,4-D	B	0.00000	0.07000	mg/l
06-14A	03/16/91	2,4,5-TP	B	0.00040	0.05000	mg/l
06-14A	03/16/91	METHYLENE CHLORIDE	B	0.02100	0.00500	mg/l
06-14A	03/16/91	BENZENE	B	0.00270	0.00500	mg/l
06-14A	03/16/91	ACETONE	B	0.02100		mg/l
06-14A	03/16/91	ANTIMONY	B	0.00570	0.01000	mg/l
06-14A	03/16/91	BARIUM	B	0.07900	2.00000	mg/l
06-14A	03/16/91	CALCIUM		55.60000		mg/l
06-14A	03/16/91	MAGNESIUM		10.70000		mg/l
06-14A	03/16/91	SODIUM	B	2.87000		mg/l
06-14A	03/16/91	SULFIDE		0.15600		mg/l
06-14A	06/01/91	METHYLENE CHLORIDE	B	0.00230	0.00500	mg/l
06-14A	06/01/91	ANTIMONY	B	0.01060	0.01000	mg/l
06-14A	06/01/91	CHROMIUM	B	0.00600	0.1	mg/l
06-14A	06/01/91	LEAD	B	0.00120	0.01500	mg/l
06-14A	06/01/91	ZINC	B	0.01600	5.00000	mg/l
06-14A	06/01/91	ALUMINUM	B	0.01600	0.05000	mg/l
06-14A	06/01/91	BARIUM	B	0.08100	2.00000	mg/l
06-14A	06/01/91	CALCIUM		55.00000		mg/l
06-14A	06/01/91	MAGNESIUM		12.70000		mg/l
06-14A	06/01/91	POTASSIUM	B	1.93000		mg/l
06-14A	06/01/91	SODIUM	B	3.56000		mg/l
06-14A	11/13/91	METHYLENE CHLORIDE	B	0.00700	0.00500	mg/l
06-14A	11/13/91	ACETONE	B	0.02300		mg/l
06-14A	11/13/91	ANTIMONY	B	0.01200	0.01000	mg/l
06-14A	11/13/91	COPPER	B	0.02100	1.00000	mg/l
06-14A	11/13/91	BARIUM	B	0.09800	2.00000	mg/l
06-14A	11/13/91	CALCIUM		55.70000		mg/l
06-14A	11/13/91	COBALT	B	0.01600		mg/l
06-14A	11/13/91	IRON	B	0.03700	0.30000	mg/l
06-14A	11/13/91	MAGNESIUM		11.10000		mg/l
06-14A	11/13/91	MANGANESE		0.02900	0.05000	mg/l
06-14A	11/13/91	POTASSIUM	B	1.44000		mg/l
06-14A	11/13/91	SODIUM	B	4.25000		mg/l
06-14A	11/13/91	VANADIUM	B	0.02600		mg/l
06-14A	03/28/92	NITRATE NITROGEN		0.08900		MG/L
06-14A	03/28/92	COPPER		0.03500	1.00000	MG/L
06-14A	03/28/92	NICKEL	B	0.00600	0.10000	MG/L
06-14A	03/28/92	ZINC	B	0.01000	5.00000	MG/L
06-14A	03/28/92	BARIUM	B	0.10200	2.00000	MG/L
06-14A	03/28/92	CALCIUM		51.00000		MG/L
06-14A	03/28/92	MAGNESIUM		9.35000		MG/L
06-14A	03/28/92	POTASSIUM	B	2.74000		MG/L
06-14A	03/28/92	SODIUM	B	3.58000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06-15	11/27/90	ANTIMONY		0.00430	0.01000	mg/l
06-15	11/27/90	ZINC		0.01800	5.00000	mg/l
06-15	11/27/90	BARIUM		0.06600	2.00000	mg/l
06-15	11/27/90	CALCIUM		37.40000		mg/l
06-15	11/27/90	MAGNESIUM		9.62000		mg/l
06-15	11/27/90	SODIUM		2.26000		mg/l
06-15	11/27/90	2,4,5-TP	B	0.00230	0.05000	mg/l
06-15	06/01/91	METHYLENE CHLORIDE	B	0.00420	0.00500	mg/l
06-15	06/01/91	DIETHYL PHTHALATE	B	0.00540		mg/l
06-15	06/01/91	DIBUTYLPHTHALATE	B	0.00100		mg/l
06-15	06/01/91	ANTIMONY	B	0.01980	0.01000	mg/l

06-15	06/01/91	NICKEL	B	0.00700	0.10000	mg/l
06-15	06/01/91	ZINC		0.02100	5.00000	mg/l
06-15	06/01/91	BARIUM	B	0.09100	2.00000	mg/l
06-15	06/01/91	CALCIUM		38.90000		mg/l
06-15	06/01/91	MAGNESIUM		12.00000		mg/l
06-15	06/01/91	MANGANESE	B	0.00900	0.05000	mg/l
06-15	06/01/91	POTASSIUM	B	2.16000		mg/l
06-15	06/01/91	SODIUM	B	1.90000		mg/l
06-15	06/01/91	PCB-1254	B	0.00028	0.00050	mg/l
06-15	03/28/92	NITRATE NITROGEN		0.55800		MG/L
06-15	03/28/92	ZINC	B	0.01200	5.00000	MG/L
06-15	03/28/92	BARIUM	B	0.07000	2.00000	MG/L
06-15	03/28/92	CALCIUM		56.10000		MG/L
06-15	03/28/92	MAGNESIUM		6.92000		MG/L
06-15	03/28/92	POTASSIUM	B	1.68000		MG/L
06-15	03/28/92	SODIUM	B	2.98000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06-16	11/27/90	ANTIMONY		0.01070	0.01000	mg/l
06-16	11/27/90	ZINC		0.03500	5.00000	mg/l
06-16	11/27/90	BARIUM		0.01300	2.00000	mg/l
06-16	11/27/90	CALCIUM		30.60000		mg/l
06-16	11/27/90	COBALT		0.00500		mg/l
06-16	11/27/90	MAGNESIUM		7.49000		mg/l
06-16	11/27/90	MANGANESE		0.09900	0.05000	mg/l
06-16	11/27/90	SODIUM		8.14000		mg/l
06-16	11/27/90	2,4,5-TP	B	0.00260	0.05000	mg/l
06-16	06/01/91	METHYLENE CHLORIDE	B	0.00410	0.00500	mg/l
06-16	06/01/91	DIETHYL PHTHALATE	B	0.00140		mg/l
06-16	06/01/91	ANTIMONY	B	0.01370	0.01000	mg/l
06-16	06/01/91	COPPER	B	0.01600	1.00000	mg/l
06-16	06/01/91	ZINC	B	0.01200	5.00000	mg/l
06-16	06/01/91	BARIUM	B	0.01100	2.00000	mg/l
06-16	06/01/91	CALCIUM		28.70000		mg/l
06-16	06/01/91	COBALT	B	0.00600		mg/l
06-16	06/01/91	MAGNESIUM		7.40000		mg/l
06-16	06/01/91	MANGANESE	B	0.01400	0.05000	mg/l
06-16	06/01/91	SODIUM		8.26000		mg/l
06-16	06/01/91	SULFIDE		0.02300		mg/l
06-16	06/01/91	PCB-1254	B	0.00019	0.00050	mg/l
06-16	11/13/91	METHYLENE CHLORIDE	B	0.00400	0.00500	mg/l
06-16	11/13/91	ACETONE	B	0.00700		mg/l
06-16	11/13/91	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.00250		mg/l
06-16	11/13/91	ANTIMONY	B	0.01190	0.01000	mg/l
06-16	11/13/91	COPPER	B	0.01500	1.00000	mg/l
06-16	11/13/91	THALLIUM	B	0.00220	0.00200	mg/l
06-16	11/13/91	CALCIUM		33.90000		mg/l
06-16	11/13/91	COBALT	B	0.02000		mg/l
06-16	11/13/91	MAGNESIUM		7.00000		mg/l
06-16	11/13/91	MANGANESE	B	0.10000	0.05000	mg/l
06-16	11/13/91	POTASSIUM	B	0.42000		mg/l
06-16	11/13/91	SODIUM		7.59000		mg/l
06-16	11/13/91	VANADIUM	B	0.01300		mg/l
06-16	03/28/92	NITRATE NITROGEN		0.08300		MG/L
06-16	03/28/92	CADMIUM	B	0.00082	0.00500	MG/L
06-16	03/28/92	ZINC	B	0.01200	5.00000	MG/L
06-16	03/28/92	BARIUM	B	0.02700	2.00000	MG/L
06-16	03/28/92	CALCIUM		22.10000		MG/L
06-16	03/28/92	MAGNESIUM		5.98000		MG/L
06-16	03/28/92	MANGANESE	B	0.01400	0.05000	MG/L

06-16	03/28/92	POTASSIUM	B	0.44500		MG/L
06-16	03/28/92	SODIUM		8.69000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06-17	11/27/90	ANTIMONY		0.00580	0.01000	mg/l
06-17	11/27/90	CHROMIUM		0.01600	0.1	mg/l
06-17	11/27/90	LEAD		0.03890	0.01500	mg/l
06-17	11/27/90	NICKEL		0.02700	0.10000	mg/l
06-17	11/27/90	ZINC		0.02700	5.00000	mg/l
06-17	11/27/90	BARIUM		0.07100	2.00000	mg/l
06-17	11/27/90	CALCIUM		18.10000		mg/l
06-17	11/27/90	COBALT		0.00500		mg/l
06-17	11/27/90	IRON		0.13200	0.30000	mg/l
06-17	11/27/90	MAGNESIUM		7.78000		mg/l
06-17	11/27/90	MANGANESE		0.05100	0.05000	mg/l
06-17	11/27/90	POTASSIUM		3.88000		mg/l
06-17	11/27/90	SODIUM		2.36000		mg/l
06-17	11/27/90	2,4,5-TP	B	0.00220	0.05000	mg/l
06-17	06/01/91	METHYLENE CHLORIDE	B	0.00260	0.00500	mg/l
06-17	06/01/91	ANTIMONY	B	0.01910	0.01000	mg/l
06-17	06/01/91	NICKEL	B	0.01400	0.10000	mg/l
06-17	06/01/91	ZINC	B	0.01900	5.00000	mg/l
06-17	06/01/91	BARIUM	B	0.05800	2.00000	mg/l
06-17	06/01/91	CALCIUM		24.80000		mg/l
06-17	06/01/91	MAGNESIUM		9.09000		mg/l
06-17	06/01/91	MANGANESE		0.04400	0.05000	mg/l
06-17	06/01/91	POTASSIUM	B	3.07000		mg/l
06-17	06/01/91	SODIUM	B	1.91000		mg/l
06-17	06/01/91	PCB-1254	B	0.00054	0.00050	mg/l
06-17	11/13/91	SULFIDE		0.05700		mg/l
06-17	11/13/91	METHYLENE CHLORIDE	B	0.00500	0.00500	mg/l
06-17	11/13/91	ACETONE	B	0.00800		mg/l
06-17	11/13/91	ANTIMONY	B	0.01490	0.01000	mg/l
06-17	11/13/91	COPPER		0.02800	1.00000	mg/l
06-17	11/13/91	NICKEL		0.01600	0.10000	mg/l
06-17	11/13/91	ZINC	B	0.01900	5.00000	mg/l
06-17	11/13/91	ALUMINUM		0.29500	0.05000	mg/l
06-17	11/13/91	BARIUM	B	0.03400	2.00000	mg/l
06-17	11/13/91	CALCIUM		14.30000		mg/l
06-17	11/13/91	IRON	B	0.95000	0.30000	mg/l
06-17	11/13/91	MAGNESIUM		5.32000		mg/l
06-17	11/13/91	MANGANESE		0.03800	0.05000	mg/l
06-17	11/13/91	POTASSIUM	B	4.38000		mg/l
06-17	11/13/91	SODIUM	B	2.65000		mg/l
06-17	03/28/92	NITRATE NITROGEN		0.60200		MG/L
06-17	03/28/92	CADMIUM	B	0.00086	0.00500	MG/L
06-17	03/28/92	COPPER		0.08600	1.00000	MG/L
06-17	03/28/92	NICKEL	B	0.01900	0.10000	MG/L
06-17	03/28/92	ZINC		0.02000	5.00000	MG/L
06-17	03/28/92	BARIUM	B	0.08000	2.00000	MG/L
06-17	03/28/92	CALCIUM		19.30000		MG/L
06-17	03/28/92	MAGNESIUM		8.02000		MG/L
06-17	03/28/92	MANGANESE		0.06400	0.05000	MG/L
06-17	03/28/92	POTASSIUM		5.78000		MG/L
06-17	03/28/92	SODIUM	B	3.11000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06-18	11/27/90	ANTIMONY		0.00780	0.01000	mg/l
06-18	11/27/90	NICKEL		0.00500	0.10000	mg/l
06-18	11/27/90	ZINC		0.03600	5.00000	mg/l

7

06-18	11/27/90	BARIUM		0.02400	2.00000	mg/l
06-18	11/27/90	CALCIUM		35.90000		mg/l
06-18	11/27/90	COBALT		0.00700		mg/l
06-18	11/27/90	MAGNESIUM		8.48000		mg/l
06-18	11/27/90	MANGANESE		0.00600	0.05000	mg/l
06-18	11/27/90	SODIUM		16.40000		mg/l
06-18	11/27/90	2,4,5-TP	B	0.00280	0.05000	mg/l
06-18	06/01/91	METHYLENE CHLORIDE	B	0.00250	0.00500	mg/l
06-18	06/01/91	ANTIMONY	B	0.01760	0.01000	mg/l
06-18	06/01/91	BARIUM	B	0.01900	2.00000	mg/l
06-18	06/01/91	CALCIUM		31.80000		mg/l
06-18	06/01/91	MAGNESIUM		8.10000		mg/l
06-18	06/01/91	MANGANESE	B	0.00600	0.05000	mg/l
06-18	06/01/91	SODIUM		15.60000		mg/l
06-18	11/13/91	METHYLENE CHLORIDE	B	0.00700	0.00500	mg/l
06-18	11/13/91	ACETONE	B	0.02100		mg/l
06-18	11/13/91	ANTIMONY	B	0.02130	0.01000	mg/l
06-18	11/13/91	COPPER		0.07200	1.00000	mg/l
06-18	11/13/91	BARIUM	B	0.01800	2.00000	mg/l
06-18	11/13/91	CALCIUM		42.10000		mg/l
06-18	11/13/91	COBALT	B	0.01000		mg/l
06-18	11/13/91	MAGNESIUM		10.90000		mg/l
06-18	11/13/91	MANGANESE	B	0.01000	0.05000	mg/l
06-18	11/13/91	POTASSIUM		0.57000		mg/l
06-18	11/13/91	SODIUM		15.90000		mg/l
06-18	03/28/92	NITRITE NITROGEN		0.01400		MG/L
06-18	03/28/92	NITRATE NITROGEN		6.94000		MG/L
06-18	03/28/92	TNT	J	0.01000		MG/L
06-18	03/28/92	COPPER		0.06800	1.00000	MG/L
06-18	03/28/92	BARIUM	B	0.03000	2.00000	MG/L
06-18	03/28/92	CALCIUM		31.40000		MG/L
06-18	03/28/92	MAGNESIUM		6.81000		MG/L
06-18	03/28/92	POTASSIUM	B	2.61000		MG/L
06-18	03/28/92	SODIUM		14.40000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06-19	03/16/91	2,4,5-TP	B	0.00035	0.05000	mg/l
06-19	03/16/91	METHYLENE CHLORIDE	B	0.11000	0.00500	mg/l
06-19	03/16/91	BENZENE	B	0.00690	0.00500	mg/l
06-19	03/16/91	ACETONE	B	0.06500		mg/l
06-19	03/16/91	ANTIMONY	B	0.00970	0.01000	mg/l
06-19	03/16/91	BARIUM	B	0.10500	2.00000	mg/l
06-19	03/16/91	CALCIUM		76.60000		mg/l
06-19	03/16/91	MAGNESIUM		10.30000		mg/l
06-19	03/16/91	MANGANESE		0.12900	0.05000	mg/l
06-19	03/16/91	POTASSIUM	B	3.42000		mg/l
06-19	03/16/91	SODIUM		14.50000		mg/l
06-19	03/16/91	SULFIDE		0.02600		mg/l
06-19	06/01/91	METHYLENE CHLORIDE	B	0.00220	0.00500	mg/l
06-19	06/01/91	ANTIMONY	B	0.00670	0.01000	mg/l
06-19	06/01/91	NICKEL	B	0.01000	0.10000	mg/l
06-19	06/01/91	ZINC	B	0.00800	5.00000	mg/l
06-19	06/01/91	BARIUM	B	0.14200	2.00000	mg/l
06-19	06/01/91	CALCIUM		83.50000		mg/l
06-19	06/01/91	COBALT	B	0.01400		mg/l
06-19	06/01/91	IRON		0.13100	0.30000	mg/l
06-19	06/01/91	MAGNESIUM		11.90000		mg/l
06-19	06/01/91	MANGANESE		0.64000	0.05000	mg/l
06-19	06/01/91	POTASSIUM	B	4.78000		mg/l
06-19	06/01/91	SODIUM		20.00000		mg/l

06-19	11/13/91	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.00770		mg/l
06-19	11/13/91	METHYLENE CHLORIDE	B	0.00500	0.00500	mg/l
06-19	11/13/91	ACETONE	B	0.01200		mg/l
06-19	11/13/91	ANTIMONY	B	0.01220	0.01000	mg/l
06-19	11/13/91	COPPER	B	0.01900	1.00000	mg/l
06-19	11/13/91	ZINC		0.04100	5.00000	mg/l
06-19	11/13/91	BARIUM	B	0.18600	2.00000	mg/l
06-19	11/13/91	CALCIUM		94.90000		mg/l
06-19	11/13/91	COBALT	B	0.02400		mg/l
06-19	11/13/91	IRON		3.80000	0.30000	mg/l
06-19	11/13/91	MAGNESIUM		16.90000		mg/l
06-19	11/13/91	MANGANESE		0.67700	0.05000	mg/l
06-19	11/13/91	POTASSIUM	B	4.90000		mg/l
06-19	11/13/91	SODIUM		35.20000		mg/l
06-19	11/13/91	VANADIUM	B	0.01100		mg/l
06-19	03/28/92	NITRATE NITROGEN		0.08900		MG/L
06-19	03/28/92	COPPER		0.07500	1.00000	MG/L
06-19	03/28/92	BARIUM	B	0.11600	2.00000	MG/L
06-19	03/28/92	CALCIUM		76.10000		MG/L
06-19	03/28/92	MAGNESIUM		7.45000		MG/L
06-19	03/28/92	MANGANESE	B	0.00600	0.05000	MG/L
06-19	03/28/92	POTASSIUM		6.23000		MG/L
06-19	03/28/92	SODIUM		7.24000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06-20	11/27/90	ANTIMONY		0.01300	0.01000	mg/l
06-20	11/27/90	BARIUM		0.02500	2.00000	mg/l
06-20	11/27/90	CALCIUM		48.20000		mg/l
06-20	11/27/90	COBALT		0.00800		mg/l
06-20	11/27/90	MAGNESIUM		12.20000		mg/l
06-20	11/27/90	MANGANESE		0.00600	0.05000	mg/l
06-20	11/27/90	SODIUM		31.10000		mg/l
06-20	11/27/90	2,4,5-TP	B	0.00280	0.05000	mg/l
06-20	06/01/91	METHYLENE CHLORIDE	B	0.00170	0.00500	mg/l
06-20	06/01/91	RDX		0.03400		mg/l
06-20	06/01/91	ANTIMONY	B	0.01430	0.01000	mg/l
06-20	06/01/91	BARIUM	B	0.02500	2.00000	mg/l
06-20	06/01/91	CALCIUM		49.70000		mg/l
06-20	06/01/91	COBALT	B	0.01000		mg/l
06-20	06/01/91	MAGNESIUM		12.90000		mg/l
06-20	06/01/91	SODIUM		34.50000		mg/l
06-20	06/01/91	HEPTACHLOR	B	0.00001	0.00040	mg/l
06-20	11/13/91	CYANIDE	B	0.00500	0.20000	mg/l
06-20	11/13/91	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.00090		mg/l
06-20	11/13/91	METHYLENE CHLORIDE	B	0.00500	0.00500	mg/l
06-20	11/13/91	ACETONE	B	0.01500		mg/l
06-20	11/13/91	RDX		0.03500		mg/l
06-20	11/13/91	ANTIMONY	B	0.01460	0.01000	mg/l
06-20	11/13/91	COPPER		0.03300	1.00000	mg/l
06-20	11/13/91	NICKEL	B	0.00600	0.10000	mg/l
06-20	11/13/91	BARIUM	B	0.02400	2.00000	mg/l
06-20	11/13/91	CALCIUM		56.70000		mg/l
06-20	11/13/91	COBALT	B	0.03000		mg/l
06-20	11/13/91	MAGNESIUM		14.90000		mg/l
06-20	11/13/91	MANGANESE	B	0.01100	0.05000	mg/l
06-20	11/13/91	POTASSIUM	B	1.32000		mg/l
06-20	11/13/91	SODIUM		35.10000		mg/l
06-20	11/13/91	VANADIUM	B	0.01700		mg/l
06-20	03/28/92	NITRATE NITROGEN		18.20000		MG/L
06-20	03/28/92	NICKEL		0.18200	0.10000	MG/L

06-20	03/28/92	BARIUM	B	0.02800	2.00000	MG/L
06-20	03/28/92	CALCIUM		46.50000		MG/L
06-20	03/28/92	MAGNESIUM		10.70000		MG/L
06-20	03/28/92	POTASSIUM	B	0.72300		MG/L
06-20	03/28/92	SODIUM		28.40000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06-21	11/27/90	ANTIMONY		0.00830	0.01000	mg/l
06-21	11/27/90	BARIUM		0.01200	2.00000	mg/l
06-21	11/27/90	CALCIUM		199.00000		mg/l
06-21	11/27/90	COBALT		0.01100		mg/l
06-21	11/27/90	IRON		0.11900	0.30000	mg/l
06-21	11/27/90	MAGNESIUM		85.30000		mg/l
06-21	11/27/90	MANGANESE		0.09500	0.05000	mg/l
06-21	11/27/90	POTASSIUM		4.06000		mg/l
06-21	11/27/90	SODIUM		23.10000		mg/l
06-21	11/27/90	2,4,5-TP	B	0.00250	0.05000	mg/l
06-21	11/27/90	ACETONE		0.01000		mg/l
06-21	06/01/91	METHYLENE CHLORIDE	B	0.00330	0.00500	mg/l
06-21	06/01/91	ACETONE	B	0.00160		mg/l
06-21	06/01/91	ANTIMONY	B	0.00340	0.01000	mg/l
06-21	06/01/91	NICKEL	B	0.01000	0.10000	mg/l
06-21	06/01/91	BARIUM	B	0.01400	2.00000	mg/l
06-21	06/01/91	CALCIUM		183.00000		mg/l
06-21	06/01/91	IRON		0.14600	0.30000	mg/l
06-21	06/01/91	MAGNESIUM		82.30000		mg/l
06-21	06/01/91	MANGANESE	N	0.14600	0.05000	mg/l
06-21	06/01/91	POTASSIUM	B	3.44000		mg/l
06-21	06/01/91	SODIUM		21.60000		mg/l
06-21	06/01/91	DIETHYL PHTHALATE	B	0.00210		mg/l
06-21	06/01/91	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.00110		mg/l
06-21	06/01/91	PCB-1254	B	0.00047	0.00050	mg/l
06-21	03/28/92	NITRITE NITROGEN		0.01000		MG/L
06-21	03/28/92	CADMIUM	B	0.00024	0.00500	MG/L
06-21	03/28/92	NICKEL	B	0.00500	0.10000	MG/L
06-21	03/28/92	CALCIUM		197.00000		MG/L
06-21	03/28/92	IRON		0.49400	0.30000	MG/L
06-21	03/28/92	MAGNESIUM		86.90000		MG/L
06-21	03/28/92	MANGANESE		0.18000	0.05000	MG/L
06-21	03/28/92	POTASSIUM	B	3.82000		MG/L
06-21	03/28/92	SODIUM		20.50000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06-22	11/27/90	ANTIMONY		0.00580	0.01000	mg/l
06-22	11/27/90	BARIUM		0.01900	2.00000	mg/l
06-22	11/27/90	CALCIUM		60.50000		mg/l
06-22	11/27/90	MAGNESIUM		9.95000		mg/l
06-22	11/27/90	SODIUM		4.23000		mg/l
06-22	11/27/90	TNT		0.14800		mg/l
06-22	11/27/90	2,4,5-TP	B	0.00270	0.05000	mg/l
06-22	11/27/90	METHYLENE CHLORIDE	B	0.09200	0.00500	mg/l
06-22	06/01/91	METHYLENE CHLORIDE	B	0.00390	0.00500	mg/l
06-22	06/01/91	TNT		0.13100		mg/l
06-22	06/01/91	ANTIMONY	B	0.01310	0.01000	mg/l
06-22	06/01/91	COPPER	B	0.00600	1.00000	mg/l
06-22	06/01/91	ZINC	B	0.01200	5.00000	mg/l
06-22	06/01/91	BARIUM	B	0.02700	2.00000	mg/l
06-22	06/01/91	CALCIUM		70.80000		mg/l
06-22	06/01/91	MAGNESIUM		11.30000		mg/l
06-22	06/01/91	MANGANESE	B	0.00500	0.05000	mg/l

06-22	06/01/91	SODIUM	B	3.82000		mg/l
06-22	11/13/91	SULFIDE		0.04200		mg/l
06-22	11/13/91	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.00230		mg/l
06-22	11/13/91	METHYLENE CHLORIDE	B	0.00500	0.00500	mg/l
06-22	11/13/91	ACETONE	B	0.01100		mg/l
06-22	11/13/91	TNT		0.09800		mg/l
06-22	11/13/91	ANTIMONY	B	0.01960	0.01000	mg/l
06-22	11/13/91	COPPER		0.05400	1.00000	mg/l
06-22	11/13/91	BARIUM	B	0.03400	2.00000	mg/l
06-22	11/13/91	CALCIUM		74.30000		mg/l
06-22	11/13/91	COBALT	B	0.02600		mg/l
06-22	11/13/91	MAGNESIUM		14.30000		mg/l
06-22	11/13/91	MANGANESE		0.04000	0.05000	mg/l
06-22	11/13/91	POTASSIUM	B	1.40000		mg/l
06-22	11/13/91	SODIUM	B	4.19000		mg/l
06-22	11/13/91	VANADIUM	B	0.01100		mg/l
06-22	03/28/92	CYANIDE	B	0.00600	0.20000	MG/L
06-22	03/28/92	NITRITE NITROGEN		0.00500		MG/L
06-22	03/28/92	NITRATE NITROGEN		3.75000		MG/L
06-22	03/28/92	TNT		0.08800		MG/L
06-22	03/28/92	BARIUM	B	0.02400	2.00000	MG/L
06-22	03/28/92	CALCIUM		67.40000		MG/L
06-22	03/28/92	MAGNESIUM		9.87000		MG/L
06-22	03/28/92	POTASSIUM	B	1.06000		MG/L
06-22	03/28/92	SODIUM	B	3.36000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06-23	11/27/90	ANTIMONY		0.00720	0.01000	mg/l
06-23	11/27/90	ZINC		0.00500	5.00000	mg/l
06-23	11/27/90	BARIUM		0.01500	2.00000	mg/l
06-23	11/27/90	CALCIUM		29.70000		mg/l
06-23	11/27/90	MAGNESIUM		8.18000		mg/l
06-23	11/27/90	MANGANESE		0.00700	0.05000	mg/l
06-23	11/27/90	SODIUM		5.05000		mg/l
06-23	11/27/90	2,4,5-TP	B	0.00230	0.05000	mg/l
06-23	11/27/90	METHYLENE CHLORIDE	B	0.06200	0.00500	mg/l
06-23	06/01/91	METHYLENE CHLORIDE	B	0.00200	0.00500	mg/l
06-23	06/01/91	ANTIMONY	B	0.01690	0.01000	mg/l
06-23	06/01/91	COPPER	B	0.02100	1.00000	mg/l
06-23	06/01/91	ZINC	B	0.01000	5.00000	mg/l
06-23	06/01/91	BARIUM	B	0.01100	2.00000	mg/l
06-23	06/01/91	CALCIUM		24.70000		mg/l
06-23	06/01/91	MAGNESIUM		7.49000		mg/l
06-23	06/01/91	MANGANESE		0.03000	0.05000	mg/l
06-23	06/01/91	SODIUM	B	4.95000		mg/l
06-23	06/01/91	SULFIDE		0.03700		mg/l
06-23	06/01/91	HEPTACHLOR	B	0.00002	0.00040	mg/l
06-23	11/13/91	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.00100		mg/l
06-23	11/13/91	METHYLENE CHLORIDE	B	0.00600	0.00500	mg/l
06-23	11/13/91	ACETONE	B	0.00900		mg/l
06-23	11/13/91	ANTIMONY	B	0.01980	0.01000	mg/l
06-23	11/13/91	COPPER		0.08900	1.00000	mg/l
06-23	11/13/91	NICKEL		0.11200	0.10000	mg/l
06-23	11/13/91	ALUMINUM	B	0.06900	0.05000	mg/l
06-23	11/13/91	BARIUM	B	0.06500	2.00000	mg/l
06-23	11/13/91	CALCIUM		51.30000		mg/l
06-23	11/13/91	IRON	B	0.08400	0.30000	mg/l
06-23	11/13/91	MAGNESIUM		14.70000		mg/l
06-23	11/13/91	MANGANESE		0.20400	0.05000	mg/l
06-23	11/13/91	POTASSIUM	B	0.56200		mg/l

06-23	11/13/91	SODIUM		5.57000		mg/l
06-23	11/13/91	VANADIUM	B	0.01500		mg/l
06-23	03/28/92	NITRITE NITROGEN		0.00900		MG/L
06-23	03/28/92	NITRATE NITROGEN		0.24600		MG/L
06-23	03/28/92	NICKEL	B	0.01300	0.10000	MG/L
06-23	03/28/92	CALCIUM		5.03000		MG/L
06-23	03/28/92	MAGNESIUM	B	2.24000		MG/L
06-23	03/28/92	MANGANESE	B	0.00700	0.05000	MG/L
06-23	03/28/92	POTASSIUM	B	0.43300		MG/L
06-23	03/28/92	SODIUM	B	3.08000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C01	11/27/90	2,4,5-TP	B	0.00320	0.05000	mg/l
06C01	11/27/90	METHYLENE CHLORIDE	B	0.01500	0.00500	mg/l
06C01	11/27/90	ANTIMONY	B	0.00440	0.01000	mg/l
06C01	11/27/90	ZINC		0.04300	5.00000	mg/l
06C01	11/27/90	BARIUM	B	0.12400	2.00000	mg/l
06C01	11/27/90	CALCIUM		53.60000		mg/l
06C01	11/27/90	IRON	B	0.01200	0.30000	mg/l
06C01	11/27/90	MAGNESIUM		11.10000		mg/l
06C01	11/27/90	MANGANESE		0.02900	0.05000	mg/l
06C01	11/27/90	SODIUM		15.50000		mg/l
06C01	06/01/91	METHYLENE CHLORIDE	B	0.00640	0.00500	mg/l
06C01	06/01/91	ACETONE	B	0.00410		mg/l
06C01	06/01/91	ANTIMONY	B	0.00660	0.01000	mg/l
06C01	06/01/91	NICKEL	B	0.00600	0.10000	mg/l
06C01	06/01/91	ZINC		0.02000	5.00000	mg/l
06C01	06/01/91	ALUMINUM	B	0.02000	0.05000	mg/l
06C01	06/01/91	BARIUM	B	0.12000	2.00000	mg/l
06C01	06/01/91	CALCIUM		49.80000		mg/l
06C01	06/01/91	IRON	B	0.04500	0.30000	mg/l
06C01	06/01/91	MAGNESIUM		10.30000		mg/l
06C01	06/01/91	MANGANESE	B	2.44000	0.05000	mg/l
06C01	06/01/91	POTASSIUM	B	2.44000		mg/l
06C01	06/01/91	SODIUM		12.70000		mg/l
06C01	06/01/91	DIETHYL PHTHALATE	B	0.02100		mg/l
06C01	06/01/91	DIBUTYLPHTHALATE	B	0.00230		mg/l
06C01	06/01/91	PCB-1254	B	0.00022	0.00050	mg/l
06C01	11/13/91	METHYLENE CHLORIDE	B	0.01000	0.00500	mg/l
06C01	11/13/91	ACETONE	B	0.00400		mg/l
06C01	11/13/91	ANTIMONY	B	0.00440	0.01000	mg/l
06C01	11/13/91	BARIUM		0.10000	2.00000	mg/l
06C01	11/13/91	CALCIUM		50.00000		mg/l
06C01	11/13/91	COBALT	B	0.01200		mg/l
06C01	11/13/91	IRON	B	0.01200	0.30000	mg/l
06C01	11/13/91	MAGNESIUM		11.60000		mg/l
06C01	11/13/91	MANGANESE		0.06200	0.05000	mg/l
06C01	11/13/91	POTASSIUM	B	1.05000		mg/l
06C01	11/13/91	SODIUM		14.90000		mg/l
06C01	03/28/92	NITRITE NITROGEN		0.00600		MG/L
06C01	03/28/92	COPPER	B	0.01900	1.00000	MG/L
06C01	03/28/92	BARIUM	B	0.10800	2.00000	MG/L
06C01	03/28/92	CALCIUM		54.40000		MG/L
06C01	03/28/92	MAGNESIUM		10.40000		MG/L
06C01	03/28/92	MANGANESE		0.11100	0.05000	MG/L
06C01	03/28/92	POTASSIUM	B	1.76000		MG/L
06C01	03/28/92	SODIUM		14.50000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C01P3	11/27/90	2,4,5-TP	B	0.00280	0.05000	mg/l

06C01P3	11/27/90	BIS(2-ETHYLHEXYL)PHTHALATE		0.01400		mg/l
06C01P3	11/27/90	METHYLENE CHLORIDE	B	0.02000	0.00500	mg/l
06C01P3	06/01/91	METHYLENE CHLORIDE	B	0.00240	0.00500	mg/l
06C01P3	06/01/91	ACETONE	B	0.00600		mg/l
06C01P3	06/01/91	ANTIMONY	B	0.00810	0.01000	mg/l
06C01P3	06/01/91	NICKEL		0.10100	0.10000	mg/l
06C01P3	06/01/91	SELENIUM	B	0.00280	0.05000	mg/l
06C01P3	06/01/91	ZINC		0.03000	5.00000	mg/l
06C01P3	06/01/91	BARIUM	B	0.01600	2.00000	mg/l
06C01P3	06/01/91	CALCIUM		259.00000		mg/l
06C01P3	06/01/91	COBALT	B	0.04800		mg/l
06C01P3	06/01/91	IRON		1.20000	0.30000	mg/l
06C01P3	06/01/91	MAGNESIUM		225.00000		mg/l
06C01P3	06/01/91	MANGANESE		1.29000	0.05000	mg/l
06C01P3	06/01/91	POTASSIUM		15.80000		mg/l
06C01P3	06/01/91	SODIUM		69.80000		mg/l
06C01P3	06/01/91	DIETHYL PHTHALATE	B	0.01200		mg/l
06C01P3	06/01/91	DIBUTYLPHTHALATE	B	0.00230		mg/l
06C01P3	11/13/91	METHYLENE CHLORIDE	B	0.02000	0.00500	mg/l
06C01P3	11/13/91	ACETONE	B	0.00600		mg/l
06C01P3	11/13/91	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.00090		mg/l
06C01P3	11/13/91	ANTIMONY	B	0.00800	0.01000	mg/l
06C01P3	11/13/91	COPPER		0.03000	1.00000	mg/l
06C01P3	11/13/91	NICKEL		0.11200	0.10000	mg/l
06C01P3	11/13/91	ZINC		0.06700	5.00000	mg/l
06C01P3	11/13/91	BARIUM	B	0.01600	2.00000	mg/l
06C01P3	11/13/91	CALCIUM		237.00000		mg/l
06C01P3	11/13/91	COBALT	B	0.04500		mg/l
06C01P3	11/13/91	IRON		0.50000	0.30000	mg/l
06C01P3	11/13/91	MAGNESIUM		203.00000		mg/l
06C01P3	11/13/91	MANGANESE		1.05000	0.05000	mg/l
06C01P3	11/13/91	POTASSIUM		6.41000		mg/l
06C01P3	11/13/91	SODIUM		65.10000		mg/l
06C01P3	03/28/92	BERYLLIUM	B	0.00100	0.00100	MG/L
06C01P3	03/28/92	COPPER		0.05400	1.00000	MG/L
06C01P3	03/28/92	NICKEL		0.10800	0.10000	MG/L
06C01P3	03/28/92	ZINC		0.03700	5.00000	MG/L
06C01P3	03/28/92	CALCIUM		244.00000		MG/L
06C01P3	03/28/92	COBALT		0.05200		MG/L
06C01P3	03/28/92	IRON		3.62000	0.30000	MG/L
06C01P3	03/28/92	MAGNESIUM		210.00000		MG/L
06C01P3	03/28/92	MANGANESE		1.90000	0.05000	MG/L
06C01P3	03/28/92	POTASSIUM		16.10000		MG/L
06C01P3	03/28/92	SODIUM		63.50000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C02	03/16/91	2,4-D	B	0.00000	0.07000	mg/l
06C02	03/16/91	2,4,5-TP	B	0.00031	0.05000	mg/l
06C02	03/16/91	METHYLENE CHLORIDE	B	0.00520	0.00500	mg/l
06C02	03/16/91	BENZENE	B	0.00600	0.00500	mg/l
06C02	03/16/91	ANTIMONY	B	0.00860	0.01000	mg/l
06C02	03/16/91	BARIUM	B	0.11000	2.00000	mg/l
06C02	03/16/91	CALCIUM		81.10000		mg/l
06C02	03/16/91	COBALT	B	0.00900		mg/l
06C02	03/16/91	IRON		1.49000	0.30000	mg/l
06C02	03/16/91	MAGNESIUM		14.80000		mg/l
06C02	03/16/91	MANGANESE		0.14500	0.05000	mg/l
06C02	03/16/91	SODIUM		15.30000		mg/l
06C02	06/01/91	DIETHYL PHTHALATE	B	0.00410		mg/l
06C02	06/01/91	METHYLENE CHLORIDE	B	0.00150	0.00500	mg/l

06C02	06/01/91	ANTIMONY	B	0.01430	0.01000	mg/l
06C02	06/01/91	BARIUM	B	0.10800	2.00000	mg/l
06C02	06/01/91	CALCIUM		80.50000		mg/l
06C02	06/01/91	IRON		1.89000	0.30000	mg/l
06C02	06/01/91	MAGNESIUM		16.30000		mg/l
06C02	06/01/91	MANGANESE		0.14100	0.05000	mg/l
06C02	06/01/91	POTASSIUM	B	1.53000		mg/l
06C02	06/01/91	SODIUM		17.70000		mg/l
06C02	06/01/91	HEPTACHLOR	B	0.00001	0.00040	mg/l
06C02	11/13/91	METHYLENE CHLORIDE	B	0.01000	0.00500	mg/l
06C02	11/13/91	ACETONE	B	0.01500		mg/l
06C02	11/13/91	ANTIMONY	B	0.00890	0.01000	mg/l
06C02	11/13/91	COPPER	B	0.01200	1.00000	mg/l
06C02	11/13/91	ALUMINUM	B	0.01100	0.05000	mg/l
06C02	11/13/91	BARIUM	B	0.11000	2.00000	mg/l
06C02	11/13/91	CALCIUM		63.70000		mg/l
06C02	11/13/91	IRON		1.99000	0.30000	mg/l
06C02	11/13/91	MAGNESIUM		13.00000		mg/l
06C02	11/13/91	MANGANESE		0.16000	0.05000	mg/l
06C02	11/13/91	POTASSIUM	B	1.24000		mg/l
06C02	11/13/91	SODIUM		25.50000		mg/l
06C02	03/28/92	NITRITE NITROGEN		0.00500		MG/L
06C02	03/28/92	NITRATE NITROGEN		0.02500		MG/L
06C02	03/28/92	ANTIMONY	B	0.00310	0.01000	MG/L
06C02	03/28/92	BARIUM	B	0.11000	2.00000	MG/L
06C02	03/28/92	CALCIUM		72.50000		MG/L
06C02	03/28/92	IRON		1.88000	0.30000	MG/L
06C02	03/28/92	MAGNESIUM		11.00000		MG/L
06C02	03/28/92	MANGANESE		0.13600	0.05000	MG/L
06C02	03/28/92	POTASSIUM	B	1.54000		MG/L
06C02	03/28/92	SODIUM		24.30000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C02P2	03/16/91	2,4,5-TP	B	0.00046	0.05000	mg/l
06C02P2	03/16/91	DINOSEB	B	0.00006	0.07000	mg/l
06C02P2	03/16/91	METHYLENE CHLORIDE	B	0.00240	0.00500	mg/l
06C02P2	03/16/91	BENZENE	B	0.00290	0.00500	mg/l
06C02P2	03/16/91	COPPER	B	0.01100	1.00000	mg/l
06C02P2	03/16/91	BARIUM	B	0.02200	2.00000	mg/l
06C02P2	03/16/91	CALCIUM		57.70000		mg/l
06C02P2	03/16/91	MAGNESIUM		36.60000		mg/l
06C02P2	03/16/91	MANGANESE	B	0.01100	0.05000	mg/l
06C02P2	03/16/91	SODIUM	B	4.50000		mg/l
06C02P2	03/16/91	SULFIDE		0.02000		mg/l
06C02P2	06/01/91	DIETHYL PHTHALATE	B	0.00380		mg/l
06C02P2	06/01/91	METHYLENE CHLORIDE	B	0.00160	0.00500	mg/l
06C02P2	06/01/91	ANTIMONY	B	0.01370	0.01000	mg/l
06C02P2	06/01/91	BARIUM	B	0.01100	2.00000	mg/l
06C02P2	06/01/91	CALCIUM		59.20000		mg/l
06C02P2	06/01/91	COBALT	B	0.01600		mg/l
06C02P2	06/01/91	MAGNESIUM		39.50000		mg/l
06C02P2	06/01/91	MANGANESE		0.01900	0.05000	mg/l
06C02P2	06/01/91	POTASSIUM	B	1.73000		mg/l
06C02P2	06/01/91	SODIUM		5.27000		mg/l
06C02P2	06/01/91	HEPTACHLOR	B	0.00001	0.00040	mg/l
06C02P2	11/13/91	METHYLENE CHLORIDE	B	0.01600	0.00500	mg/l
06C02P2	11/13/91	ACETONE	B	0.02000		mg/l
06C02P2	11/13/91	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.00120		mg/l
06C02P2	11/13/91	ANTIMONY	B	0.00330	0.01000	mg/l
06C02P2	11/13/91	CHROMIUM	B	0.00500	0.1	mg/l

06C02P2	11/13/91	BARIUM	B	0.02600	2.00000	mg/l
06C02P2	11/13/91	CALCIUM		49.50000		mg/l
06C02P2	11/13/91	MAGNESIUM		34.60000		mg/l
06C02P2	11/13/91	MANGANESE		0.03600	0.05000	mg/l
06C02P2	11/13/91	POTASSIUM	B	1.48000		mg/l
06C02P2	11/13/91	SODIUM		5.43000		mg/l
06C02P2	03/28/92	NITRATE NITROGEN		0.19200		MG/L
06C02P2	03/28/92	BARIUM	B	0.02600	2.00000	MG/L
06C02P2	03/28/92	CALCIUM		54.30000		MG/L
06C02P2	03/28/92	MAGNESIUM		33.60000		MG/L
06C02P2	03/28/92	MANGANESE	B	0.01000	0.05000	MG/L
06C02P2	03/28/92	POTASSIUM	B	1.75000		MG/L
06C02P2	03/28/92	SODIUM	B	4.31000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C03	03/16/91	2,4,5-TP	B	0.00065	0.05000	mg/l
06C03	03/16/91	METHYLENE CHLORIDE	B	0.00330	0.00500	mg/l
06C03	03/16/91	BENZENE	B	0.00200	0.00500	mg/l
06C03	03/16/91	ANTIMONY	B	0.00540	0.01000	mg/l
06C03	03/16/91	ARSENIC	B	0.00990	0.05000	mg/l
06C03	03/16/91	COPPER	B	0.01600	1.00000	mg/l
06C03	03/16/91	LEAD	B	0.00160	0.01500	mg/l
06C03	03/16/91	BARIUM	B	0.08400	2.00000	mg/l
06C03	03/16/91	CALCIUM		53.60000		mg/l
06C03	03/16/91	COBALT	B	0.00900		mg/l
06C03	03/16/91	IRON		6.75000	0.30000	mg/l
06C03	03/16/91	MAGNESIUM		10.90000		mg/l
06C03	03/16/91	MANGANESE		0.40400	0.05000	mg/l
06C03	03/16/91	SODIUM		17.40000		mg/l
06C03	06/01/91	DIETHYL PHTHALATE	B	0.00380		mg/l
06C03	06/01/91	METHYLENE CHLORIDE	B	0.00900	0.00500	mg/l
06C03	06/01/91	ACETONE	B	0.00620		mg/l
06C03	06/01/91	ANTIMONY	B	0.01270	0.01000	mg/l
06C03	06/01/91	ARSENIC		0.01230	0.05000	mg/l
06C03	06/01/91	CHROMIUM	B	0.00500	0.1	mg/l
06C03	06/01/91	COPPER	B	0.00500	1.00000	mg/l
06C03	06/01/91	ZINC	B	0.00700	5.00000	mg/l
06C03	06/01/91	BARIUM	B	0.07500	2.00000	mg/l
06C03	06/01/91	CALCIUM		55.00000		mg/l
06C03	06/01/91	COBALT	B	0.00800		mg/l
06C03	06/01/91	IRON		7.21000	0.30000	mg/l
06C03	06/01/91	MAGNESIUM		11.40000		mg/l
06C03	06/01/91	MANGANESE		0.36400	0.05000	mg/l
06C03	06/01/91	POTASSIUM	B	1.23000		mg/l
06C03	06/01/91	SODIUM		18.70000		mg/l
06C03	11/13/91	METHYLENE CHLORIDE	B	0.01600	0.00500	mg/l
06C03	11/13/91	ACETONE	B	0.01000		mg/l
06C03	11/13/91	ARSENIC		0.01070	0.05000	mg/l
06C03	11/13/91	BARIUM	B	0.08400	2.00000	mg/l
06C03	11/13/91	CALCIUM		52.90000		mg/l
06C03	11/13/91	COBALT	B	0.01200		mg/l
06C03	11/13/91	IRON		7.09000	0.30000	mg/l
06C03	11/13/91	MAGNESIUM		11.70000		mg/l
06C03	11/13/91	MANGANESE		0.40500	0.05000	mg/l
06C03	11/13/91	POTASSIUM		1.12000		mg/l
06C03	11/13/91	SODIUM		19.50000		mg/l
06C03	03/28/92	NITRATE NITROGEN		0.01500		MG/L
06C03	03/28/92	ARSENIC		0.01190	0.05000	MG/L
06C03	03/28/92	BARIUM	B	0.08200	2.00000	MG/L
06C03	03/28/92	CALCIUM		55.50000		MG/L

06C03	03/28/92	IRON		7.12000	0.30000	MG/L
06C03	03/28/92	MAGNESIUM		9.84000		MG/L
06C03	03/28/92	MANGANESE		0.38300	0.05000	MG/L
06C03	03/28/92	POTASSIUM	B	1.17000		MG/L
06C03	03/28/92	SODIUM		17.30000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C03P2	03/16/91	2,4-D	B	0.00035	0.07000	mg/l
06C03P2	03/16/91	2,4,5-TP	B	0.00032	0.05000	mg/l
06C03P2	03/16/91	METHYLENE CHLORIDE	B	0.00180	0.00500	mg/l
06C03P2	03/16/91	BENZENE	B	0.00220	0.00500	mg/l
06C03P2	03/16/91	ANTIMONY	B	0.00660	0.01000	mg/l
06C03P2	03/16/91	COPPER	B	0.01500	1.00000	mg/l
06C03P2	03/16/91	BARIUM	B	0.04600	2.00000	mg/l
06C03P2	03/16/91	CALCIUM		70.50000		mg/l
06C03P2	03/16/91	COBALT	B	0.00600		mg/l
06C03P2	03/16/91	IRON	B	0.02500	0.30000	mg/l
06C03P2	03/16/91	MAGNESIUM		18.60000		mg/l
06C03P2	03/16/91	MANGANESE		0.03100	0.05000	mg/l
06C03P2	03/16/91	SODIUM		14.50000		mg/l
06C03P2	03/16/91	SULFIDE		0.08100		mg/l
06C03P2	06/01/91	DIETHYL PHTHALATE	B	0.00370		mg/l
06C03P2	06/01/91	METHYLENE CHLORIDE	B	0.00650	0.00500	mg/l
06C03P2	06/01/91	ACETONE	B	0.00750		mg/l
06C03P2	06/01/91	ANTIMONY	B	0.01130	0.01000	mg/l
06C03P2	06/01/91	BARIUM	B	0.04900	2.00000	mg/l
06C03P2	06/01/91	CALCIUM		72.80000		mg/l
06C03P2	06/01/91	COBALT	B	0.00900		mg/l
06C03P2	06/01/91	IRON	B	0.01400	0.30000	mg/l
06C03P2	06/01/91	MAGNESIUM		17.60000		mg/l
06C03P2	06/01/91	MANGANESE		0.02800	0.05000	mg/l
06C03P2	06/01/91	POTASSIUM	B	1.62000		mg/l
06C03P2	06/01/91	SODIUM		15.20000		mg/l
06C03P2	06/01/91	HEPTACHLOR	B	0.00001	0.00040	mg/l
06C03P2	11/13/91	METHYLENE CHLORIDE	B	0.01000	0.00500	mg/l
06C03P2	11/13/91	ACETONE	B	0.01200		mg/l
06C03P2	11/13/91	ANTIMONY	B	0.00840	0.01000	mg/l
06C03P2	11/13/91	COPPER		0.02800	1.00000	mg/l
06C03P2	11/13/91	BARIUM	B	0.08100	2.00000	mg/l
06C03P2	11/13/91	CALCIUM		70.80000		mg/l
06C03P2	11/13/91	COBALT	B	0.01400		mg/l
06C03P2	11/13/91	IRON	B	0.02800	0.30000	mg/l
06C03P2	11/13/91	MAGNESIUM		17.40000		mg/l
06C03P2	11/13/91	MANGANESE	B	0.00900	0.05000	mg/l
06C03P2	11/13/91	POTASSIUM		1.80000		mg/l
06C03P2	11/13/91	SODIUM		17.80000		mg/l
06C03P2	03/28/92	NITRATE NITROGEN		0.01900		MG/L
06C03P2	03/28/92	BARIUM	B	0.05400	2.00000	MG/L
06C03P2	03/28/92	CALCIUM		73.10000		MG/L
06C03P2	03/28/92	MAGNESIUM		15.70000		MG/L
06C03P2	03/28/92	MANGANESE	B	0.01000	0.05000	MG/L
06C03P2	03/28/92	POTASSIUM	B	1.35000		MG/L
06C03P2	03/28/92	SODIUM		15.00000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C04	03/16/91	2,4-D	B	0.00023	0.07000	mg/l
06C04	03/16/91	2,4,5-TP	B	0.00033	0.05000	mg/l
06C04	03/16/91	ANTIMONY	B	0.00670	0.01000	mg/l
06C04	03/16/91	ZINC	B	0.01100	5.00000	mg/l
06C04	03/16/91	BARIUM	B	0.12200	2.00000	mg/l

06C04	03/16/91	CALCIUM		77.10000		mg/l
06C04	03/16/91	COBALT	B	0.00800		mg/l
06C04	03/16/91	IRON		1.18000	0.30000	mg/l
06C04	03/16/91	MAGNESIUM		23.10000		mg/l
06C04	03/16/91	MANGANESE		0.08100	0.05000	mg/l
06C04	03/16/91	POTASSIUM	B	2.57000		mg/l
06C04	03/16/91	SODIUM		37.20000		mg/l
06C04	03/16/91	METHYLENE CHLORIDE	B	0.00410	0.00500	mg/l
06C04	03/16/91	BENZENE	B	0.00260	0.00500	mg/l
06C04	06/01/91	DIETHYL PHTHALATE	B	0.00350		mg/l
06C04	06/01/91	METHYLENE CHLORIDE	B	0.01400	0.00500	mg/l
06C04	06/01/91	ACETONE	B	0.00960		mg/l
06C04	06/01/91	ANTIMONY	B	0.01290	0.01000	mg/l
06C04	06/01/91	BARIUM	B	0.13200	2.00000	mg/l
06C04	06/01/91	CALCIUM		74.30000		mg/l
06C04	06/01/91	COBALT	B	0.01000		mg/l
06C04	06/01/91	IRON		1.17000	0.30000	mg/l
06C04	06/01/91	MAGNESIUM		22.00000		mg/l
06C04	06/01/91	MANGANESE		0.10800	0.05000	mg/l
06C04	06/01/91	POTASSIUM	B	2.67000		mg/l
06C04	06/01/91	SODIUM		38.70000		mg/l
06C04	11/13/91	METHYLENE CHLORIDE	B	0.00500	0.00500	mg/l
06C04	11/13/91	ACETONE	B	0.00500		mg/l
06C04	11/13/91	ANTIMONY	B	0.00340	0.01000	mg/l
06C04	11/13/91	BARIUM	B	0.14500	2.00000	mg/l
06C04	11/13/91	CALCIUM		68.70000		mg/l
06C04	11/13/91	COBALT	B	0.01900		mg/l
06C04	11/13/91	IRON		1.41000	0.30000	mg/l
06C04	11/13/91	MAGNESIUM		21.90000		mg/l
06C04	11/13/91	MANGANESE		0.15100	0.05000	mg/l
06C04	11/13/91	POTASSIUM	B	2.42000		mg/l
06C04	11/13/91	SODIUM		43.80000		mg/l
06C04	03/28/92	NITRATE NITROGEN		0.03000		MG/L
06C04	03/28/92	LEAD	B	0.00180	0.01500	MG/L
06C04	03/28/92	BARIUM	B	0.13100	2.00000	MG/L
06C04	03/28/92	CALCIUM		81.40000		MG/L
06C04	03/28/92	IRON		1.39000	0.30000	MG/L
06C04	03/28/92	MAGNESIUM		18.30000		MG/L
06C04	03/28/92	MANGANESE		0.12600	0.05000	MG/L
06C04	03/28/92	POTASSIUM	B	2.06000		MG/L
06C04	03/28/92	SODIUM		36.20000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C04P2	03/16/91	2,4-D	B	0.00004	0.07000	mg/l
06C04P2	03/16/91	2,4,5-TP	B	0.00026	0.05000	mg/l
06C04P2	03/16/91	ANTIMONY	B	0.00680	0.01000	mg/l
06C04P2	03/16/91	ZINC	B	0.01900	5.00000	mg/l
06C04P2	03/16/91	CALCIUM		74.50000		mg/l
06C04P2	03/16/91	COBALT	B	0.01100		mg/l
06C04P2	03/16/91	IRON	B	0.01100	0.30000	mg/l
06C04P2	03/16/91	MAGNESIUM		59.10000		mg/l
06C04P2	03/16/91	MANGANESE		0.02400	0.05000	mg/l
06C04P2	03/16/91	POTASSIUM	B	2.94000		mg/l
06C04P2	03/16/91	SODIUM		70.30000		mg/l
06C04P2	03/16/91	METHYLENE CHLORIDE	B	0.00780	0.00500	mg/l
06C04P2	03/16/91	BENZENE	B	0.00360	0.00500	mg/l
06C04P2	06/01/91	DIETHYL PHTHALATE	B	0.00400		mg/l
06C04P2	06/01/91	METHYLENE CHLORIDE	B	0.02600	0.00500	mg/l
06C04P2	06/01/91	ANTIMONY	B	0.01230	0.01000	mg/l
06C04P2	06/01/91	COPPER	B	0.00500	1.00000	mg/l

06C04P2	06/01/91	CALCIUM		66.30000		mg/l
06C04P2	06/01/91	COBALT	B	0.01300		mg/l
06C04P2	06/01/91	MAGNESIUM		47.20000		mg/l
06C04P2	06/01/91	MANGANESE		0.04900	0.05000	mg/l
06C04P2	06/01/91	POTASSIUM	B	3.23000		mg/l
06C04P2	06/01/91	SODIUM		87.20000		mg/l
06C04P2	06/01/91	SULFIDE		0.02300		mg/l
06C04P2	11/13/91	METHYLENE CHLORIDE	B	0.00200	0.00500	mg/l
06C04P2	11/13/91	ACETONE	B	0.01100		mg/l
06C04P2	11/13/91	ANTIMONY	B	0.01990	0.01000	mg/l
06C04P2	11/13/91	CADMIUM	B	0.00027	0.00500	mg/l
06C04P2	11/13/91	COPPER		0.08500	1.00000	mg/l
06C04P2	11/13/91	BARIUM	B	0.02200	2.00000	mg/l
06C04P2	11/13/91	CALCIUM		66.80000		mg/l
06C04P2	11/13/91	COBALT	B	0.03100		mg/l
06C04P2	11/13/91	IRON	B	0.06400	0.30000	mg/l
06C04P2	11/13/91	MAGNESIUM		42.70000		mg/l
06C04P2	11/13/91	MANGANESE		0.06900	0.05000	mg/l
06C04P2	11/13/91	POTASSIUM	B	3.67000		mg/l
06C04P2	11/13/91	SODIUM		112.00000		mg/l
06C04P2	03/28/92	NITRATE NITROGEN		0.20700		MG/L
06C04P2	03/28/92	COPPER		0.05300	1.00000	MG/L
06C04P2	03/28/92	BARIUM	B	0.02600	2.00000	MG/L
06C04P2	03/28/92	CALCIUM		76.50000		MG/L
06C04P2	03/28/92	MAGNESIUM		45.70000		MG/L
06C04P2	03/28/92	MANGANESE		0.06000	0.05000	MG/L
06C04P2	03/28/92	POTASSIUM	B	4.50000		MG/L
06C04P2	03/28/92	SODIUM		82.60000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C05	03/16/91	DIETHYL PHTHALATE	B	0.00350		mg/l
06C05	03/16/91	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.00120		mg/l
06C05	03/16/91	2,4-D	B	0.00005	0.07000	mg/l
06C05	03/16/91	2,4,5-TP	B	0.00038	0.05000	mg/l
06C05	03/16/91	METHYLENE CHLORIDE	B	0.00180	0.00500	mg/l
06C05	03/16/91	ANTIMONY	B	0.00720	0.01000	mg/l
06C05	03/16/91	COPPER	B	0.01900	1.00000	mg/l
06C05	03/16/91	BARIUM	B	0.06100	2.00000	mg/l
06C05	03/16/91	CALCIUM		11.80000		mg/l
06C05	03/16/91	COBALT	B	0.01600		mg/l
06C05	03/16/91	IRON	B	0.01600	0.30000	mg/l
06C05	03/16/91	MAGNESIUM	B	3.17000		mg/l
06C05	03/16/91	MANGANESE		0.01500	0.05000	mg/l
06C05	03/16/91	SODIUM		154.00000		mg/l
06C05	03/16/91	SULFIDE		0.05800		mg/l
06C05	06/01/91	DIETHYL PHTHALATE	B	0.00320		mg/l
06C05	06/01/91	METHYLENE CHLORIDE	B	0.00970	0.00500	mg/l
06C05	06/01/91	ANTIMONY	B	0.01560	0.01000	mg/l
06C05	06/01/91	COPPER	B	0.00800	1.00000	mg/l
06C05	06/01/91	ZINC	B	0.01000	5.00000	mg/l
06C05	06/01/91	BARIUM	B	0.05700	2.00000	mg/l
06C05	06/01/91	CALCIUM		11.60000		mg/l
06C05	06/01/91	MAGNESIUM	B	3.33000		mg/l
06C05	06/01/91	MANGANESE	B	0.00900	0.05000	mg/l
06C05	06/01/91	POTASSIUM	B	1.16000		mg/l
06C05	06/01/91	SODIUM		153.00000		mg/l
06C05	11/13/91	METHYLENE CHLORIDE	B	0.00900	0.00500	mg/l
06C05	11/13/91	ACETONE	B	0.00600		mg/l
06C05	11/13/91	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.00050		mg/l
06C05	11/13/91	BARIUM	B	0.05400	2.00000	mg/l

06C05	11/13/91	CALCIUM		11.50000		mg/l
06C05	11/13/91	COBALT	B	0.04100		mg/l
06C05	11/13/91	IRON	B	0.03500	0.30000	mg/l
06C05	11/13/91	MAGNESIUM		3.14000		mg/l
06C05	11/13/91	MANGANESE	B	0.01000	0.05000	mg/l
06C05	11/13/91	POTASSIUM	B	1.24000		mg/l
06C05	11/13/91	SODIUM		176.00000		mg/l
06C05	03/28/92	NITRATE NITROGEN		0.02600		MG/L
06C05	03/28/92	ANTIMONY	B	0.00300	0.01000	MG/L
06C05	03/28/92	BARIUM	B	0.06300	2.00000	MG/L
06C05	03/28/92	CALCIUM		10.70000		MG/L
06C05	03/28/92	IRON	U	0.04000	0.30000	MG/L
06C05	03/28/92	MAGNESIUM	B	2.64000		MG/L
06C05	03/28/92	MANGANESE	B	0.00500	0.05000	MG/L
06C05	03/28/92	POTASSIUM	B	1.18000		MG/L
06C05	03/28/92	SODIUM		161.00000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C06	03/16/91	2,4,5-TP	B	0.00033	0.05000	mg/l
06C06	03/16/91	DINOSEB	B	0.00000	0.07000	mg/l
06C06	03/16/91	ZINC	B	0.00600	5.00000	mg/l
06C06	03/16/91	BARIUM	B	0.04300	2.00000	mg/l
06C06	03/16/91	CALCIUM		15.10000		mg/l
06C06	03/16/91	COBALT	B	0.00800		mg/l
06C06	03/16/91	MAGNESIUM		8.59000		mg/l
06C06	03/16/91	MANGANESE		0.11300	0.05000	mg/l
06C06	03/16/91	POTASSIUM	B	2.10000		mg/l
06C06	03/16/91	SODIUM		138.00000		mg/l
06C06	03/16/91	SULFIDE		0.05800		mg/l
06C06	03/16/91	METHYLENE CHLORIDE	B	0.12000	0.00500	mg/l
06C06	03/16/91	BENZENE	B	0.00800	0.00500	mg/l
06C06	03/16/91	ACETONE	B	0.00760		mg/l
06C06	03/16/91	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.00110		mg/l
06C06	06/01/91	DIETHYL PHTHALATE	B	0.00300		mg/l
06C06	06/01/91	METHYLENE CHLORIDE	B	0.00720	0.00500	mg/l
06C06	06/01/91	ACETONE	B	0.02500		mg/l
06C06	06/01/91	ANTIMONY	B	0.01870	0.01000	mg/l
06C06	06/01/91	CHROMIUM	B	0.00500	0.1	mg/l
06C06	06/01/91	COPPER	B	0.01200	1.00000	mg/l
06C06	06/01/91	LEAD	B	0.00130	0.01500	mg/l
06C06	06/01/91	BARIUM	B	0.01900	2.00000	mg/l
06C06	06/01/91	CALCIUM		12.60000		mg/l
06C06	06/01/91	COBALT	B	0.01600		mg/l
06C06	06/01/91	IRON	B	0.02200	0.30000	mg/l
06C06	06/01/91	MAGNESIUM		7.36000		mg/l
06C06	06/01/91	MANGANESE		0.12500	0.05000	mg/l
06C06	06/01/91	POTASSIUM	B	2.11000		mg/l
06C06	06/01/91	SODIUM		136.00000		mg/l
06C06	11/13/91	SULFIDE		0.15600		mg/l
06C06	11/13/91	METHYLENE CHLORIDE	B	0.01200	0.00500	mg/l
06C06	11/13/91	ACETONE	B	0.00600		mg/l
06C06	11/13/91	ANTIMONY	B	0.00490	0.01000	mg/l
06C06	11/13/91	BARIUM	B	0.04500	2.00000	mg/l
06C06	11/13/91	CALCIUM		11.00000		mg/l
06C06	11/13/91	COBALT	B	0.02700		mg/l
06C06	11/13/91	IRON	B	0.03800	0.30000	mg/l
06C06	11/13/91	MAGNESIUM		6.79000		mg/l
06C06	11/13/91	MANGANESE		0.07500	0.05000	mg/l
06C06	11/13/91	POTASSIUM	B	2.08000		mg/l
06C06	11/13/91	SODIUM		172.00000		mg/l

06C06	03/28/92	NITRATE NITROGEN		0.04000		MG/L
06C06	03/28/92	BARIUM	B	0.04100	2.00000	MG/L
06C06	03/28/92	CALCIUM		11.00000		MG/L
06C06	03/28/92	IRON		0.31500	0.30000	MG/L
06C06	03/28/92	MAGNESIUM		5.67000		MG/L
06C06	03/28/92	MANGANESE		0.12000	0.05000	MG/L
06C06	03/28/92	POTASSIUM	B	1.68000		MG/L
06C06	03/28/92	SODIUM		148.00000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C06P2	03/16/91	2,4,5-TP	B	0.00030	0.05000	mg/l
06C06P2	03/16/91	DINOSEB	B	0.00066	0.07000	mg/l
06C06P2	03/16/91	ALUMINUM	B	0.02500	0.05000	mg/l
06C06P2	03/16/91	CALCIUM		16.50000		mg/l
06C06P2	03/16/91	MAGNESIUM	B	2.89000		mg/l
06C06P2	03/16/91	MANGANESE	B	0.00800	0.05000	mg/l
06C06P2	03/16/91	SODIUM		8.36000		mg/l
06C06P2	03/16/91	SULFIDE		0.16900		mg/l
06C06P2	03/16/91	METHYLENE CHLORIDE	B	0.05900	0.00500	mg/l
06C06P2	03/16/91	BENZENE	B	0.00410	0.00500	mg/l
06C06P2	03/16/91	ACETONE	B	0.00670		mg/l
06C06P2	06/01/91	METHYLENE CHLORIDE	B	0.00220	0.00500	mg/l
06C06P2	06/01/91	ACETONE	B	0.00830		mg/l
06C06P2	06/01/91	ANTIMONY		0.00360	0.01000	mg/l
06C06P2	06/01/91	ALUMINUM	B	0.01300	0.05000	mg/l
06C06P2	06/01/91	BARIUM	B	0.01400	2.00000	mg/l
06C06P2	06/01/91	CALCIUM		12.10000		mg/l
06C06P2	06/01/91	MAGNESIUM	B	4.85000		mg/l
06C06P2	06/01/91	MANGANESE		0.02500	0.05000	mg/l
06C06P2	06/01/91	POTASSIUM	B	1.02000		mg/l
06C06P2	06/01/91	SODIUM		9.87000		mg/l
06C06P2	11/13/91	2,4,5-TP	B	0.00044	0.05000	mg/l
06C06P2	11/13/91	METHYLENE CHLORIDE	B	0.01000	0.00500	mg/l
06C06P2	11/13/91	ACETONE	B	0.00400		mg/l
06C06P2	11/13/91	ANTIMONY	B	0.00800	0.01000	mg/l
06C06P2	11/13/91	COPPER		0.04300	1.00000	mg/l
06C06P2	11/13/91	NICKEL	B	0.00700	0.10000	mg/l
06C06P2	11/13/91	BARIUM	B	0.01400	2.00000	mg/l
06C06P2	11/13/91	CALCIUM		7.92000		mg/l
06C06P2	11/13/91	IRON	B	0.04100	0.30000	mg/l
06C06P2	11/13/91	MAGNESIUM	B	4.02000		mg/l
06C06P2	11/13/91	MANGANESE		0.01700	0.05000	mg/l
06C06P2	11/13/91	POTASSIUM	B	1.18000		mg/l
06C06P2	11/13/91	SODIUM		12.10000		mg/l
06C06P2	03/28/92	NITRATE NITROGEN		0.95200		MG/L
06C06P2	03/28/92	SULFIDE		0.02000		MG/L
06C06P2	03/28/92	CADMIUM	B	0.00022	0.00500	MG/L
06C06P2	03/28/92	COPPER		0.05000	1.00000	MG/L
06C06P2	03/28/92	LEAD		0.00430	0.01500	MG/L
06C06P2	03/28/92	CALCIUM		8.25000		MG/L
06C06P2	03/28/92	MAGNESIUM	B	3.73000		MG/L
06C06P2	03/28/92	MANGANESE	B	0.00900	0.05000	MG/L
06C06P2	03/28/92	POTASSIUM	B	2.24000		MG/L
06C06P2	03/28/92	SODIUM		11.20000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C07	03/16/91	2,4,5-TP	B	0.00024	0.05000	mg/l
06C07	03/16/91	DINOSEB	B	0.00001	0.07000	mg/l
06C07	03/16/91	ZINC	B	0.01400	5.00000	mg/l
06C07	03/16/91	BARIUM	B	0.19900	2.00000	mg/l

06C07	03/16/91	CALCIUM		5.53000		mg/l
06C07	03/16/91	IRON	B	0.02300	0.30000	mg/l
06C07	03/16/91	MAGNESIUM		5.43000		mg/l
06C07	03/16/91	MANGANESE	B	0.00500	0.05000	mg/l
06C07	03/16/91	POTASSIUM	B	2.22000		mg/l
06C07	03/16/91	SODIUM		148.00000		mg/l
06C07	03/16/91	METHYLENE CHLORIDE	B	0.02000	0.00500	mg/l
06C07	03/16/91	BENZENE	B	0.01500	0.00500	mg/l
06C07	03/16/91	ACETONE	B	0.00790		mg/l
06C07	03/16/91	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.00140		mg/l
06C07	06/01/91	METHYLENE CHLORIDE	B	0.00150	0.00500	mg/l
06C07	06/01/91	ACETONE	B	0.00340		mg/l
06C07	06/01/91	ANTIMONY	B	0.01160	0.01000	mg/l
06C07	06/01/91	COPPER	B	0.02200	1.00000	mg/l
06C07	06/01/91	BARIUM		0.21200	2.00000	mg/l
06C07	06/01/91	CALCIUM		5.60000		mg/l
06C07	06/01/91	MAGNESIUM		5.86000		mg/l
06C07	06/01/91	MANGANESE	B	0.00700	0.05000	mg/l
06C07	06/01/91	POTASSIUM	B	2.32000		mg/l
06C07	06/01/91	SODIUM		150.00000		mg/l
06C07	11/13/91	2,4,5-TP	B	0.00031	0.05000	mg/l
06C07	11/13/91	METHYLENE CHLORIDE	B	0.00700	0.00500	mg/l
06C07	11/13/91	ACETONE	B	0.00300		mg/l
06C07	11/13/91	ANTIMONY	B	0.00970	0.01000	mg/l
06C07	11/13/91	COPPER	B	0.02100	1.00000	mg/l
06C07	11/13/91	BARIUM		0.21200	2.00000	mg/l
06C07	11/13/91	CALCIUM		6.94000		mg/l
06C07	11/13/91	COBALT	B	0.02000		mg/l
06C07	11/13/91	IRON	B	0.02200	0.30000	mg/l
06C07	11/13/91	MAGNESIUM		6.99000		mg/l
06C07	11/13/91	MANGANESE	B	0.01000	0.05000	mg/l
06C07	11/13/91	POTASSIUM	B	3.10000		mg/l
06C07	11/13/91	SODIUM		163.00000		mg/l
06C07	03/28/92	NITRITE NITROGEN		0.00700		MG/L
06C07	03/28/92	COPPER	B	0.00700	1.00000	MG/L
06C07	03/28/92	BARIUM		0.21800	2.00000	MG/L
06C07	03/28/92	CALCIUM		5.45000		MG/L
06C07	03/28/92	MAGNESIUM		5.20000		MG/L
06C07	03/28/92	POTASSIUM	B	2.65000		MG/L
06C07	03/28/92	SODIUM		149.00000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C08	11/27/90	ANTIMONY		0.00570	0.01000	mg/l
06C08	11/27/90	ARSENIC		0.01210	0.05000	mg/l
06C08	11/27/90	ZINC		0.00500	5.00000	mg/l
06C08	11/27/90	ALUMINUM		0.17800	0.05000	mg/l
06C08	11/27/90	CALCIUM		1.49000		mg/l
06C08	11/27/90	COBALT		0.01500		mg/l
06C08	11/27/90	IRON		0.04900	0.30000	mg/l
06C08	11/27/90	POTASSIUM		4.73000		mg/l
06C08	11/27/90	SODIUM		136.00000		mg/l
06C08	11/27/90	TIN		0.06800		mg/l
06C08	11/27/90	SULFIDE		0.05400		mg/l
06C08	11/27/90	METHYLENE CHLORIDE	B	0.03400	0.00500	mg/l
06C08	06/01/91	METHYLENE CHLORIDE	B	0.00840	0.00500	mg/l
06C08	06/01/91	ACETONE	B	0.00420		mg/l
06C08	06/01/91	ANTIMONY	B	0.02060	0.01000	mg/l
06C08	06/01/91	ARSENIC	B	0.00590	0.05000	mg/l
06C08	06/01/91	COPPER	B	0.01700	1.00000	mg/l
06C08	06/01/91	ZINC		0.07000	5.00000	mg/l

06C08	06/01/91	ALUMINUM	B	0.10700	0.05000	mg/l
06C08	06/01/91	CALCIUM	B	1.23000		mg/l
06C08	06/01/91	IRON		0.14200	0.30000	mg/l
06C08	06/01/91	MANGANESE	B	0.01000	0.05000	mg/l
06C08	06/01/91	POTASSIUM	B	3.46000		mg/l
06C08	06/01/91	SODIUM		177.00000		mg/l
06C08	06/01/91	VANADIUM	B	0.00500		mg/l
06C08	06/01/91	SULFIDE		0.06500		mg/l
06C08	06/01/91	DIETHYL PHTHALATE	B	0.00160		mg/l
06C08	06/01/91	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.00740		mg/l
06C08	11/13/91	SULFIDE		0.02900		mg/l
06C08	11/13/91	METHYLENE CHLORIDE	B	0.02900	0.00500	mg/l
06C08	11/13/91	ACETONE	B	0.04400		mg/l
06C08	11/13/91	ANTIMONY	B	0.00480	0.01000	mg/l
06C08	11/13/91	ARSENIC	B	0.00790	0.05000	mg/l
06C08	11/13/91	NICKEL	B	0.00700	0.10000	mg/l
06C08	11/13/91	ALUMINUM	B	0.09600	0.05000	mg/l
06C08	11/13/91	BARIUM	B	0.01100	2.00000	mg/l
06C08	11/13/91	CALCIUM	B	2.03000		mg/l
06C08	11/13/91	COBALT	B	0.04500		mg/l
06C08	11/13/91	IRON	B	0.01300	0.30000	mg/l
06C08	11/13/91	MAGNESIUM	B	0.19900		mg/l
06C08	11/13/91	POTASSIUM	B	3.50000		mg/l
06C08	11/13/91	SODIUM		196.00000		mg/l
06C08	11/13/91	VANADIUM	B	0.01300		mg/l
06C08	03/28/92	NITRITE NITROGEN		0.03000		MG/L
06C08	03/28/92	NITRATE NITROGEN		0.14600		MG/L
06C08	03/28/92	ARSENIC	B	0.00520	0.05000	MG/L
06C08	03/28/92	COPPER	B	0.01300	1.00000	MG/L
06C08	03/28/92	NICKEL	B	0.00700	0.10000	MG/L
06C08	03/28/92	ZINC		0.05800	5.00000	MG/L
06C08	03/28/92	ALUMINUM		0.15400	0.05000	MG/L
06C08	03/28/92	BARIUM	B	0.03200	2.00000	MG/L
06C08	03/28/92	CALCIUM	B	4.67000		MG/L
06C08	03/28/92	COBALT	B	0.04300		MG/L
06C08	03/28/92	IRON		0.33500	0.30000	MG/L
06C08	03/28/92	MAGNESIUM	B	0.29800		MG/L
06C08	03/28/92	MANGANESE		0.02500	0.05000	MG/L
06C08	03/28/92	POTASSIUM		5.58000		MG/L
06C08	03/28/92	SODIUM		204.00000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C08P2	11/27/90	LEAD		0.00290	0.01500	mg/l
06C08P2	11/27/90	NICKEL		0.02600	0.10000	mg/l
06C08P2	11/27/90	ZINC		0.02400	5.00000	mg/l
06C08P2	11/27/90	ALUMINUM		0.27700	0.05000	mg/l
06C08P2	11/27/90	CALCIUM		10.70000		mg/l
06C08P2	11/27/90	COBALT		0.01000		mg/l
06C08P2	11/27/90	IRON		16.20000	0.30000	mg/l
06C08P2	11/27/90	MAGNESIUM		6.10000		mg/l
06C08P2	11/27/90	MANGANESE		0.63700	0.05000	mg/l
06C08P2	11/27/90	POTASSIUM		2.71000		mg/l
06C08P2	11/27/90	SODIUM		5.09000		mg/l
06C08P2	11/27/90	TIN		0.06100		mg/l
06C08P2	11/27/90	METHYLENE CHLORIDE	B	0.01400	0.00500	mg/l
06C08P2	06/01/91	METHYLENE CHLORIDE	B	0.00750	0.00500	mg/l
06C08P2	06/01/91	ACETONE	B	0.00670		mg/l
06C08P2	06/01/91	ANTIMONY	B	0.01780	0.01000	mg/l
06C08P2	06/01/91	COPPER	B	0.01800	1.00000	mg/l
06C08P2	06/01/91	NICKEL	B	0.02600	0.10000	mg/l

06C08P2	06/01/91	ZINC		0.04600	5.00000	mg/l
06C08P2	06/01/91	ALUMINUM		0.20600	0.05000	mg/l
06C08P2	06/01/91	CALCIUM		9.50000		mg/l
06C08P2	06/01/91	IRON		15.50000	0.30000	mg/l
06C08P2	06/01/91	MAGNESIUM		5.74000		mg/l
06C08P2	06/01/91	MANGANESE	B	1.98000	0.05000	mg/l
06C08P2	06/01/91	POTASSIUM	B	1.98000		mg/l
06C08P2	06/01/91	SODIUM	B	4.68000		mg/l
06C08P2	06/01/91	DIETHYL PHTHALATE	B	0.02300		mg/l
06C08P2	06/01/91	DIBUTYLPHTHALATE	B	0.00260		mg/l
06C08P2	06/01/91	PCB-1254	B	0.00043	0.00050	mg/l
06C08P2	11/13/91	2,4,5-TP	B	0.00044	0.05000	mg/l
06C08P2	11/13/91	METHYLENE CHLORIDE	B	0.01000	0.00500	mg/l
06C08P2	11/13/91	ACETONE	B	0.00600		mg/l
06C08P2	11/13/91	ANTIMONY	B	0.00680	0.01000	mg/l
06C08P2	11/13/91	COPPER		0.03300	1.00000	mg/l
06C08P2	11/13/91	LEAD	B	0.00260	0.01500	mg/l
06C08P2	11/13/91	NICKEL	B	0.03000	0.10000	mg/l
06C08P2	11/13/91	ZINC		0.03400	5.00000	mg/l
06C08P2	11/13/91	ALUMINUM		0.22500	0.05000	mg/l
06C08P2	11/13/91	BARIUM	B	0.02700	2.00000	mg/l
06C08P2	11/13/91	CALCIUM		1.04000		mg/l
06C08P2	11/13/91	IRON		0.57800	0.30000	mg/l
06C08P2	11/13/91	MAGNESIUM		5.92000		mg/l
06C08P2	11/13/91	MANGANESE		0.64700	0.05000	mg/l
06C08P2	11/13/91	POTASSIUM	B	2.76000		mg/l
06C08P2	11/13/91	SODIUM		6.73000		mg/l
06C08P2	03/28/92	BERYLLIUM	B	0.00100	0.00100	MG/L
06C08P2	03/28/92	CADMIUM	B	0.00040	0.00500	MG/L
06C08P2	03/28/92	COPPER		0.06300	1.00000	MG/L
06C08P2	03/28/92	NICKEL	B	0.03900	0.10000	MG/L
06C08P2	03/28/92	ZINC		0.02600	5.00000	MG/L
06C08P2	03/28/92	ALUMINUM		0.27600	0.05000	MG/L
06C08P2	03/28/92	CALCIUM		10.00000		MG/L
06C08P2	03/28/92	COBALT	B	0.03600		MG/L
06C08P2	03/28/92	IRON		17.10000	0.30000	MG/L
06C08P2	03/28/92	MAGNESIUM		5.75000		MG/L
06C08P2	03/28/92	MANGANESE		0.68300	0.05000	MG/L
06C08P2	03/28/92	POTASSIUM	B	2.14000		MG/L
06C08P2	03/28/92	SODIUM	B	4.69000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C09	11/27/90	BARIUM		0.04600	2.00000	mg/l
06C09	11/27/90	CALCIUM		36.30000		mg/l
06C09	11/27/90	COBALT		0.00600		mg/l
06C09	11/27/90	MAGNESIUM		4.68000		mg/l
06C09	11/27/90	MANGANESE		0.09100	0.05000	mg/l
06C09	11/27/90	SODIUM		17.30000		mg/l
06C09	11/27/90	METHYLENE CHLORIDE	B	0.03100	0.00500	mg/l
06C09	06/01/91	METHYLENE CHLORIDE	B	0.00300	0.00500	mg/l
06C09	06/01/91	ACETONE	B	0.00230		mg/l
06C09	06/01/91	DIETHYL PHTHALATE	B	0.00150		mg/l
06C09	06/01/91	ANTIMONY	B	0.01330	0.01000	mg/l
06C09	06/01/91	COPPER	B	0.01200	1.00000	mg/l
06C09	06/01/91	ZINC		0.76900	5.00000	mg/l
06C09	06/01/91	BARIUM	B	0.03300	2.00000	mg/l
06C09	06/01/91	CALCIUM		32.70000		mg/l
06C09	06/01/91	COBALT	B	0.00900		mg/l
06C09	06/01/91	MAGNESIUM	B	4.34000		mg/l
06C09	06/01/91	MANGANESE		0.06500	0.05000	mg/l

06C09	06/01/91	SODIUM		17.30000		mg/l
06C09	06/01/91	PCB-1254	B	0.00047	0.00050	mg/l
06C09	11/13/91	METHYLENE CHLORIDE	B	0.01100	0.00500	mg/l
06C09	11/13/91	ACETONE	B	0.01600		mg/l
06C09	11/13/91	ANTIMONY	B	0.00830	0.01000	mg/l
06C09	11/13/91	BARIUM	B	0.02400	2.00000	mg/l
06C09	11/13/91	CALCIUM		31.80000		mg/l
06C09	11/13/91	COBALT	B	0.02500		mg/l
06C09	11/13/91	MAGNESIUM	B	4.22000		mg/l
06C09	11/13/91	MANGANESE		0.06800	0.05000	mg/l
06C09	11/13/91	POTASSIUM	B	1.04000		mg/l
06C09	11/13/91	SODIUM		20.00000		mg/l
06C09	03/28/92	NITRATE NITROGEN		3.34000		MG/L
06C09	03/28/92	BARIUM	B	0.03100	2.00000	MG/L
06C09	03/28/92	CALCIUM		32.90000		MG/L
06C09	03/28/92	MAGNESIUM	B	3.84000		MG/L
06C09	03/28/92	MANGANESE		0.06300	0.05000	MG/L
06C09	03/28/92	POTASSIUM	B	0.72400		MG/L
06C09	03/28/92	SODIUM		15.70000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C10	03/16/91	DIETHYL PHTHALATE	B	0.00310		mg/l
06C10	03/16/91	2,4-D	B	0.00002	0.07000	mg/l
06C10	03/16/91	2,4,5-TP	B	0.00046	0.05000	mg/l
06C10	03/16/91	METHYLENE CHLORIDE	B	0.00630	0.00500	mg/l
06C10	03/16/91	ACETONE	B	0.00640		mg/l
06C10	03/16/91	ANTIMONY	B	0.00670	0.01000	mg/l
06C10	03/16/91	COPPER	B	0.01600	1.00000	mg/l
06C10	03/16/91	BARIUM	B	0.03100	2.00000	mg/l
06C10	03/16/91	CALCIUM		91.80000		mg/l
06C10	03/16/91	COBALT	B	0.00500		mg/l
06C10	03/16/91	IRON		1.09000	0.30000	mg/l
06C10	03/16/91	MAGNESIUM		8.08000		mg/l
06C10	03/16/91	MANGANESE		0.08400	0.05000	mg/l
06C10	03/16/91	SODIUM	B	3.75000		mg/l
06C10	06/01/91	METHYLENE CHLORIDE	B	0.00260	0.00500	mg/l
06C10	06/01/91	ANTIMONY	B	0.00530	0.01000	mg/l
06C10	06/01/91	ARSENIC	B	0.00740	0.05000	mg/l
06C10	06/01/91	CHROMIUM	B	0.00600	0.1	mg/l
06C10	06/01/91	NICKEL	B	0.01100	0.10000	mg/l
06C10	06/01/91	BARIUM	B	0.04800	2.00000	mg/l
06C10	06/01/91	CALCIUM		88.70000		mg/l
06C10	06/01/91	IRON		0.37000	0.30000	mg/l
06C10	06/01/91	MAGNESIUM		8.78000		mg/l
06C10	06/01/91	MANGANESE		0.08900	0.05000	mg/l
06C10	06/01/91	POTASSIUM	B	1.52000		mg/l
06C10	06/01/91	SODIUM		5.57000		mg/l
06C10	06/01/91	SULFIDE		0.03000		mg/l
06C10	11/13/91	SULFIDE		0.02800		mg/l
06C10	11/13/91	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.00330		mg/l
06C10	11/13/91	METHYLENE CHLORIDE	B	0.00700	0.00500	mg/l
06C10	11/13/91	ACETONE	B	0.02600		mg/l
06C10	11/13/91	CADMIUM	B	0.00123	0.00500	mg/l
06C10	11/13/91	CHROMIUM	B	0.00600	0.1	mg/l
06C10	11/13/91	BARIUM	B	0.02800	2.00000	mg/l
06C10	11/13/91	CALCIUM		82.30000		mg/l
06C10	11/13/91	COBALT	B	0.01100		mg/l
06C10	11/13/91	IRON		0.59700	0.30000	mg/l
06C10	11/13/91	MAGNESIUM		8.50000		mg/l
06C10	11/13/91	MANGANESE		0.07900	0.05000	mg/l

06C10	11/13/91	POTASSIUM	B	0.83000		mg/l
06C10	11/13/91	SODIUM	B	4.52000		mg/l
06C10	03/28/92	COPPER		0.03000	1.00000	MG/L
06C10	03/28/92	BARIUM	B	0.03400	2.00000	MG/L
06C10	03/28/92	CALCIUM		91.00000		MG/L
06C10	03/28/92	IRON		0.94000	0.30000	MG/L
06C10	03/28/92	MAGNESIUM		6.79000		MG/L
06C10	03/28/92	MANGANESE		0.10200	0.05000	MG/L
06C10	03/28/92	POTASSIUM	B	1.52000		MG/L
06C10	03/28/92	SODIUM	B	4.48000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C10P2	03/16/91	DIETHYL PHTHALATE	B	0.00280		mg/l
06C10P2	03/16/91	2,4-D	B	0.00004	0.07000	mg/l
06C10P2	03/16/91	2,4,5-TP	B	0.00031	0.05000	mg/l
06C10P2	03/16/91	METHYLENE CHLORIDE	B	0.01200	0.00500	mg/l
06C10P2	03/16/91	ACETONE	B	0.00330		mg/l
06C10P2	03/16/91	ANTIMONY	B	0.00610	0.01000	mg/l
06C10P2	03/16/91	COPPER	B	0.01700	1.00000	mg/l
06C10P2	03/16/91	BARIUM	B	0.05300	2.00000	mg/l
06C10P2	03/16/91	CALCIUM		115.00000		mg/l
06C10P2	03/16/91	MAGNESIUM		19.00000		mg/l
06C10P2	03/16/91	SODIUM	B	4.32000		mg/l
06C10P2	06/01/91	METHYLENE CHLORIDE	B	0.00580	0.00500	mg/l
06C10P2	06/01/91	ACETONE	B	0.01400		mg/l
06C10P2	06/01/91	ANTIMONY	B	0.02090	0.01000	mg/l
06C10P2	06/01/91	CHROMIUM	B	0.00600	0.1	mg/l
06C10P2	06/01/91	COPPER	B	0.02000	1.00000	mg/l
06C10P2	06/01/91	ZINC	B	0.00700	5.00000	mg/l
06C10P2	06/01/91	BARIUM	B	0.05100	2.00000	mg/l
06C10P2	06/01/91	CALCIUM		103.00000		mg/l
06C10P2	06/01/91	MAGNESIUM		20.40000		mg/l
06C10P2	06/01/91	MANGANESE	B	0.00600	0.05000	mg/l
06C10P2	06/01/91	SODIUM		5.84000		mg/l
06C10P2	11/13/91	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.00090		mg/l
06C10P2	11/13/91	METHYLENE CHLORIDE	B	0.01200	0.00500	mg/l
06C10P2	11/13/91	ACETONE	B	0.00600		mg/l
06C10P2	11/13/91	ANTIMONY	B	0.01830	0.01000	mg/l
06C10P2	11/13/91	ARSENIC	B	0.00200	0.05000	mg/l
06C10P2	11/13/91	COPPER		0.05100	1.00000	mg/l
06C10P2	11/13/91	BARIUM	B	0.03500	2.00000	mg/l
06C10P2	11/13/91	CALCIUM		90.10000		mg/l
06C10P2	11/13/91	COBALT	B	0.02500		mg/l
06C10P2	11/13/91	MAGNESIUM		17.80000		mg/l
06C10P2	11/13/91	MANGANESE	B	0.01200	0.05000	mg/l
06C10P2	11/13/91	POTASSIUM	B	0.73200		mg/l
06C10P2	11/13/91	SODIUM	B	4.54000		mg/l
06C10P2	11/13/91	VANADIUM	B	0.01700		mg/l
06C10P2	03/28/92	NITRATE NITROGEN		0.96800		MG/L
06C10P2	03/28/92	COPPER	B	0.00900	1.00000	MG/L
06C10P2	03/28/92	BARIUM	B	0.05200	2.00000	MG/L
06C10P2	03/28/92	CALCIUM		115.00000		MG/L
06C10P2	03/28/92	MAGNESIUM		16.10000		MG/L
06C10P2	03/28/92	POTASSIUM	B	0.78200		MG/L
06C10P2	03/28/92	SODIUM	B	3.41000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C11	03/16/91	SULFIDE		0.03300		mg/l
06C11	03/16/91	DIETHYL PHTHALATE	B	0.00270		mg/l
06C11	03/16/91	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.00130		mg/l

06C11	03/16/91	2,4,5-TP	B	0.00039	0.05000	mg/l
06C11	03/16/91	DINOSEB	B	0.00004	0.07000	mg/l
06C11	03/16/91	METHYLENE CHLORIDE	B	0.01300	0.00500	mg/l
06C11	03/16/91	ANTIMONY	B	0.00910	0.01000	mg/l
06C11	03/16/91	COPPER	B	0.01800	1.00000	mg/l
06C11	03/16/91	BARIUM	B	0.07000	2.00000	mg/l
06C11	03/16/91	CALCIUM		73.50000		mg/l
06C11	03/16/91	COBALT	B	0.00500		mg/l
06C11	03/16/91	IRON		0.61000	0.30000	mg/l
06C11	03/16/91	MAGNESIUM		8.99000		mg/l
06C11	03/16/91	MANGANESE		0.14700	0.05000	mg/l
06C11	03/16/91	SODIUM		8.38000		mg/l
06C11	06/01/91	METHYLENE CHLORIDE	B	0.00440	0.00500	mg/l
06C11	06/01/91	ACETONE	B	0.03700		mg/l
06C11	06/01/91	ANTIMONY	B	0.01900	0.01000	mg/l
06C11	06/01/91	CHROMIUM	B	0.00500	0.1	mg/l
06C11	06/01/91	COPPER	B	0.01400	1.00000	mg/l
06C11	06/01/91	ZINC	B	0.00700	5.00000	mg/l
06C11	06/01/91	BARIUM	B	0.13500	2.00000	mg/l
06C11	06/01/91	CALCIUM		72.80000		mg/l
06C11	06/01/91	IRON	B	0.05000	0.30000	mg/l
06C11	06/01/91	MAGNESIUM		9.92000		mg/l
06C11	06/01/91	MANGANESE		0.14500	0.05000	mg/l
06C11	06/01/91	POTASSIUM	B	1.04000		mg/l
06C11	06/01/91	SODIUM		13.00000		mg/l
06C11	11/13/91	METHYLENE CHLORIDE	B	0.00900	0.00500	mg/l
06C11	11/13/91	ACETONE	B	0.03400		mg/l
06C11	11/13/91	ANTIMONY	B	0.02270	0.01000	mg/l
06C11	11/13/91	ARSENIC	B	0.00440	0.05000	mg/l
06C11	11/13/91	COPPER		0.06300	1.00000	mg/l
06C11	11/13/91	ALUMINUM	B	0.16900	0.05000	mg/l
06C11	11/13/91	BARIUM	B	0.03100	2.00000	mg/l
06C11	11/13/91	CALCIUM		12.20000		mg/l
06C11	11/13/91	COBALT	B	0.02700		mg/l
06C11	11/13/91	IRON		0.61800	0.30000	mg/l
06C11	11/13/91	MAGNESIUM	B	2.10000		mg/l
06C11	11/13/91	MANGANESE	B	0.01500	0.05000	mg/l
06C11	11/13/91	POTASSIUM	B	0.79800		mg/l
06C11	11/13/91	SODIUM		213.00000		mg/l
06C11	03/28/92	NITRATE NITROGEN		0.03900		MG/L
06C11	03/28/92	ARSENIC	B	0.00360	0.05000	MG/L
06C11	03/28/92	COPPER	B	0.01500	1.00000	MG/L
06C11	03/28/92	BARIUM	B	0.11500	2.00000	MG/L
06C11	03/28/92	CALCIUM		22.00000		MG/L
06C11	03/28/92	MAGNESIUM	B	3.86000		MG/L
06C11	03/28/92	MANGANESE		0.01500	0.05000	MG/L
06C11	03/28/92	POTASSIUM	B	1.72000		MG/L
06C11	03/28/92	SODIUM		117.00000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C11P2	03/16/91	2,4,5-TP	B	0.00042	0.05000	mg/l
06C11P2	03/16/91	METHYLENE CHLORIDE	B	0.00760	0.00500	mg/l
06C11P2	03/16/91	COPPER	B	0.00800	1.00000	mg/l
06C11P2	03/16/91	BARIUM	B	0.03000	2.00000	mg/l
06C11P2	03/16/91	CALCIUM		65.60000		mg/l
06C11P2	03/16/91	IRON		0.14800	0.30000	mg/l
06C11P2	03/16/91	MAGNESIUM		10.30000		mg/l
06C11P2	03/16/91	MANGANESE		0.09800	0.05000	mg/l
06C11P2	03/16/91	SODIUM	B	2.04000		mg/l
06C11P2	03/16/91	SULFIDE		0.03600		mg/l

06C11P2	03/16/91	DIETHYL PHTHALATE	B	0.00240		mg/l
06C11P2	06/01/91	METHYLENE CHLORIDE	B	0.00250	0.00500	mg/l
06C11P2	06/01/91	ACETONE	B	0.01300		mg/l
06C11P2	06/01/91	ANTIMONY	B	0.01930	0.01000	mg/l
06C11P2	06/01/91	CHROMIUM	B	0.00500	0.1	mg/l
06C11P2	06/01/91	ZINC	B	0.00700	5.00000	mg/l
06C11P2	06/01/91	BARIUM	B	0.01600	2.00000	mg/l
06C11P2	06/01/91	CALCIUM		64.20000		mg/l
06C11P2	06/01/91	IRON		0.42600	0.30000	mg/l
06C11P2	06/01/91	MAGNESIUM		11.10000		mg/l
06C11P2	06/01/91	MANGANESE		0.07800	0.05000	mg/l
06C11P2	06/01/91	SODIUM	B	2.41000		mg/l
06C11P2	11/13/91	METHYLENE CHLORIDE	B	0.01100	0.00500	mg/l
06C11P2	11/13/91	ACETONE	B	0.01700		mg/l
06C11P2	11/13/91	ANTIMONY	B	0.00760	0.01000	mg/l
06C11P2	11/13/91	COPPER	B	0.01100	1.00000	mg/l
06C11P2	11/13/91	BARIUM	B	0.04400	2.00000	mg/l
06C11P2	11/13/91	CALCIUM		59.00000		mg/l
06C11P2	11/13/91	IRON		0.14300	0.30000	mg/l
06C11P2	11/13/91	MAGNESIUM		10.60000		mg/l
06C11P2	11/13/91	MANGANESE		0.13000	0.05000	mg/l
06C11P2	11/13/91	POTASSIUM	B	0.54200		mg/l
06C11P2	11/13/91	SODIUM	B	2.77000		mg/l
06C11P2	03/28/92	NITRITE NITROGEN		0.00600		MG/L
06C11P2	03/28/92	NITRATE NITROGEN		0.05700		MG/L
06C11P2	03/28/92	BARIUM	B	0.02600	2.00000	MG/L
06C11P2	03/28/92	CALCIUM		72.30000		MG/L
06C11P2	03/28/92	IRON		0.57100	0.30000	MG/L
06C11P2	03/28/92	MAGNESIUM		9.77000		MG/L
06C11P2	03/28/92	MANGANESE		0.08700	0.05000	MG/L
06C11P2	03/28/92	POTASSIUM	B	0.62300		MG/L
06C11P2	03/28/92	SODIUM	B	1.97000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C12	03/16/91	DIETHYL PHTHALATE	B	0.00240		mg/l
06C12	03/16/91	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.00170		mg/l
06C12	03/16/91	2,4,5-TP	B	0.00040	0.05000	mg/l
06C12	03/16/91	DINOSEB	B	0.00001	0.07000	mg/l
06C12	03/16/91	METHYLENE CHLORIDE	B	0.01900	0.00500	mg/l
06C12	03/16/91	BENZENE		0.00840	0.00500	mg/l
06C12	03/16/91	ACETONE	B	0.01400		mg/l
06C12	03/16/91	ANTIMONY	B	0.00980	0.01000	mg/l
06C12	03/16/91	BARIUM	B	0.06500	2.00000	mg/l
06C12	03/16/91	CALCIUM		88.70000		mg/l
06C12	03/16/91	IRON		0.54000	0.30000	mg/l
06C12	03/16/91	MAGNESIUM		13.80000		mg/l
06C12	03/16/91	MANGANESE		0.26700	0.05000	mg/l
06C12	03/16/91	SODIUM		5.39000		mg/l
06C12	06/01/91	METHYLENE CHLORIDE	B	0.00480	0.00500	mg/l
06C12	06/01/91	ACETONE	B	0.00990		mg/l
06C12	06/01/91	DIETHYL PHTHALATE	B	0.00160		mg/l
06C12	06/01/91	ANTIMONY	B	0.00900	0.01000	mg/l
06C12	06/01/91	COPPER	B	0.01100	1.00000	mg/l
06C12	06/01/91	LEAD	B	0.00100	0.01500	mg/l
06C12	06/01/91	NICKEL	B	0.00500	0.10000	mg/l
06C12	06/01/91	BARIUM	B	0.06500	2.00000	mg/l
06C12	06/01/91	CALCIUM		82.10000		mg/l
06C12	06/01/91	IRON		0.46400	0.30000	mg/l
06C12	06/01/91	MAGNESIUM		12.50000		mg/l
06C12	06/01/91	MANGANESE		0.25300	0.05000	mg/l

06C12	06/01/91	POTASSIUM	B	1.05000		mg/l
06C12	06/01/91	SODIUM		7.49000		mg/l
06C12	06/01/91	PCB-1254	B	0.00030	0.00050	mg/l
06C12	11/13/91	METHYLENE CHLORIDE	B	0.00200	0.00500	mg/l
06C12	11/13/91	ACETONE	B	0.00400		mg/l
06C12	11/13/91	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.00080		mg/l
06C12	11/13/91	ANTIMONY	B	0.00840	0.01000	mg/l
06C12	11/13/91	COPPER	B	0.02100	1.00000	mg/l
06C12	11/13/91	BARIUM	B	0.06000	2.00000	mg/l
06C12	11/13/91	CALCIUM		70.30000		mg/l
06C12	11/13/91	COBALT	B	0.01500		mg/l
06C12	11/13/91	IRON		0.51200	0.30000	mg/l
06C12	11/13/91	MAGNESIUM		12.70000		mg/l
06C12	11/13/91	MANGANESE		0.24000	0.05000	mg/l
06C12	11/13/91	POTASSIUM	B	1.24000		mg/l
06C12	11/13/91	SODIUM		7.68000		mg/l
06C12	03/28/92	BARIUM	B	0.07600	2.00000	MG/L
06C12	03/28/92	CALCIUM		98.50000		MG/L
06C12	03/28/92	IRON		0.77100	0.30000	MG/L
06C12	03/28/92	MAGNESIUM		13.50000		MG/L
06C12	03/28/92	MANGANESE		0.29400	0.05000	MG/L
06C12	03/28/92	POTASSIUM	B	1.04000		MG/L
06C12	03/28/92	SODIUM		7.65000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C12P2	03/16/91	DIETHYL PHTHALATE	B	0.00210		mg/l
06C12P2	03/16/91	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.00260		mg/l
06C12P2	03/16/91	2,4-D	B	0.00006	0.07000	mg/l
06C12P2	03/16/91	2,4,5-TP	B	0.00036	0.05000	mg/l
06C12P2	03/16/91	METHYLENE CHLORIDE	B	0.01700	0.00500	mg/l
06C12P2	03/16/91	BENZENE	B	0.00550	0.00500	mg/l
06C12P2	03/16/91	ACETONE	B	0.00800		mg/l
06C12P2	03/16/91	ANTIMONY	B	0.00960	0.01000	mg/l
06C12P2	03/16/91	BARIUM	B	0.02800	2.00000	mg/l
06C12P2	03/16/91	CALCIUM		108.00000		mg/l
06C12P2	03/16/91	IRON	B	0.04200	0.30000	mg/l
06C12P2	03/16/91	MAGNESIUM		24.00000		mg/l
06C12P2	03/16/91	MANGANESE		0.11000	0.05000	mg/l
06C12P2	03/16/91	POTASSIUM	B	3.70000		mg/l
06C12P2	03/16/91	SODIUM		7.17000		mg/l
06C12P2	06/01/91	METHYLENE CHLORIDE	B	0.00240	0.00500	mg/l
06C12P2	06/01/91	ACETONE	B	0.00430		mg/l
06C12P2	06/01/91	DIETHYL PHTHALATE	B	0.00160		mg/l
06C12P2	06/01/91	ANTIMONY	B	0.01030	0.01000	mg/l
06C12P2	06/01/91	COPPER	B	0.01300	1.00000	mg/l
06C12P2	06/01/91	NICKEL	B	0.01000	0.10000	mg/l
06C12P2	06/01/91	SELENIUM	B	0.00290	0.05000	mg/l
06C12P2	06/01/91	ZINC		0.03900	5.00000	mg/l
06C12P2	06/01/91	BARIUM	B	0.02100	2.00000	mg/l
06C12P2	06/01/91	CALCIUM		104.00000		mg/l
06C12P2	06/01/91	COBALT	B	0.01600		mg/l
06C12P2	06/01/91	MAGNESIUM		22.50000		mg/l
06C12P2	06/01/91	MANGANESE		0.06300	0.05000	mg/l
06C12P2	06/01/91	POTASSIUM	B	4.04000		mg/l
06C12P2	06/01/91	SODIUM		8.52000		mg/l
06C12P2	06/01/91	PCB-1254	B	0.00045	0.00050	mg/l
06C12P2	11/13/91	METHYLENE CHLORIDE	B	0.00200	0.00500	mg/l
06C12P2	11/13/91	ACETONE	B	0.00300		mg/l
06C12P2	11/13/91	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.00070		mg/l
06C12P2	11/13/91	ANTIMONY	B	0.00760	0.01000	mg/l

06C12P2	11/13/91	COPPER	B	0.02100	1.00000	mg/l
06C12P2	11/13/91	BARIUM	B	0.01700	2.00000	mg/l
06C12P2	11/13/91	CALCIUM		63.40000		mg/l
06C12P2	11/13/91	COBALT	B	0.01600		mg/l
06C12P2	11/13/91	MAGNESIUM		17.10000		mg/l
06C12P2	11/13/91	MANGANESE		0.03700	0.05000	mg/l
06C12P2	11/13/91	POTASSIUM	B	3.15000		mg/l
06C12P2	11/13/91	SODIUM		8.15000		mg/l
06C12P2	11/13/91	VANADIUM	B	0.01100		mg/l
06C12P2	03/28/92	NITRATE NITROGEN		0.06200		MG/L
06C12P2	03/28/92	COPPER		0.07400	1.00000	MG/L
06C12P2	03/28/92	BARIUM	B	0.02200	2.00000	MG/L
06C12P2	03/28/92	CALCIUM		110.00000		MG/L
06C12P2	03/28/92	IRON	B	0.06000	0.30000	MG/L
06C12P2	03/28/92	MAGNESIUM		20.20000		MG/L
06C12P2	03/28/92	MANGANESE		0.05000	0.05000	MG/L
06C12P2	03/28/92	POTASSIUM		5.17000		MG/L
06C12P2	03/28/92	SODIUM		8.37000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C13	11/27/90	ANTIMONY		0.00860	0.01000	mg/l
06C13	11/27/90	ARSENIC		0.02430	0.05000	mg/l
06C13	11/27/90	ZINC		0.01500	5.00000	mg/l
06C13	11/27/90	ALUMINUM		0.02000	0.05000	mg/l
06C13	11/27/90	BARIUM		0.06900	2.00000	mg/l
06C13	11/27/90	CALCIUM		24.40000		mg/l
06C13	11/27/90	COBALT		0.01400		mg/l
06C13	11/27/90	IRON		7.75000	0.30000	mg/l
06C13	11/27/90	MAGNESIUM		8.02000		mg/l
06C13	11/27/90	MANGANESE		0.35200	0.05000	mg/l
06C13	11/27/90	SODIUM		110.00000		mg/l
06C13	11/27/90	2,4,5-TP	B	0.00240	0.05000	mg/l
06C13	11/27/90	METHYLENE CHLORIDE	B	0.01400	0.00500	mg/l
06C13	11/27/90	ACETONE	B	0.00430		mg/l
06C13	06/01/91	METHYLENE CHLORIDE	B	0.00440	0.00500	mg/l
06C13	06/01/91	ACETONE	B	0.00970		mg/l
06C13	06/01/91	DIETHYL PHTHALATE	B	0.00140		mg/l
06C13	06/01/91	ANTIMONY	B	0.01730	0.01000	mg/l
06C13	06/01/91	COPPER		0.02700	1.00000	mg/l
06C13	06/01/91	BARIUM	B	0.01800	2.00000	mg/l
06C13	06/01/91	CALCIUM		28.60000		mg/l
06C13	06/01/91	MAGNESIUM		6.57000		mg/l
06C13	06/01/91	MANGANESE	B	0.01400	0.05000	mg/l
06C13	06/01/91	SODIUM		19.40000		mg/l
06C13	06/01/91	PCB-1254	B	0.00029	0.00050	mg/l
06C13	11/13/91	SULFIDE		0.05600		mg/l
06C13	11/13/91	DIBUTYLPHTHALATE	B	0.00060		mg/l
06C13	11/13/91	METHYLENE CHLORIDE	B	0.00700	0.00500	mg/l
06C13	11/13/91	ACETONE	B	0.00800		mg/l
06C13	11/13/91	ANTIMONY	B	0.00370	0.01000	mg/l
06C13	11/13/91	BARIUM	B	0.01000	2.00000	mg/l
06C13	11/13/91	CALCIUM		27.40000		mg/l
06C13	11/13/91	COBALT		0.02800		mg/l
06C13	11/13/91	MAGNESIUM		6.38000		mg/l
06C13	11/13/91	MANGANESE	B	0.00600	0.05000	mg/l
06C13	11/13/91	POTASSIUM	B	0.85900		mg/l
06C13	11/13/91	SODIUM		17.60000		mg/l
06C13	03/28/92	NITRATE NITROGEN		0.87100		MG/L
06C13	03/28/92	BARIUM	B	0.02300	2.00000	MG/L
06C13	03/28/92	CALCIUM		28.60000		MG/L

06C13	03/28/92	MAGNESIUM		5.96000		MG/L
06C13	03/28/92	POTASSIUM	B	0.91800		MG/L
06C13	03/28/92	SODIUM		15.40000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C13P2	11/27/90	ANTIMONY		0.01090	0.01000	mg/l
06C13P2	11/27/90	BARIUM		0.02500	2.00000	mg/l
06C13P2	11/27/90	CALCIUM		32.60000		mg/l
06C13P2	11/27/90	COBALT		0.00500		mg/l
06C13P2	11/27/90	IRON		0.03000	0.30000	mg/l
06C13P2	11/27/90	MAGNESIUM		7.30000		mg/l
06C13P2	11/27/90	MANGANESE		0.05200	0.05000	mg/l
06C13P2	11/27/90	SODIUM		21.40000		mg/l
06C13P2	11/27/90	SULFIDE		0.02300		mg/l
06C13P2	11/27/90	METHYLENE CHLORIDE	B	0.01000	0.00500	mg/l
06C13P2	06/01/91	METHYLENE CHLORIDE	B	0.00750	0.00500	mg/l
06C13P2	06/01/91	ACETONE	B	0.00530		mg/l
06C13P2	06/01/91	DIETHYL PHTHALATE	B	0.00130		mg/l
06C13P2	06/01/91	ANTIMONY	B	0.01390	0.01000	mg/l
06C13P2	06/01/91	ARSENIC		0.02800	0.05000	mg/l
06C13P2	06/01/91	ZINC	B	0.00800	5.00000	mg/l
06C13P2	06/01/91	BARIUM	B	0.07600	2.00000	mg/l
06C13P2	06/01/91	CALCIUM		33.30000		mg/l
06C13P2	06/01/91	COBALT	B	0.01100		mg/l
06C13P2	06/01/91	IRON		11.50000	0.30000	mg/l
06C13P2	06/01/91	MAGNESIUM		9.85000		mg/l
06C13P2	06/01/91	MANGANESE		0.38800	0.05000	mg/l
06C13P2	06/01/91	SODIUM		80.50000		mg/l
06C13P2	06/01/91	PCB-1254	B	0.00032	0.00050	mg/l
06C13P2	11/13/91	METHYLENE CHLORIDE	B	0.01100	0.00500	mg/l
06C13P2	11/13/91	ACETONE	B	0.00500		mg/l
06C13P2	11/13/91	ANTIMONY	B	0.00310	0.01000	mg/l
06C13P2	11/13/91	ARSENIC		0.02700	0.05000	mg/l
06C13P2	11/13/91	CHROMIUM	B	0.00500	0.1	mg/l
06C13P2	11/13/91	BARIUM	B	0.07000	2.00000	mg/l
06C13P2	11/13/91	CALCIUM		37.60000		mg/l
06C13P2	11/13/91	COBALT	B	0.04100		mg/l
06C13P2	11/13/91	IRON		13.00000	0.30000	mg/l
06C13P2	11/13/91	MAGNESIUM		10.40000		mg/l
06C13P2	11/13/91	MANGANESE		0.41400	0.05000	mg/l
06C13P2	11/13/91	POTASSIUM	B	1.02000		mg/l
06C13P2	11/13/91	SODIUM		74.40000		mg/l
06C13P2	03/28/92	NITRITE NITROGEN		0.01000		MG/L
06C13P2	03/28/92	ARSENIC		0.02660	0.05000	MG/L
06C13P2	03/28/92	COPPER	B	0.01500	1.00000	MG/L
06C13P2	03/28/92	BARIUM	B	0.07400	2.00000	MG/L
06C13P2	03/28/92	CALCIUM		33.90000		MG/L
06C13P2	03/28/92	IRON		10.40000	0.30000	MG/L
06C13P2	03/28/92	MAGNESIUM		8.62000		MG/L
06C13P2	03/28/92	MANGANESE		0.34700	0.05000	MG/L
06C13P2	03/28/92	POTASSIUM	B	1.74000		MG/L
06C13P2	03/28/92	SODIUM		68.90000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C14	11/27/90	2,4,5-TP	B	0.00140	0.05000	mg/l
06C14	11/27/90	ANTIMONY	B	0.01240	0.01000	mg/l
06C14	11/27/90	BARIUM	B	0.03700	2.00000	mg/l
06C14	11/27/90	CALCIUM		43.10000		mg/l
06C14	11/27/90	IRON	B	0.06400	0.30000	mg/l
06C14	11/27/90	MAGNESIUM	B	4.96000		mg/l

06C14	11/27/90	MANGANESE		0.31500	0.05000	mg/l
06C14	11/27/90	SODIUM		8.37000		mg/l
06C14	06/01/91	METHYLENE CHLORIDE	B	0.00260	0.00500	mg/l
06C14	06/01/91	ACETONE	B	0.00480		mg/l
06C14	06/01/91	ANTIMONY	B	0.00940	0.01000	mg/l
06C14	06/01/91	CADMIUM		0.00800	0.00500	mg/l
06C14	06/01/91	NICKEL	B	0.00500	0.10000	mg/l
06C14	06/01/91	ZINC		0.02300	5.00000	mg/l
06C14	06/01/91	BARIUM	B	0.03200	2.00000	mg/l
06C14	06/01/91	CALCIUM		50.80000		mg/l
06C14	06/01/91	IRON		0.22800	0.30000	mg/l
06C14	06/01/91	MAGNESIUM		5.18000		mg/l
06C14	06/01/91	MANGANESE	N	0.14500	0.05000	mg/l
06C14	06/01/91	SODIUM		8.18000		mg/l
06C14	06/01/91	SULFIDE		0.03300		mg/l
06C14	06/01/91	DIETHYL PHTHALATE	B	0.03000		mg/l
06C14	06/01/91	DIBUTYLPHTHALATE	B	0.00260		mg/l
06C14	06/01/91	PCB-1254	B	0.00020	0.00050	mg/l
06C14	11/13/91	SULFIDE		0.05500		mg/l
06C14	11/13/91	METHYLENE CHLORIDE	B	0.00700	0.00500	mg/l
06C14	11/13/91	ACETONE	B	0.01300		mg/l
06C14	11/13/91	ANTIMONY	B	0.01340	0.01000	mg/l
06C14	11/13/91	COPPER		0.04400	1.00000	mg/l
06C14	11/13/91	NICKEL	B	0.00600	0.10000	mg/l
06C14	11/13/91	ZINC	B	0.01000	5.00000	mg/l
06C14	11/13/91	BARIUM	B	0.03900	2.00000	mg/l
06C14	11/13/91	CALCIUM		54.10000		mg/l
06C14	11/13/91	IRON	N	0.20900	0.30000	mg/l
06C14	11/13/91	MAGNESIUM		6.74000		mg/l
06C14	11/13/91	MANGANESE		0.23800	0.05000	mg/l
06C14	11/13/91	POTASSIUM	B	1.03000		mg/l
06C14	11/13/91	SODIUM		12.30000		mg/l
06C14	03/28/92	NITRITE NITROGEN		0.00700		MG/L
06C14	03/28/92	NITRATE NITROGEN		0.03300		MG/L
06C14	03/28/92	BARIUM	B	0.04000	2.00000	MG/L
06C14	03/28/92	CALCIUM		56.80000		MG/L
06C14	03/28/92	IRON		0.31800	0.30000	MG/L
06C14	03/28/92	MAGNESIUM		6.01000		MG/L
06C14	03/28/92	MANGANESE		0.12200	0.05000	MG/L
06C14	03/28/92	POTASSIUM	B	0.64400		MG/L
06C14	03/28/92	SODIUM		9.84000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C14P2	11/27/90	2,4,5-TP	B	0.00260	0.05000	mg/l
06C14P2	11/27/90	METHYLENE CHLORIDE	B	0.05400	0.00500	mg/l
06C14P2	11/27/90	ANTIMONY	B	0.01310	0.01000	mg/l
06C14P2	11/27/90	COPPER		0.04700	1.00000	mg/l
06C14P2	11/27/90	BARIUM	B	0.02600	2.00000	mg/l
06C14P2	11/27/90	CALCIUM		9.50000		mg/l
06C14P2	11/27/90	MAGNESIUM	B	2.89000		mg/l
06C14P2	11/27/90	MANGANESE		0.02200	0.05000	mg/l
06C14P2	11/27/90	SODIUM		5.12000		mg/l
06C14P2	11/27/90	TIN		0.03700		mg/l
06C14P2	06/01/91	METHYLENE CHLORIDE	B	0.00480	0.00500	mg/l
06C14P2	06/01/91	ACETONE	B	0.00280		mg/l
06C14P2	06/01/91	ANTIMONY	B	0.00610	0.01000	mg/l
06C14P2	06/01/91	NICKEL	B	0.01300	0.10000	mg/l
06C14P2	06/01/91	ZINC	B	0.00600	5.00000	mg/l
06C14P2	06/01/91	BARIUM	B	0.02300	2.00000	mg/l
06C14P2	06/01/91	CALCIUM		7.45000		mg/l

06C14P2	06/01/91	IRON	B	0.07100	0.30000	mg/l
06C14P2	06/01/91	MAGNESIUM	B	2.25000		mg/l
06C14P2	06/01/91	MANGANESE	B	0.01100	0.05000	mg/l
06C14P2	06/01/91	SODIUM	B	3.97000		mg/l
06C14P2	06/01/91	DIETHYL PHTHALATE	B	0.02800		mg/l
06C14P2	06/01/91	DIBUTYLPHTHALATE	B	0.00300		mg/l
06C14P2	06/01/91	PCB-1254	B	0.00026	0.00050	mg/l
06C14P2	11/13/91	DIETHYL PHTHALATE	B	0.00250		mg/l
06C14P2	11/13/91	SULFIDE		0.04500		mg/l
06C14P2	11/13/91	METHYLENE CHLORIDE	B	0.00600	0.00500	mg/l
06C14P2	11/13/91	ANTIMONY	B	0.01200	0.01000	mg/l
06C14P2	11/13/91	COPPER		0.05000	1.00000	mg/l
06C14P2	11/13/91	NICKEL	B	0.00500	0.10000	mg/l
06C14P2	11/13/91	ZINC		0.02800	5.00000	mg/l
06C14P2	11/13/91	BARIUM	B	0.02900	2.00000	mg/l
06C14P2	11/13/91	CALCIUM		9.58000		mg/l
06C14P2	11/13/91	MAGNESIUM	B	3.19000		mg/l
06C14P2	11/13/91	MANGANESE		0.01800	0.05000	mg/l
06C14P2	11/13/91	POTASSIUM	B	0.43300		mg/l
06C14P2	11/13/91	SODIUM		6.63000		mg/l
06C14P2	03/28/92	NITRATE NITROGEN		0.06100		MG/L
06C14P2	03/28/92	BARIUM	B	0.02600	2.00000	MG/L
06C14P2	03/28/92	CALCIUM		7.93000		MG/L
06C14P2	03/28/92	MAGNESIUM	B	2.49000		MG/L
06C14P2	03/28/92	MANGANESE		0.00800	0.05000	MG/L
06C14P2	03/28/92	POTASSIUM	B	0.34900		MG/L
06C14P2	03/28/92	SODIUM	B	4.04000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C15	11/27/90	2,4,5-TP	B	0.00200	0.05000	mg/l
06C15	11/27/90	METHYLENE CHLORIDE	B	0.03300	0.00500	mg/l
06C15	11/27/90	BARIUM	B	0.02600	2.00000	mg/l
06C15	11/27/90	CALCIUM		37.60000		mg/l
06C15	11/27/90	COBALT	B	0.00700		mg/l
06C15	11/27/90	MAGNESIUM		11.20000		mg/l
06C15	11/27/90	MANGANESE		0.10600	0.05000	mg/l
06C15	11/27/90	SODIUM		11.30000		mg/l
06C15	06/01/91	METHYLENE CHLORIDE	B	0.00640	0.00500	mg/l
06C15	06/01/91	ACETONE	B	0.01200		mg/l
06C15	06/01/91	ANTIMONY	B	0.01470	0.01000	mg/l
06C15	06/01/91	NICKEL	B	0.00800	0.10000	mg/l
06C15	06/01/91	ZINC	B	0.00700	5.00000	mg/l
06C15	06/01/91	BARIUM	B	0.02500	2.00000	mg/l
06C15	06/01/91	CALCIUM		47.10000		mg/l
06C15	06/01/91	MAGNESIUM		13.20000		mg/l
06C15	06/01/91	MANGANESE	B	0.00800	0.05000	mg/l
06C15	06/01/91	POTASSIUM	B	1.46000		mg/l
06C15	06/01/91	SODIUM		11.60000		mg/l
06C15	06/01/91	DIETHYL PHTHALATE	B	0.02600		mg/l
06C15	06/01/91	DIBUTYLPHTHALATE	B	0.00600		mg/l
06C15	06/01/91	PCB-1254	B	0.00013	0.00050	mg/l
06C15	11/13/91	DIETHYL PHTHALATE	B	0.00180		mg/l
06C15	11/13/91	METHYLENE CHLORIDE	B	0.00500	0.00500	mg/l
06C15	11/13/91	ANTIMONY	B	0.00900	0.01000	mg/l
06C15	11/13/91	COPPER	B	0.02200	1.00000	mg/l
06C15	11/13/91	ZINC	B	0.00700	5.00000	mg/l
06C15	11/13/91	BARIUM	B	0.02300	2.00000	mg/l
06C15	11/13/91	CALCIUM		46.90000		mg/l
06C15	11/13/91	MAGNESIUM		14.10000		mg/l
06C15	11/13/91	MANGANESE	B	0.00900	0.05000	mg/l

06C15	11/13/91	POTASSIUM	B	1.48000		mg/l
06C15	11/13/91	SODIUM		15.60000		mg/l
06C15	03/28/92	NITRATE NITROGEN		0.18600		MG/L
06C15	03/28/92	BARIUM	B	0.02500	2.00000	MG/L
06C15	03/28/92	CALCIUM		51.90000		MG/L
06C15	03/28/92	MAGNESIUM		13.00000		MG/L
06C15	03/28/92	POTASSIUM	B	1.16000		MG/L
06C15	03/28/92	SODIUM		10.70000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C15P2	11/27/90	2,4,5-TP	B	0.00260	0.05000	mg/l
06C15P2	11/27/90	ANTIMONY	B	0.00870	0.01000	mg/l
06C15P2	11/27/90	ZINC		0.04100	5.00000	mg/l
06C15P2	11/27/90	BARIUM	B	0.02300	2.00000	mg/l
06C15P2	11/27/90	CALCIUM		15.20000		mg/l
06C15P2	11/27/90	MAGNESIUM		6.03000		mg/l
06C15P2	11/27/90	SODIUM	B	4.40000		mg/l
06C15P2	11/27/90	TIN		0.03100		mg/l
06C15P2	06/01/91	METHYLENE CHLORIDE	B	0.00650	0.00500	mg/l
06C15P2	06/01/91	ACETONE	B	0.00530		mg/l
06C15P2	06/01/91	ANTIMONY	B	0.01700	0.01000	mg/l
06C15P2	06/01/91	COPPER	B	0.00700	1.00000	mg/l
06C15P2	06/01/91	LEAD	B	0.00110	0.01500	mg/l
06C15P2	06/01/91	NICKEL	B	0.00600	0.10000	mg/l
06C15P2	06/01/91	ZINC	B	0.00600	5.00000	mg/l
06C15P2	06/01/91	BARIUM	B	0.02500	2.00000	mg/l
06C15P2	06/01/91	CALCIUM		13.80000		mg/l
06C15P2	06/01/91	IRON	B	0.01200	0.30000	mg/l
06C15P2	06/01/91	MAGNESIUM		6.19000		mg/l
06C15P2	06/01/91	MANGANESE	B	0.00700	0.05000	mg/l
06C15P2	06/01/91	POTASSIUM	B	1.35000		mg/l
06C15P2	06/01/91	SODIUM	B	3.84000		mg/l
06C15P2	06/01/91	SULFIDE		0.02200		mg/l
06C15P2	06/01/91	DIETHYL PHTHALATE	B	0.00220		mg/l
06C15P2	06/01/91	PCB-1254	B	0.00023	0.00050	mg/l
06C15P2	11/13/91	DIETHYL PHTHALATE	B	0.00150		mg/l
06C15P2	11/13/91	SULFIDE		0.04000		mg/l
06C15P2	11/13/91	METHYLENE CHLORIDE	B	0.00900	0.00500	mg/l
06C15P2	11/13/91	ACETONE	B	0.00700		mg/l
06C15P2	11/13/91	ANTIMONY	B	0.01410	0.01000	mg/l
06C15P2	11/13/91	COPPER		0.03200	1.00000	mg/l
06C15P2	11/13/91	ZINC	B	0.00500	5.00000	mg/l
06C15P2	11/13/91	BARIUM	B	0.01900	2.00000	mg/l
06C15P2	11/13/91	CALCIUM		16.20000		mg/l
06C15P2	11/13/91	MAGNESIUM		5.60000		mg/l
06C15P2	11/13/91	MANGANESE	B	0.00600	0.05000	mg/l
06C15P2	11/13/91	POTASSIUM	B	1.58000		mg/l
06C15P2	11/13/91	SODIUM		8.61000		mg/l
06C15P2	03/28/92	NITRATE NITROGEN		0.38500		MG/L
06C15P2	03/28/92	CADMIUM	B	0.00037	0.00500	MG/L
06C15P2	03/28/92	BARIUM	B	0.02400	2.00000	MG/L
06C15P2	03/28/92	CALCIUM		15.20000		MG/L
06C15P2	03/28/92	MAGNESIUM		5.76000		MG/L
06C15P2	03/28/92	POTASSIUM	B	1.09000		MG/L
06C15P2	03/28/92	SODIUM	B	4.06000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C16	11/27/90	2,4,5-TP	B	0.00240	0.05000	mg/l
06C16	11/27/90	METHYLENE CHLORIDE	B	0.03500	0.00500	mg/l
06C16	11/27/90	ANTIMONY	B	0.00930	0.01000	mg/l

06C16	11/27/90	ZINC		0.14400	5.00000	mg/l
06C16	11/27/90	BARIUM	B	0.08900	2.00000	mg/l
06C16	11/27/90	CALCIUM		31.00000		mg/l
06C16	11/27/90	COBALT	B	0.01500		mg/l
06C16	11/27/90	IRON		0.05600	0.30000	mg/l
06C16	11/27/90	MAGNESIUM		13.90000		mg/l
06C16	11/27/90	MANGANESE		0.01700	0.05000	mg/l
06C16	11/27/90	SODIUM		135.00000		mg/l
06C16	06/01/91	METHYLENE CHLORIDE	B	0.00450	0.00500	mg/l
06C16	06/01/91	ACETONE	B	0.00310		mg/l
06C16	06/01/91	ANTIMONY	B	0.01530	0.01000	mg/l
06C16	06/01/91	COPPER	B	0.00900	1.00000	mg/l
06C16	06/01/91	NICKEL	B	0.00500	0.10000	mg/l
06C16	06/01/91	BARIUM	B	0.09400	2.00000	mg/l
06C16	06/01/91	CALCIUM		18.60000		mg/l
06C16	06/01/91	IRON	B	0.02700	0.30000	mg/l
06C16	06/01/91	MAGNESIUM		9.56000		mg/l
06C16	06/01/91	MANGANESE	B	0.01400	0.05000	mg/l
06C16	06/01/91	POTASSIUM	B	1.76000		mg/l
06C16	06/01/91	SODIUM		145.00000		mg/l
06C16	06/01/91	SULFIDE		0.03100		mg/l
06C16	06/01/91	DIETHYL PHTHALATE	B	0.00210		mg/l
06C16	06/01/91	PCB-1254	B	0.00020	0.00050	mg/l
06C16	11/13/91	DIETHYL PHTHALATE	B	0.00130		mg/l
06C16	11/13/91	SULFIDE		0.04000		mg/l
06C16	11/13/91	METHYLENE CHLORIDE	B	0.00700	0.00500	mg/l
06C16	11/13/91	ANTIMONY	B	0.01290	0.01000	mg/l
06C16	11/13/91	COPPER		0.03900	1.00000	mg/l
06C16	11/13/91	ZINC	B	0.00700	5.00000	mg/l
06C16	11/13/91	BARIUM	B	0.10000	2.00000	mg/l
06C16	11/13/91	CALCIUM		8.65000		mg/l
06C16	11/13/91	COBALT	B	0.01800		mg/l
06C16	11/13/91	MAGNESIUM	B	4.06000		mg/l
06C16	11/13/91	MANGANESE	B	0.01000	0.05000	mg/l
06C16	11/13/91	POTASSIUM	B	1.49000		mg/l
06C16	11/13/91	SODIUM		174.00000		mg/l
06C16	03/28/92	BARIUM	B	0.11600	2.00000	MG/L
06C16	03/28/92	CALCIUM		7.68000		MG/L
06C16	03/28/92	MAGNESIUM	B	3.55000		MG/L
06C16	03/28/92	POTASSIUM	B	1.32000		MG/L
06C16	03/28/92	SODIUM		168.00000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C16P2	11/27/90	SULFIDE		0.02000		mg/l
06C16P2	11/27/90	2,4,5-TP	B	0.00250	0.05000	mg/l
06C16P2	11/27/90	ANTIMONY	B	0.01460	0.01000	mg/l
06C16P2	11/27/90	BARIUM	B	0.07900	2.00000	mg/l
06C16P2	11/27/90	CALCIUM		45.80000		mg/l
06C16P2	11/27/90	COBALT	B	0.01400		mg/l
06C16P2	11/27/90	IRON	B	0.01600	0.30000	mg/l
06C16P2	11/27/90	MAGNESIUM		34.90000		mg/l
06C16P2	11/27/90	MANGANESE		0.04500	0.05000	mg/l
06C16P2	11/27/90	POTASSIUM		10.60000		mg/l
06C16P2	11/27/90	SODIUM		34.00000		mg/l
06C16P2	11/27/90	TIN		0.03000		mg/l
06C16P2	06/01/91	METHYLENE CHLORIDE	B	0.00450	0.00500	mg/l
06C16P2	06/01/91	ACETONE	B	0.00520		mg/l
06C16P2	06/01/91	ANTIMONY	B	0.00960	0.01000	mg/l
06C16P2	06/01/91	ARSENIC	B	0.00260	0.05000	mg/l
06C16P2	06/01/91	NICKEL	B	0.00500	0.10000	mg/l

06C16P2	06/01/91	BARIUM	B	0.06600	2.00000	mg/l
06C16P2	06/01/91	CALCIUM		84.20000		mg/l
06C16P2	06/01/91	IRON		0.35700	0.30000	mg/l
06C16P2	06/01/91	MAGNESIUM		57.40000		mg/l
06C16P2	06/01/91	MANGANESE	N	0.15000	0.05000	mg/l
06C16P2	06/01/91	POTASSIUM		8.19000		mg/l
06C16P2	06/01/91	SODIUM		50.80000		mg/l
06C16P2	06/01/91	SULFIDE		0.03500		mg/l
06C16P2	06/01/91	DIETHYL PHTHALATE	B	0.00200		mg/l
06C16P2	06/01/91	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.00150		mg/l
06C16P2	11/13/91	DIETHYL PHTHALATE	B	0.00080		mg/l
06C16P2	11/13/91	SULFIDE		0.03900		mg/l
06C16P2	11/13/91	METHYLENE CHLORIDE	B	0.00700	0.00500	mg/l
06C16P2	11/13/91	ACETONE	B	0.00800		mg/l
06C16P2	11/13/91	ANTIMONY	B	0.01410	0.01000	mg/l
06C16P2	11/13/91	COPPER		0.03200	1.00000	mg/l
06C16P2	11/13/91	BARIUM	B	0.05000	2.00000	mg/l
06C16P2	11/13/91	CALCIUM		84.90000		mg/l
06C16P2	11/13/91	COBALT	B	0.01200		mg/l
06C16P2	11/13/91	IRON	N	0.30300	0.30000	mg/l
06C16P2	11/13/91	MAGNESIUM		50.90000		mg/l
06C16P2	11/13/91	MANGANESE		0.11000	0.05000	mg/l
06C16P2	11/13/91	POTASSIUM		6.14000		mg/l
06C16P2	11/13/91	SODIUM		49.20000		mg/l
06C16P2	03/28/92	ZINC	B	0.01500	5.00000	MG/L
06C16P2	03/28/92	BARIUM	B	0.04000	2.00000	MG/L
06C16P2	03/28/92	CALCIUM		99.50000		MG/L
06C16P2	03/28/92	IRON		0.12500	0.30000	MG/L
06C16P2	03/28/92	MAGNESIUM		53.40000		MG/L
06C16P2	03/28/92	MANGANESE		0.02500	0.05000	MG/L
06C16P2	03/28/92	POTASSIUM	B	4.44000		MG/L
06C16P2	03/28/92	SODIUM		32.20000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C16P3	11/27/90	2,4,5-TP	B	0.00260	0.05000	mg/l
06C16P3	11/27/90	ANTIMONY	B	0.01610	0.01000	mg/l
06C16P3	11/27/90	BARIUM	B	0.04700	2.00000	mg/l
06C16P3	11/27/90	CALCIUM		72.50000		mg/l
06C16P3	11/27/90	COBALT	B	0.00600		mg/l
06C16P3	11/27/90	IRON	B	0.04800	0.30000	mg/l
06C16P3	11/27/90	MAGNESIUM		31.30000		mg/l
06C16P3	11/27/90	MANGANESE		0.03400	0.05000	mg/l
06C16P3	11/27/90	SODIUM		9.41000		mg/l
06C16P3	06/01/91	METHYLENE CHLORIDE	B	0.00250	0.00500	mg/l
06C16P3	06/01/91	ACETONE	B	0.00280		mg/l
06C16P3	06/01/91	ANTIMONY	B	0.01420	0.01000	mg/l
06C16P3	06/01/91	COPPER	B	0.00600	1.00000	mg/l
06C16P3	06/01/91	BARIUM	B	0.04300	2.00000	mg/l
06C16P3	06/01/91	CALCIUM		72.80000		mg/l
06C16P3	06/01/91	IRON	B	0.01000	0.30000	mg/l
06C16P3	06/01/91	MAGNESIUM		41.70000		mg/l
06C16P3	06/01/91	MANGANESE	B	0.00900	0.05000	mg/l
06C16P3	06/01/91	POTASSIUM	B	1.90000		mg/l
06C16P3	06/01/91	SODIUM		7.80000		mg/l
06C16P3	06/01/91	SULFIDE		0.02300		mg/l
06C16P3	06/01/91	DIETHYL PHTHALATE	B	0.00200		mg/l
06C16P3	06/01/91	PCB-1254	B	0.00015	0.00050	mg/l
06C16P3	11/13/91	DIETHYL PHTHALATE	B	0.00070		mg/l
06C16P3	11/13/91	METHYLENE CHLORIDE	B	0.01100	0.00500	mg/l
06C16P3	11/13/91	ACETONE	B	0.01000		mg/l

06C16P3	11/13/91	ANTIMONY	B	0.01100	0.01000	mg/l
06C16P3	11/13/91	ARSENIC	B	0.00200	0.05000	mg/l
06C16P3	11/13/91	COPPER		0.03700	1.00000	mg/l
06C16P3	11/13/91	ZINC	B	0.00500	5.00000	mg/l
06C16P3	11/13/91	BARIUM	B	0.05200	2.00000	mg/l
06C16P3	11/13/91	CALCIUM		61.40000		mg/l
06C16P3	11/13/91	IRON	B	0.02000	0.30000	mg/l
06C16P3	11/13/91	MAGNESIUM		22.00000		mg/l
06C16P3	11/13/91	MANGANESE		0.07300	0.05000	mg/l
06C16P3	11/13/91	POTASSIUM	B	2.37000		mg/l
06C16P3	11/13/91	SODIUM		10.30000		mg/l
06C16P3	03/28/92	BARIUM	B	0.05300	2.00000	MG/L
06C16P3	03/28/92	CALCIUM		100.00000		MG/L
06C16P3	03/28/92	MAGNESIUM		29.00000		MG/L
06C16P3	03/28/92	MANGANESE	B	0.00500	0.05000	MG/L
06C16P3	03/28/92	POTASSIUM	B	1.10000		MG/L
06C16P3	03/28/92	SODIUM		6.43000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C17	11/27/90	ANTIMONY		0.00490	0.01000	mg/l
06C17	11/27/90	NICKEL		0.00500	0.10000	mg/l
06C17	11/27/90	ZINC		0.01500	5.00000	mg/l
06C17	11/27/90	BARIUM		0.02000	2.00000	mg/l
06C17	11/27/90	CALCIUM		40.70000		mg/l
06C17	11/27/90	COBALT		0.00600		mg/l
06C17	11/27/90	MAGNESIUM		5.84000		mg/l
06C17	11/27/90	MANGANESE		0.00800	0.05000	mg/l
06C17	11/27/90	SODIUM		15.30000		mg/l
06C17	11/27/90	SULFIDE		0.03700		mg/l
06C17	11/27/90	2,4,5-TP	B	0.00320	0.05000	mg/l
06C17	06/01/91	METHYLENE CHLORIDE	B	0.00190	0.00500	mg/l
06C17	06/01/91	ANTIMONY	B	0.01010	0.01000	mg/l
06C17	06/01/91	SELENIUM	B	0.00290	0.05000	mg/l
06C17	06/01/91	ZINC	B	0.00900	5.00000	mg/l
06C17	06/01/91	BARIUM	B	0.01900	2.00000	mg/l
06C17	06/01/91	CALCIUM		44.80000		mg/l
06C17	06/01/91	MAGNESIUM		6.09000		mg/l
06C17	06/01/91	MANGANESE	B	0.00700	0.05000	mg/l
06C17	06/01/91	SODIUM		14.40000		mg/l
06C17	06/01/91	HEPTACHLOR	B	0.00001	0.00040	mg/l
06C17	11/13/91	METHYLENE CHLORIDE	B	0.00900	0.00500	mg/l
06C17	11/13/91	ACETONE	B	0.03800		mg/l
06C17	11/13/91	ANTIMONY	B	0.00920	0.01000	mg/l
06C17	11/13/91	COPPER		0.03100	1.00000	mg/l
06C17	11/13/91	NICKEL		0.11200	0.10000	mg/l
06C17	11/13/91	BARIUM	B	0.01600	2.00000	mg/l
06C17	11/13/91	CALCIUM		42.20000		mg/l
06C17	11/13/91	MAGNESIUM		6.68000		mg/l
06C17	11/13/91	MANGANESE	B	0.00900	0.05000	mg/l
06C17	11/13/91	POTASSIUM	B	0.70200		mg/l
06C17	11/13/91	SODIUM		12.80000		mg/l
06C17	03/28/92	NITRITE NITROGEN		0.00500		MG/L
06C17	03/28/92	NITRATE NITROGEN		0.26700		MG/L
06C17	03/28/92	CADMIUM	B	0.00048	0.00500	MG/L
06C17	03/28/92	COPPER	B	0.01600	1.00000	MG/L
06C17	03/28/92	NICKEL	B	0.00900	0.10000	MG/L
06C17	03/28/92	CALCIUM		35.90000		MG/L
06C17	03/28/92	COBALT	B	0.02400		MG/L
06C17	03/28/92	MAGNESIUM	B	4.86000		MG/L
06C17	03/28/92	MANGANESE	B	0.00700	0.05000	MG/L

06C17	03/28/92	POTASSIUM	B	0.89200		MG/L
06C17	03/28/92	SODIUM		9.80000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C18	11/27/90	ANTIMONY		0.01830	0.01000	mg/l
06C18	11/27/90	ARSENIC		0.00320	0.05000	mg/l
06C18	11/27/90	COPPER		0.00500	1.00000	mg/l
06C18	11/27/90	BARIUM		0.15200	2.00000	mg/l
06C18	11/27/90	CALCIUM		42.90000		mg/l
06C18	11/27/90	COBALT		0.01100		mg/l
06C18	11/27/90	IRON		2.79000	0.30000	mg/l
06C18	11/27/90	MAGNESIUM		7.66000		mg/l
06C18	11/27/90	MANGANESE		0.15300	0.05000	mg/l
06C18	11/27/90	SODIUM		43.10000		mg/l
06C18	11/27/90	SULFIDE		0.04400		mg/l
06C18	11/27/90	2,4,5-TP	B	0.00270	0.05000	mg/l
06C18	11/27/90	METHYLENE CHLORIDE	B	0.02100	0.00500	mg/l
06C18	06/01/91	METHYLENE CHLORIDE	B	0.00120	0.00500	mg/l
06C18	06/01/91	ANTIMONY	B	0.01800	0.01000	mg/l
06C18	06/01/91	ARSENIC	B	0.00300	0.05000	mg/l
06C18	06/01/91	CHROMIUM	B	0.00500	0.1	mg/l
06C18	06/01/91	ZINC	B	0.00800	5.00000	mg/l
06C18	06/01/91	BARIUM	B	0.11700	2.00000	mg/l
06C18	06/01/91	CALCIUM		43.60000		mg/l
06C18	06/01/91	IRON		3.04000	0.30000	mg/l
06C18	06/01/91	MAGNESIUM		8.27000		mg/l
06C18	06/01/91	MANGANESE		0.15800	0.05000	mg/l
06C18	06/01/91	POTASSIUM	B	1.58000		mg/l
06C18	06/01/91	SODIUM		44.50000		mg/l
06C18	06/01/91	HEPTACHLOR	B	0.00001	0.00040	mg/l
06C18	11/13/91	METHYLENE CHLORIDE	B	0.00200	0.00500	mg/l
06C18	11/13/91	ACETONE	B	0.00600		mg/l
06C18	11/13/91	ANTIMONY	B	0.00630	0.01000	mg/l
06C18	11/13/91	ARSENIC	B	0.00360	0.05000	mg/l
06C18	11/13/91	COPPER	B	0.00900	1.00000	mg/l
06C18	11/13/91	BARIUM	B	0.12900	2.00000	mg/l
06C18	11/13/91	CALCIUM		40.20000		mg/l
06C18	11/13/91	COBALT		0.05000		mg/l
06C18	11/13/91	IRON		3.52000	0.30000	mg/l
06C18	11/13/91	MAGNESIUM		7.73000		mg/l
06C18	11/13/91	MANGANESE		0.13300	0.05000	mg/l
06C18	11/13/91	POTASSIUM	B	1.06000		mg/l
06C18	11/13/91	SODIUM		48.30000		mg/l
06C18	11/13/91	VANADIUM	B	0.01500		mg/l
06C18	03/28/92	NITRATE NITROGEN		0.04100		MG/L
06C18	03/28/92	ARSENIC	B	0.00280	0.05000	MG/L
06C18	03/28/92	BARIUM	B	0.12400	2.00000	MG/L
06C18	03/28/92	CALCIUM		42.80000		MG/L
06C18	03/28/92	IRON		3.13000	0.30000	MG/L
06C18	03/28/92	MAGNESIUM		7.18000		MG/L
06C18	03/28/92	MANGANESE		0.12500	0.05000	MG/L
06C18	03/28/92	POTASSIUM	B	0.25000		MG/L
06C18	03/28/92	SODIUM		45.80000		MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	MCL	UNIT
06C18P2	11/27/90	ARSENIC		0.01099	0.05000	mg/l
06C18P2	11/27/90	ZINC		0.10100	5.00000	mg/l
06C18P2	11/27/90	BARIUM		0.18100	2.00000	mg/l
06C18P2	11/27/90	CALCIUM		37.50000		mg/l
06C18P2	11/27/90	COBALT		0.00800		mg/l

06C18P2	11/27/90	IRON		70.50000	0.30000	mg/l
06C18P2	11/27/90	MAGNESIUM		12.40000		mg/l
06C18P2	11/27/90	MANGANESE		0.86400	0.05000	mg/l
06C18P2	11/27/90	SODIUM		31.60000		mg/l
06C18P2	11/27/90	2,4,5-TP	B	0.00380	0.05000	mg/l
06C18P2	11/27/90	BIS(2-ETHYLHEXYL)PHTHALATE		0.05000		mg/l
06C18P2	06/01/91	METHYLENE CHLORIDE	B	0.00450	0.00500	mg/l
06C18P2	06/01/91	ANTIMONY	B	0.01500	0.01000	mg/l
06C18P2	06/01/91	ARSENIC		0.01560	0.05000	mg/l
06C18P2	06/01/91	BERYLLIUM	B	0.00200	0.00100	mg/l
06C18P2	06/01/91	CHROMIUM	B	0.00700	0.1	mg/l
06C18P2	06/01/91	COPPER	B	0.01000	1.00000	mg/l
06C18P2	06/01/91	ZINC	B	0.01600	5.00000	mg/l
06C18P2	06/01/91	BARIUM	B	0.12300	2.00000	mg/l
06C18P2	06/01/91	CALCIUM		32.60000		mg/l
06C18P2	06/01/91	IRON		51.20000	0.30000	mg/l
06C18P2	06/01/91	MAGNESIUM		10.90000		mg/l
06C18P2	06/01/91	MANGANESE		0.55200	0.05000	mg/l
06C18P2	06/01/91	POTASSIUM	B	2.84000		mg/l
06C18P2	06/01/91	SODIUM		31.00000		mg/l
06C18P2	06/01/91	HEPTACHLOR	B	0.00000	0.00040	mg/l
06C18P2	11/13/91	SULFIDE		0.06200		mg/l
06C18P2	11/13/91	METHYLENE CHLORIDE	B	0.01300	0.00500	mg/l
06C18P2	11/13/91	ACETONE	B	0.00700		mg/l
06C18P2	11/13/91	ANTIMONY	B	0.00860	0.01000	mg/l
06C18P2	11/13/91	ARSENIC		0.01240	0.05000	mg/l
06C18P2	11/13/91	COPPER		0.03900	1.00000	mg/l
06C18P2	11/13/91	BARIUM	B	0.08700	2.00000	mg/l
06C18P2	11/13/91	CALCIUM		39.90000		mg/l
06C18P2	11/13/91	COBALT	B	0.02500		mg/l
06C18P2	11/13/91	IRON		20.30000	0.30000	mg/l
06C18P2	11/13/91	MAGNESIUM		8.83000		mg/l
06C18P2	11/13/91	MANGANESE		0.34900	0.05000	mg/l
06C18P2	11/13/91	POTASSIUM	B	0.90800		mg/l
06C18P2	11/13/91	SODIUM		25.00000		mg/l
06C18P2	11/13/91	VANADIUM	B	0.01000		mg/l
06C18P2	03/28/92	NITRITE NITROGEN		0.02500		MG/L
06C18P2	03/28/92	NITRATE NITROGEN		0.07200		MG/L
06C18P2	03/28/92	ARSENIC		0.01840	0.05000	MG/L
06C18P2	03/28/92	BARIUM	B	0.15000	2.00000	MG/L
06C18P2	03/28/92	CALCIUM		38.30000		MG/L
06C18P2	03/28/92	IRON		65.50000	0.30000	MG/L
06C18P2	03/28/92	MAGNESIUM		11.70000		MG/L
06C18P2	03/28/92	MANGANESE		0.63500	0.05000	MG/L
06C18P2	03/28/92	POTASSIUM	B	2.43000		MG/L
06C18P2	03/28/92	SODIUM		28.50000		MG/L

Appendix H
Detected levels of metals in Demolition Area/Old IRifle Range wells

Detected Levels of **Aluminum** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-07	11/27/1990	145
06-07	11/13/1991	139
06-07	06/01/1991	78.6
06-07	03/28/1992	76.1
06-06	03/28/1992	1.72
06-17	11/13/1991	0.295
06C08P2	11/27/1990	0.277
06C08P2	03/28/1992	0.276
06C08P2	11/13/1991	0.225
06C08P2	06/01/1991	0.206
06C08	11/27/1990	0.178
06C11	11/13/1991	0.169
06C08	03/28/1992	0.154
06-06	11/27/1990	0.111
06C08	06/01/1991	0.107
06C08	11/13/1991	0.096
06-23	11/13/1991	0.069
06C06P2	03/16/1991	0.025
06C13	11/27/1990	0.02
06C01	06/01/1991	0.02
06-14A	06/01/1991	0.016
06C06P2	06/01/1991	0.013
06C02	11/13/1991	0.011

Detected Levels of **Antimony** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C11	11/13/1991	0.0227
06-18	11/13/1991	0.0213
06C10P2	06/01/1991	0.0209
06C08	06/01/1991	0.0206
06C04P2	11/13/1991	0.0199
06-15	06/01/1991	0.0198
06-23	11/13/1991	0.0198
06-22	11/13/1991	0.0196
06C11P2	06/01/1991	0.0193
06-17	06/01/1991	0.0191
06C11	06/01/1991	0.019
06C06	06/01/1991	0.0187
06-07	06/01/1991	0.0184
06C18	11/27/1990	0.0183
06C10P2	11/13/1991	0.0183
06C18	06/01/1991	0.018
06C08P2	06/01/1991	0.0178
06-12	11/27/1990	0.0177
06-18	06/01/1991	0.0176
06C13	06/01/1991	0.0173
06C15P2	06/01/1991	0.017
06-23	06/01/1991	0.0169
06C16P3	11/27/1990	0.0161
06C05	06/01/1991	0.0156
06C16	06/01/1991	0.0153
06C18P2	06/01/1991	0.015

Detected Levels of **Antimony** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-17	11/13/1991	0.0149
06C15	06/01/1991	0.0147
06-01A	06/01/1991	0.0146
06-20	11/13/1991	0.0146
06C16P2	11/27/1990	0.0146
06-12	06/01/1991	0.0144
06C02	06/01/1991	0.0143
06-20	06/01/1991	0.0143
06-01A	11/27/1990	0.0142
06C16P3	06/01/1991	0.0142
06C15P2	11/13/1991	0.0141
06C16P2	11/13/1991	0.0141
06C13P2	06/01/1991	0.0139
06-01A	11/13/1991	0.0138
06-16	06/01/1991	0.0137
06C02P2	06/01/1991	0.0137
06C14	11/13/1991	0.0134
06C09	06/01/1991	0.0133
06C14P2	11/27/1990	0.0131
06-22	06/01/1991	0.0131
06-20	11/27/1990	0.013
06C04	06/01/1991	0.0129
06C16	11/13/1991	0.0129
06C03	06/01/1991	0.0127
06C14	11/27/1990	0.0124
06C04P2	06/01/1991	0.0123

Detected Levels of **Antimony** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-19	11/13/1991	0.0122
06C14P2	11/13/1991	0.012
06-14A	11/13/1991	0.012
06-16	11/13/1991	0.0119
06C07	06/01/1991	0.0116
06C03P2	06/01/1991	0.0113
06C16P3	11/13/1991	0.011
06C13P2	11/27/1990	0.0109
06-16	11/27/1990	0.0107
06-14A	06/01/1991	0.0106
06C12P2	06/01/1991	0.0103
06C17	06/01/1991	0.0101
06C12	03/16/1991	0.0098
06-19	03/16/1991	0.0097
06C07	11/13/1991	0.0097
06C12P2	03/16/1991	0.0096
06C16P2	06/01/1991	0.0096
06-06	11/27/1990	0.0094
06C14	06/01/1991	0.0094
06C16	11/27/1990	0.0093
06C17	11/13/1991	0.0092
06C11	03/16/1991	0.0091
06C12	06/01/1991	0.009
06C15	11/13/1991	0.009
06C02	11/13/1991	0.0089
06-06	11/13/1991	0.0088

Detected Levels of **Antimony** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C15P2	11/27/1990	0.0087
06C02	03/16/1991	0.0086
06C13	11/27/1990	0.0086
06C18P2	11/13/1991	0.0086
06C03P2	11/13/1991	0.0084
06C12	11/13/1991	0.0084
06-21	11/27/1990	0.0083
06C09	11/13/1991	0.0083
06-07	11/13/1991	0.0082
06C01P3	06/01/1991	0.0081
06C06P2	11/13/1991	0.008
06C01P3	11/13/1991	0.008
06-06	06/01/1991	0.0078
06-18	11/27/1990	0.0078
06C11P2	11/13/1991	0.0076
06C12P2	11/13/1991	0.0076
06C05	03/16/1991	0.0072
06-23	11/27/1990	0.0072
06C08P2	11/13/1991	0.0068
06C04P2	03/16/1991	0.0068
06C04	03/16/1991	0.0067
06C10	03/16/1991	0.0067
06-19	06/01/1991	0.0067
06C03P2	03/16/1991	0.0066
06C01	06/01/1991	0.0066
06C18	11/13/1991	0.0063

Detected Levels of **Antimony** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C10P2	03/16/1991	0.0061
06C14P2	06/01/1991	0.0061
06-22	11/27/1990	0.0058
06-17	11/27/1990	0.0058
06C08	11/27/1990	0.0057
06-14A	03/16/1991	0.0057
06C03	03/16/1991	0.0054
06C10	06/01/1991	0.0053
06-07	11/27/1990	0.0051
06C06	11/13/1991	0.0049
06C17	11/27/1990	0.0049
06C08	11/13/1991	0.0048
06C01	11/27/1990	0.0044
06C01	11/13/1991	0.0044
06-15	11/27/1990	0.0043
06-01A	03/28/1992	0.004
06C13	11/13/1991	0.0037
06C06P2	06/01/1991	0.0036
06C04	11/13/1991	0.0034
06-21	06/01/1991	0.0034
06C02P2	11/13/1991	0.0033
06C02	03/28/1992	0.0031
06C13P2	11/13/1991	0.0031
06C05	03/28/1992	0.003

Detected Levels of **Arsenic** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C13P2	06/01/1991	0.028
06C13P2	11/13/1991	0.027
06C13P2	03/28/1992	0.0266
06C13	11/27/1990	0.0243
06C18P2	03/28/1992	0.0184
06C18P2	06/01/1991	0.0156
06C18P2	11/13/1991	0.0124
06C03	06/01/1991	0.0123
06C08	11/27/1990	0.0121
06C03	03/28/1992	0.0119
06C18P2	11/27/1990	0.01099
06C03	11/13/1991	0.0107
06C03	03/16/1991	0.0099
06-07	11/27/1990	0.0084
06C08	11/13/1991	0.0079
06C10	06/01/1991	0.0074
06-07	06/01/1991	0.0066
06C08	06/01/1991	0.0059
06C08	03/28/1992	0.0052
06C11	11/13/1991	0.0044
06C11	03/28/1992	0.0036
06C18	11/13/1991	0.0036
06C18	11/27/1990	0.0032
06C18	06/01/1991	0.003
06-07	03/28/1992	0.0029
06C18	03/28/1992	0.0028

Detected Levels of **Arsenic** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C16P2	06/01/1991	0.0026
06C10P2	11/13/1991	0.002
06C16P3	11/13/1991	0.002
06-07	11/13/1991	0.002

Detected Levels of **Barium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C07	03/28/1992	0.218
06C07	06/01/1991	0.212
06C07	11/13/1991	0.212
06C07	03/16/1991	0.199
06-19	11/13/1991	0.186
06C18P2	11/27/1990	0.181
06C18	11/27/1990	0.152
06C18P2	03/28/1992	0.15
06C04	11/13/1991	0.145
06-19	06/01/1991	0.142
06C11	06/01/1991	0.135
06C04	06/01/1991	0.132
06C04	03/28/1992	0.131
06C18	11/13/1991	0.129
06C01	11/27/1990	0.124
06C18	03/28/1992	0.124
06C18P2	06/01/1991	0.123
06C04	03/16/1991	0.122
06C01	06/01/1991	0.12
06C18	06/01/1991	0.117
06C16	03/28/1992	0.116
06-19	03/28/1992	0.116
06C11	03/28/1992	0.115
06C02	11/13/1991	0.11
06C02	03/28/1992	0.11
06C02	03/16/1991	0.11

Detected Levels of **Barium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C02	06/01/1991	0.108
06C01	03/28/1992	0.108
06-19	03/16/1991	0.105
06-14A	03/28/1992	0.102
06C16	11/13/1991	0.1
06C01	11/13/1991	0.1
06-14A	11/13/1991	0.098
06C16	06/01/1991	0.094
06-15	06/01/1991	0.091
06C16	11/27/1990	0.089
06C18P2	11/13/1991	0.087
06C03	11/13/1991	0.084
06C03	03/16/1991	0.084
06C03	03/28/1992	0.082
06-14A	06/01/1991	0.081
06C03P2	11/13/1991	0.081
06-17	03/28/1992	0.08
06-14A	03/16/1991	0.079
06C16P2	11/27/1990	0.079
06C13P2	06/01/1991	0.076
06C12	03/28/1992	0.076
06C03	06/01/1991	0.075
06C13P2	03/28/1992	0.074
06-17	11/27/1990	0.071
06-15	03/28/1992	0.07
06C13P2	11/13/1991	0.07

Detected Levels of **Barium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C11	03/16/1991	0.07
06C13	11/27/1990	0.069
06-15	11/27/1990	0.066
06C16P2	06/01/1991	0.066
06C12	03/16/1991	0.065
06-23	11/13/1991	0.065
06C12	06/01/1991	0.065
06C05	03/28/1992	0.063
06C05	03/16/1991	0.061
06C12	11/13/1991	0.06
06-17	06/01/1991	0.058
06C05	06/01/1991	0.057
06C03P2	03/28/1992	0.054
06C05	11/13/1991	0.054
06C10P2	03/16/1991	0.053
06C16P3	03/28/1992	0.053
06C16P3	11/13/1991	0.052
06C10P2	03/28/1992	0.052
06C10P2	06/01/1991	0.051
06C16P2	11/13/1991	0.05
06C03P2	06/01/1991	0.049
06C10	06/01/1991	0.048
06C16P3	11/27/1990	0.047
06C09	11/27/1990	0.046
06C03P2	03/16/1991	0.046
06C06	11/13/1991	0.045

Detected Levels of **Barium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C11P2	11/13/1991	0.044
06C06	03/16/1991	0.043
06C16P3	06/01/1991	0.043
06C06	03/28/1992	0.041
06C14P3	03/28/1992	0.041
06C16P2	03/28/1992	0.04
06C14	03/28/1992	0.04
06C14	11/13/1991	0.039
06C14	11/27/1990	0.037
06C10P2	11/13/1991	0.035
06-17	11/13/1991	0.034
06C10	03/28/1992	0.034
06-22	11/13/1991	0.034
06C09	06/01/1991	0.033
06C14	06/01/1991	0.032
06C08	03/28/1992	0.032
06C11	11/13/1991	0.031
06C09	03/28/1992	0.031
06C10	03/16/1991	0.031
06C11P2	03/16/1991	0.03
06-18	03/28/1992	0.03
06C14P2	11/13/1991	0.029
06C12P2	03/16/1991	0.028
06-20	03/28/1992	0.028
06C10	11/13/1991	0.028
06-16	03/28/1992	0.027

Detected Levels of **Barium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-22	06/01/1991	0.027
06C08P2	11/13/1991	0.027
06C02P2	03/28/1992	0.026
06C14P2	03/28/1992	0.026
06C02P2	11/13/1991	0.026
06C04P2	03/28/1992	0.026
06C14P2	11/27/1990	0.026
06C15	11/27/1990	0.026
06C11P2	03/28/1992	0.026
06-20	06/01/1991	0.025
06-20	11/27/1990	0.025
06C15P2	06/01/1991	0.025
06C13P2	11/27/1990	0.025
06C15	06/01/1991	0.025
06C15	03/28/1992	0.025
06C09	11/13/1991	0.024
06C15P2	03/28/1992	0.024
06-22	03/28/1992	0.024
06-18	11/27/1990	0.024
06-20	11/13/1991	0.024
06C14P2	06/01/1991	0.023
06C15P2	11/27/1990	0.023
06C15	11/13/1991	0.023
06C13	03/28/1992	0.023
06C12P2	03/28/1992	0.022
06C04P2	11/13/1991	0.022

Detected Levels of **Barium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C02P2	03/16/1991	0.022
06C12P2	06/01/1991	0.021
06-01A	11/27/1990	0.02
06C17	11/27/1990	0.02
06C06	06/01/1991	0.019
06C17	06/01/1991	0.019
06C15P2	11/13/1991	0.019
06-22	11/27/1990	0.019
06-18	06/01/1991	0.019
06C13	06/01/1991	0.018
06-18	11/13/1991	0.018
06-12	06/01/1991	0.017
06C12P2	11/13/1991	0.017
06C01P3	11/13/1991	0.016
06C11P2	06/01/1991	0.016
06C17	11/13/1991	0.016
06C01P3	06/01/1991	0.016
06-06	06/01/1991	0.015
06-23	11/27/1990	0.015
06C06P2	11/13/1991	0.014
06-21	06/01/1991	0.014
06C06P2	06/01/1991	0.014
06-01A	11/13/1991	0.014
06-06	11/27/1990	0.014
06-16	11/27/1990	0.013
06-12	11/27/1990	0.013

Detected Levels of **Barium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-01A	06/01/1991	0.012
06-21	11/27/1990	0.012
06-23	06/01/1991	0.011
06C02P2	06/01/1991	0.011
06-16	06/01/1991	0.011
06C08	11/13/1991	0.011
06-12	11/13/1991	0.01
06C13	11/13/1991	0.01

Detected Levels of **Beryllium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-07	06/01/1991	0.014
06-07	11/27/1990	0.013
06-07	11/13/1991	0.012
06-07	03/28/1992	0.01
06-06	11/13/1991	0.003
06-06	03/28/1992	0.002
06C18P2	06/01/1991	0.002
06-12	11/13/1991	0.001
06C08P2	03/28/1992	0.001
06-12	03/28/1992	0.001
06C01P3	03/28/1992	0.001

Detected Levels of **Cadmium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-07	11/13/1991	0.0102
06-07	03/28/1992	0.00827
06C14	06/01/1991	0.008
06-07	06/01/1991	0.008
06-06	03/28/1992	0.00372
06-06	11/13/1991	0.00344
06C10	11/13/1991	0.00123
06-17	03/28/1992	0.00086
06-16	03/28/1992	0.00082
06-12	03/28/1992	0.00066
06C17	03/28/1992	0.00048
06C08P2	03/28/1992	0.0004
06C15P2	03/28/1992	0.00037
06C04P2	11/13/1991	0.00027
06-21	03/28/1992	0.00024
06C06P2	03/28/1992	0.00022

Detected Levels of **Calcium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-12	06/01/1991	591
06-06	06/01/1991	590
06-06	11/27/1990	563
06-12	03/28/1992	534
06-12	11/27/1990	492
06-12	11/13/1991	439
06-06	03/28/1992	421
06-06	11/13/1991	357
06-07	11/13/1991	302
06-07	11/27/1990	275
06C01P3	06/01/1991	259
06C01P3	03/28/1992	244
06C01P3	11/13/1991	237
06-07	06/01/1991	204
06-21	11/27/1990	199
06-21	03/28/1992	197
06-21	06/01/1991	183
06-07	03/28/1992	173
06-01A	11/13/1991	135
06C10P2	03/16/1991	115
06C10P2	03/28/1992	115
06-01A	11/27/1990	114
06C12P2	03/28/1992	110
06C12P2	03/16/1991	108
06-01A	06/01/1991	107
06C12P2	06/01/1991	104

Detected Levels of **Calcium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C10P2	06/01/1991	103
06C16P3	03/28/1992	100
06C16P2	03/28/1992	99.5
06C12	03/28/1992	98.5
06-01A	03/28/1992	98.2
06-19	11/13/1991	94.9
06C10	03/16/1991	91.8
06C10	03/28/1992	91
06C10P2	11/13/1991	90.1
06C10	06/01/1991	88.7
06C12	03/16/1991	88.7
06C16P2	11/13/1991	84.9
06C16P2	06/01/1991	84.2
06-19	06/01/1991	83.5
06C10	11/13/1991	82.3
06C12	06/01/1991	82.1
06C04	03/28/1992	81.4
06C02	03/16/1991	81.1
06C02	06/01/1991	80.5
06C04	03/16/1991	77.1
06-19	03/16/1991	76.6
06C04P2	03/28/1992	76.5
06-19	03/28/1992	76.1
06C04P2	03/16/1991	74.5
06-22	11/13/1991	74.3
06C04	06/01/1991	74.3

Detected Levels of **Calcium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C11	03/16/1991	73.5
06C03P2	03/28/1992	73.1
06C03P2	06/01/1991	72.8
06C16P3	06/01/1991	72.8
06C11	06/01/1991	72.8
06C02	03/28/1992	72.5
06C16P3	11/27/1990	72.5
06C11P2	03/28/1992	72.3
06C03P2	11/13/1991	70.8
06-22	06/01/1991	70.8
06C03P2	03/16/1991	70.5
06C12	11/13/1991	70.3
06C04	11/13/1991	68.7
06-22	03/28/1992	67.4
06C04P2	11/13/1991	66.8
06C04P2	06/01/1991	66.3
06C11P2	03/16/1991	65.6
06C11P2	06/01/1991	64.2
06C02	11/13/1991	63.7
06C12P2	11/13/1991	63.4
06C16P3	11/13/1991	61.4
06-22	11/27/1990	60.5
06C02P2	06/01/1991	59.2
06C11P2	11/13/1991	59
06C02P2	03/16/1991	57.7
06C14P3	03/28/1992	57.5

Detected Levels of **Calcium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C14	03/28/1992	56.8
06-20	11/13/1991	56.7
06-15	03/28/1992	56.1
06-14A	11/13/1991	55.7
06-14A	03/16/1991	55.6
06C03	03/28/1992	55.5
06-14A	06/01/1991	55
06C03	06/01/1991	55
06C01	03/28/1992	54.4
06C02P2	03/28/1992	54.3
06C14	11/13/1991	54.1
06C03	03/16/1991	53.6
06C01	11/27/1990	53.6
06C03	11/13/1991	52.9
06C15	03/28/1992	51.9
06-23	11/13/1991	51.3
06-14A	03/28/1992	51
06C14	06/01/1991	50.8
06C01	11/13/1991	50
06C01	06/01/1991	49.8
06-20	06/01/1991	49.7
06C02P2	11/13/1991	49.5
06-20	11/27/1990	48.2
06C15	06/01/1991	47.1
06C15	11/13/1991	46.9
06-20	03/28/1992	46.5

Detected Levels of **Calcium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C16P2	11/27/1990	45.8
06C17	06/01/1991	44.8
06C18	06/01/1991	43.6
06C14	11/27/1990	43.1
06C18	11/27/1990	42.9
06C18	03/28/1992	42.8
06C17	11/13/1991	42.2
06-18	11/13/1991	42.1
06C17	11/27/1990	40.7
06C18	11/13/1991	40.2
06C18P2	11/13/1991	39.9
06-15	06/01/1991	38.9
06C18P2	03/28/1992	38.3
06C13P2	11/13/1991	37.6
06C15	11/27/1990	37.6
06C18P2	11/27/1990	37.5
06-15	11/27/1990	37.4
06C09	11/27/1990	36.3
06-18	11/27/1990	35.9
06C17	03/28/1992	35.9
06-16	11/13/1991	33.9
06C13P2	03/28/1992	33.9
06C13P2	06/01/1991	33.3
06C09	03/28/1992	32.9
06C09	06/01/1991	32.7
06C18P2	06/01/1991	32.6

Detected Levels of **Calcium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C13P2	11/27/1990	32.6
06-18	06/01/1991	31.8
06C09	11/13/1991	31.8
06-18	03/28/1992	31.4
06C16	11/27/1990	31
06-16	11/27/1990	30.6
06-23	11/27/1990	29.7
06-16	06/01/1991	28.7
06C13	03/28/1992	28.6
06C13	06/01/1991	28.6
06C13	11/13/1991	27.4
06-17	06/01/1991	24.8
06-23	06/01/1991	24.7
06C13	11/27/1990	24.4
06-16	03/28/1992	22.1
06C11	03/28/1992	22
06-17	03/28/1992	19.3
06C16	06/01/1991	18.6
06-17	11/27/1990	18.1
06C06P2	03/16/1991	16.5
06C15P2	11/13/1991	16.2
06C15P2	03/28/1992	15.2
06C15P2	11/27/1990	15.2
06C06	03/16/1991	15.1
06-17	11/13/1991	14.3
06C15P2	06/01/1991	13.8

Detected Levels of **Calcium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C06	06/01/1991	12.6
06C11	11/13/1991	12.2
06C06P2	06/01/1991	12.1
06C05	03/16/1991	11.8
06C05	06/01/1991	11.6
06C05	11/13/1991	11.5
06C06	11/13/1991	11
06C06	03/28/1992	11
06C08P2	11/27/1990	10.7
06C05	03/28/1992	10.7
06C08P2	03/28/1992	10
06C14P2	11/13/1991	9.58
06C14P2	11/27/1990	9.5
06C08P2	06/01/1991	9.5
06C16	11/13/1991	8.65
06C06P2	03/28/1992	8.25
06C14P2	03/28/1992	7.93
06C06P2	11/13/1991	7.92
06C16	03/28/1992	7.68
06C14P2	06/01/1991	7.45
06C07	11/13/1991	6.94
06C07	06/01/1991	5.6
06C07	03/16/1991	5.53
06C07	03/28/1992	5.45
06-23	03/28/1992	5.03
06C08	03/28/1992	4.67

Detected Levels of **Calcium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C08	11/13/1991	2.03
06C08	11/27/1990	1.49
06C08	06/01/1991	1.23
06C08P2	11/13/1991	1.04

Detected Levels of **Cobalt** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-07	11/13/1991	0.665
06-07	11/27/1990	0.577
06-07	06/01/1991	0.466
06-06	11/13/1991	0.428
06-07	03/28/1992	0.388
06-06	03/28/1992	0.361
06-06	06/01/1991	0.323
06-06	11/27/1990	0.316
06-12	11/27/1990	0.12
06-12	03/28/1992	0.086
06-12	11/13/1991	0.077
06-12	06/01/1991	0.064
06C01P3	03/28/1992	0.052
06C18	11/13/1991	0.05
06C01P3	06/01/1991	0.048
06C08	11/13/1991	0.045
06C01P3	11/13/1991	0.045
06C08	03/28/1992	0.043
06C05	11/13/1991	0.041
06C13P2	11/13/1991	0.041
06-01A	03/28/1992	0.04
06-01A	11/13/1991	0.039
06C08P2	03/28/1992	0.036
06C04P2	11/13/1991	0.031
06-20	11/13/1991	0.03
06C13	11/13/1991	0.028

Detected Levels of **Cobalt** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C11	11/13/1991	0.027
06C06	11/13/1991	0.027
06-22	11/13/1991	0.026
06C10P2	11/13/1991	0.025
06C09	11/13/1991	0.025
06C18P2	11/13/1991	0.025
06-19	11/13/1991	0.024
06C17	03/28/1992	0.024
06-16	11/13/1991	0.02
06C07	11/13/1991	0.02
06C04	11/13/1991	0.019
06C16	11/13/1991	0.018
06-01A	11/27/1990	0.017
06C12P2	11/13/1991	0.016
06-14A	11/13/1991	0.016
06C12P2	06/01/1991	0.016
06C02P2	06/01/1991	0.016
06C06	06/01/1991	0.016
06C05	03/16/1991	0.016
06C08	11/27/1990	0.015
06-01A	06/01/1991	0.015
06C16	11/27/1990	0.015
06C12	11/13/1991	0.015
06C03P2	11/13/1991	0.014
06C16P2	11/27/1990	0.014
06C13	11/27/1990	0.014

Detected Levels of **Cobalt** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-19	06/01/1991	0.014
06C04P2	06/01/1991	0.013
06C01	11/13/1991	0.012
06C16P2	11/13/1991	0.012
06C03	11/13/1991	0.012
06C10	11/13/1991	0.011
06C13P2	06/01/1991	0.011
06C18	11/27/1990	0.011
06-21	11/27/1990	0.011
06C04P2	03/16/1991	0.011
06-18	11/13/1991	0.01
06C04	06/01/1991	0.01
06-20	06/01/1991	0.01
06C08P2	11/27/1990	0.01
06C09	06/01/1991	0.009
06C03P2	06/01/1991	0.009
06C03	03/16/1991	0.009
06C02	03/16/1991	0.009
06C06	03/16/1991	0.008
06C18P2	11/27/1990	0.008
06C04	03/16/1991	0.008
06-20	11/27/1990	0.008
06C03	06/01/1991	0.008
06-18	11/27/1990	0.007
06C15	11/27/1990	0.007
06C09	11/27/1990	0.006

Detected Levels of **Cobalt** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C17	11/27/1990	0.006
06C03P2	03/16/1991	0.006
06-16	06/01/1991	0.006
06C16P3	11/27/1990	0.006
06-17	11/27/1990	0.005
06-16	11/27/1990	0.005
06C13P2	11/27/1990	0.005
06C10	03/16/1991	0.005
06C11	03/16/1991	0.005

Detected Levels of **Chromium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-07	11/27/1990	0.032
06-07	11/13/1991	0.022
06-17	11/27/1990	0.016
06-07	06/01/1991	0.016
06-06	11/13/1991	0.009
06C18P2	06/01/1991	0.007
06-06	06/01/1991	0.007
06C10	06/01/1991	0.006
06C10P2	06/01/1991	0.006
06-14A	06/01/1991	0.006
06C10	11/13/1991	0.006
06C18	06/01/1991	0.005
06C13P2	11/13/1991	0.005
06C02P2	11/13/1991	0.005
06C11P2	06/01/1991	0.005
06C11	06/01/1991	0.005
06C06	06/01/1991	0.005
06C03	06/01/1991	0.005

Detected Levels of **Copper** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-23	11/13/1991	0.089
06-17	03/28/1992	0.086
06C04P2	11/13/1991	0.085
06-19	03/28/1992	0.075
06C12P2	03/28/1992	0.074
06-18	11/13/1991	0.072
06-18	03/28/1992	0.068
06C11	11/13/1991	0.063
06C08P2	03/28/1992	0.063
06-22	11/13/1991	0.054
06C01P3	03/28/1992	0.054
06C04P2	03/28/1992	0.053
06C10P2	11/13/1991	0.051
06-07	11/13/1991	0.05
06C06P2	03/28/1992	0.05
06C14P2	11/13/1991	0.05
06C14P2	11/27/1990	0.047
06C14	11/13/1991	0.044
06C06P2	11/13/1991	0.043
06-06	11/13/1991	0.04
06C16	11/13/1991	0.039
06C18P2	11/13/1991	0.039
06-06	03/28/1992	0.039
06C16P3	11/13/1991	0.037
06-14A	03/28/1992	0.035
06C08P2	11/13/1991	0.033

Detected Levels of **Copper** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-20	11/13/1991	0.033
06C15P2	11/13/1991	0.032
06C16P2	11/13/1991	0.032
06C17	11/13/1991	0.031
06C01P3	11/13/1991	0.03
06C10	03/28/1992	0.03
06-01A	11/13/1991	0.03
06C03P2	11/13/1991	0.028
06-17	11/13/1991	0.028
06C13	06/01/1991	0.027
06C15	11/13/1991	0.022
06C07	06/01/1991	0.022
06C07	11/13/1991	0.021
06C12P2	11/13/1991	0.021
06-14A	11/13/1991	0.021
06C12	11/13/1991	0.021
06-23	06/01/1991	0.021
06C10P2	06/01/1991	0.02
06C05	03/16/1991	0.019
06-01A	06/01/1991	0.019
06-19	11/13/1991	0.019
06C01	03/28/1992	0.019
06C08P2	06/01/1991	0.018
06C11	03/16/1991	0.018
06C10P2	03/16/1991	0.017
06C08	06/01/1991	0.017

Detected Levels of **Copper** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C17	03/28/1992	0.016
06-16	06/01/1991	0.016
06C03	03/16/1991	0.016
06C10	03/16/1991	0.016
06C03P2	03/16/1991	0.015
06C11	03/28/1992	0.015
06-16	11/13/1991	0.015
06C13P2	03/28/1992	0.015
06C11	06/01/1991	0.014
06C12P2	06/01/1991	0.013
06C08	03/28/1992	0.013
06C06	06/01/1991	0.012
06C09	06/01/1991	0.012
06C02	11/13/1991	0.012
06C11P2	11/13/1991	0.011
06C02P2	03/16/1991	0.011
06C12	06/01/1991	0.011
06C18P2	06/01/1991	0.01
06-01A	03/28/1992	0.01
06C16	06/01/1991	0.009
06C18	11/13/1991	0.009
06C10P2	03/28/1992	0.009
06C05	06/01/1991	0.008
06C11P2	03/16/1991	0.008
06C15P2	06/01/1991	0.007
06C07	03/28/1992	0.007

Detected Levels of **Copper** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-07	03/28/1992	0.007
06C16P3	06/01/1991	0.006
06-22	06/01/1991	0.006
06C03	06/01/1991	0.005
06C18	11/27/1990	0.005
06C04P2	06/01/1991	0.005

Detected Levels of **Iron** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-07	11/13/1991	84.2
06-07	11/27/1990	78.5
06C18P2	11/27/1990	70.5
06C18P2	03/28/1992	65.5
06C18P2	06/01/1991	51.2
06-07	06/01/1991	50.1
06-07	03/28/1992	49.2
06C18P2	11/13/1991	20.3
06C08P2	03/28/1992	17.1
06C08P2	11/27/1990	16.2
06C08P2	06/01/1991	15.5
06C13P2	11/13/1991	13
06C13P2	06/01/1991	11.5
06C13P2	03/28/1992	10.4
06-06	11/13/1991	8.72
06C13	11/27/1990	7.75
06-06	03/28/1992	7.46
06C03	06/01/1991	7.21
06C03	03/28/1992	7.12
06C03	11/13/1991	7.09
06C03	03/16/1991	6.75
06-06	06/01/1991	4.16
06-19	11/13/1991	3.8
06C01P3	03/28/1992	3.62
06-06	11/27/1990	3.6
06C18	11/13/1991	3.52

Detected Levels of **Iron** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C18	03/28/1992	3.13
06C18	06/01/1991	3.04
06C18	11/27/1990	2.79
06C02	11/13/1991	1.99
06C02	06/01/1991	1.89
06C02	03/28/1992	1.88
06C02	03/16/1991	1.49
06C04	11/13/1991	1.41
06C04	03/28/1992	1.39
06C01P3	06/01/1991	1.2
06C04	03/16/1991	1.18
06C04	06/01/1991	1.17
06C10	03/16/1991	1.09
06-17	11/13/1991	0.95
06C10	03/28/1992	0.94
06C12	03/28/1992	0.771
06C11	11/13/1991	0.618
06C11	03/16/1991	0.61
06-12	03/28/1992	0.6
06C10	11/13/1991	0.597
06C08P2	11/13/1991	0.578
06C11P2	03/28/1992	0.571
06-12	06/01/1991	0.558
06C12	03/16/1991	0.54
06C12	11/13/1991	0.512
06C01P3	11/13/1991	0.5

Detected Levels of **Iron** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-21	03/28/1992	0.494
06C12	06/01/1991	0.464
06C11P2	06/01/1991	0.426
06C10	06/01/1991	0.37
06C16P2	06/01/1991	0.357
06C08	03/28/1992	0.335
06C14	03/28/1992	0.318
06C06	03/28/1992	0.315
06C14P3	03/28/1992	0.309
06-12	11/27/1990	0.305
06C16P2	11/13/1991	0.303
06C14	06/01/1991	0.228
06C14	11/13/1991	0.209
06C11P2	03/16/1991	0.148
06-21	06/01/1991	0.146
06C11P2	11/13/1991	0.143
06C08	06/01/1991	0.142
06-17	11/27/1990	0.132
06-19	06/01/1991	0.131
06C16P2	03/28/1992	0.125
06-21	11/27/1990	0.119
06-23	11/13/1991	0.084
06C14P2	06/01/1991	0.071
06C04P2	11/13/1991	0.064
06C14	11/27/1990	0.064
06C12P2	03/28/1992	0.06

Detected Levels of **Iron** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C16	11/27/1990	0.056
06C11	06/01/1991	0.05
06C08	11/27/1990	0.049
06C16P3	11/27/1990	0.048
06C01	06/01/1991	0.045
06C12P2	03/16/1991	0.042
06C06P2	11/13/1991	0.041
06C05	03/28/1992	0.04
06C06	11/13/1991	0.038
06-14A	11/13/1991	0.037
06C05	11/13/1991	0.035
06C13P2	11/27/1990	0.03
06C03P2	11/13/1991	0.028
06C16	06/01/1991	0.027
06C03P2	03/16/1991	0.025
06C07	03/16/1991	0.023
06C06	06/01/1991	0.022
06C07	11/13/1991	0.022
06C16P3	11/13/1991	0.02
06-01A	11/13/1991	0.02
06-01A	11/27/1990	0.02
06C16P2	11/27/1990	0.016
06C05	03/16/1991	0.016
06C03P2	06/01/1991	0.014
06C08	11/13/1991	0.013
06-12	11/13/1991	0.013

Detected Levels of **Iron** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C01	11/13/1991	0.012
06C01	11/27/1990	0.012
06C15P2	06/01/1991	0.012
06C04P2	03/16/1991	0.011
06C16P3	06/01/1991	0.01

Detected Levels of **Lead** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-17	11/27/1990	0.0389
06-06	11/13/1991	0.0066
06C06P2	03/28/1992	0.0043
06C08P2	11/27/1990	0.0029
06-07	06/01/1991	0.0027
06C08P2	11/13/1991	0.0026
06C04	03/28/1992	0.0018
06C03	03/16/1991	0.0016
06-07	11/27/1990	0.0014
06C06	06/01/1991	0.0013
06-14A	06/01/1991	0.0012
06C15P2	06/01/1991	0.0011
06C12	06/01/1991	0.001

Detected Levels of **Magnesium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-06	11/27/1990	438
06-06	06/01/1991	422
06-12	11/27/1990	389
06-12	06/01/1991	386
06-06	03/28/1992	365
06-06	11/13/1991	343
06-12	03/28/1992	317
06-12	11/13/1991	306
06-07	11/27/1990	232
06C01P3	06/01/1991	225
06-07	11/13/1991	222
06C01P3	03/28/1992	210
06C01P3	11/13/1991	203
06-07	06/01/1991	168
06-07	03/28/1992	140
06-01A	11/13/1991	96.5
06-21	03/28/1992	86.9
06-01A	11/27/1990	86.7
06-21	11/27/1990	85.3
06-21	06/01/1991	82.3
06-01A	06/01/1991	75.8
06C04P2	03/16/1991	59.1
06C16P2	06/01/1991	57.4
06C16P2	03/28/1992	53.4
06C16P2	11/13/1991	50.9
06C04P2	06/01/1991	47.2

Detected Levels of **Magnesium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C04P2	03/28/1992	45.7
06C04P2	11/13/1991	42.7
06C16P3	06/01/1991	41.7
06-01A	03/28/1992	41.1
06C02P2	06/01/1991	39.5
06C02P2	03/16/1991	36.6
06C16P2	11/27/1990	34.9
06C02P2	11/13/1991	34.6
06C02P2	03/28/1992	33.6
06C16P3	11/27/1990	31.3
06C16P3	03/28/1992	29
06C12P2	03/16/1991	24
06C04	03/16/1991	23.1
06C12P2	06/01/1991	22.5
06C04	06/01/1991	22
06C16P3	11/13/1991	22
06C04	11/13/1991	21.9
06C10P2	06/01/1991	20.4
06C12P2	03/28/1992	20.2
06C10P2	03/16/1991	19
06C03P2	03/16/1991	18.6
06C04	03/28/1992	18.3
06C10P2	11/13/1991	17.8
06C03P2	06/01/1991	17.6
06C03P2	11/13/1991	17.4
06C12P2	11/13/1991	17.1

Detected Levels of **Magnesium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-19	11/13/1991	16.9
06C02	06/01/1991	16.3
06C10P2	03/28/1992	16.1
06C03P2	03/28/1992	15.7
06-20	11/13/1991	14.9
06C02	03/16/1991	14.8
06-23	11/13/1991	14.7
06-22	11/13/1991	14.3
06C15	11/13/1991	14.1
06C16	11/27/1990	13.9
06C12	03/16/1991	13.8
06C12	03/28/1992	13.5
06C15	06/01/1991	13.2
06C15	03/28/1992	13
06C02	11/13/1991	13
06-20	06/01/1991	12.9
06-14A	06/01/1991	12.7
06C12	11/13/1991	12.7
06C12	06/01/1991	12.5
06C18P2	11/27/1990	12.4
06-20	11/27/1990	12.2
06-15	06/01/1991	12
06-19	06/01/1991	11.9
06C18P2	03/28/1992	11.7
06C03	11/13/1991	11.7
06C01	11/13/1991	11.6

Detected Levels of **Magnesium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C03	06/01/1991	11.4
06-22	06/01/1991	11.3
06C15	11/27/1990	11.2
06C01	11/27/1990	11.1
06-14A	11/13/1991	11.1
06C11P2	06/01/1991	11.1
06C02	03/28/1992	11
06-18	11/13/1991	10.9
06C18P2	06/01/1991	10.9
06C03	03/16/1991	10.9
06-14A	03/16/1991	10.7
06-20	03/28/1992	10.7
06C11P2	11/13/1991	10.6
06C13P2	11/13/1991	10.4
06C01	03/28/1992	10.4
06C11P2	03/16/1991	10.3
06C01	06/01/1991	10.3
06-19	03/16/1991	10.3
06-22	11/27/1990	9.95
06C11	06/01/1991	9.92
06-22	03/28/1992	9.87
06C13P2	06/01/1991	9.85
06C03	03/28/1992	9.84
06C11P2	03/28/1992	9.77
06-15	11/27/1990	9.62
06C16	06/01/1991	9.56

Detected Levels of **Magnesium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-14A	03/28/1992	9.35
06-17	06/01/1991	9.09
06C11	03/16/1991	8.99
06C18P2	11/13/1991	8.83
06C10	06/01/1991	8.78
06C13P2	03/28/1992	8.62
06C06	03/16/1991	8.59
06C10	11/13/1991	8.5
06-18	11/27/1990	8.48
06C18	06/01/1991	8.27
06-23	11/27/1990	8.18
06-18	06/01/1991	8.1
06C10	03/16/1991	8.08
06-17	03/28/1992	8.02
06C13	11/27/1990	8.02
06-17	11/27/1990	7.78
06C18	11/13/1991	7.73
06C18	11/27/1990	7.66
06-23	06/01/1991	7.49
06-16	11/27/1990	7.49
06-19	03/28/1992	7.45
06-16	06/01/1991	7.4
06C06	06/01/1991	7.36
06C13P2	11/27/1990	7.3
06C18	03/28/1992	7.18
06-16	11/13/1991	7

Detected Levels of **Magnesium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C07	11/13/1991	6.99
06-15	03/28/1992	6.92
06-18	03/28/1992	6.81
06C06	11/13/1991	6.79
06C10	03/28/1992	6.79
06C14	11/13/1991	6.74
06C17	11/13/1991	6.68
06C13	06/01/1991	6.57
06C13	11/13/1991	6.38
06C15P2	06/01/1991	6.19
06C08P2	11/27/1990	6.1
06C17	06/01/1991	6.09
06C15P2	11/27/1990	6.03
06C14P3	03/28/1992	6.02
06C14	03/28/1992	6.01
06-16	03/28/1992	5.98
06C13	03/28/1992	5.96
06C08P2	11/13/1991	5.92
06C07	06/01/1991	5.86
06C17	11/27/1990	5.84
06C15P2	03/28/1992	5.76
06C08P2	03/28/1992	5.75
06C08P2	06/01/1991	5.74
06C06	03/28/1992	5.67
06C15P2	11/13/1991	5.6
06C07	03/16/1991	5.43

Detected Levels of **Magnesium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-17	11/13/1991	5.32
06C07	03/28/1992	5.2
06C14	06/01/1991	5.18
06C14	11/27/1990	4.96
06C17	03/28/1992	4.86
06C06P2	06/01/1991	4.85
06C09	11/27/1990	4.68
06C09	06/01/1991	4.34
06C09	11/13/1991	4.22
06C16	11/13/1991	4.06
06C06P2	11/13/1991	4.02
06C11	03/28/1992	3.86
06C09	03/28/1992	3.84
06C06P2	03/28/1992	3.73
06C16	03/28/1992	3.55
06C05	06/01/1991	3.33
06C14P2	11/13/1991	3.19
06C05	03/16/1991	3.17
06C05	11/13/1991	3.14
06C06P2	03/16/1991	2.89
06C14P2	11/27/1990	2.89
06C05	03/28/1992	2.64
06C14P2	03/28/1992	2.49
06C14P2	06/01/1991	2.25
06-23	03/28/1992	2.24
06C11	11/13/1991	2.1

Detected Levels of **Magnesium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C08	03/28/1992	0.298
06C08	11/13/1991	0.199

Detected Levels of **Manganese** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-06	03/28/1992	51.1
06-06	11/13/1991	48.1
06-06	06/01/1991	41.8
06-06	11/27/1990	37.7
06-12	11/27/1990	21.9
06-12	06/01/1991	16.5
06-07	11/13/1991	12.7
06-07	11/27/1990	12.4
06-12	03/28/1992	11.5
06-07	06/01/1991	10.4
06-12	11/13/1991	9.49
06-07	03/28/1992	8.19
06C01	06/01/1991	2.44
06C08P2	06/01/1991	1.98
06C01P3	03/28/1992	1.9
06C01P3	06/01/1991	1.29
06C01P3	11/13/1991	1.05
06C18P2	11/27/1990	0.864
06C08P2	03/28/1992	0.683
06-19	11/13/1991	0.677
06C08P2	11/13/1991	0.647
06-19	06/01/1991	0.64
06C08P2	11/27/1990	0.637
06C18P2	03/28/1992	0.635
06C18P2	06/01/1991	0.552
06C13P2	11/13/1991	0.414

Detected Levels of **Manganese** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C03	11/13/1991	0.405
06C03	03/16/1991	0.404
06C13P2	06/01/1991	0.388
06C03	03/28/1992	0.383
06C03	06/01/1991	0.364
06C13	11/27/1990	0.352
06C18P2	11/13/1991	0.349
06C13P2	03/28/1992	0.347
06C14	11/27/1990	0.315
06C12	03/28/1992	0.294
06C12	03/16/1991	0.267
06C12	06/01/1991	0.253
06C12	11/13/1991	0.24
06C14	11/13/1991	0.238
06-23	11/13/1991	0.204
06-21	03/28/1992	0.18
06C02	11/13/1991	0.16
06C18	06/01/1991	0.158
06C18	11/27/1990	0.153
06C04	11/13/1991	0.151
06C16P2	06/01/1991	0.15
06C11	03/16/1991	0.147
06-21	06/01/1991	0.146
06C14	06/01/1991	0.145
06C11	06/01/1991	0.145
06C02	03/16/1991	0.145

Detected Levels of **Manganese** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C02	06/01/1991	0.141
06C02	03/28/1992	0.136
06C18	11/13/1991	0.133
06C11P2	11/13/1991	0.13
06-19	03/16/1991	0.129
06C04	03/28/1992	0.126
06C18	03/28/1992	0.125
06C06	06/01/1991	0.125
06C14P3	03/28/1992	0.123
06C14	03/28/1992	0.122
06C06	03/28/1992	0.12
06C06	03/16/1991	0.113
06C01	03/28/1992	0.111
06C12P2	03/16/1991	0.11
06C16P2	11/13/1991	0.11
06C04	06/01/1991	0.108
06C15	11/27/1990	0.106
06C10	03/28/1992	0.102
06-16	11/13/1991	0.1
06-16	11/27/1990	0.099
06C11P2	03/16/1991	0.098
06-01A	06/01/1991	0.095
06-21	11/27/1990	0.095
06C09	11/27/1990	0.091
06C10	06/01/1991	0.089
06C11P2	03/28/1992	0.087

Detected Levels of **Manganese** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C10	03/16/1991	0.084
06C04	03/16/1991	0.081
06C10	11/13/1991	0.079
06C11P2	06/01/1991	0.078
06C06	11/13/1991	0.075
06C16P3	11/13/1991	0.073
06C04P2	11/13/1991	0.069
06C09	11/13/1991	0.068
06C09	06/01/1991	0.065
06-17	03/28/1992	0.064
06C09	03/28/1992	0.063
06C12P2	06/01/1991	0.063
06C01	11/13/1991	0.062
06C04P2	03/28/1992	0.06
06-01A	11/13/1991	0.055
06C13P2	11/27/1990	0.052
06-17	11/27/1990	0.051
06C12P2	03/28/1992	0.05
06C04P2	06/01/1991	0.049
06C16P2	11/27/1990	0.045
06-17	06/01/1991	0.044
06-01A	11/27/1990	0.043
06-22	11/13/1991	0.04
06-17	11/13/1991	0.038
06C12P2	11/13/1991	0.037
06C02P2	11/13/1991	0.036

Detected Levels of **Manganese** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C16P3	11/27/1990	0.034
06C03P2	03/16/1991	0.031
06-23	06/01/1991	0.03
06C01	11/27/1990	0.029
06-14A	11/13/1991	0.029
06C03P2	06/01/1991	0.028
06C08	03/28/1992	0.025
06C06P2	06/01/1991	0.025
06C16P2	03/28/1992	0.025
06C04P2	03/16/1991	0.024
06C14P2	11/27/1990	0.022
06C02P2	06/01/1991	0.019
06C14P2	11/13/1991	0.018
06C06P2	11/13/1991	0.017
06C16	11/27/1990	0.017
06-01A	03/28/1992	0.016
06C11	11/13/1991	0.015
06C05	03/16/1991	0.015
06C11	03/28/1992	0.015
06-16	03/28/1992	0.014
06C13	06/01/1991	0.014
06C16	06/01/1991	0.014
06-16	06/01/1991	0.014
06C10P2	11/13/1991	0.012
06-20	11/13/1991	0.011
06C14P2	06/01/1991	0.011

Detected Levels of **Manganese** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C02P2	03/16/1991	0.011
06C07	11/13/1991	0.01
06C16	11/13/1991	0.01
06-18	11/13/1991	0.01
06C08	06/01/1991	0.01
06C05	11/13/1991	0.01
06C03P2	03/28/1992	0.01
06C02P2	03/28/1992	0.01
06C03P2	11/13/1991	0.009
06C16P3	06/01/1991	0.009
06C17	11/13/1991	0.009
06C06P2	03/28/1992	0.009
06C15	11/13/1991	0.009
06-15	06/01/1991	0.009
06C05	06/01/1991	0.009
06C17	11/27/1990	0.008
06C15	06/01/1991	0.008
06C14P2	03/28/1992	0.008
06C06P2	03/16/1991	0.008
06C07	06/01/1991	0.007
06-23	11/27/1990	0.007
06C17	03/28/1992	0.007
06-23	03/28/1992	0.007
06C15P2	06/01/1991	0.007
06C17	06/01/1991	0.007
06-18	06/01/1991	0.006

Detected Levels of **Manganese** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-20	11/27/1990	0.006
06-18	11/27/1990	0.006
06C10P2	06/01/1991	0.006
06C15P2	11/13/1991	0.006
06-19	03/28/1992	0.006
06C13	11/13/1991	0.006
06-22	06/01/1991	0.005
06C16P3	03/28/1992	0.005
06C07	03/16/1991	0.005
06C05	03/28/1992	0.005

Detected Levels of **Nickel** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-07	11/13/1991	2
06-07	11/27/1990	1.98
06-07	06/01/1991	1.59
06-06	11/13/1991	1.26
06-07	03/28/1992	1.12
06-06	06/01/1991	1.02
06-06	03/28/1992	1.02
06-06	11/27/1990	0.951
06-12	11/27/1990	0.543
06-12	06/01/1991	0.345
06-12	11/13/1991	0.287
06-12	03/28/1992	0.259
06-20	03/28/1992	0.182
06C01P3	11/13/1991	0.112
06-23	11/13/1991	0.112
06C17	11/13/1991	0.112
06C01P3	03/28/1992	0.108
06C01P3	06/01/1991	0.101
06C08P2	03/28/1992	0.039
06C08P2	11/13/1991	0.03
06-17	11/27/1990	0.027
06C08P2	06/01/1991	0.026
06C08P2	11/27/1990	0.026
06-17	03/28/1992	0.019
06-17	11/13/1991	0.016
06-17	06/01/1991	0.014

Detected Levels of Nickel in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C14P2	06/01/1991	0.013
06-23	03/28/1992	0.013
06C10	06/01/1991	0.011
06C12P2	06/01/1991	0.01
06-01A	06/01/1991	0.01
06-19	06/01/1991	0.01
06-21	06/01/1991	0.01
06C17	03/28/1992	0.009
06C15	06/01/1991	0.008
06-15	06/01/1991	0.007
06C06P2	11/13/1991	0.007
06C08	03/28/1992	0.007
06C08	11/13/1991	0.007
06C01	06/01/1991	0.006
06C15P2	06/01/1991	0.006
06-14A	03/28/1992	0.006
06-20	11/13/1991	0.006
06C14	11/13/1991	0.006
06-01A	03/28/1992	0.006
06-21	03/28/1992	0.005
06C16	06/01/1991	0.005
06C14	06/01/1991	0.005
06C12	06/01/1991	0.005
06C16P2	06/01/1991	0.005
06-18	11/27/1990	0.005
06C17	11/27/1990	0.005

Detected Levels of **Nickel** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C14P2	11/13/1991	0.005

Detected Levels of **Potassium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-12	11/27/1990	91
06C01P3	03/28/1992	16.1
06C01P3	06/01/1991	15.8
06-06	11/13/1991	12.1
06-06	03/28/1992	11
06-12	11/13/1991	10.7
06C16P2	11/27/1990	10.6
06-06	11/27/1990	10.4
06-12	03/28/1992	9.81
06-06	06/01/1991	9.62
06-12	06/01/1991	8.47
06C16P2	06/01/1991	8.19
06C01P3	11/13/1991	6.41
06-19	03/28/1992	6.23
06C16P2	11/13/1991	6.14
06-17	03/28/1992	5.78
06C08	03/28/1992	5.58
06C12P2	03/28/1992	5.17
06-19	11/13/1991	4.9
06-19	06/01/1991	4.78
06C08	11/27/1990	4.73
06C04P2	03/28/1992	4.5
06C16P2	03/28/1992	4.44
06-17	11/13/1991	4.38
06-21	11/27/1990	4.06
06C12P2	06/01/1991	4.04

Detected Levels of **Potassium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-17	11/27/1990	3.88
06-21	03/28/1992	3.82
06C12P2	03/16/1991	3.7
06C04P2	11/13/1991	3.67
06C08	11/13/1991	3.5
06C08	06/01/1991	3.46
06-21	06/01/1991	3.44
06-19	03/16/1991	3.42
06-01A	11/13/1991	3.31
06C04P2	06/01/1991	3.23
06C12P2	11/13/1991	3.15
06-07	11/27/1990	3.12
06C07	11/13/1991	3.1
06-17	06/01/1991	3.07
06C04P2	03/16/1991	2.94
06-07	11/13/1991	2.86
06C18P2	06/01/1991	2.84
06C08P2	11/13/1991	2.76
06-14A	03/28/1992	2.74
06C08P2	11/27/1990	2.71
06C04	06/01/1991	2.67
06C07	03/28/1992	2.65
06-18	03/28/1992	2.61
06C04	03/16/1991	2.57
06C01	06/01/1991	2.44
06C18P2	03/28/1992	2.43

Detected Levels of **Potassium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C04	11/13/1991	2.42
06C16P3	11/13/1991	2.37
06C07	06/01/1991	2.32
06C06P2	03/28/1992	2.24
06C07	03/16/1991	2.22
06-15	06/01/1991	2.16
06C08P2	03/28/1992	2.14
06C06	06/01/1991	2.11
06C06	03/16/1991	2.1
06C06	11/13/1991	2.08
06C04	03/28/1992	2.06
06-07	03/28/1992	2.03
06C08P2	06/01/1991	1.98
06-14A	06/01/1991	1.93
06C16P3	06/01/1991	1.9
06-07	06/01/1991	1.81
06C03P2	11/13/1991	1.8
06C16	06/01/1991	1.76
06C01	03/28/1992	1.76
06C02P2	03/28/1992	1.75
06C13P2	03/28/1992	1.74
06C02P2	06/01/1991	1.73
06C11	03/28/1992	1.72
06-15	03/28/1992	1.68
06C06	03/28/1992	1.68
06C03P2	06/01/1991	1.62

Detected Levels of **Potassium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C15P2	11/13/1991	1.58
06C18	06/01/1991	1.58
06C02	03/28/1992	1.54
06C02	06/01/1991	1.53
06C10	03/28/1992	1.52
06C10	06/01/1991	1.52
06C16	11/13/1991	1.49
06C15	11/13/1991	1.48
06C02P2	11/13/1991	1.48
06C15	06/01/1991	1.46
06-14A	11/13/1991	1.44
06-22	11/13/1991	1.4
06-01A	06/01/1991	1.36
06C03P2	03/28/1992	1.35
06C15P2	06/01/1991	1.35
06-20	11/13/1991	1.32
06C16	03/28/1992	1.32
06C05	11/13/1991	1.24
06C12	11/13/1991	1.24
06C02	11/13/1991	1.24
06C03	06/01/1991	1.23
06C05	03/28/1992	1.18
06C06P2	11/13/1991	1.18
06C03	03/28/1992	1.17
06C05	06/01/1991	1.16
06C15	03/28/1992	1.16

Detected Levels of **Potassium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C03	11/13/1991	1.12
06-01A	03/28/1992	1.1
06C16P3	03/28/1992	1.1
06C15P2	03/28/1992	1.09
06-22	03/28/1992	1.06
06C18	11/13/1991	1.06
06C01	11/13/1991	1.05
06C12	06/01/1991	1.05
06C11	06/01/1991	1.04
06C09	11/13/1991	1.04
06C12	03/28/1992	1.04
06C14	11/13/1991	1.03
06C13P2	11/13/1991	1.02
06C06P2	06/01/1991	1.02
06C13	03/28/1992	0.918
06C18P2	11/13/1991	0.908
06C17	03/28/1992	0.892
06C13	11/13/1991	0.859
06C10	11/13/1991	0.83
06C11	11/13/1991	0.798
06C10P2	03/28/1992	0.782
06C10P2	11/13/1991	0.732
06C09	03/28/1992	0.724
06-20	03/28/1992	0.723
06C17	11/13/1991	0.702
06C14	03/28/1992	0.644

Detected Levels of **Potassium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C14P3	03/28/1992	0.63
06C11P2	03/28/1992	0.623
06-18	11/13/1991	0.57
06-23	11/13/1991	0.562
06C11P2	11/13/1991	0.542
06-16	03/28/1992	0.445
06-23	03/28/1992	0.433
06C14P2	11/13/1991	0.433
06-16	11/13/1991	0.42
06C14P2	03/28/1992	0.349
06C18	03/28/1992	0.25

Detected Levels of **Selenium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C12P2	06/01/1991	0.0029
06C17	06/01/1991	0.0029
06C01P3	06/01/1991	0.0028

Detected Levels of **Sodium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C11	11/13/1991	213
06C08	03/28/1992	204
06C08	11/13/1991	196
06C08	06/01/1991	177
06C05	11/13/1991	176
06C16	11/13/1991	174
06C06	11/13/1991	172
06C16	03/28/1992	168
06C07	11/13/1991	163
06C05	03/28/1992	161
06C05	03/16/1991	154
06C05	06/01/1991	153
06C07	06/01/1991	150
06C07	03/28/1992	149
06C06	03/28/1992	148
06C07	03/16/1991	148
06C16	06/01/1991	145
06-01A	11/13/1991	141
06C06	03/16/1991	138
06C08	11/27/1990	136
06C06	06/01/1991	136
06C16	11/27/1990	135
06-01A	11/27/1990	117
06C11	03/28/1992	117
06C04P2	11/13/1991	112
06C13	11/27/1990	110

Detected Levels of **Sodium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-01A	06/01/1991	108
06C04P2	06/01/1991	87.2
06C04P2	03/28/1992	82.6
06C13P2	06/01/1991	80.5
06-01A	03/28/1992	74.6
06C13P2	11/13/1991	74.4
06-06	11/27/1990	72.4
06-07	11/13/1991	71
06C04P2	03/16/1991	70.3
06C01P3	06/01/1991	69.8
06-07	11/27/1990	69.8
06C13P2	03/28/1992	68.9
06-06	06/01/1991	66.8
06C01P3	11/13/1991	65.1
06C01P3	03/28/1992	63.5
06-06	11/13/1991	55.7
06-07	06/01/1991	52.8
06-06	03/28/1992	52
06-07	03/28/1992	51.4
06C16P2	06/01/1991	50.8
06C16P2	11/13/1991	49.2
06C18	11/13/1991	48.3
06C18	03/28/1992	45.8
06C18	06/01/1991	44.5
06C04	11/13/1991	43.8
06C18	11/27/1990	43.1

Detected Levels of **Sodium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-12	11/27/1990	41.8
06-12	06/01/1991	40.4
06C04	06/01/1991	38.7
06-12	11/13/1991	37.9
06C04	03/16/1991	37.2
06C04	03/28/1992	36.2
06-19	11/13/1991	35.2
06-20	11/13/1991	35.1
06-20	06/01/1991	34.5
06C16P2	11/27/1990	34
06C16P2	03/28/1992	32.2
06-12	03/28/1992	31.7
06C18P2	11/27/1990	31.6
06-20	11/27/1990	31.1
06C18P2	06/01/1991	31
06C18P2	03/28/1992	28.5
06-20	03/28/1992	28.4
06C02	11/13/1991	25.5
06C18P2	11/13/1991	25
06C02	03/28/1992	24.3
06-21	11/27/1990	23.1
06-21	06/01/1991	21.6
06C13P2	11/27/1990	21.4
06-21	03/28/1992	20.5
06-19	06/01/1991	20
06C09	11/13/1991	20

Detected Levels of **Sodium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C03	11/13/1991	19.5
06C13	06/01/1991	19.4
06C03	06/01/1991	18.7
06C03P2	11/13/1991	17.8
06C02	06/01/1991	17.7
06C13	11/13/1991	17.6
06C03	03/16/1991	17.4
06C03	03/28/1992	17.3
06C09	06/01/1991	17.3
06C09	11/27/1990	17.3
06-18	11/27/1990	16.4
06-18	11/13/1991	15.9
06C09	03/28/1992	15.7
06C15	11/13/1991	15.6
06-18	06/01/1991	15.6
06C01	11/27/1990	15.5
06C13	03/28/1992	15.4
06C17	11/27/1990	15.3
06C02	03/16/1991	15.3
06C03P2	06/01/1991	15.2
06C03P2	03/28/1992	15
06C01	11/13/1991	14.9
06-19	03/16/1991	14.5
06C03P2	03/16/1991	14.5
06C01	03/28/1992	14.5
06C17	06/01/1991	14.4

Detected Levels of **Sodium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-18	03/28/1992	14.4
06C11	06/01/1991	13
06C17	11/13/1991	12.8
06C01	06/01/1991	12.7
06C14	11/13/1991	12.3
06C06P2	11/13/1991	12.1
06C15	06/01/1991	11.6
06C15	11/27/1990	11.3
06C06P2	03/28/1992	11.2
06C15	03/28/1992	10.7
06C16P3	11/13/1991	10.3
06C06P2	06/01/1991	9.87
06C14P3	03/28/1992	9.85
06C14	03/28/1992	9.84
06C17	03/28/1992	9.8
06C16P3	11/27/1990	9.41
06-16	03/28/1992	8.69
06C15P2	11/13/1991	8.61
06C12P2	06/01/1991	8.52
06C11	03/16/1991	8.38
06C12P2	03/28/1992	8.37
06C14	11/27/1990	8.37
06C06P2	03/16/1991	8.36
06-16	06/01/1991	8.26
06C14	06/01/1991	8.18
06C12P2	11/13/1991	8.15

Detected Levels of **Sodium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-16	11/27/1990	8.14
06C16P3	06/01/1991	7.8
06C12	11/13/1991	7.68
06C12	03/28/1992	7.65
06-16	11/13/1991	7.59
06C12	06/01/1991	7.49
06-19	03/28/1992	7.24
06C12P2	03/16/1991	7.17
06C08P2	11/13/1991	6.73
06C14P2	11/13/1991	6.63
06C16P3	03/28/1992	6.43
06C10P2	06/01/1991	5.84
06C10	06/01/1991	5.57
06-23	11/13/1991	5.57
06C02P2	11/13/1991	5.43
06C12	03/16/1991	5.39
06C02P2	06/01/1991	5.27
06C14P2	11/27/1990	5.12
06C08P2	11/27/1990	5.09
06-23	11/27/1990	5.05
06-23	06/01/1991	4.95
06C08P2	03/28/1992	4.69
06C08P2	06/01/1991	4.68
06C10P2	11/13/1991	4.54
06C10	11/13/1991	4.52
06C02P2	03/16/1991	4.5

Detected Levels of **Sodium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C10	03/28/1992	4.48
06C15P2	11/27/1990	4.4
06C10P2	03/16/1991	4.32
06C02P2	03/28/1992	4.31
06-14A	11/13/1991	4.25
06-22	11/27/1990	4.23
06-22	11/13/1991	4.19
06C15P2	03/28/1992	4.06
06C14P2	03/28/1992	4.04
06C14P2	06/01/1991	3.97
06C15P2	06/01/1991	3.84
06-22	06/01/1991	3.82
06C10	03/16/1991	3.75
06-14A	03/28/1992	3.58
06-14A	06/01/1991	3.56
06C10P2	03/28/1992	3.41
06-22	03/28/1992	3.36
06-17	03/28/1992	3.11
06-23	03/28/1992	3.08
06-15	03/28/1992	2.98
06-14A	03/16/1991	2.87
06C11P2	11/13/1991	2.77
06-17	11/13/1991	2.65
06C11P2	06/01/1991	2.41
06-17	11/27/1990	2.36
06-15	11/27/1990	2.26

Detected Levels of **Sodium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C11P2	03/16/1991	2.04
06C11P2	03/28/1992	1.97
06-17	06/01/1991	1.91
06-15	06/01/1991	1.9

Detected Levels of **Thallium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-07	11/27/1990	0.0029
06-16	11/13/1991	0.0022

Detected Levels of **Vanadium** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-14A	11/13/1991	0.026
06-12	03/28/1992	0.019
06-20	11/13/1991	0.017
06C10P2	11/13/1991	0.017
06-23	11/13/1991	0.015
06C18	11/13/1991	0.015
06-07	03/28/1992	0.014
06-07	06/01/1991	0.013
06C08	11/13/1991	0.013
06-16	11/13/1991	0.013
06-22	11/13/1991	0.011
06C12P2	11/13/1991	0.011
06-19	11/13/1991	0.011
06C18P2	11/13/1991	0.01
06C08	06/01/1991	0.005

Detected Levels of **Zinc** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06-07	11/27/1990	3
06-07	11/13/1991	2.74
06-07	06/01/1991	2.61
06-07	03/28/1992	1.82
06-06	11/13/1991	1.44
06-12	03/28/1992	1.35
06-06	03/28/1992	1.17
06-06	06/01/1991	0.778
06C09	06/01/1991	0.769
06-06	11/27/1990	0.521
06-12	11/27/1990	0.392
06C16	11/27/1990	0.144
06-12	06/01/1991	0.13
06C18P2	11/27/1990	0.101
06C08	06/01/1991	0.07
06C01P3	11/13/1991	0.067
06C08	03/28/1992	0.058
06C08P2	06/01/1991	0.046
06C01	11/27/1990	0.043
06-19	11/13/1991	0.041
06C15P2	11/27/1990	0.041
06C12P2	06/01/1991	0.039
06C01P3	03/28/1992	0.037
06-18	11/27/1990	0.036
06-16	11/27/1990	0.035
06C08P2	11/13/1991	0.034

Detected Levels of **Zinc** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C01P3	06/01/1991	0.03
06C14P2	11/13/1991	0.028
06-17	11/27/1990	0.027
06C08P2	03/28/1992	0.026
06C08P2	11/27/1990	0.024
06C14	06/01/1991	0.023
06-15	06/01/1991	0.021
06C01	06/01/1991	0.02
06-17	03/28/1992	0.02
06C04P2	03/16/1991	0.019
06-17	06/01/1991	0.019
06-17	11/13/1991	0.019
06-15	11/27/1990	0.018
06C18P2	06/01/1991	0.016
06-14A	06/01/1991	0.016
06C13	11/27/1990	0.015
06C17	11/27/1990	0.015
06C16P2	03/28/1992	0.015
06C07	03/16/1991	0.014
06-16	06/01/1991	0.012
06-22	06/01/1991	0.012
06-15	03/28/1992	0.012
06-16	03/28/1992	0.012
06C04	03/16/1991	0.011
06-23	06/01/1991	0.01
06C05	06/01/1991	0.01

Detected Levels of **Zinc** in Demolition Area/Old Rifle Range Wells		
WELL NUMBER	DATE SAMPLED	AMOUNT DETECTED (mg/l)
06C14	11/13/1991	0.01
06-14A	03/28/1992	0.01
06C17	06/01/1991	0.009
06C13P2	06/01/1991	0.008
06-19	06/01/1991	0.008
06C18	06/01/1991	0.008
06C16	11/13/1991	0.007
06C11P2	06/01/1991	0.007
06C11	06/01/1991	0.007
06C10P2	06/01/1991	0.007
06C03	06/01/1991	0.007
06C15	06/01/1991	0.007
06C15	11/13/1991	0.007
06C15P2	06/01/1991	0.006
06C14P2	06/01/1991	0.006
06C06	03/16/1991	0.006
06-23	11/27/1990	0.005
06C08	11/27/1990	0.005
06C16P3	11/13/1991	0.005
06C15P2	11/13/1991	0.005

Appendix I
Excerpts from "USEPA Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities" (EPA/530-SW-89-026), April 1989

SECTION 4

CHOOSING A STATISTICAL METHOD

This section discusses the choice of an appropriate statistical method. Section 4.1 includes a flowchart to guide this selection. Section 4.2 contains procedures to test the distributional assumptions of statistical methods and Section 4.3 has procedures to test specifically for equality of variances.

The choice of an appropriate statistical test depends on the type of monitoring and the nature of the data. The proportion of values in the data set that are below detection is one important consideration. If most of the values are below detection, a test of proportions is suggested.

One set of statistical procedures is suggested when the monitoring consists of comparisons of water sample data from the background (hydraulically upgradient) well with the sample data from compliance (hydraulically downgradient) wells. The recommended approach is analysis of variance (ANOVA). Also, for a facility with limited amounts of data, it is advisable to initially use the ANOVA method of data evaluation, and later, when sufficient amounts of data are collected, to change to a tolerance interval or a control chart approach for each compliance well. However, alternate approaches are allowed. These include adjustments for seasonality, use of tolerance intervals, and use of prediction intervals. These methods are discussed in Section 5.

When the monitoring objective is to compare the concentration of a hazardous constituent to a fixed level such as a maximum concentration limit (MCL), a different type of approach is needed. This type of comparison commonly serves as a basis of compliance monitoring. Control charts may be used, as may tolerance or confidence intervals. Methods for comparison with a fixed level are presented in Section 6.

When a long history of data from each well is available, intra-well comparisons are appropriate. That is, the data from a single uncontaminated well are compared over time to detect shifts in concentration, or gradual trends in concentration that may indicate contamination. Methods for this situation are presented in Section 7.

4.1 FLOWCHARTS--OVERVIEW AND USE

The selection and use of a statistical procedure for ground-water monitoring is a detailed process. Because a single flowchart would become too complicated for easy use, a series of flowcharts has been developed. These flowcharts are found at the beginning of each section and are intended to

SECTION 5

BACKGROUND WELL TO COMPLIANCE WELL COMPARISONS

There are many situations in ground-water monitoring that call for the comparison of data from different wells. The assumption is that a set of uncontaminated wells can be defined. Generally these are background wells and have been sited to be hydraulically upgradient from the regulated unit. A second set of wells are sited hydraulically downgradient from the regulated unit and are otherwise known as compliance wells. The data from these compliance wells are compared to the data from the background wells to determine whether there is any evidence of contamination in the compliance wells that would presumably result from a release from the regulated unit.

If the owner or operator of a hazardous waste facility does not have reason to suspect that the test assumptions of equal variance or normality will be violated, then he or she may simply choose the parametric analysis of variance as a default method of statistical analysis. In the event that this method indicates a statistically significant difference between the groups being tested, then the test assumptions should be evaluated.

This situation, where the relevant comparison is between data from background wells and data from compliance wells, is the topic of this section. Comparisons between background well data and compliance well data may be called for in all phases of monitoring. This type of comparison is the general case for detection monitoring. It is also the usual approach for compliance monitoring if the compliance limits are determined by the background well constituent concentration levels. Compounds that are present in background wells (e.g., naturally occurring metals) are most appropriately evaluated using this comparison method.

Section 5.1 provides a flowchart and overview for the selection of methods for comparison of background well and compliance well data. Section 5.2 contains analysis of variance methods. These provide methods for directly comparing background well data to compliance well data. Section 5.3 describes a tolerance interval approach, where the background well data are used to define the tolerance limits for comparison with the compliance well data. Section 5.4 contains an approach based on prediction intervals, again using the background well data to determine the prediction interval for comparison with the compliance well data. Methods for comparing data to a fixed compliance limit (an MCL or ACL) will be described in Section 6.

5.1 SUMMARY FLOWCHART FOR BACKGROUND WELL TO COMPLIANCE WELL COMPARISONS

Figure 5-1 is a flowchart to aid in selecting the appropriate statistical procedure for background well to compliance well comparisons. The first step is to determine whether most of the observations are quantified (that is, above the detection limits) or not. Generally, if more than 50% of the observations are below the detection limit (as might be the case with detection or compliance monitoring for volatile organics) then the appropriate comparison is a test of proportions. The test of proportions compares the proportion of detected values in the background wells to those in the compliance wells. See Section 8.1 for a discussion of dealing with data below the detection limit.

If the proportion of detected values is 50% or more, then an analysis of variance procedure is the first choice. Tolerance limits or prediction intervals are acceptable alternate choices that the user may select. The analysis of variance procedures give a more thorough picture of the situation at the facility. However, the tolerance limit or prediction interval approach is acceptable and requires less computation in many situations.

Figure 5-2 is a flowchart to guide the user if a tolerance limits approach is selected. The first step in using Figure 5-2 is to determine whether the facility is in detection monitoring. If so, much of the data may be below the detection limit. See Section 8.1 for a discussion of this case, which may call for consulting a statistician. If most of the data are quantified, then follow the flow chart to determine if normal tolerance limits can be used. If the data are not normal (as determined by one of the procedures in Section 4.2), then the logarithm transformation may be done and the transformed data checked for normality. If the log data are normal, the lognormal tolerance limit should be used. If neither the original data nor the log-transformed data are normal, seek consultation with a professional statistician.

If a prediction interval is selected as the method of choice, see Section 5.4 for guidance in performing the procedure.

If analysis of variance is to be used, then continue with Figure 5-1 to select the specific method that is appropriate. A one-way analysis of variance is recommended. If the data show evidence of seasonality (observed, for example, in a plot of the data over time), a trend analysis or perhaps a two-way analysis of variance may be the appropriate choice. These instances may require consultation with a professional statistician.

If the one-way analysis of variance is appropriate, the computations are performed, then the residuals are checked to see if they meet the assumptions of normality and equal variance. If so, the analysis concludes. If not, a logarithm transformation may be tried and the residuals from the analysis of variance on the log data are checked for assumptions. If these still do not adequately satisfy the assumptions, then a one-way nonparametric analysis of variance may be done, or professional consultation may be sought.

BACKGROUND WELL TO COMPLIANCE WELL COMPARISONS

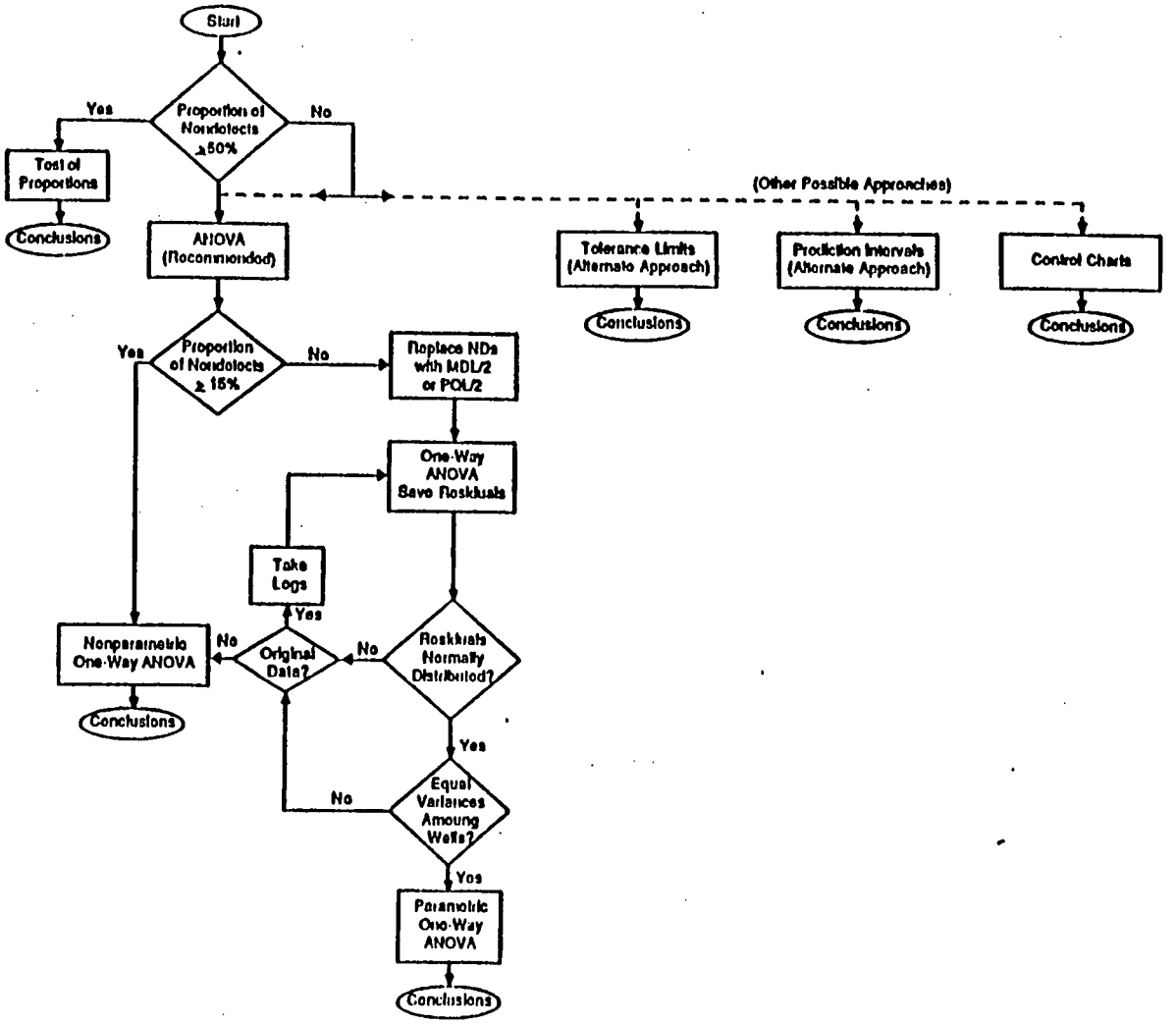

Figure 5-1. Background well to c lance well comparisons.

Tolerance Limits: Alternate Approach to Background Well To Compliance Well Comparisons

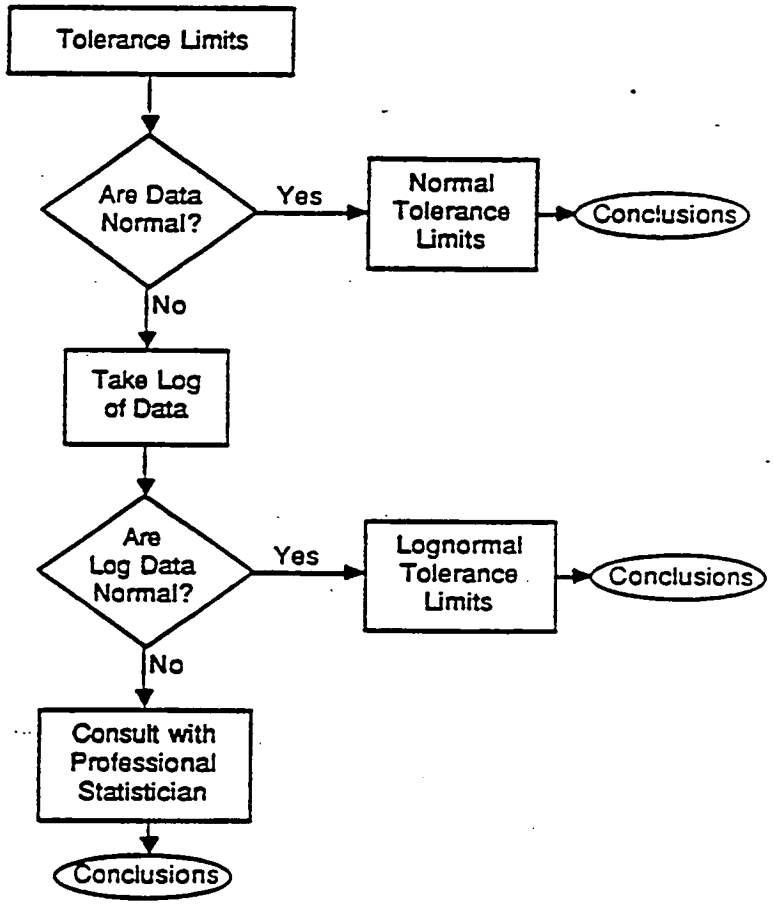

Figure 5-2. Tolerance limits: alternate approach to background well to compliance well comparisons.

5-4

5.2 ANALYSIS OF VARIANCE

If contamination of the ground water occurs from the waste disposal facility and if the monitoring wells are hydraulically upgradient and hydraulically downgradient from the site, then contamination is unlikely to change the levels of a constituent in all wells by the same amount. Thus, contamination from a disposal site can be seen as differences in average concentration among wells, and such differences can be detected by analysis of variance.

Analysis of variance (ANOVA) is the name given to a wide variety of statistical procedures. All of these procedures compare the means of different groups of observations to determine whether there are any significant differences among the groups, and if so, contrast procedures may be used to determine where the differences lie. Such procedures are also known in the statistical literature as general linear model procedures.

Because of its flexibility and power, analysis of variance is the preferred method of statistical analysis when the ground-water monitoring is based on a comparison of background and compliance well data. The ANOVA is especially useful in situations where sample sizes are small, as is the case during the initial phases of ground-water monitoring. Two types of analysis of variance are presented: parametric and nonparametric one-way analyses of variance. Both methods are appropriate when the only factor of concern is the different monitoring wells at a given sampling period.

The hypothesis tests with parametric analysis of variance usually assume that the errors (residuals) are normally distributed with equal variance. These assumptions can be checked by saving the residuals (the difference between the observations and the values predicted by the analysis of variance model) and using the tests of assumptions presented in Section 4. Since the data will generally be concentrations and since concentration data are often found to follow the lognormal distribution, the log transformation is suggested if substantial violations of the assumptions are found in the analysis of the original concentration data. If the residuals from the transformed data do not meet the parametric ANOVA requirements, then nonparametric approaches to analysis of variance are available using the ranks of the observations. A one-way analysis of variance using the ranks is presented in Section 5.2.2.

When several sampling periods have been used and it is important to consider the sampling periods as a second factor, then two-way analysis of variance, parametric or nonparametric, is appropriate. This would be one way to test for and adjust the data for seasonality. Also, trend analysis (e.g., time series) may be used to identify seasonality in the data set. If necessary, data that exhibit seasonal trends can be adjusted. Usually, however, seasonal variation will affect all wells at a facility by nearly the same amount, and in most circumstances, corrections will not be necessary. Further, the effects of seasonality will be substantially reduced by simultaneously comparing aggregate compliance well data to background well data. Situations that require an analysis procedure other than a one-way ANOVA should be referred to a professional statistician.

5.2.1 One-Way Parametric Analysis of Variance

In the context of ground-water monitoring, two situations exist for which a one-way analysis of variance is most applicable:

* Data for a water quality parameter are available from several wells but for only one time period (e.g., monitoring has just begun).

* Data for a water quality parameter are available from several wells for several time periods. However, the data do not exhibit seasonality.

In order to apply a parametric one-way analysis of variance, a minimum number of observations is needed to give meaningful results. At least $p \geq 2$ groups are to be compared (i.e., two or more wells). It is recommended that each group (here, wells) have at least three observations and that the total sample size, N, be large enough so that $N-p \geq 5$. A variety of combinations of groups and number of observations in groups will fulfill this minimum. One sampling interval with four independent samples per well and at least three wells would fulfill the minimum sample size requirements. The wells should be spaced so as to maximize the probability of intercepting a plume of contamination. The samples should be taken far enough apart in time to guard against autocorrelation.

PURPOSE

One-way analysis of variance is a statistical procedure to determine whether differences in mean concentrations among wells, or groups of wells, are statistically significant. For example, is there significant contamination of one or more compliance wells as compared to background wells?

PROCEDURE

Suppose the regulated unit has p wells and that n_i data points (concentrations of a constituent) are available for the ith well. These data can be from either a single sampling period or from more than one. In the latter case, the user could check for seasonality before proceeding by plotting the data over time. Usually the computation will be done on a computer using a commercially available program. However, the procedure is presented so that computations can be done using a desk calculator, if necessary.

Step 1. Arrange the $N = \sum_{i=1}^{p} n_i$ data points in a data table as follows

(N is the total sample size at this specific regulated unit):

	Observations	Well Total (from Step 1)	Well Mean (from Step 2)
Well No. 1	X_{11}.....X_{1n_i}	$X_{1.}$	$\bar{X}_{1.}$
2	.		
3	.		
.	.		
u	X_{u1}	$X_{u.}$	$\bar{X}_{u.}$
.	.		
.	.		
p	X_{p1}.....X_{pn_p}	$X_{p.}$	$\bar{X}_{p.}$
		$X_{..}$	$\bar{X}_{..}$

Step 2. Compute well totals and well means as follows:

$$X_{i.} = \sum_{j=1}^{n_i} X_{ij} \text{ , total of all } n_i \text{ observations at well } i$$

$$\bar{X}_{i.} = \frac{1}{n_i} X_{i.} \text{ , average of all } n_i \text{ observations at well } i$$

$$X_{..} = \sum_{i=1}^{p} \sum_{j=1}^{n_i} X_{ij} \text{ , grand total of all } n_i \text{ observations}$$

$$\bar{X}_{..} = \frac{1}{N} X_{..} \text{ , grand mean of all observations}$$

These totals and means are shown in the last two columns of the table above.

Step 3. Compute the sum of squares of differences <u>between</u> well means and the grand mean:

$$SS_{Wells} = \sum_{i=1}^{p} n_i (\bar{X}_{i.} - \bar{X}_{..})^2 = \sum_{i=1}^{p} \frac{1}{n_i} X_{i.}^2 - \frac{1}{N} X_{..}^2$$

(The formula on the far right is usually most convenient for calculation.) This sum of squares has (p-1) degrees of freedom associated with it and is a measure of the variability <u>between</u> wells.

Step 4. Compute the corrected total sum of squares

$$SS_{Total} = \sum_{i=1}^{p} \sum_{j=1}^{n_i} (X_{ij} - \bar{X}_{..})^2 = \sum_{i=1}^{p} \sum_{j=1}^{n_i} X_{ij}^2 - (X_{..}^2/N)$$

(The formula on the far right is usually most convenient for calculation.) This sum of squares has (N-1) degrees of freedom associated with it and is a measure of the variability in the whole data set.

Step 5. Compute the sum of squares of differences of observations within wells from the well means. This is the sum of squares due to error and is obtained by subtraction:

$$SS_{Error} = SS_{Total} - SS_{Wells}$$

It has associated with it (N-p) degrees of freedom and is a measure of the variability within wells.

Step 6. Set up the ANOVA table as shown below in Table 5-1. The sums of squares and their degree of freedom were obtained from Steps 3 through 5. The mean square quantities are simply obtained by dividing each sum of squares by its corresponding degrees of freedom.

TABLE 5-1. ONE-WAY PARAMETRIC ANOVA TABLE

Source of Variation	Sums of squares	Degrees of freedom	Mean squares	F
Between wells	SS_{Wells}	p-1	$MS_{Wells} = SS_{Wells}/(p-1)$	$F = \frac{MS_{Wells}}{MS_{Error}}$
Error (within wells)	SS_{Error}	N-p	$MS_{Error} = SS_{Error}/(N-p)$	
Total	SS_{Total}	N-1		

Step 7. To test the hypothesis of equal means for all p wells, compute $F = MS_{Wells}/MS_{Error}$ (last column in Table 5-1). Compare this statistic to the tabulated F statistic with (p-1) and (N-p) degrees of freedom (Table 2, Appendix B) at the 5% significance level. If the calculated F value exceeds the tabulated value, reject the hypothesis of equal well means. Otherwise,

conclude that there is no significant difference between the concentrations at the p wells and thus no evidence of well contamination.

In the case of a significant F (calculated F greater than tabulated F in Step 7), the user will conduct the next few steps to determine which compliance well(s) is (are) contaminated. This will be done by comparing each compliance well with the background well(s). Concentration differences between a pair of background wells and compliance wells or between a compliance well and a set of background wells are called contrasts in the ANOVA and multiple comparisons framework.

Step 8. Determine if the significant F is due to differences between background and compliance wells (computation of Bonferroni t-statistics).

Assume that of the p wells, u are background wells and m are compliance wells (thus u + m = p). Then m differences--m compliance wells each compared with the average of the background wells--need to be computed and tested for statistical significance. If there are more than five downgradient wells, the individual comparisons are done at the comparisonwise significance level of 1%, which may make the experimentwise significance level greater than 5%.

- Obtain the total sample size of all u background wells.

$$n_b = \sum_{i=1}^{u} n_i$$

- Compute the average concentration from the u background wells.

$$\overline{X}_b = \frac{1}{n_b} \sum_{i=1}^{u} \overline{X}_{i.}$$

- Compute the m differences between the average concentrations from each compliance well and the average background wells.

$$\overline{X}_{i.} - \overline{X}_b , \quad i = 1, \ldots, m$$

- Compute the standard error of each difference as

$$SE_i = [MS_{Error} (1/n_b + 1/n_i)]^{\frac{1}{2}}$$

where MS_{Error} is determined from the ANOVA table (Table 5-1) and n_i is the number of observations at well i.

- Obtain the t-statistic $t = t_{(N-p),(1-\alpha/m)}$ from Bonferroni's t-table (Table 3, Appendix B) with $\alpha = 0.05$ and (N-p) degrees of freedom.

- Compute the m quantities $D_i = SE_i \times t$ for each compliance well i. If m > 5 use the entry for $t_{(N-p),(1-0.01)}$. That is, use the entry at m = 5.

Step 9. Compute the residuals. The residuals are the differences between each observation and its predicted value according to the particular analysis of variance model under consideration. In the case of a one-way analysis of variance, the predicted value for each observation is the group (that is, well) mean. Thus the residuals are given by:

$$R_{ij} = X_{ij} - \bar{X}_{i.}$$

The residuals, R_{ij} can be used to check for departures from normality as described in Section 4.2.

NOTE

The data can also be checked for equality of variances as described in Section 4.3. The last column of Table 5-2 contains the standard deviations estimated for each well, the S_i used in Bartlett's test.

INTERPRETATION

If the difference $\bar{X}_{i.} - \bar{X}_b$ exceeds the value D_i, conclude that the ith compliance well has significantly higher concentrations than the average background wells. Otherwise conclude that the well is not contaminated. This exercise needs to be performed for each of the m compliance wells individually. The test is designed so that the overall experimentwise error is 5% if there are no more than five compliance wells.

In some cases it may be appropriate to implement the ANOVA procedure independently for an individual regulated unit. If there are more than five wells at the compliance point and the waste management area consists of more than one regulated unit, then the data may be evaluated separately for each regulated unit if approved by the Regional Administrator or State Director. In many cases the monitoring well system design and site hydrogeology will determine if this approach is appropriate for a particular regulated unit. This will help reduce the number of compliance wells used in a multiple well comparisons procedure.

If a single regulated unit has more than five wells at the point of compliance, refer to the caveat in the cautionary note.

CAUTIONARY NOTE

Should the regulated unit consist of more than five compliance wells, then the Bonferroni t-test should be modified by doing the individual comparisons at the 1% level so that the Part 264 Subpart F regulatory requirement

pursuant to §264.97(i)(2) will be met. Alternately, a different analysis of contrasts, such as Scheffe's, may be used. The more advanced user is referred to the second reference below for a discussion of multiple comparisons.

REFERENCES

Johnson, Norman L., and F. C. Leone. 1977. *Statistics and Experimental Design in Engineering and the Physical Sciences.* Vol. II, Second Edition, John Wiley and Sons, New York.

Miller, Ruppert G., Jr. 1981. *Simultaneous Statistical Inference.* Second Edition, Springer-Verlag, New York.

EXAMPLE

Four lead concentration values at each of six wells are given in Table 5-2 below. The wells consist of u=2 background and m=4 compliance wells. (The values in Table 5-2 are actually the natural logarithms of the original lead concentrations.)

Step 1. Arrange the 4 x 6 = 24 observations in a data table as follows:

TABLE 5-2. EXAMPLE DATA FOR ONE-WAY PARAMETRIC ANALYSIS OF VARIANCE

		Natural log of Pb concentrations(μg/L)						
Well No.	Date:	Jan 1	Feb 1	Mar 1	Apr 1	Well total ($X_{i.}$)	Well mean ($\bar{X}_{i.}$)	Well std. dev.
1	Background wells	4.06	3.99	3.40	3.83	15.28	3.82	0.296
2		3.83	4.34	3.47	4.22	15.86	3.97	0.395
3	Compliance wells	5.61	5.14	3.47	3.97	18.19	4.55	0.996 (max)
4		3.53	4.54	4.26	4.42	16.75	4.19	0.453
5		3.91	4.29	5.50	5.31	19.01	4.75	0.773
6		5.42	5.21	5.29	5.08	21.00	5.25	0.143 (min)
						$X_{..}$ = 106.09	$\bar{X}_{..}$ = 4.42	

Step 2. The calculations are shown on the right-hand side of the data table above. Sample standard deviations have been computed also.

Step 3. Compute the between-well sum of squares.

$$SS_{Wells} = \frac{1}{4}(15.28^2 + \ldots + 21.01^2) - \frac{1}{24} \times 106.08^2 = 5.75$$

with [6 (wells) - 1] = 5 degrees of freedom.

Step 4. Compute the corrected total sum of squares.

$$SS_{Total} = 4.06^2 + 3.99^2 + \ldots + 5.08^2 - \frac{1}{24} \times 106.08^2 = 11.92$$

with [24 (observations) - 1] = 23 degrees of freedom.

Step 5. Obtain the within-well or error sum of squares by subtraction.

$$SS_{Error} = 11.92 - 5.75 = 6.17$$

with [24 (observations) - 6 (wells)] = 18 degrees of freedom.

Step 6. Set up the one-way ANOVA as in Table 5-3 below:

TABLE 5-3. EXAMPLE COMPUTATIONS IN ONE-WAY PARAMETRIC ANOVA TABLE

Source of variation	Sums of squares	Degrees of freedom	Mean squares	F
Between wells	5.76	5	5.76/5 = 1.15	1.15/0.34 = 3.38
Error (within wells)	6.18	18	6.18/18 = 0.34	
Total	11.94	23		

Step 7. The calculated F statistic is 3.38. The tabulated F value with 5 and 18 degrees of freedom at the $\alpha = 0.05$ level is 2.77 (Table 2, Appendix B). Since the calculated value exceeds the tabulated value, the hypothesis of equal well means must be rejected, and *post hoc* comparisons are necessary.

Step 8. Computation of Bonferroni t-statistics.

- Note that there are four compliance wells, so m = 4 comparisons will be made
- $n_b = 8$ total number of samples in background wells
- $\bar{X}_b = 3.89$ average concentration of background wells

- Compute the differences between the four compliance wells and the average of the two background wells:

  $\bar{X}_{3.} - \bar{X}_b = 4.55 - 3.89 = 0.66$

  $\bar{X}_{4.} - \bar{X}_b = 4.19 - 3.89 = 0.3$

  $\bar{X}_{5.} - \bar{X}_b = 4.75 - 3.89 = 0.86$

  $\bar{X}_{6.} - \bar{X}_b = 5.25 - 3.89 = 1.36$

- Compute the standard error of each difference. Since the number of observations is the same for all compliance wells, the standard errors for the four differences will be equal.

  $$SE_i = [0.34\ (1/8 + 1/4)]^{1/2} = 0.357 \text{ for } i = 3, \ldots, 6$$

- From Table 3, Appendix B, obtain the critical t with (24 - 6) = 18 degrees of freedom, m = 4, and for $\alpha = 0.05$. The approximate value is 2.43 obtained by linear interpolation between 15 and 20 degrees of freedom.

- Compute the quantities D_i. Again, due to equal sample sizes, they will all be equal.

  $$D_i = SE_i \times t = 0.357 \times 2.43 = \underline{0.868} \text{ for } i = 3, \ldots, 6$$

Step 9. Compute the residuals using the data given in Table 5-2.

Residuals for Well 1:

$R_{11} = 4.06 - 3.82 = 0.24$
$R_{12} = 3.99 - 3.82 = 0.17$
$R_{13} = 3.40 - 3.82 = -0.42$
$R_{14} = 3.83 - 3.82 = 0.01$

Residuals for Well 2:

$R_{21} = 3.83 - 3.97 = -0.14$
$R_{22} = 4.34 - 3.97 = 0.37$
$R_{23} = 3.47 - 3.97 = -0.50$
$R_{24} = 4.22 - 3.97 = 0.25$

Residuals for Well 3:

$R_{31} = 5.61 - 4.55 = 1.06$
$R_{32} = 5.14 - 4.55 = 0.59$

$R_{33} = 3.47 - 4.55 = -1.08$
$R_{34} = 3.97 - 4.55 = -0.58$

Residuals for Well 4:

$R_{41} = 3.53 - 4.19 = -0.66$
$R_{42} = 4.54 - 4.19 = 0.35$
$R_{43} = 4.26 - 4.19 = 0.07$
$R_{44} = 4.42 - 4.19 = 0.23$

Residuals for Well 5:

$R_{51} = 3.91 - 4.75 = -0.84$
$R_{52} = 4.29 - 4.75 = -0.46$
$R_{53} = 5.50 - 4.75 = 0.75$
$R_{54} = 5.31 - 4.75 = 0.56$

Residuals for Well 6:

$R_{61} = 5.42 - 5.25 = 0.17$
$R_{62} = 5.21 - 5.25 = -0.04$
$R_{63} = 5.29 - 5.25 = 0.04$
$R_{64} = 5.08 - 5.25 = -0.17$

INTERPRETATION

The F test was significant at the 5% level. The Bonferroni multiple comparisons procedure was then used to determine for which wells there was statistically significant evidence of contamination. Of the four differences $\bar{X}_{i.} - \bar{X}_b$, only $\bar{X}_{6.} - \bar{X}_b = \underline{1.36}$ exceeds the critical value of 0.868. From this it is concluded that there is significant evidence of contamination at Well 6. Well 5 is right on the boundary of significance. It is likely that Well 6 has intercepted a plume of contamination with Well 5 being on the edge of the plume.

All the compliance well concentrations were somewhat above the mean concentration of the background levels. The well means should be used to indicate the location of the plume. The findings should be reported to the Regional Administrator.

5.2.2 <u>One-Way Nonparametric Analysis of Variance</u>

This procedure is appropriate for interwell comparisons when the data or the residuals from a parametric ANOVA have been found to be significantly different from normal and when a log transformation fails to adequately normalize the data. In one-way nonparametric ANOVA, the assumption under the null hypothesis is that the data from each well come from the same continuous distribution and hence have the same median concentrations of a specific hazardous constituent. The alternatives of interest are that the data from some wells show increased levels of the hazardous constituent in question.

The procedure is called the Kruskal-Wallis test. For meaningful results, there should be at least three groups with a minimum sample size of three in each group. For large data sets use of a computer program is recommended. In the case of large data sets a good approximation to the procedure is to replace each observation by its rank (its numerical place when the data are ordered from least to greatest) and perform the (parametric) one-way analysis of variance (Section 5.2.1) on the ranks. Such an approach can be done with some commercially statistical packages such as SAS.

PURPOSE

The purpose of the procedure is to test the hypothesis that all wells (or groups of wells) around regulated units have the same median concentration of a hazardous constituent. If the wells are found to differ, *post-hoc* comparisons are again necessary to determine if contamination is present.

Note that the wells define the groups. All wells will have at least four observations. Denote the number of groups by K and the number of observations in each group by n_i, with N being the total number of all observations. Let X_{ij} denote the jth observation in the ith group, where j runs from 1 to the number of observations in the group, n_i, and i runs from 1 to the number of groups, K.

PROCEDURE

Step 1. Rank all N observations of the groups from least to greatest. Let R_{ij} denote the rank of the jth observation in the ith group. As a convention, denote the background well(s) as group 1.

Step 2. Add the ranks of the observations in each group. Call the sum of the ranks for the ith group R_i. Also calculate the average rank for each group, $\bar{R}_i = R_i/n_i$.

Step 3. Compute the Kruskal-Wallis statistic:

$$H = \left[\frac{12}{N(N+1)} \sum_{i=1}^{K} \frac{R_i^2}{N_i}\right] - 3(N+1)$$

Step 4. Compare the calculated value H to the tabulated chi-squared value with (K-1) degrees of freedom, where K is the number of groups (Table 1, Appendix B). Reject the null hypothesis if the computed value exceeds the tabulated critical value.

Step 5. If the computed value exceeds the value from the chi-squared table, compute the critical difference for well comparisons to the background, assumed to be group 1:

$$C_i = Z_{(\alpha/(K-1))} \left[\frac{N(N+1)}{12}\right]^{1/2} \frac{1}{n_1} + \frac{1}{n_i} ,$$

for i taking values 2,..., K,

where $Z_{(\alpha/(K-1))}$ is the upper $(\alpha/(K-1))$-percentile from the standard normal distribution found in Table 4, Appendix B. Note: If there are more than five compliance wells at the regulated unit ($K > 6$), use $Z_{.01}$, the upper one-percentile from the standard normal distribution.

Step 6. Form the differences of the average ranks for each group to the background and compare these with the critical values found in step 5 to determine which wells give evidence of contamination. That is, compare $\bar{R}_i - \bar{R}_1$ to C_i for i taking the values 2 through K. (Recall that group 1 is the background.)

While the above steps are the general procedure, some details need to be specified further to handle special cases. First, it may happen that two or more observations are numerically equal or tied. When this occurs, determine the ranks that the tied observations would have received if they had been slightly different from each other, but still in the same places with respect to the rest of the observations. Add these ranks and divide by the number of observations tied at that value to get an average rank. This average rank is used for each of the tied observations. This same procedure is repeated for any other groups of tied observations. Second, if there are any values below detection, consider all values below detection as tied at zero. (It is irrelevant what number is assigned to nondetected values as long as all such values are assigned the same number, and it is smaller than any detected or quantified value.)

The effect of tied observations is to increase the value of the statistic, H. Unless there are many observations tied at the same value, the effect of ties on the computed test statistic is <u>negligible</u> (in practice, the effect of ties can probably be neglected unless some group contains 10 percent of the observations all tied, which is most likely to occur for concentrations below detection limit). In the present context, the term "negligible" can be more specifically defined as follows. Compute the Kruskal-Wallis statistic without the adjustment for ties. If the test statistic is significant at the 5% level then conclude the test since the statistic with correction for ties will be significant as well. If the test statistic falls between the 10% and the 5% critical values, then proceed with the adjustment for ties as shown below.

ADJUSTMENT FOR TIES

If there are 50% or more observations that fell below the detection limit, then this method for adjustment for ties is inappropriate. The user is referred to Section 8 "Miscellaneous Topics." Otherwise, if there are tied values present in the data, use the following correction for the H statistic

$$H' = \frac{H}{1 - \left(\sum_{i=1}^{g} T_i/(N^3-N)\right)}$$

where g = the number of groups of distinct tied observations and $T_i = (t_i^3-t_i)$, where t_i is the number of observations in the tied group i. Note that unique observations can be considered groups of size 1, with the corresponding $T_i = (1^3-1) = 0$.

REFERENCE

Hollander, Myles, and D. A. Wolfe. 1973. *Nonparametric Statistical Methods*. John Wiley and Sons, New York.

EXAMPLE

The data in Table 5-4 represent benzene concentrations in water samples taken at one background and five compliance wells.

Step 1. The 20 observations have been ranked from least to greatest. The limit of detection was 1.0 ppm. Note that two values in Well 4 were below detection and were assigned value zero. These two are tied for the smallest value and have consequently been assigned the average of the two ranks 1 and 2, or 1.5. The ranks of the observations are indicated in parentheses after the observation in Table 5-4. Note that there are 3 observations tied at 1.3 that would have had ranks 4, 5, and 6 if they had been slightly different. These three have been assigned the average rank of 5 resulting from averaging 4, 5, and 6. Other ties occurred at 1.5 (ranks 7 and 8) and 1.9 (ranks 11 and 12).

Step 2. The values of the sums of ranks and average ranks are indicated at the bottom of Table 5-4.

Step 3. Compute the Kruskal-Wallis statistic

$$H = \frac{12}{20(20+1)} (34^2/4 + \ldots + 35.5^2/3) - 3(20+1) = 14.68$$

TABLE 5-4. EXAMPLE DATA FOR ONE-WAY NONPARAMETRIC ANOVA--BENZENE CONCENTRATIONS (ppm)

Date	Background Well 1	Compliance wells Well 2	Well 3	Well 4	Well 5	Well 6
Jan 1	1.7 (10)	11.0 (20)	1.3 (5)	0 (1.5)	4.9 (17)	1.6 (9)
Feb 1	1.9 (11.5)	8.0 (18)	1.2 (3)	1.3 (5)	3.7 (16)	2.5 (15)
Mar 1	1.5 (7.5)	9.5 (19)	1.5 (7.5)	0 (1.5)	2.3 (14)	1.9 (11.5)
Apr 1	1.3 (5)			2.2 (13)		
	$n_1 = 4$	$n_2 = 3$	$n_3 = 3$	$n_4 = 4$	$n_5 = 3$	$n_6 = 3$
Sum of ranks:	$R_1 = 34$	$R_2 = 57$	$R_3 = 15.5$	$R_4 = 21$	$R_5 = 47$	$R_6 = 35.5$
Average rank:	$\bar{R}_1 = 8.5$	$\bar{R}_2 = 19$	$\bar{R}_3 = 5.17$	$\bar{R}_4 = 5.25$	$\bar{R}_5 = 15.67$	$\bar{R}_6 = 11.83$

$K = 6$, the number of wells

$N = \sum_{i=1}^{6} n_i = 20$, the total number of observations.

IN5 170 023 498

ADJUSTMENT FOR TIES

There are four groups of ties in the data of Table 5-4:

$T_1 = (2^3-2) = 6$ for the 2 observations of 1,900.
$T_2 = (2^3-2) = 6$ for the 2 observations of 1,500.
$T_3 = (3^3-3) = 24$ for the 3 observations of 1,300.
$T_4 = (2^3-2) = 6$ for the 2 observations of 0.

Thus $\sum_{i=1}^{4} T_i = 6+6+24+6 = 42$

and $H' = \frac{14.68}{1-(42/(20^3-20))} = \frac{14.68}{0.995} = 14.76$, a negligible change from 14.68.

Step 4. To test the null hypothesis of no contamination, obtain the critical chi-squared value with (6-1) = 5 degrees of freedom at the 5% significance level from Table 1, Appendix B. The value is 11.07. Compare the calculated value, H', with the tabulated value. Since 14.76 is greater than 11.07, reject the hypothesis of no contamination at the 5% level. If the site was in detection monitoring it should move into compliance monitoring. If the site was in compliance monitoring it should move into corrective action. If the site was in corrective action it should stay there.

In the case where the hydraulically upgradient wells serve as the background against which the compliance wells are to be compared, comparisons of each compliance well with the background wells should be performed in addition to the analysis of variance procedure. In this example, data from each of the compliance wells would be compared with the background well data. This comparison is accomplished as follows. The average ranks for each group, $\bar{R}_{i.}$ are used to compute differences. If a group of compliance wells for a regulated unit have larger concentrations than those found in the background wells, the average rank for the compliance wells at that unit will be larger than the average rank for the background wells.

Step 5. Calculate the critical values to compare each compliance well to the background well.

In this example, K=6, so there are 5 comparisons of the compliance wells with the background wells. Using an experimentwise significance level of α = 0.05, we find the upper 0.05/5 = 0.01 percentile of the standard normal distribution to be 2.33 (Table 4, Appendix B). The total sample size, N, is 20. The approximate critical value, C_2, is computed for compliance Well 2, which has the largest average rank, as:

$$C_2 = 2.32 \left[\frac{20(21)}{12}\right]^{1/2} \left[\frac{1}{4} + \frac{1}{3}\right]^{1/2} = 10.5$$

The critical values for the other wells are: 10.5 for Wells 3, 5, and 6; and 9.8 for Well 4.

Step 6. Compute the differences between the average rank of each compliance well and the average rank of the background well:

Differences	Critical values
$D_2 = 19.0 - 8.5 = 10.5$	$C_2 = 10.5$
$D_3 = 5.17 - 8.5 = -3.33$	$C_3 = 10.5$
$D_4 = 5.25 - 8.5 = -3.25$	$C_4 = 9.8$
$D_5 = 15.67 - 8.5 = 7.17$	$C_5 = 10.5$
$D_6 = 11.83 - 8.5 = 3.13$	$C_6 = 10.5$

Compare each difference with the corresponding critical difference. $D_2 = 10.5$ equals the critical value of $C_2 = 10.5$. We conclude that the concentration of benzene averaged over compliance Well 2 is significantly greater than that at the background well. None of the other compliance well concentration of benzene is significantly higher than the average background value. Based upon these results, only compliance Well 2 can be singled out as being contaminated.

For data sets with more than 30 observations, the parametric analysis of variance performed on the rank values is a good approximation to the Kruskal-Wallis test (Quade, 1966). If the user has access to SAS, the PROC RANK procedure is used to obtain the ranks of the data. The analysis of variance procedure detailed in Section 5.2.1 is then performed on the ranks. Contrasts are tested as in the parametric analysis of variance.

INTERPRETATION

The Kruskal-Wallis test statistic is compared to the tabulated critical value from the chi-squared distribution. If the test statistic does not exceed the tabulated value, there is no statistically significant evidence of contamination and the analysis would stop and report this finding. If the test statistic exceeds the tabulated value, there is significant evidence that the hypothesis of no differences in compliance concentrations from the background level is not true. Consequently, if the test statistic exceeds the critical value, one concludes that there is significant evidence of contamination. One then proceeds to investigate where the differences lie, that is, which wells are indicating contamination.

The multiple comparisons procedure described in steps 5 and 6 compares each compliance well to the background well. This determines which compliance wells show statistically significant evidence of contamination at an experimentwise error rate of 5 percent. In many cases, inspection of the mean or median concentrations will be sufficient to indicate where the problem lies.

5.3 TOLERANCE INTERVALS BASED ON THE NORMAL DISTRIBUTION

An alternate approach to analysis of variance to determine whether there is statistically significant evidence of contamination is to use tolerance intervals. A tolerance interval is constructed from the data on (uncontaminated) background wells. The concentrations from compliance wells are then

Appendix J
Examples of statistical analyses using GRITS/STAT

Parametric test on Big Clifty/Beech Creek wells, Antimony.
No evidence of contamination

```
Report Printed: 03-03-1993  15:21

    Facility:DEMO_ORR     demo_orr
    Address:

        City:                      ST:IN Zip:
      County:MARTIN

     Contact:
       Phone:

 Permit Type:Background

 Constituent:Sb dis   Antimony, dissolved
         MCL:       10.000 PPB
         ACL:        0.000 PPB
Detect Limit:        3.000 PPB

  Start Date:Nov 01 1990
    End Date:Apr 01 1992

 Normality Test On Pooled Residuals
 ----------------------------------

 Scale:Original
 Observations:     72

 Pooled Statistics:

       Statistic   Original Scale
       ---------   --------------
            Mean:          0.0000
         Std Dev:          5.3459
        Kurtosis:         -0.5781
         Minimum:        -11.5750
         Maximum:         12.4500
 Shapiro-Francia:          0.9780
 Shapiro-Francia Critical Values
   1%: 0.9560
   5%: 0.9680
```

passed

Since the calculated statistic exceeds both the 1% and 5% critical values there is no significant evidence of nonnormality.

Report Printed: 03-03-1993 15:22

Facility:DEMO_ORR demo_orr
Address:

City: ST:IN Zip:
County:MARTIN

Contact:
Phone:

Permit Type:Background

Constituent:Sb dis Antimony, dissolved
MCL: 10.000 PPB
ACL: 0.000 PPB
Detect Limit: 3.000 PPB

Start Date:Nov 01 1990
End Date:Apr 01 1992

Levene's Test For Homogenity of Variance

Data Mode:Original

Background Wells

Well ID	N	%ND	Max Value	Min Value	Mean	Std Dev
06C07	4	50	11.60	1.50	6.08	5.34

Compliance Wells

Well ID	N	%ND	Max Value	Min Value	Mean	Std Dev
06C01	4	25	6.60	1.50	4.22	2.09
06C02	4	0	14.30	3.10	8.73	4.57
06C03	4	50	12.70	1.50	5.28	5.28
06C04	4	25	12.90	1.50	6.12	5.00
06C05	4	25	15.60	1.50	6.82	6.33
06C06	4	50	18.70	1.50	6.65	8.19
06C08	4	25	20.60	1.50	8.15	8.49
06C09	4	50	13.30	1.50	6.15	5.74
06C10	4	50	6.70	1.50	3.75	2.66
06C11	4	25	22.70	1.50	13.08	9.62
06C12	4	25	9.80	1.50	7.18	3.83
06C13	4	25	17.30	1.50	7.78	7.01
06C14	4	25	13.40	1.50	9.17	5.39
06C15	4	50	14.70	1.50	6.68	6.41
06C16	4	25	15.30	1.50	9.75	6.03
06C17	4	25	10.10	1.50	6.43	3.99
06C18	4	25	18.30	1.50	11.02	8.46

Source of Variation	Sum of squares	Degrees of freedom	Mean squares	Computed F
Between wells	189.36	17	11.14	1.38
Within wells	435.63	54	8.07	
Total	624.99	71		

Tabulated F at Á=0.05: 1.82
Since the computed F does not exceed the tabulated F, the assumption of equal variances may be accepted.

Report Printed: 03-03-1993 15:23

Facility:DEMO_ORR demo_orr
Address:

City: ST:IN Zip:
County:MARTIN

Contact:
Phone:

Permit Type:Background

Constituent:Sb dis Antimony, dissolved
MCL: 10.000 PPB
ACL: 0.000 PPB
Detect Limit: 3.000 PPB

Start Date:Nov 01 1990
End Date:Apr 01 1992
ááááááááááááááááááááááááOne-Way Parametric ANOVA Tableááááááááááááááááááááááááá

Data Mode:Original

Background Wells

Well ID	N	%ND	Max Value	Min Value	Mean	Std Dev
06C07	4	50	11.60	1.50	6.08	5.34

Compliance Wells

Well ID	N	%ND	Max Value	Min Value	Mean	Std Dev
06C01	4	25	6.60	1.50	4.22	2.09
06C02	4	0	14.30	3.10	8.73	4.57
06C03	4	50	12.70	1.50	5.28	5.28
06C04	4	25	12.90	1.50	6.12	5.00
06C05	4	25	15.60	1.50	6.82	6.33
06C06	4	50	18.70	1.50	6.65	8.19
06C08	4	25	20.60	1.50	8.15	8.49
06C09	4	50	13.30	1.50	6.15	5.74
06C10	4	50	6.70	1.50	3.75	2.66
06C11	4	25	22.70	1.50	13.08	9.62
06C12	4	25	9.80	1.50	7.18	3.83
06C13	4	25	17.30	1.50	7.78	7.01
06C14	4	25	13.40	1.50	9.17	5.39
06C15	4	50	14.70	1.50	6.68	6.41
06C16	4	25	15.30	1.50	9.75	6.03
06C17	4	25	10.10	1.50	6.43	3.99
06C18	4	25	18.30	1.50	11.02	8.46

Source of Variation	Sum of squares	Degrees of freedom	Mean squares	Computed F
Between wells	367.04	17	21.59	0.57
Within wells	2029.05	54	37.57	
Total	2396.08	71		

Tabulated F: 1.82

Since the calculated F does not exceed the tabulated F, there is no significant difference between the concentrations at the selected wells and thus no evidence of contamination.

none

Non-parametric test on Big Clifty/Beech Creek wells, Arsenic.
Evidence of contamination in two wells: 06C03 and 06C08.

```
Report Printed: 03-03-1993  11:57

    Facility:DEMO_ORR      demo_orr
    Address:

        City:                          ST:IN Zip:
      County:MARTIN

     Contact:
       Phone:

 Permit Type:Background

 Constituent:As dis   Arsenic, dissolved
         MCL:       50.000 PPB
         ACL:        0.000 PPB
Detect Limit:        2.000 PPB

  Start Date:Nov 01 1990
    End Date:Apr 01 1992

 Normality Test On Pooled Residuals
 ----------------------------------

 Scale:Original
 Observations:     72

 Pooled Statistics:

       Statistic   Original Scale
       ---------   --------------
            Mean:          -0.0000
         Std Dev:           2.6003
        Kurtosis:          27.5211
         Minimum:          -5.8250
         Maximum:          17.4750
Shapiro-Francia:            0.4334  *   FAILS
Shapiro-Francia Critical Values
  1%: 0.9560
  5%: 0.9680

* Since the calculated statistic
  is less than the 1% and 5%
  critical values there is
  significant evidence that the
  residuals are not normally
  distributed.
```

Report Printed: 03-03-1993 11:57

Facility:DEMO_ORR demo_orr
Address:

City: ST:IN Zip:
County:MARTIN

Contact:
Phone:

Permit Type:Background

Constituent:As dis Arsenic, dissolved
MCL: 50.000 PPB
ACL: 0.000 PPB
Detect Limit: 2.000 PPB

Start Date:Nov 01 1990
End Date:Apr 01 1992

Levene's Test For Homogenity of Variance

Data Mode:Original

Background Wells

Well ID	N	%ND	Max Value	Min Value	Mean	Std Dev
06C07	4	100	1.00	1.00	1.00	0.00

Compliance Wells

Well ID	N	%ND	Max Value	Min Value	Mean	Std Dev
06C01	4	100	1.00	1.00	1.00	0.00
06C02	4	100	1.00	1.00	1.00	0.00
06C03	4	0	12.30	9.90	11.20	1.10
06C04	4	100	1.00	1.00	1.00	0.00
06C05	4	100	1.00	1.00	1.00	0.00
06C06	4	100	1.00	1.00	1.00	0.00
06C08	4	0	12.10	5.20	7.77	3.10
06C09	4	100	1.00	1.00	1.00	0.00
06C10	4	75	7.40	1.00	2.60	3.20
06C11	4	50	4.40	1.00	2.50	1.76
06C12	4	100	1.00	1.00	1.00	0.00
06C13	4	75	24.30	1.00	6.82	11.65
06C14	4	100	1.00	1.00	1.00	0.00
06C15	4	100	1.00	1.00	1.00	0.00
06C16	4	100	1.00	1.00	1.00	0.00
06C17	4	100	1.00	1.00	1.00	0.00
06C18	4	0	3.60	2.80	3.15	0.34

Source of Variation	Sum of squares	Degrees of freedom	Mean squares	Computed F
Between wells	303.73	17	17.87	8.08
Within wells	119.36	54	2.21	
Total	423.09	71		

Tabulated F at Á=0.05: 1.82
Since the computed F exceeds the tabulated F, the assumption of equal variances should be rejected.

failed

```
Report Printed: 03-03-1993  12:02

    Facility:DEMO_ORR     demo_orr
    Address:

        City:                       ST:IN Zip:
      County:MARTIN

     Contact:
       Phone:

 Permit Type:Background

 Constituent:As dis   Arsenic, dissolved
         MCL:       50.000 PPB
         ACL:        0.000 PPB
Detect Limit:        2.000 PPB

  Start Date:Nov 01 1990
    End Date:Apr 01 1992

 Normality Test On Pooled Residuals
 ----------------------------------

 Scale:Log
 Observations:     72

 Pooled Statistics:

       Statistic   Log Scale
       ---------   ---------
            Mean:        -0.0000
         Std Dev:         0.4288
        Kurtosis:        14.0359
         Minimum:        -0.7976
         Maximum:         2.3929
 Shapiro-Francia:         0.5435  *  Fail
 Shapiro-Francia Critical Values
   1%: 0.9560
   5%: 0.9680

* Since the calculated statistic
  is less than the 1% and 5%
  critical values there is
  significant evidence that the
  residuals are not normally
  distributed.
```

Report Printed: 03-03-1993 12:02

Facility:DEMO_ORR demo_orr
Address:

City: ST:IN Zip:
County:MARTIN

Contact:
Phone:

Permit Type:Background

Constituent:As dis Arsenic, dissolved
MCL: 50.000 PPB
ACL: 0.000 PPB
Detect Limit: 2.000 PPB

Start Date:Nov 01 1990
End Date:Apr 01 1992

Levene's Test For Homogenity of Variance

Data Mode:Log Transformed

Background Wells

Well ID	N	%ND	Max Value	Min Value	Mean	Std Dev
06C07	4	100	0.00	0.00	0.00	0.00

Compliance Wells

Well ID	N	%ND	Max Value	Min Value	Mean	Std Dev
06C01	4	100	0.00	0.00	0.00	0.00
06C02	4	100	0.00	0.00	0.00	0.00
06C03	4	0	2.51	2.29	2.41	0.10
06C04	4	100	0.00	0.00	0.00	0.00
06C05	4	100	0.00	0.00	0.00	0.00
06C06	4	100	0.00	0.00	0.00	0.00
06C08	4	0	2.49	1.65	2.00	0.37
06C09	4	100	0.00	0.00	0.00	0.00
06C10	4	75	2.00	0.00	0.50	1.00
06C11	4	50	1.48	0.00	0.69	0.80
06C12	4	100	0.00	0.00	0.00	0.00
06C13	4	75	3.19	0.00	0.80	1.60
06C14	4	100	0.00	0.00	0.00	0.00
06C15	4	100	0.00	0.00	0.00	0.00
06C16	4	100	0.00	0.00	0.00	0.00
06C17	4	100	0.00	0.00	0.00	0.00
06C18	4	0	1.28	1.03	1.14	0.11

Source of Variation	Sum of squares	Degrees of freedom	Mean squares	Computed F
Between wells	8.15	17	0.48	9.27
Within wells	2.79	54	0.05	
Total	10.94	71		

Tabulated F at Á=0.05: 1.82
Since the computed F exceeds the tabulated F, the assumption of equal variances should be rejected.

Report Printed: 03-03-1993 11:50

Facility:DEMO_ORR demo_orr
Address:

City: ST:IN Zip:
County:MARTIN

Contact:
Phone:

Permit Type:Background

Constituent:As dis Arsenic, dissolved
MCL: 50.000 PPB
ACL: 0.000 PPB
Detect Limit: 2.000 PPB

Start Date:Nov 01 1990
End Date:Apr 01 1992
ááááááááááááááááááOne-Way Nonparametric Analysis of Varianceááááááááááááááááá

Data Mode:Original

Background Wells

Well ID	N	%ND	Max Value	Min Value	Mean	Std Dev
06C07	4	100	1.00	1.00	1.00	0.00

Compliance Wells

Well ID	N	%ND	Max Value	Min Value	Mean	Std Dev
06C01	4	100	1.00	1.00	1.00	0.00
06C02	4	100	1.00	1.00	1.00	0.00
06C03	4	0	12.30	9.90	11.20	1.10
06C04	4	100	1.00	1.00	1.00	0.00
06C05	4	100	1.00	1.00	1.00	0.00
06C06	4	100	1.00	1.00	1.00	0.00
06C08	4	0	12.10	5.20	7.77	3.10
06C09	4	100	1.00	1.00	1.00	0.00
06C10	4	75	7.40	1.00	2.60	3.20
06C11	4	50	4.40	1.00	2.50	1.76
06C12	4	100	1.00	1.00	1.00	0.00
06C13	4	75	24.30	1.00	6.82	11.65
06C14	4	100	1.00	1.00	1.00	0.00
06C15	4	100	1.00	1.00	1.00	0.00
06C16	4	100	1.00	1.00	1.00	0.00
06C17	4	100	1.00	1.00	1.00	0.00
06C18	4	0	3.60	2.80	3.15	0.34

Well ID	Date	Observation	Rank
06C07	11/01/90	1.0000	28.5
06C07	06/01/91	1.0000	28.5
06C07	11/01/91	1.0000	28.5
06C07	04/01/92	1.0000	28.5

áááááááááá

Background Rank Sum: 114.0

	Background Rank Avg:		28.5
06C01	11/01/90	1.0000	28.5
06C01	06/01/91	1.0000	28.5
06C01	11/01/91	1.0000	28.5
06C01	04/01/92	1.0000	28.5
			áááááááááááá
	Compliance Well Rank Sum:		114.0
	Compliance Well Rank Avg:		28.5
06C02	11/01/90	1.0000	28.5
06C02	06/01/91	1.0000	28.5
06C02	11/01/91	1.0000	28.5
06C02	04/01/92	1.0000	28.5
			áááááááááááá
	Compliance Well Rank Sum:		114.0
	Compliance Well Rank Avg:		28.5
06C03	11/01/90	9.9000	67.0
06C03	06/01/91	12.3000	71.0
06C03	11/01/91	10.7000	68.0
06C03	04/01/92	11.9000	69.0
			áááááááááááá
	Compliance Well Rank Sum:		275.0
	Compliance Well Rank Avg:		68.8
06C04	11/01/90	1.0000	28.5
06C04	06/01/91	1.0000	28.5
06C04	11/01/91	1.0000	28.5
06C04	04/01/92	1.0000	28.5
			áááááááááááá
	Compliance Well Rank Sum:		114.0
	Compliance Well Rank Avg:		28.5
06C05	11/01/90	1.0000	28.5
06C05	06/01/91	1.0000	28.5
06C05	11/01/91	1.0000	28.5
06C05	04/01/92	1.0000	28.5
			áááááááááááá
	Compliance Well Rank Sum:		114.0
	Compliance Well Rank Avg:		28.5
06C06	11/01/90	1.0000	28.5
06C06	06/01/91	1.0000	28.5
06C06	11/01/91	1.0000	28.5
06C06	04/01/92	1.0000	28.5
			áááááááááááá
	Compliance Well Rank Sum:		114.0
	Compliance Well Rank Avg:		28.5
06C08	11/01/90	12.1000	70.0
06C08	06/01/91	5.9000	64.0
06C08	11/01/91	7.9000	66.0
06C08	04/01/92	5.2000	63.0
			áááááááááááá
	Compliance Well Rank Sum:		263.0
	Compliance Well Rank Avg:		65.8
06C09	11/01/90	1.0000	28.5
06C09	06/01/91	1.0000	28.5
06C09	11/01/91	1.0000	28.5
06C09	04/01/92	1.0000	28.5
			áááááááááááá
	Compliance Well Rank Sum:		114.0
	Compliance Well Rank Avg:		28.5
06C10	11/01/90	1.0000	28.5
06C10	06/01/91	7.4000	65.0

```
                                        06C10    11/01/91        1.0000      28.5
06C10     04/01/92        1.0000      28.5
                              ááááááááááá
   Compliance Well Rank Sum:      150.5
   Compliance Well Rank Avg:       37.6
06C11     11/01/90        1.0000      28.5
06C11     06/01/91        1.0000      28.5
06C11     11/01/91        4.4000      62.0
06C11     04/01/92        3.6000      60.5
                              ááááááááááá
   Compliance Well Rank Sum:      179.5
   Compliance Well Rank Avg:       44.9
06C12     11/01/90        1.0000      28.5
06C12     06/01/91        1.0000      28.5
06C12     11/01/91        1.0000      28.5
06C12     04/01/92        1.0000      28.5
                              ááááááááááá
   Compliance Well Rank Sum:      114.0
   Compliance Well Rank Avg:       28.5
06C13     11/01/90       24.3000      72.0
06C13     06/01/91        1.0000      28.5
06C13     11/01/91        1.0000      28.5
06C13     04/01/92        1.0000      28.5
                              ááááááááááá
   Compliance Well Rank Sum:      157.5
   Compliance Well Rank Avg:       39.4
06C14     11/01/90        1.0000      28.5
06C14     06/01/91        1.0000      28.5
06C14     11/01/91        1.0000      28.5
06C14     04/01/92        1.0000      28.5
                              ááááááááááá
   Compliance Well Rank Sum:      114.0
   Compliance Well Rank Avg:       28.5
06C15     11/01/90        1.0000      28.5
06C15     06/01/91        1.0000      28.5
06C15     11/01/91        1.0000      28.5
06C15     04/01/92        1.0000      28.5
                              ááááááááááá
   Compliance Well Rank Sum:      114.0
   Compliance Well Rank Avg:       28.5
06C16     11/01/90        1.0000      28.5
06C16     06/01/91        1.0000      28.5
06C16     11/01/91        1.0000      28.5
06C16     04/01/92        1.0000      28.5
                              ááááááááááá
   Compliance Well Rank Sum:      114.0
   Compliance Well Rank Avg:       28.5
06C17     11/01/90        1.0000      28.5
06C17     06/01/91        1.0000      28.5
06C17     11/01/91        1.0000      28.5
06C17     04/01/92        1.0000      28.5
                              ááááááááááá
   Compliance Well Rank Sum:      114.0
   Compliance Well Rank Avg:       28.5
06C18     11/01/90        3.2000      59.0
06C18     06/01/91        3.0000      58.0
06C18     11/01/91        3.6000      60.5
06C18     04/01/92        2.8000      57.0
                              ááááááááááá
   Compliance Well Rank Sum:      234.5
```

Compliance Well Rank Avg: 58.6

H Statistic:	29.5234
H Adjusted for Ties;	55.7534
Degrees of Freedom:	17
Chi-Squared:	27.5872
ZÁ/DF:	2.3263

* Indicates significant evidence of contamination

Well ID	Crit. Diff.	Rank Avg.	Background Rank Avg.	Difference
06C01	34.4268	28.50	28.50	0.00
06C02	34.4268	28.50	28.50	0.00
*06C03	34.4268	68.75	28.50	40.25
06C04	34.4268	28.50	28.50	0.00
06C05	34.4268	28.50	28.50	0.00
06C06	34.4268	28.50	28.50	0.00
*06C08	34.4268	65.75	28.50	37.25
06C09	34.4268	28.50	28.50	0.00
06C10	34.4268	37.63	28.50	9.13
06C11	34.4268	44.88	28.50	16.38
06C12	34.4268	28.50	28.50	0.00
06C13	34.4268	39.38	28.50	10.88
06C14	34.4268	28.50	28.50	0.00
06C15	34.4268	28.50	28.50	0.00
06C16	34.4268	28.50	28.50	0.00
06C17	34.4268	28.50	28.50	0.00
06C18	34.4268	58.63	28.50	30.13

Non-parametric test on Old Rifle Range upper aquifer wells, Manganese. Evidence of contamination in four wells: 06-19, 06C11P2, 06C13P2, and 06C18P2.

```
Report Printed: 03-04-1993  20:27

    Facility:OLD RIFLE RA old rifle range
    Address:

        City:                        ST:IN Zip:
      County:MARTIN

     Contact:
       Phone:

 Permit Type:Background

 Constituent:Mn dis   Manganese, dissolved
         MCL:       50.000 PPB
         ACL:        0.000 PPB
Detect Limit:        5.000 PPB

  Start Date:Nov 01 1990
    End Date:Apr 01 1992

 Normality Test On Pooled Residuals
 ----------------------------------

 Scale:Original
 Observations:     64

 Pooled Statistics:

       Statistic   Original Scale
       ---------   --------------
            Mean:         -0.0000
         Std Dev:         99.9253
        Kurtosis:          4.7944
         Minimum:       -357.0000
         Maximum:        314.0000
 Shapiro-Francia:          0.7197  *  Fails
 Shapiro-Francia Critical Values
   1%: 0.9480
   5%: 0.9650

* Since the calculated statistic
  is less than the 1% and 5%
  critical values there is
  significant evidence that the
  residuals are not normally
  distributed.
```

Report Printed: 03-04-1993 20:27

Facility:OLD RIFLE RA old rifle range
Address:

City: ST:IN Zip:
County:MARTIN

Contact:
Phone:

Permit Type:Background

Constituent:Mn dis Manganese, dissolved
MCL: 50.000 PPB
ACL: 0.000 PPB
Detect Limit: 5.000 PPB

Start Date:Nov 01 1990
End Date:Apr 01 1992
ááááááááááááááááááLevene's Test For Homogenity of Varianceááááááááááááááááááá

Data Mode:Original

Background Wells

Well ID	N	%ND	Max Value	Min Value	Mean	Std Dev
06C07	4	25	10.00	2.50	6.13	3.17

Compliance Wells

Well ID	N	%ND	Max Value	Min Value	Mean	Std Dev
06-16	4	0	100.00	14.00	56.75	49.37
06-17	4	0	64.00	38.00	49.25	11.18
06-18	4	25	10.00	2.50	6.13	3.07
06-19	4	0	677.00	6.00	363.00	345.22
06-20	4	50	11.00	2.50	5.50	4.02
06-22	4	50	40.00	2.50	12.50	18.37
06-23	4	0	204.00	7.00	62.00	95.29
06C10P2	4	50	12.00	2.50	5.75	4.48
06C11P2	4	0	130.00	78.00	98.25	22.69
06C12P2	4	0	110.00	37.00	65.00	31.82
06C13P2	4	0	414.00	52.00	300.25	167.78
06C14P2	4	0	22.00	8.00	14.75	6.40
06C15P2	4	50	7.00	2.50	4.50	2.35
06C16P2	4	0	150.00	25.00	82.50	57.81
06C18P2	4	0	864.00	349.00	600.00	213.09

Source of Variation	Sum of squares	Degrees of freedom	Mean squares	Computed F
Between wells	377669.66	15	25177.98	13.74
Within wells	87945.92	48	1832.21	
Total	465615.56	63		

Tabulated F at Á=0.05: 1.88
Since the computed F exceeds the tabulated F, the assumption of equal

variances should be rejected.

Report Printed: 03-04-1993 20:32

Facility:OLD RIFLE RA old rifle range
Address:

City: ST:IN Zip:
County:MARTIN

Contact:
Phone:

Permit Type:Background

Constituent:Mn dis Manganese, dissolved
MCL: 50.000 PPB
ACL: 0.000 PPB
Detect Limit: 5.000 PPB

Start Date:Nov 01 1990
End Date:Apr 01 1992

Normality Test On Pooled Residuals

Scale:Log
Observations: 64

Pooled Statistics:

Statistic	Log Scale
Mean:	0.0000
Std Dev:	0.8421
Kurtosis:	2.1759
Minimum:	-3.1159
Maximum:	2.1653
Shapiro-Francia:	0.9432 * Fails

Shapiro-Francia Critical Values
1%: 0.9480
5%: 0.9650

* Since the calculated statistic is less than the 1% and 5% critical values there is significant evidence that the residuals are not normally distributed.

Report Printed: 03-04-1993 20:32

Facility:OLD RIFLE RA old rifle range
Address:

City: ST:IN Zip:
County:MARTIN

Contact:
Phone:

Permit Type:Background

Constituent:Mn dis Manganese, dissolved
MCL: 50.000 PPB
ACL: 0.000 PPB
Detect Limit: 5.000 PPB

Start Date:Nov 01 1990
End Date:Apr 01 1992
ááááááááááááááááááLevene's Test For Homogenity of Varianceááááááááááááááááááá

Data Mode:Log Transformed

Background Wells

Well ID	N	%ND	Max Value	Min Value	Mean	Std Dev
06C07	4	25	2.30	0.92	1.69	0.59

Compliance Wells

Well ID	N	%ND	Max Value	Min Value	Mean	Std Dev
06-16	4	0	4.61	2.64	3.62	1.13
06-17	4	0	4.16	3.64	3.88	0.22
06-18	4	25	2.30	0.92	1.70	0.58
06-19	4	0	6.52	1.79	4.91	2.21
06-20	4	50	2.40	0.92	1.51	0.72
06-22	4	50	3.69	0.92	1.78	1.31
06-23	4	0	5.32	1.95	3.15	1.60
06C10P2	4	50	2.48	0.92	1.53	0.76
06C11P2	4	0	4.87	4.36	4.57	0.22
06C12P2	4	0	4.70	3.61	4.09	0.46
06C13P2	4	0	6.03	3.95	5.45	1.00
06C14P2	4	0	3.09	2.08	2.61	0.46
06C15P2	4	50	1.95	0.92	1.39	0.55
06C16P2	4	0	5.01	3.22	4.18	0.82
06C18P2	4	0	6.76	5.86	6.35	0.38

Source of Variation	Sum of squares	Degrees of freedom	Mean squares	Computed F
Between wells	9.32	15	0.62	2.79
Within wells	10.68	48	0.22	
Total	20.00	63		

Tabulated F at Á=0.05: 1.88
Since the computed F exceeds the tabulated F, the assumption of equal

variances should be rejected.

Report Printed: 03-04-1993 20:30

Facility:OLD RIFLE RA old rifle range
Address:

City: ST:IN Zip:
County:MARTIN

Contact:
Phone:

Permit Type:Background

Constituent:Mn dis Manganese, dissolved
MCL: 50.000 PPB
ACL: 0.000 PPB
Detect Limit: 5.000 PPB

Start Date:Nov 01 1990
End Date:Apr 01 1992
ááááááááááááááááááOne-Way Nonparametric Analysis of Varianceááááááááááááááááá

Data Mode:Original

Background Wells

Well ID	N	%ND	Max Value	Min Value	Mean	Std Dev
06C07	4	25	10.00	2.50	6.13	3.17

Compliance Wells

Well ID	N	%ND	Max Value	Min Value	Mean	Std Dev
06-16	4	0	100.00	14.00	56.75	49.37
06-17	4	0	64.00	38.00	49.25	11.18
06-18	4	25	10.00	2.50	6.13	3.07
06-19	4	0	677.00	6.00	363.00	345.22
06-20	4	50	11.00	2.50	5.50	4.02
06-22	4	50	40.00	2.50	12.50	18.37
06-23	4	0	204.00	7.00	62.00	95.29
06C10P2	4	50	12.00	2.50	5.75	4.48
06C11P2	4	0	130.00	78.00	98.25	22.69
06C12P2	4	0	110.00	37.00	65.00	31.82
06C13P2	4	0	414.00	52.00	300.25	167.78
06C14P2	4	0	22.00	8.00	14.75	6.40
06C15P2	4	50	7.00	2.50	4.50	2.35
06C16P2	4	0	150.00	25.00	82.50	57.81
06C18P2	4	0	864.00	349.00	600.00	213.09

Well ID	Date	Observation	Rank
06C07	11/01/90	5.0000	11.5
06C07	06/01/91	7.0000	20.5
06C07	11/01/91	10.0000	24.5
06C07	04/01/92	2.5000	5.5

áááááááááááá

Background Rank Sum: 62.0
Background Rank Avg: 15.5

```
                                        06-16    11/01/90      99.0000      48.0
06-16     06/01/91      14.0000      29.5
06-16     11/01/91     100.0000      49.0
06-16     04/01/92      14.0000      29.5
                          ááááááááááá
   Compliance Well Rank Sum:      156.0
   Compliance Well Rank Avg:       39.0
06-17     11/01/90      51.0000      41.0
06-17     06/01/91      44.0000      38.0
06-17     11/01/91      38.0000      36.0
06-17     04/01/92      64.0000      44.0
                          ááááááááááá
   Compliance Well Rank Sum:      159.0
   Compliance Well Rank Avg:       39.8
06-18     11/01/90       6.0000      15.5
06-18     06/01/91       6.0000      15.5
06-18     11/01/91      10.0000      24.5
06-18     04/01/92       2.5000       5.5
                          ááááááááááá
   Compliance Well Rank Sum:       61.0
   Compliance Well Rank Avg:       15.3
06-19     11/01/90     129.0000      52.0
06-19     06/01/91     640.0000      62.0
06-19     11/01/91     677.0000      63.0
06-19     04/01/92       6.0000      15.5
                          ááááááááááá
   Compliance Well Rank Sum:      192.5
   Compliance Well Rank Avg:       48.1
06-20     11/01/90       6.0000      15.5
06-20     06/01/91       2.5000       5.5
06-20     11/01/91      11.0000      26.5
06-20     04/01/92       2.5000       5.5
                          ááááááááááá
   Compliance Well Rank Sum:       53.0
   Compliance Well Rank Avg:       13.3
06-22     11/01/90       2.5000       5.5
06-22     06/01/91       5.0000      11.5
06-22     11/01/91      40.0000      37.0
06-22     04/01/92       2.5000       5.5
                          ááááááááááá
   Compliance Well Rank Sum:       59.5
   Compliance Well Rank Avg:       14.9
06-23     11/01/90       7.0000      20.5
06-23     06/01/91      30.0000      34.0
06-23     11/01/91     204.0000      55.0
06-23     04/01/92       7.0000      20.5
                          ááááááááááá
   Compliance Well Rank Sum:      130.0
   Compliance Well Rank Avg:       32.5
06C10P2   11/01/90       2.5000       5.5
06C10P2   06/01/91       6.0000      15.5
06C10P2   11/01/91      12.0000      28.0
06C10P2   04/01/92       2.5000       5.5
                          ááááááááááá
   Compliance Well Rank Sum:       54.5
   Compliance Well Rank Avg:       13.6
06C11P2   11/01/90      98.0000      47.0
06C11P2   06/01/91      78.0000      45.0
06C11P2   11/01/91     130.0000      53.0
06C11P2   04/01/92      87.0000      46.0
```

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                                                                    áááááááááááá
   Compliance Well Rank Sum:      191.0
   Compliance Well Rank Avg:       47.8
06C12P2  11/01/90     110.0000      50.5
06C12P2  06/01/91      63.0000      43.0
06C12P2  11/01/91      37.0000      35.0
06C12P2  04/01/92      50.0000      40.0
                            ááááááááááá
   Compliance Well Rank Sum:      168.5
   Compliance Well Rank Avg:       42.1
06C13P2  11/01/90      52.0000      42.0
06C13P2  06/01/91     388.0000      58.0
06C13P2  11/01/91     414.0000      59.0
06C13P2  04/01/92     347.0000      56.0
                            ááááááááááá
   Compliance Well Rank Sum:      215.0
   Compliance Well Rank Avg:       53.8
06C14P2  11/01/90      22.0000      32.0
06C14P2  06/01/91      11.0000      26.5
06C14P2  11/01/91      18.0000      31.0
06C14P2  04/01/92       8.0000      23.0
                            ááááááááááá
   Compliance Well Rank Sum:      112.5
   Compliance Well Rank Avg:       28.1
06C15P2  11/01/90       2.5000       5.5
06C15P2  06/01/91       7.0000      20.5
06C15P2  11/01/91       6.0000      15.5
06C15P2  04/01/92       2.5000       5.5
                            ááááááááááá
   Compliance Well Rank Sum:       47.0
   Compliance Well Rank Avg:       11.8
06C16P2  11/01/90      45.0000      39.0
06C16P2  06/01/91     150.0000      54.0
06C16P2  11/01/91     110.0000      50.5
06C16P2  04/01/92      25.0000      33.0
                            ááááááááááá
   Compliance Well Rank Sum:      176.5
   Compliance Well Rank Avg:       44.1
06C18P2  11/01/90     864.0000      64.0
06C18P2  06/01/91     552.0000      60.0
06C18P2  11/01/91     349.0000      57.0
06C18P2  04/01/92     635.0000      61.0
                            ááááááááááá
   Compliance Well Rank Sum:      242.0
   Compliance Well Rank Avg:       60.5
         H Statistic:      47.4069
 H Adjusted for Ties:      47.6413
  Degrees of Freedom:      15
         Chi-Squared:      24.9958
               ZÁ/DF:       2.3263

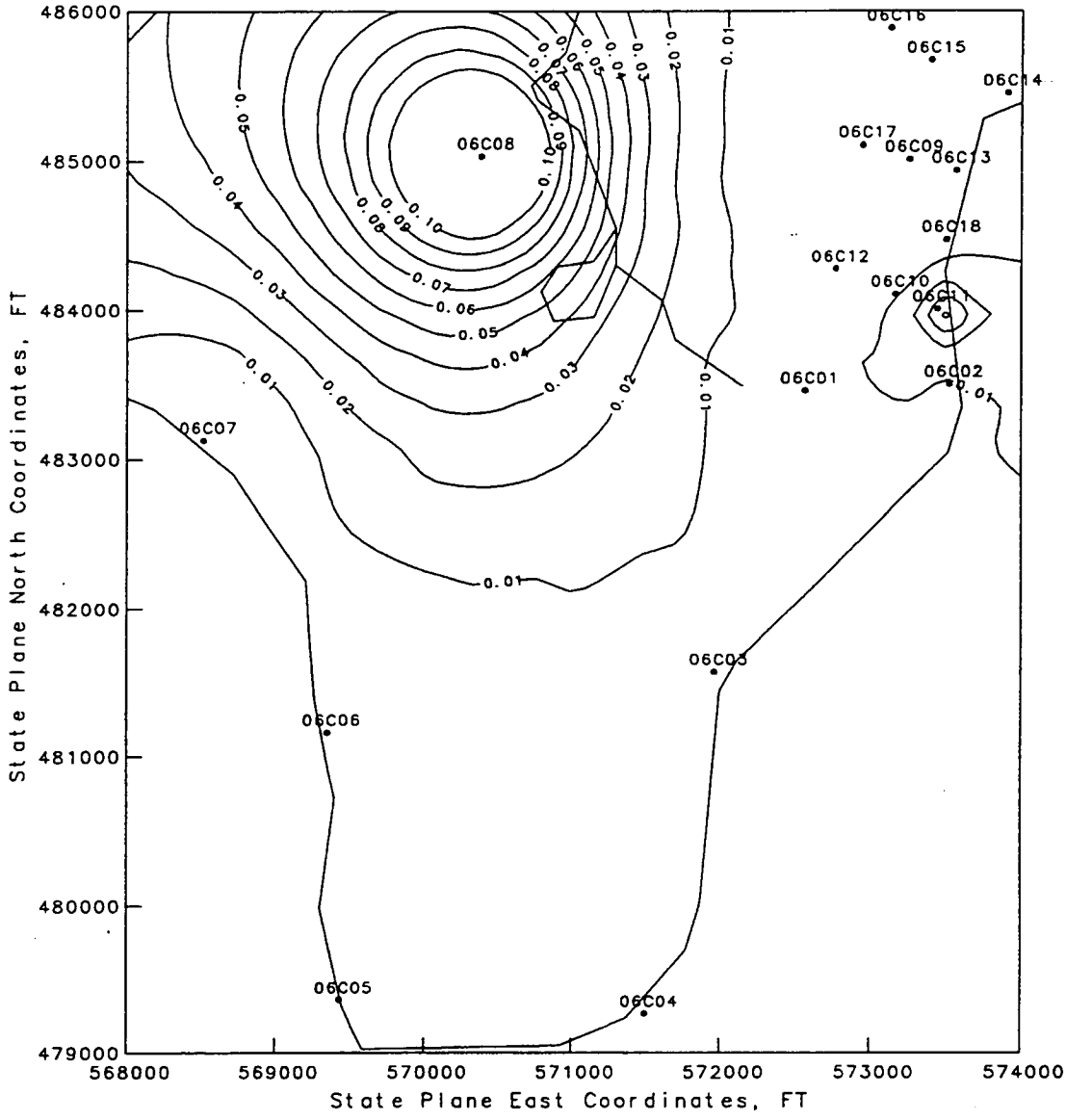
* Indicates significant evidence of contamination
 Well ID  Crit. Diff. Rank Avg. Background Rank Avg. Difference
 06-16        30.5983     39.00          15.50          23.50
 06-17        30.5983     39.75          15.50          24.25
 06-18        30.5983     15.25          15.50          -0.25
*06-19        30.5983     48.13          15.50          32.63
 06-20        30.5983     13.25          15.50          -2.25
 06-22        30.5983     14.88          15.50          -0.63
 06-23        30.5983     32.50          15.50          17.00
```

06C10P2				-1.88	06C10P2	30.5983
*06C11P2	30.5983	47.75	15.50	32.25		
06C12P2	30.5983	42.13	15.50	26.63		
*06C13P2	30.5983	53.75	15.50	38.25		
06C14P2	30.5983	28.13	15.50	12.63		
06C15P2	30.5983	11.75	15.50	-3.75		
06C16P2	30.5983	44.13	15.50	28.63		
*06C18P2	30.5983	60.50	15.50	45.00		

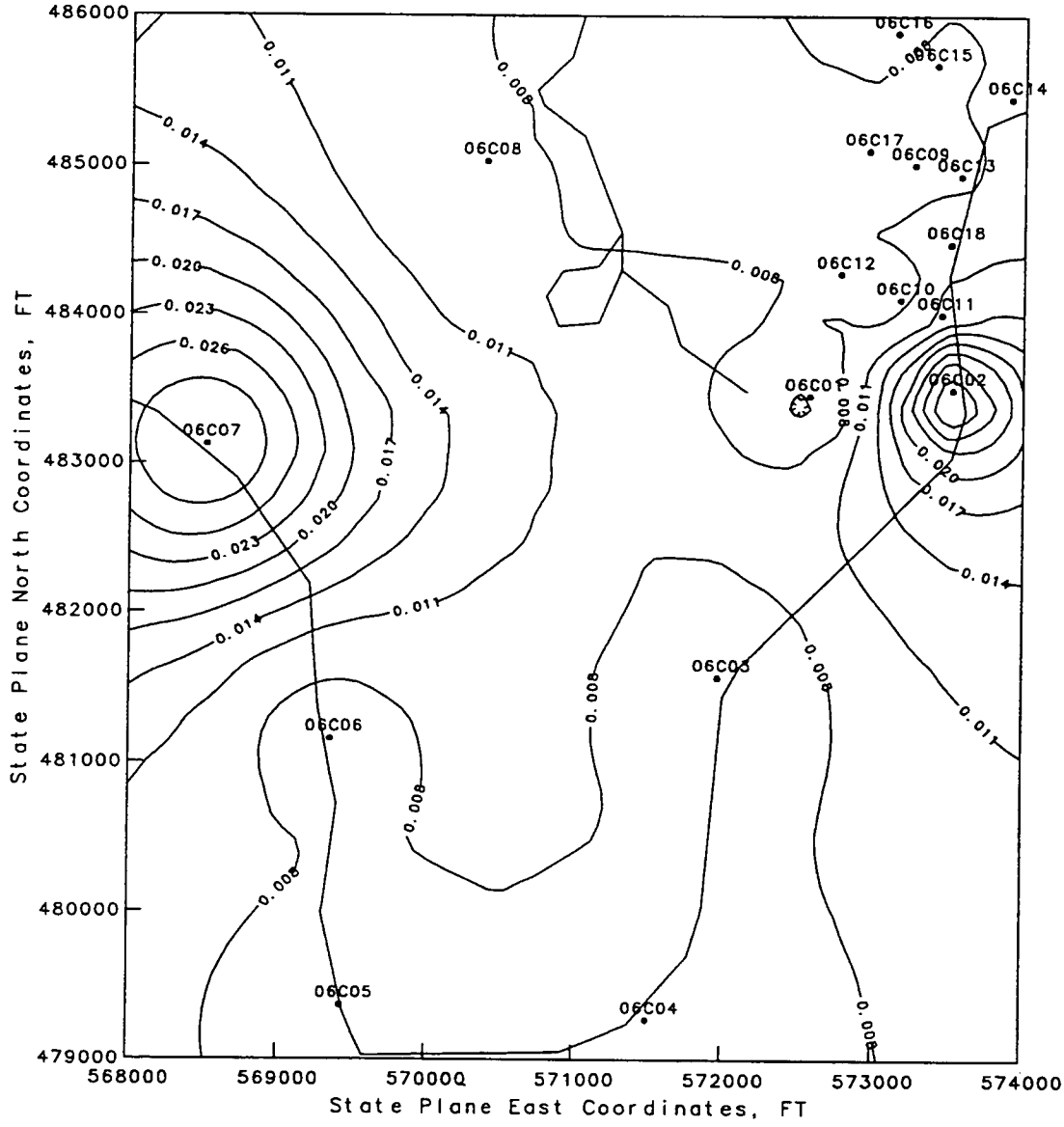
4 weeks

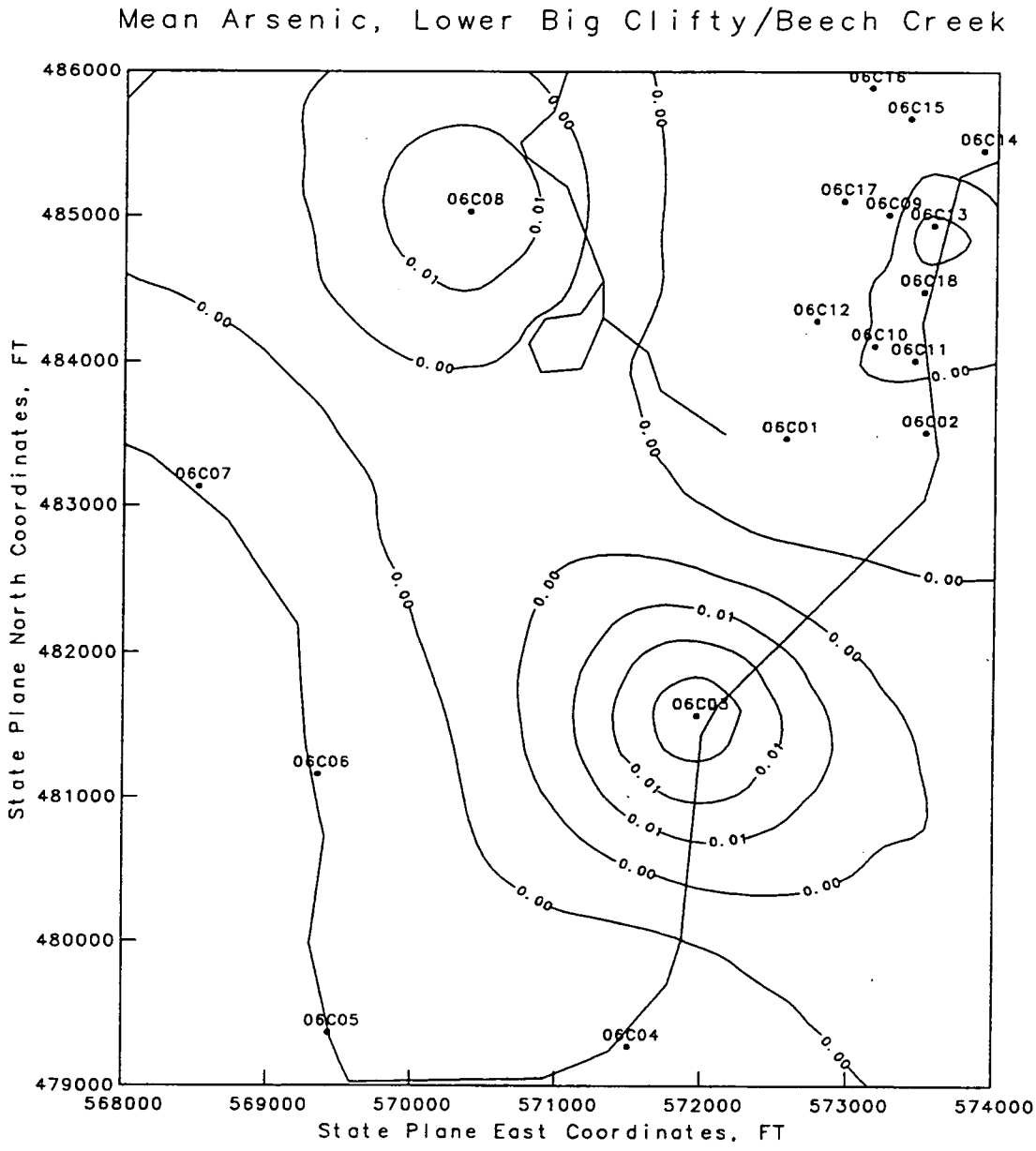
Appendix K
Contaminant distribution maps for Demolition Area/Old Rifle Range

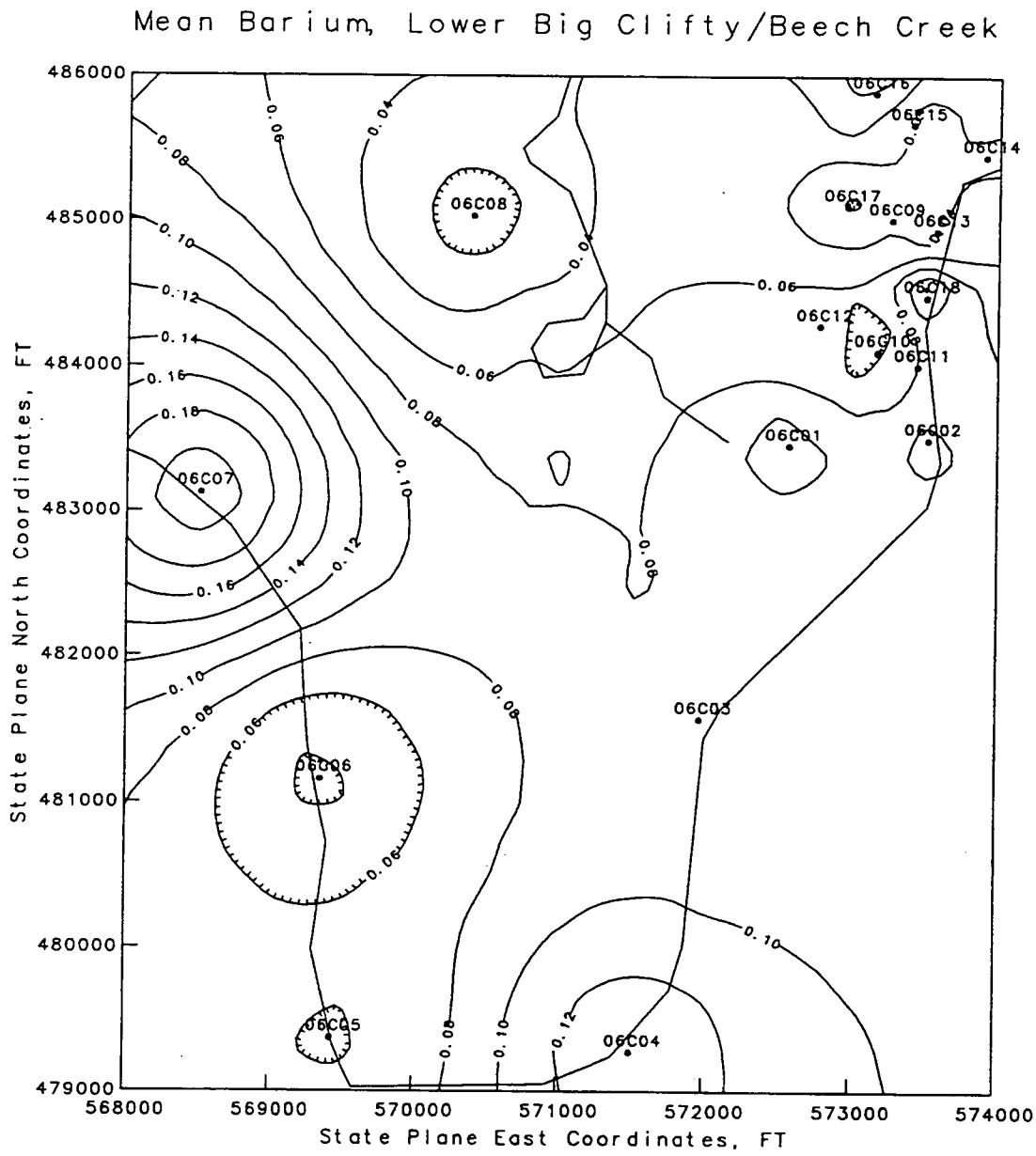
Mean Aluminum, Lower Big Clifty/Beech Creek

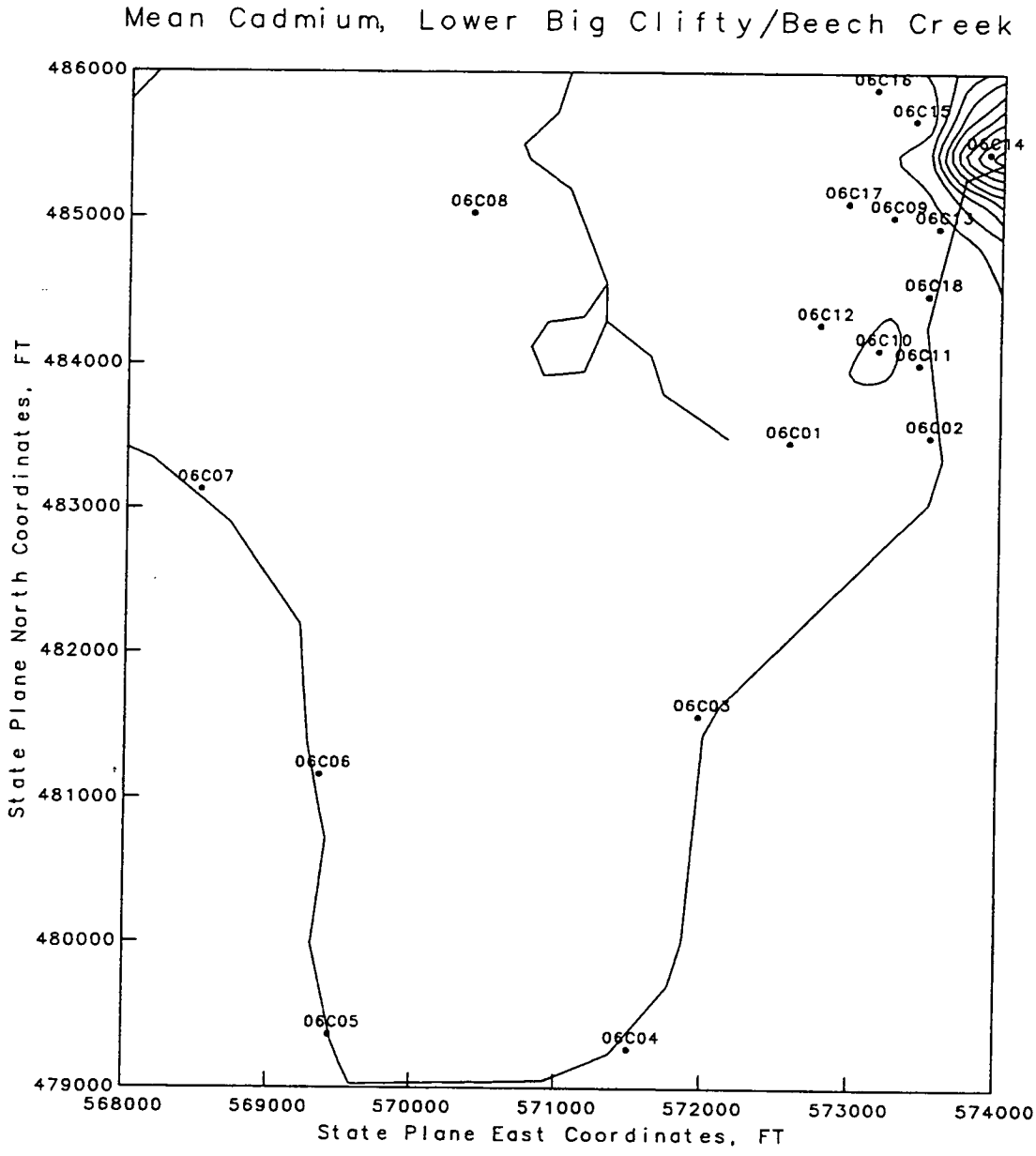


Mean Antimony, Lower Big Clifty/Beech Creek




Mean Arsenic, Lower Big Clifty/Beech Creek
State Plane North Coordinates, FT
State Plane East Coordinates, FT
486000
485000
484000
483000
482000
481000
480000
479000
568000
569000
570000
571000
572000
573000
574000
06C08
06C16
06C15
06C14
06C17
06C09
06C13
06C18
06C12
06C10
06C11
06C01
06C02
06C07
06C03
06C06
06C05
06C04
0.00
0.01


Mean Barium, Lower Big Clifty/Beech Creek
State Plane North Coordinates, FT
State Plane East Coordinates, FT
486000
485000
484000
483000
482000
481000
480000
479000
568000
569000
570000
571000
572000
573000
574000
06C08
06C07
06C06
06C05
06C04
06C03
06C01
06C02
06C12
06C10
06C11
06C18
06C17
06C09
06C13
06C15
06C14
0.04
0.06
0.08
0.10
0.12
0.14
0.16
0.18


Mean Cadmium, Lower Big Clifty/Beech Creek
486000
485000
484000
483000
482000
481000
480000
479000
State Plane North Coordinates, FT
568000
569000
570000
571000
572000
573000
574000
State Plane East Coordinates, FT
06C16
06C15
06C14
06C08
06C17
06C09
06C13
06C18
06C12
06C10
06C11
06C01
06C02
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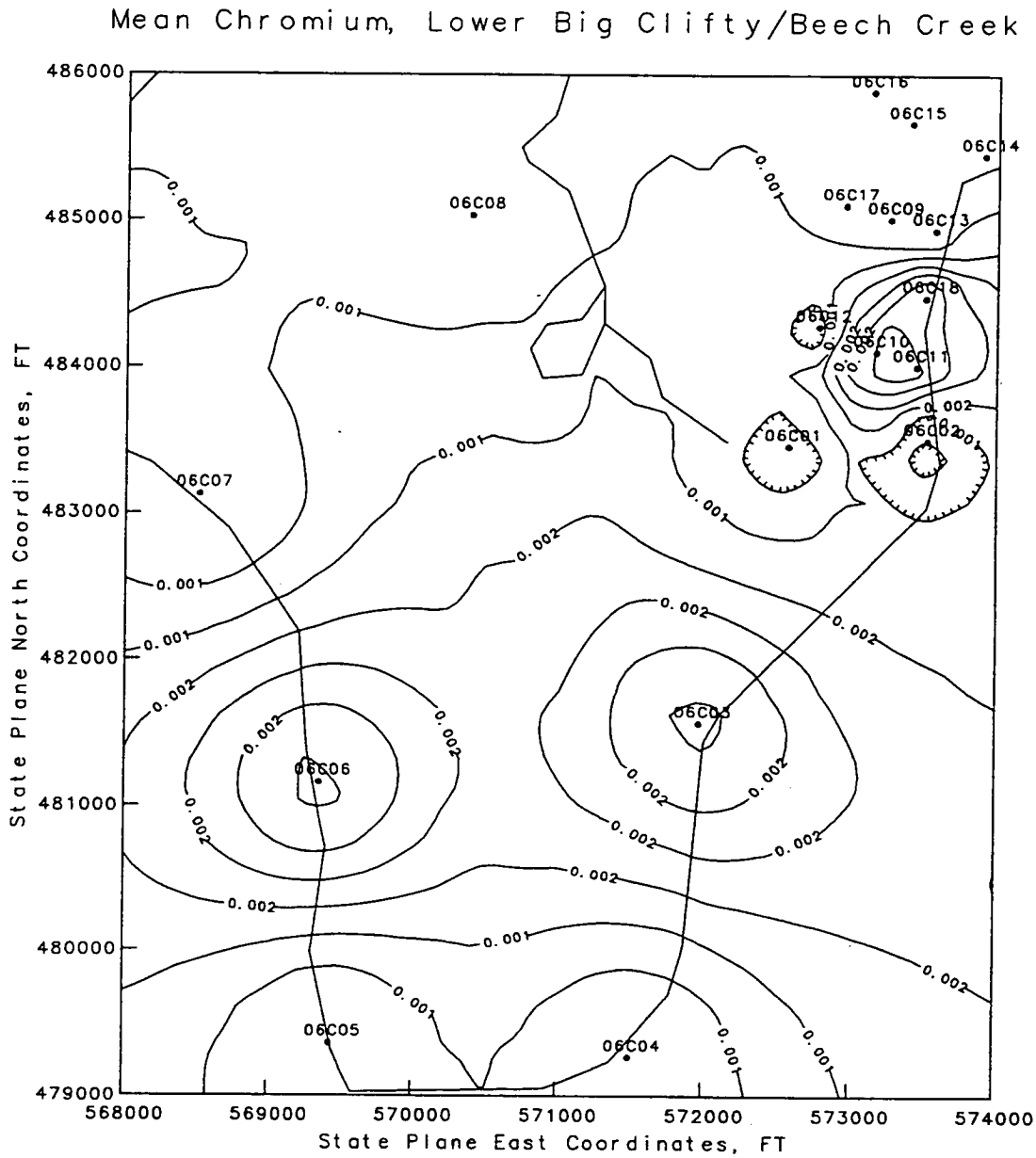
06C03
06C06
06C05
06C04


Mean Chromium, Lower Big Clifty/Beech Creek
State Plane North Coordinates, FT
State Plane East Coordinates, FT
486000
485000
484000
483000
482000
481000
480000
479000
568000
569000
570000
571000
572000
573000
574000
06C08
06C07
06C06
06C05
06C04
06C03
06C01
06C02
06C09
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06C11
06C13
06C14
06C15
06C16
06C17
06C18
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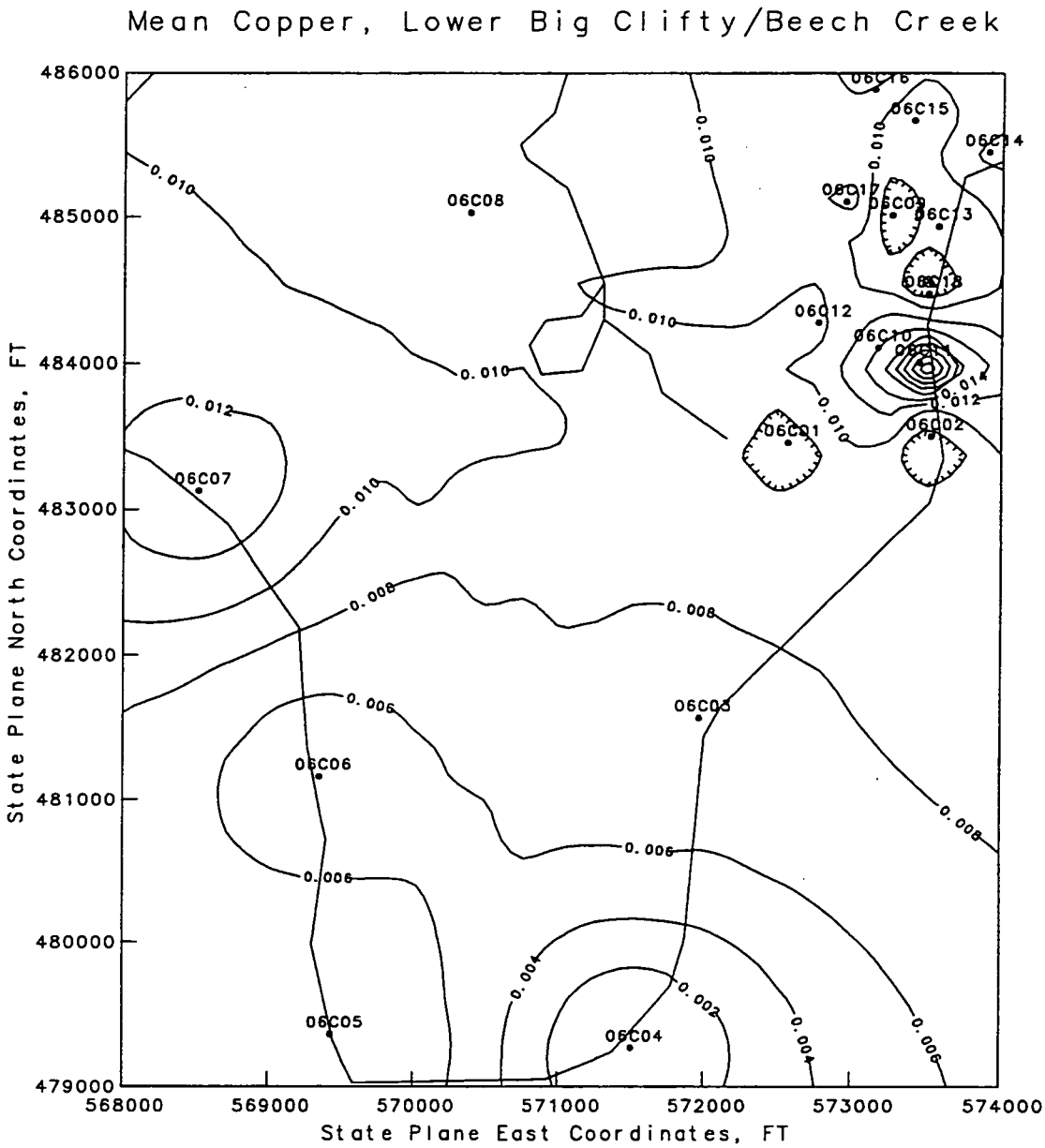
0.002


Mean Copper, Lower Big Clifty/Beech Creek
State Plane North Coordinates, FT
State Plane East Coordinates, FT
486000
485000
484000
483000
482000
481000
480000
479000
568000
569000
570000
571000
572000
573000
574000
06C08
06C15
06C14
06C13
06C12
06C10
06C01
06C02
06C07
06C03
06C06
06C05
06C04
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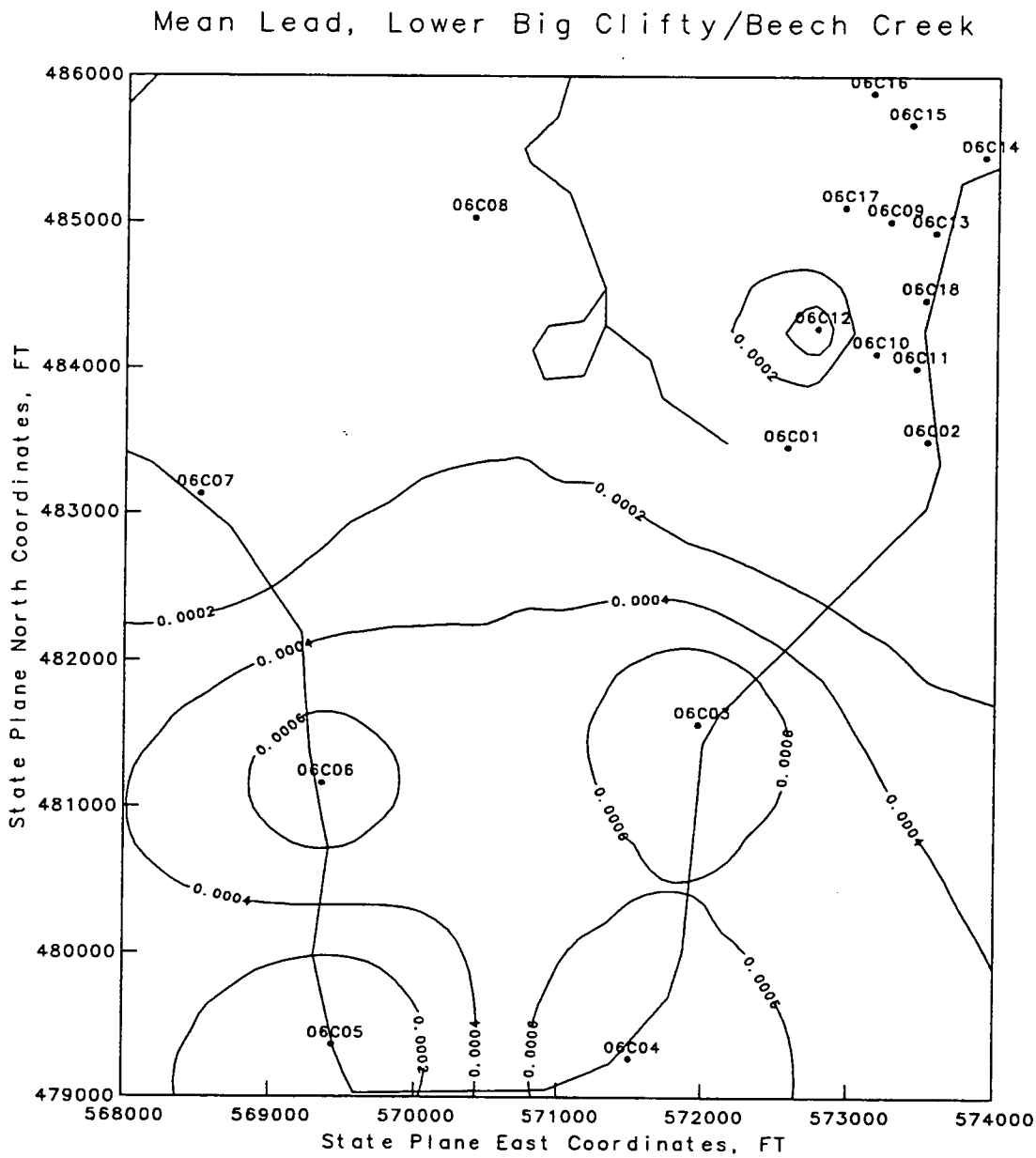
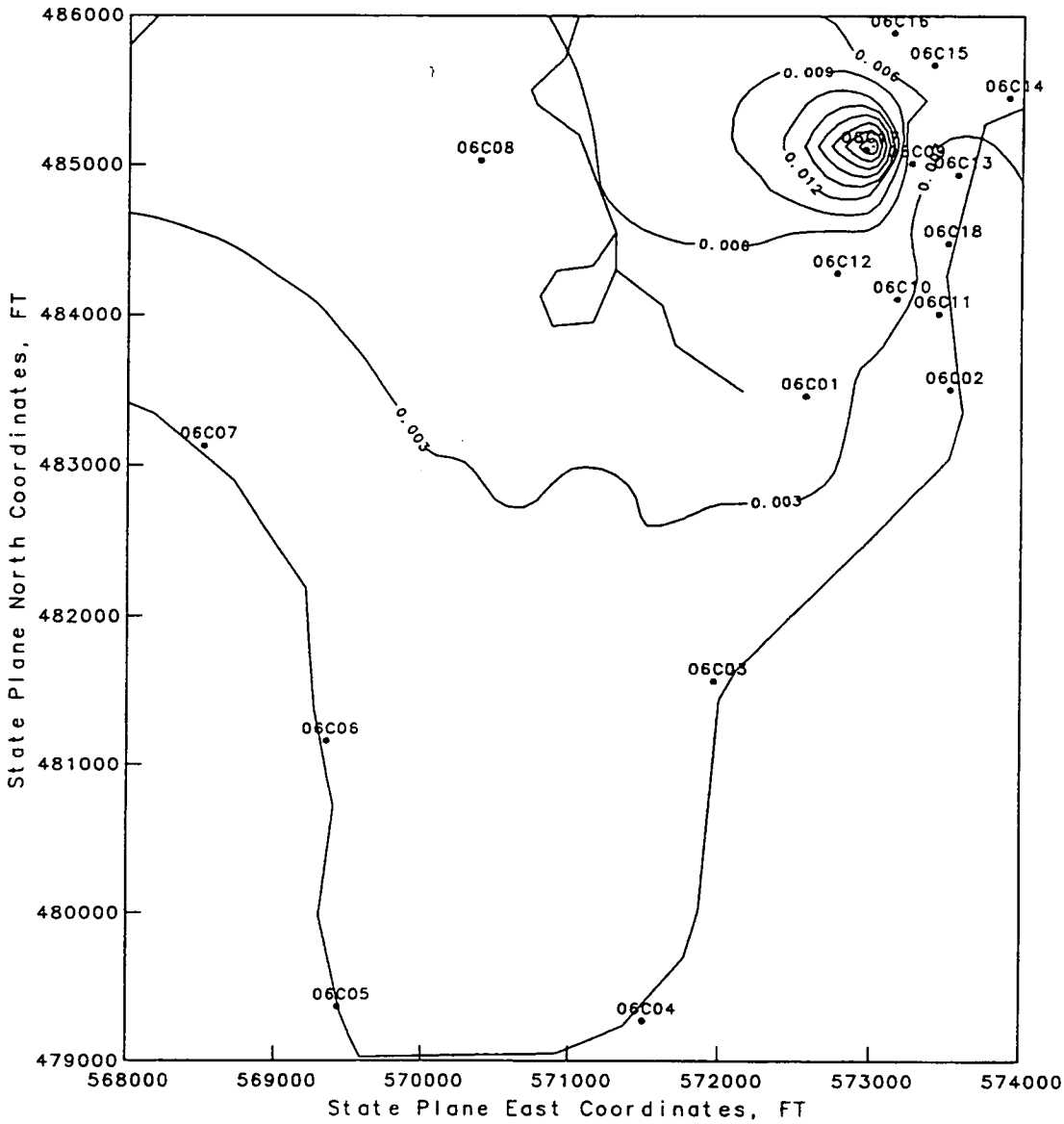
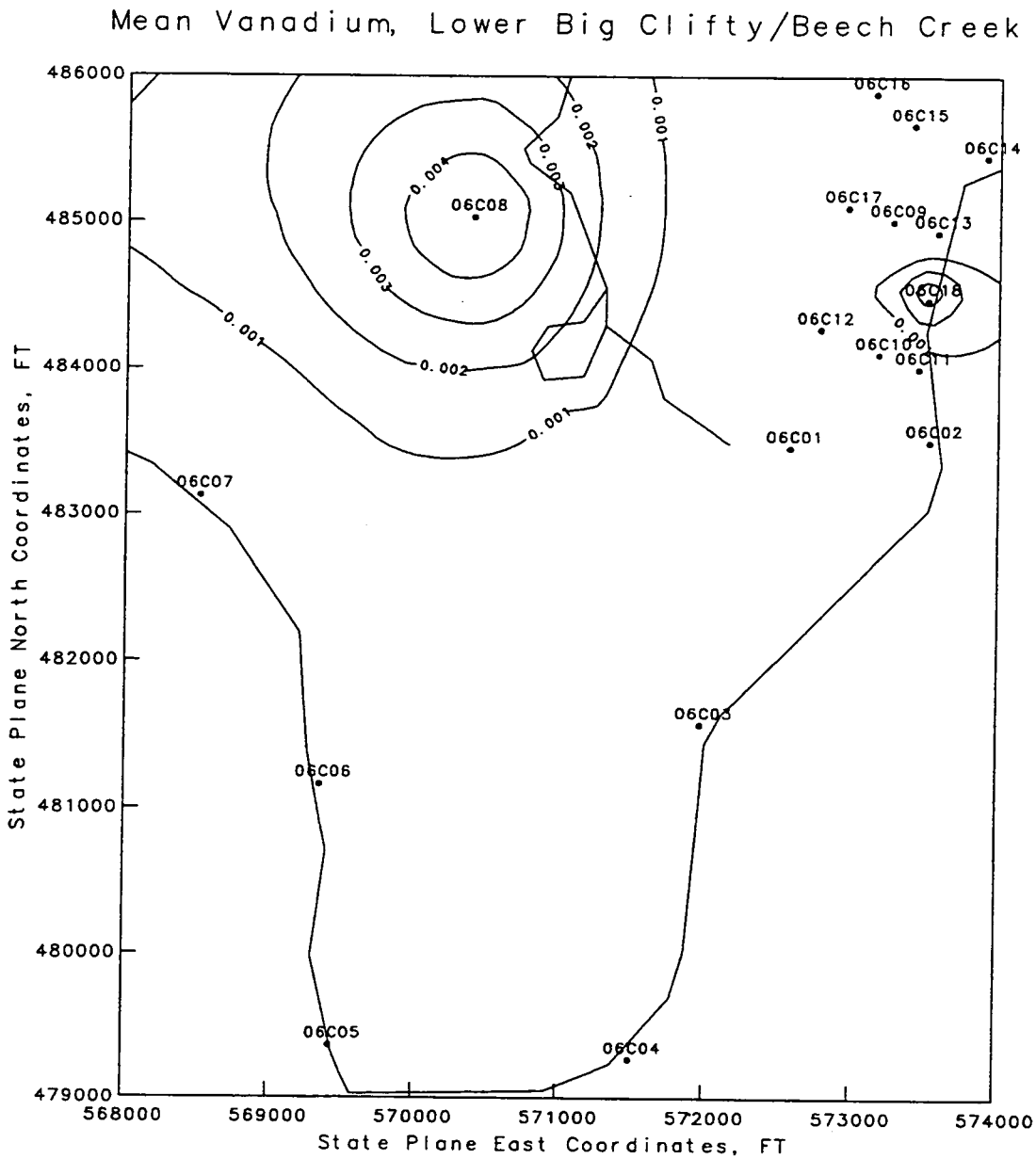
0.012
0.014
0.008
0.006
0.004
0.002


Mean Lead, Lower Big Clifty/Beech Creek
State Plane North Coordinates, FT
State Plane East Coordinates, FT
486000
485000
484000
483000
482000
481000
480000
479000
568000
569000
570000
571000
572000
573000
574000
06C16
06C15
06C14
06C08
06C17
06C09
06C13
06C18
06C12
06C10
06C11
06C01
06C02
06C07
06C03
06C06
06C05
06C04
0.0002
0.0004
0.0006

Mean Nickel, Lower Big Clifty/Beech Creek




Mean Vanadium, Lower Big Clifty/Beech Creek
State Plane North Coordinates, FT
State Plane East Coordinates, FT
486000
485000
484000
483000
482000
481000
480000
479000
568000
569000
570000
571000
572000
573000
574000
06C08
06C16
06C15
06C14
06C17
06C09
06C13
06C18
06C12
06C10
06C11
06C01
06C02
06C07
06C03
06C06
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06C04
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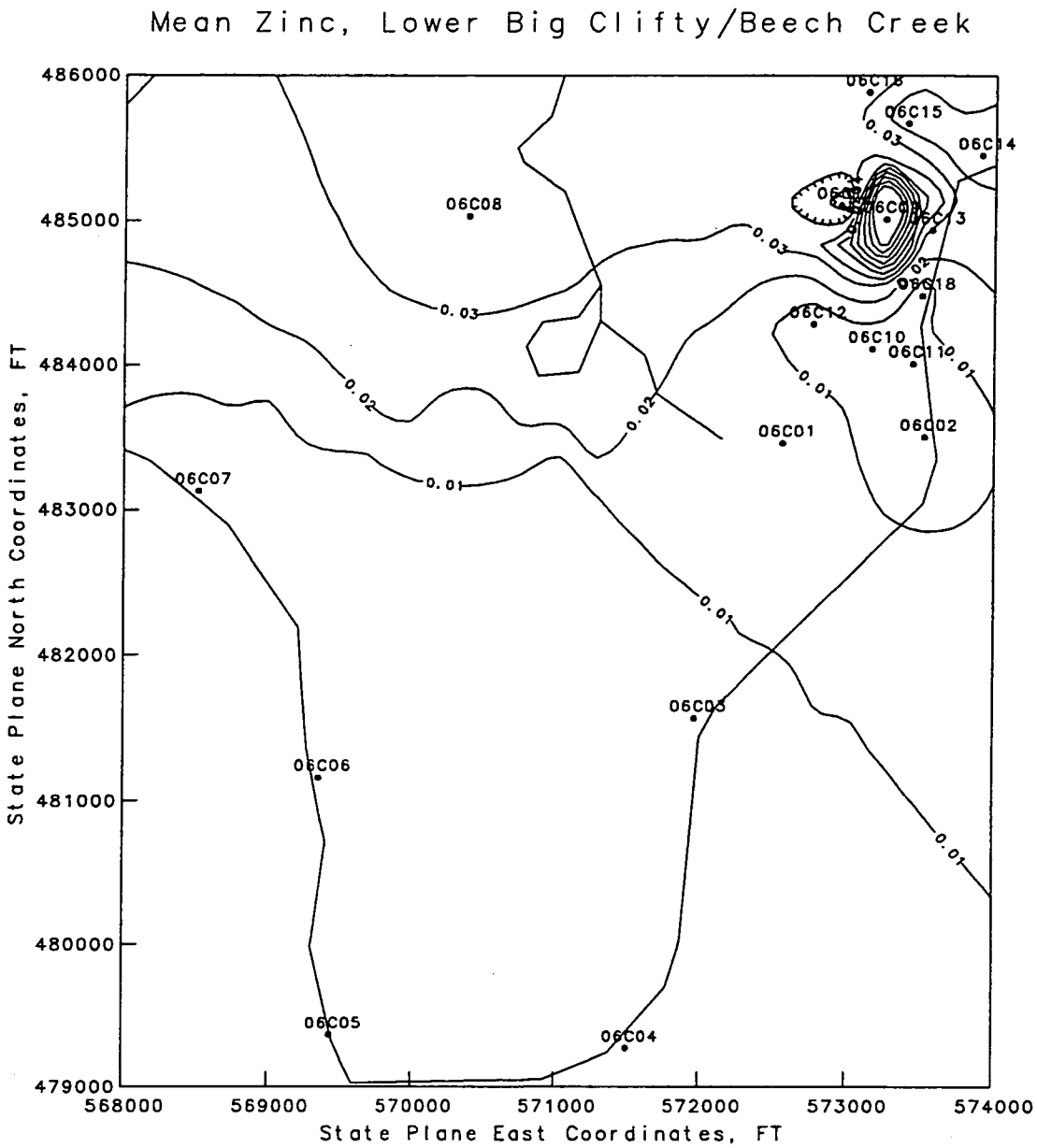
0.003
0.002
0.001


Mean Zinc, Lower Big Clifty/Beech Creek
State Plane North Coordinates, FT
State Plane East Coordinates, FT
486000
485000
484000
483000
482000
481000
480000
479000
568000
569000
570000
571000
572000
573000
574000
06C08
06C15
06C14
06C13
06C18
06C12
06C10
06C11
06C01
06C02
06C07
06C03
06C06
06C05
06C04
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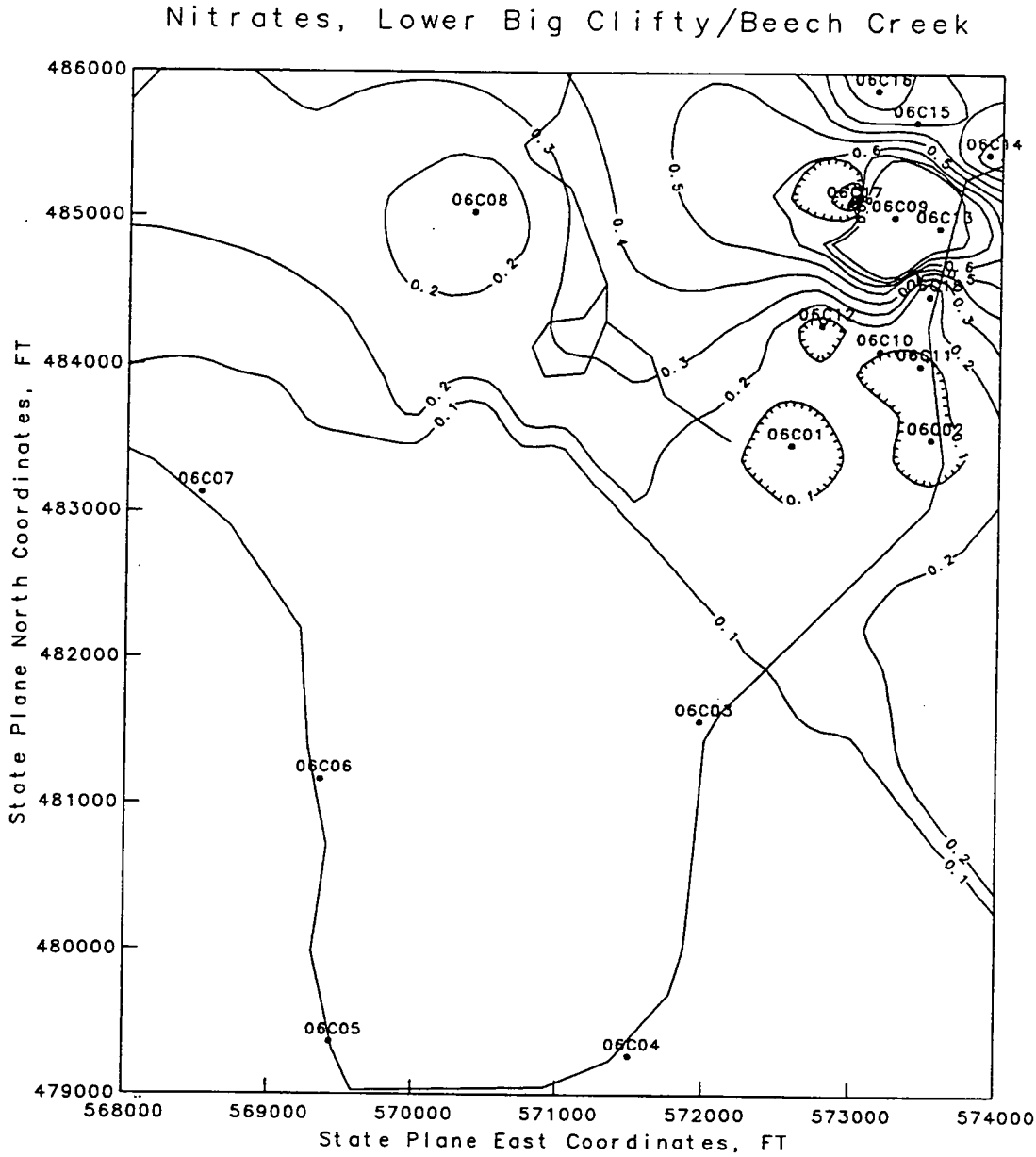
0.02
0.01


Nitrates, Lower Big Clifty/Beech Creek
State Plane North Coordinates, FT
State Plane East Coordinates, FT
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485000
484000
483000
482000
481000
480000
479000
568000
569000
570000
571000
572000
573000
574000
06C08
06C07
06C06
06C05
06C04
06C03
06C01
06C02
06C10
06C11
06C12
06C13
06C14
06C15
06C16
06C17
06C09
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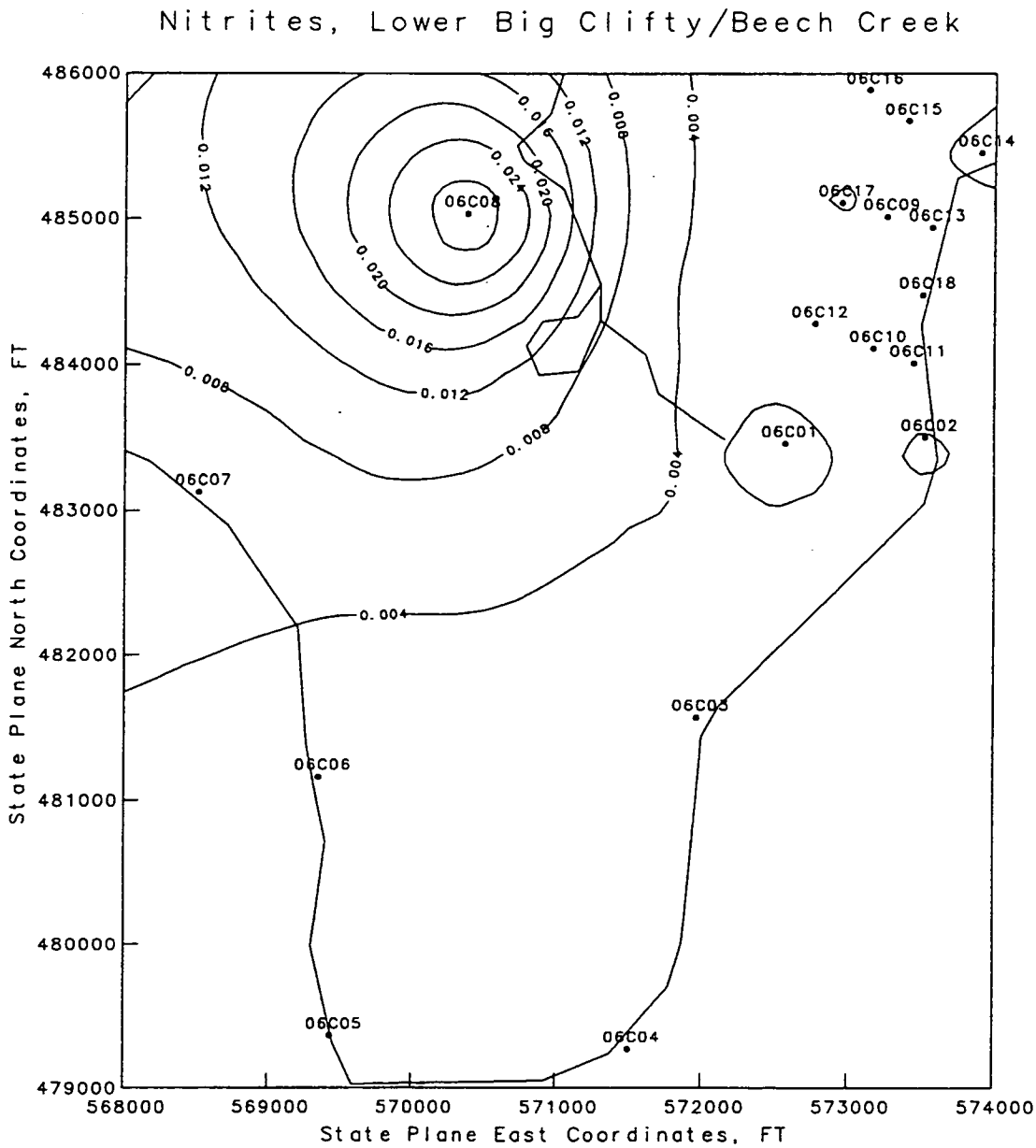
0.2
0.3
0.4
0.5
0.6


Nitrites, Lower Big Clifty/Beech Creek
State Plane North Coordinates, FT
State Plane East Coordinates, FT
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485000
484000
483000
482000
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480000
479000
568000
569000
570000
571000
572000
573000
574000
06C08
06C07
06C06
06C05
06C04
06C03
06C01
06C02
06C12
06C10
06C11
06C18
06C17
06C09
06C13
06C15
06C14
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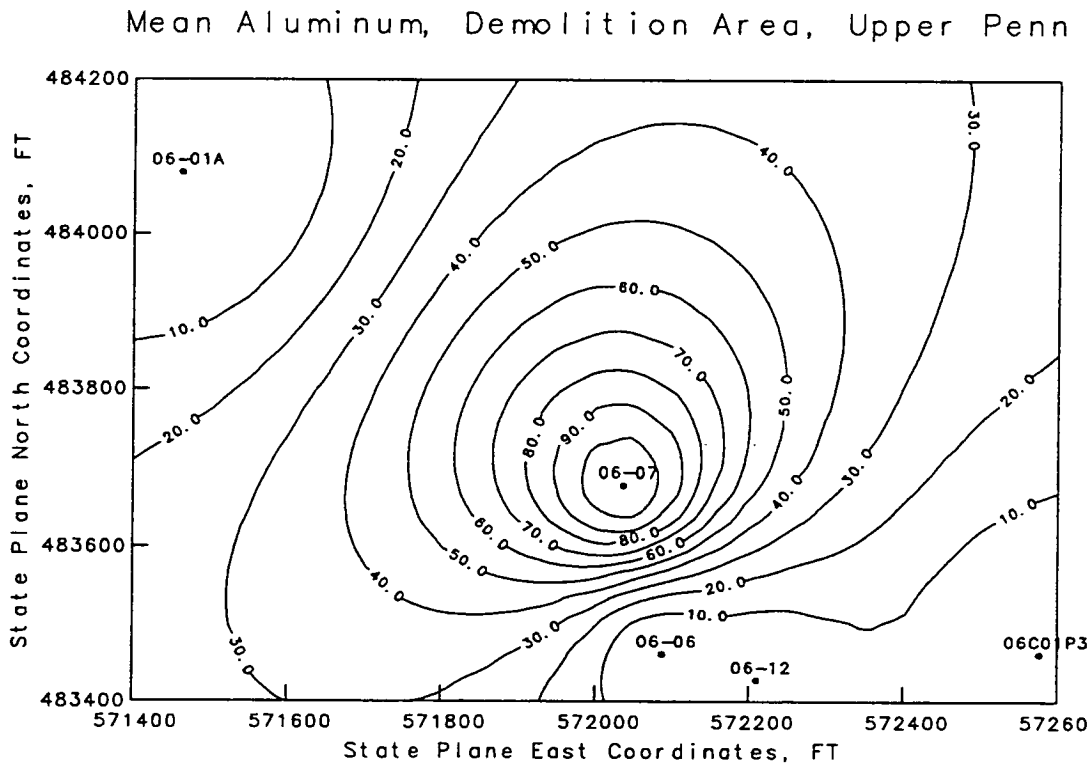
0.012
0.008
0.004


Mean Aluminum, Demolition Area, Upper Penn
State Plane North Coordinates, FT
484200
484000
483800
483600
483400
State Plane East Coordinates, FT
571400
571600
571800
572000
572200
572400
572600
06-01A
06-07
06-06
06-12
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30.0
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50.0
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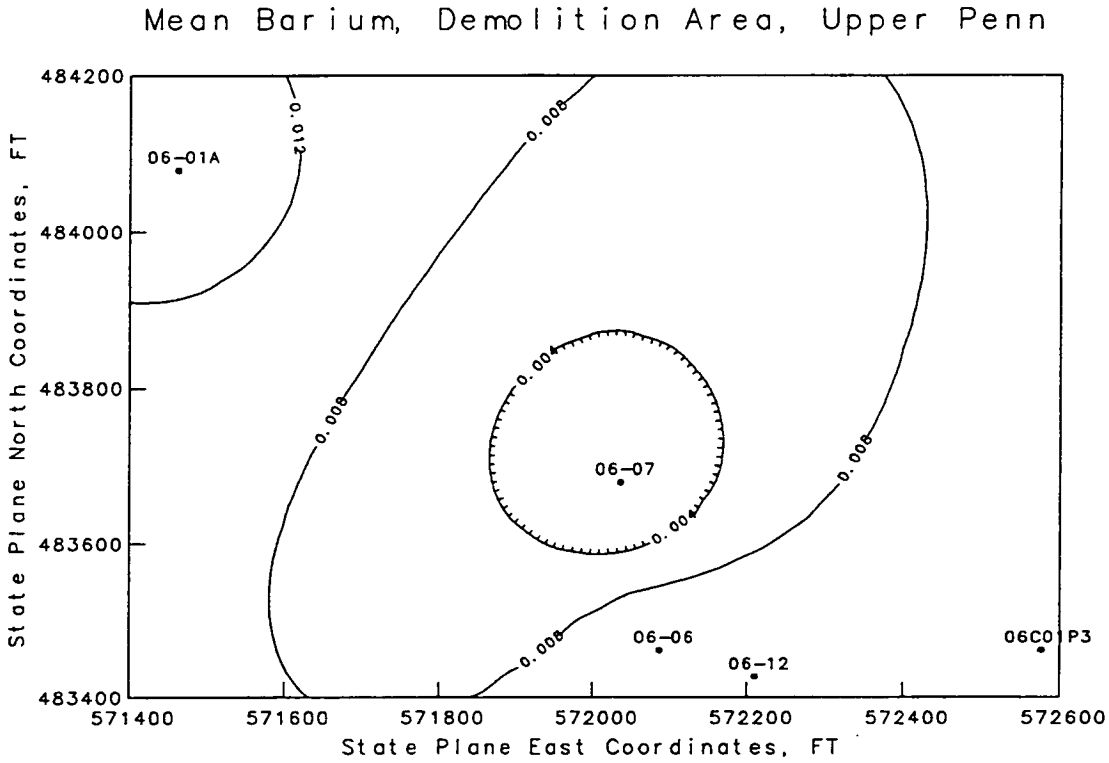
70.0
80.0
90.0


Mean Barium, Demolition Area, Upper Penn
484200
484000
483800
483600
483400
State Plane North Coordinates, FT
571400
571600
571800
572000
572200
572400
572600
State Plane East Coordinates, FT
06-01A
06-07
06-06
06-12
06C01P3
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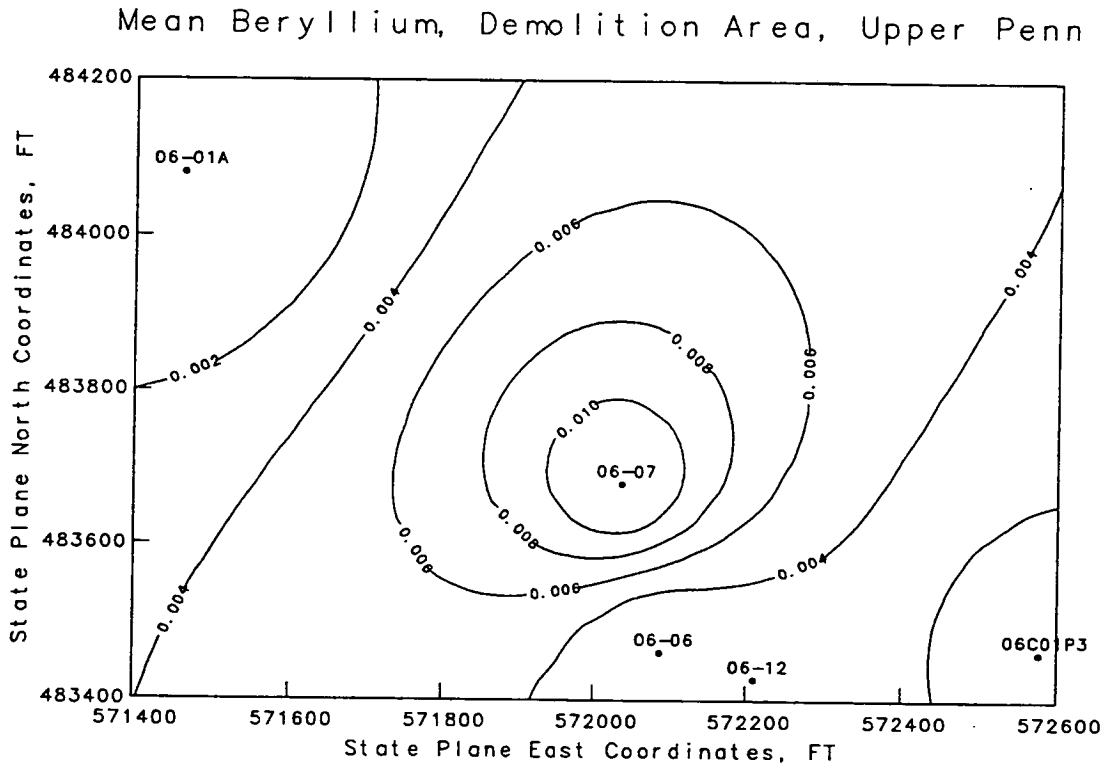
0.008
0.004


Mean Beryllium, Demolition Area, Upper Penn
484200
484000
483800
483600
483400
State Plane North Coordinates, FT
571400
571600
571800
572000
572200
572400
572600
State Plane East Coordinates, FT
06-01A
06-07
06-06
06-12
06C01P3
0.002
0.004
0.006
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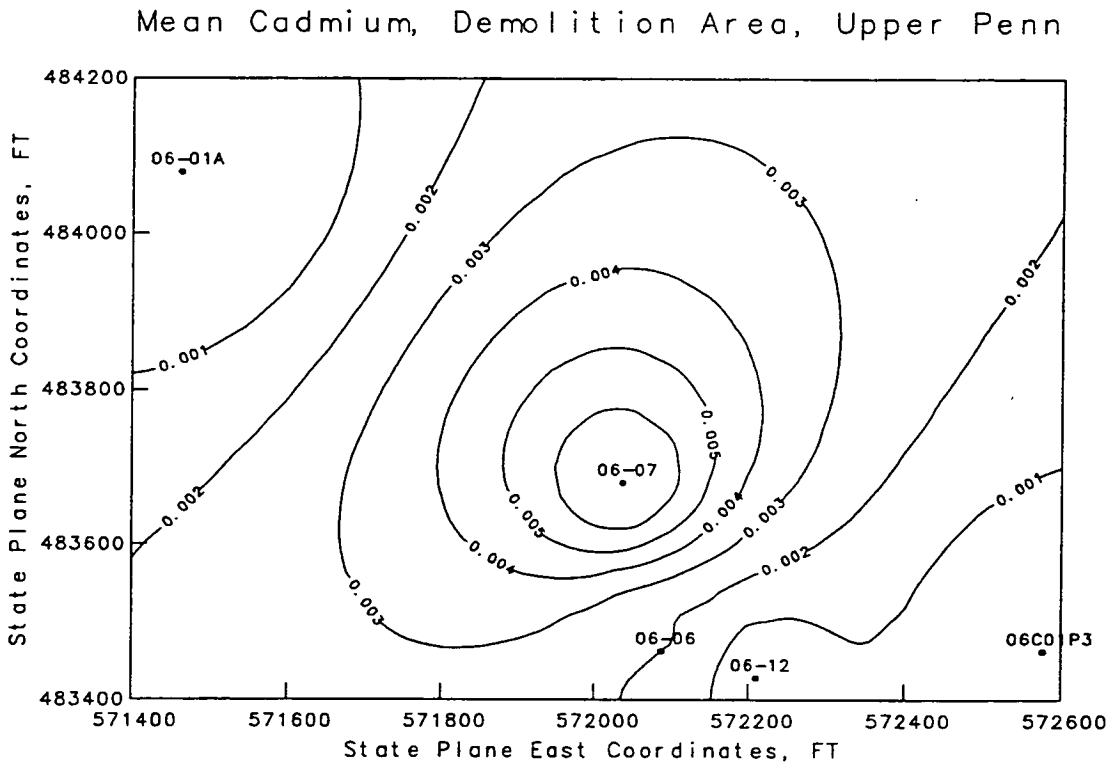
0.010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State Plane East Coordinates, FT
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571600
571800
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572200
572400
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06-07
06-06
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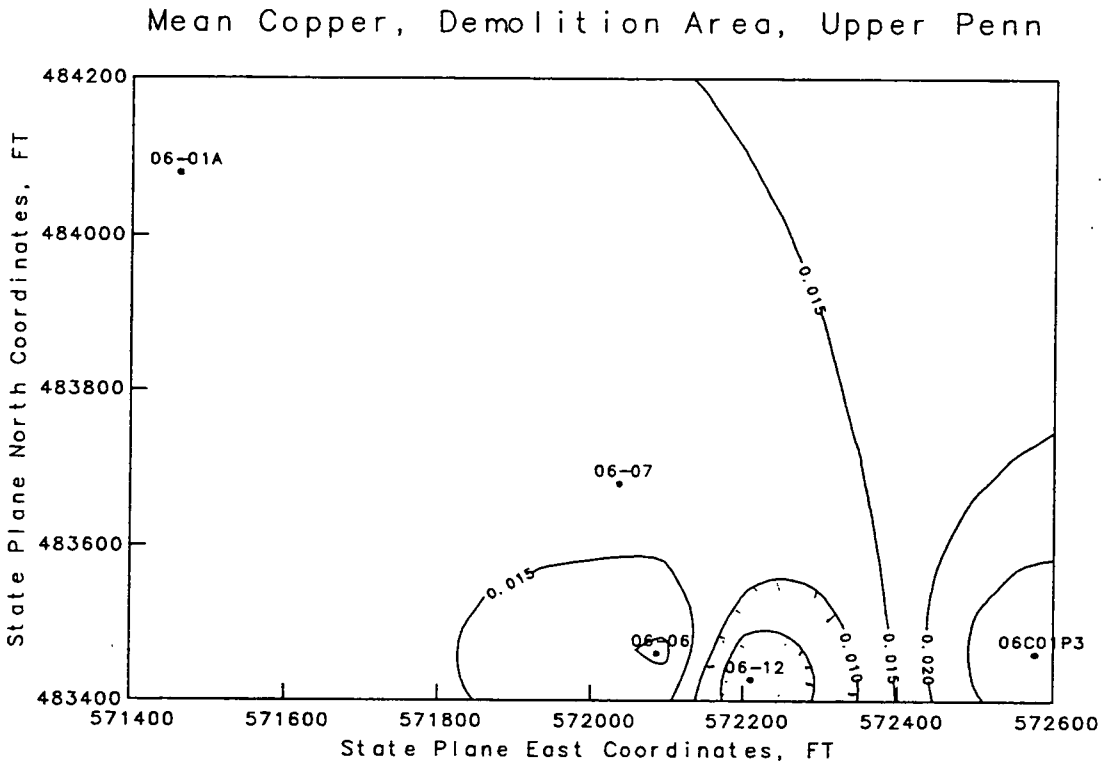
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06-12
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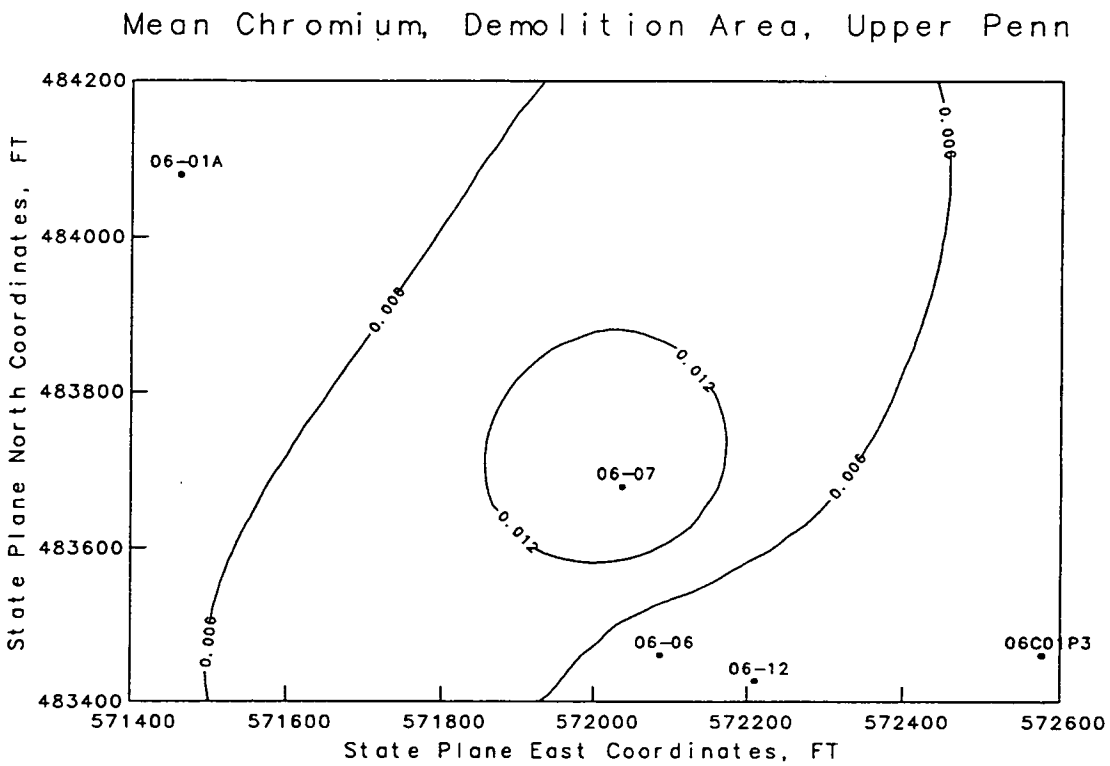
0.015
0.010
0.015
0.020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572400
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State Plane East Coordinates, FT
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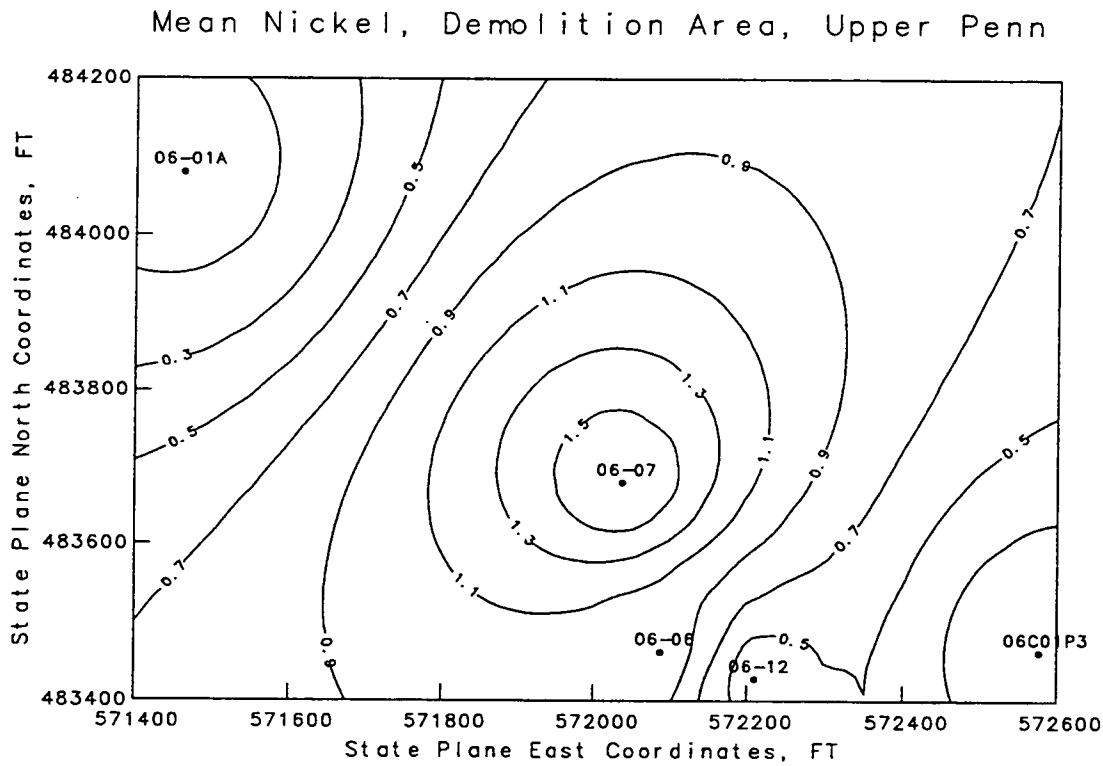
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State Plane East Coordinates, FT
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571800
572000
572200
572400
572600
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0.5
0.7
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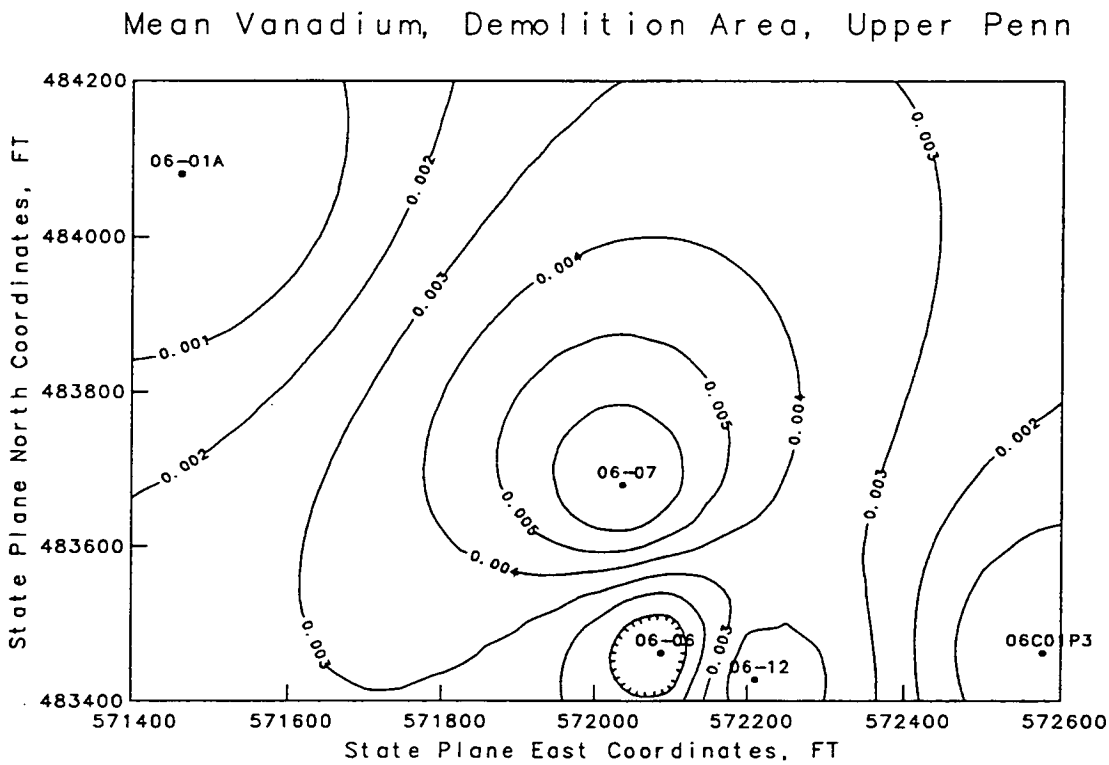
1.3
1.5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483600
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State Plane East Coordinates, FT
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571600
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572000
572200
572400
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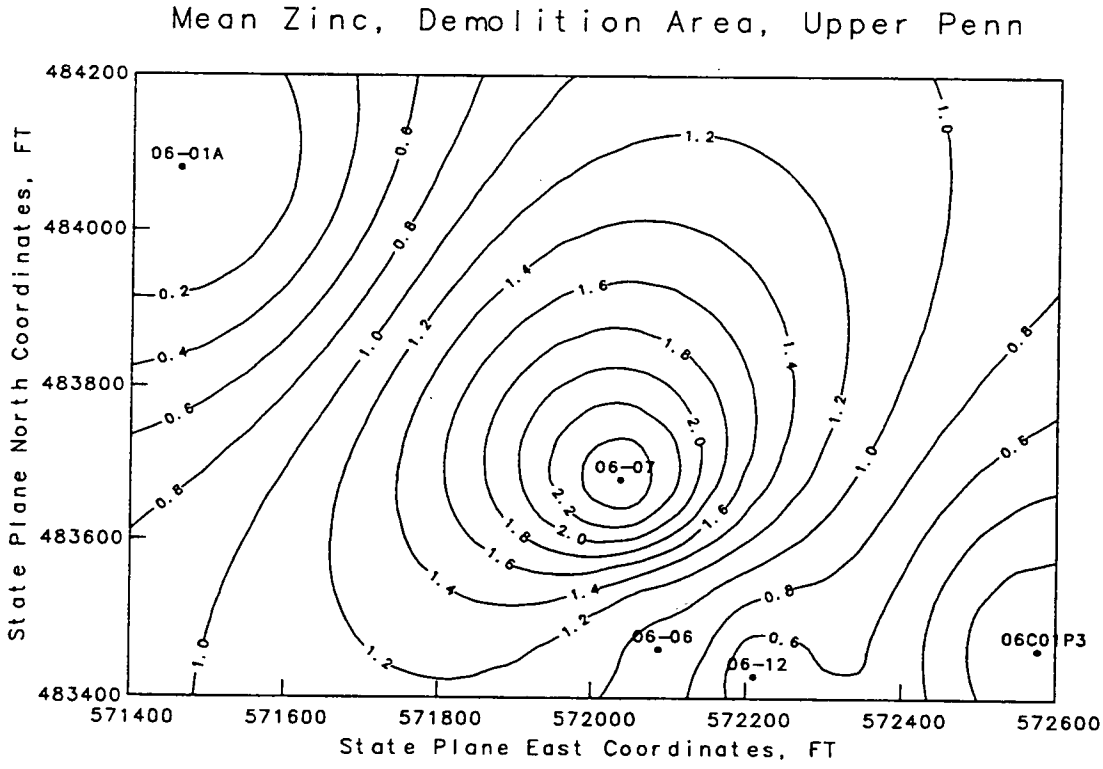
Mean Zinc, Demolition Area, Upper Penn
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483400
State Plane East Coordinates, FT
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571600
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572200
572400
572600
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06-07
06-06
06-12
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0.4
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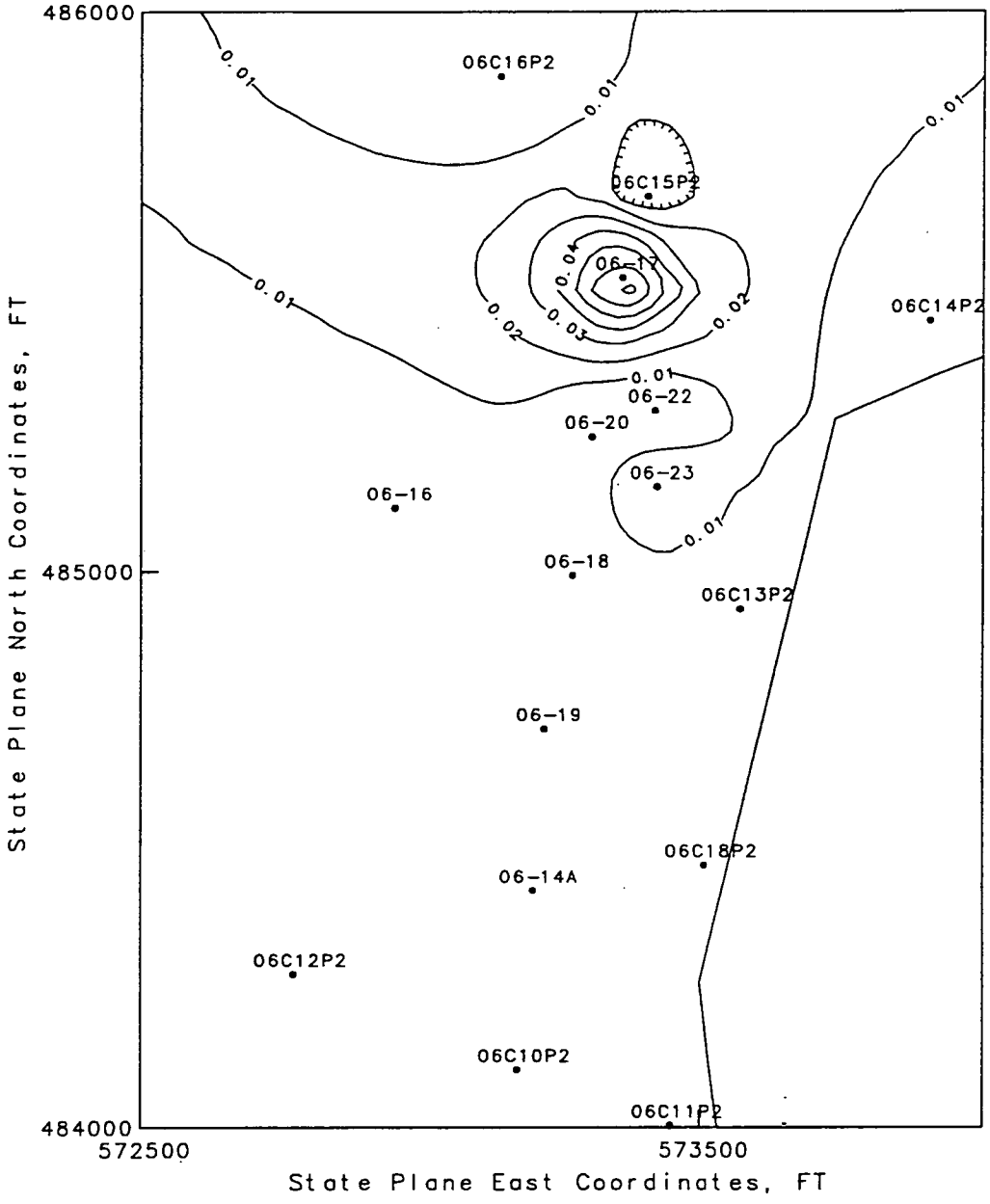
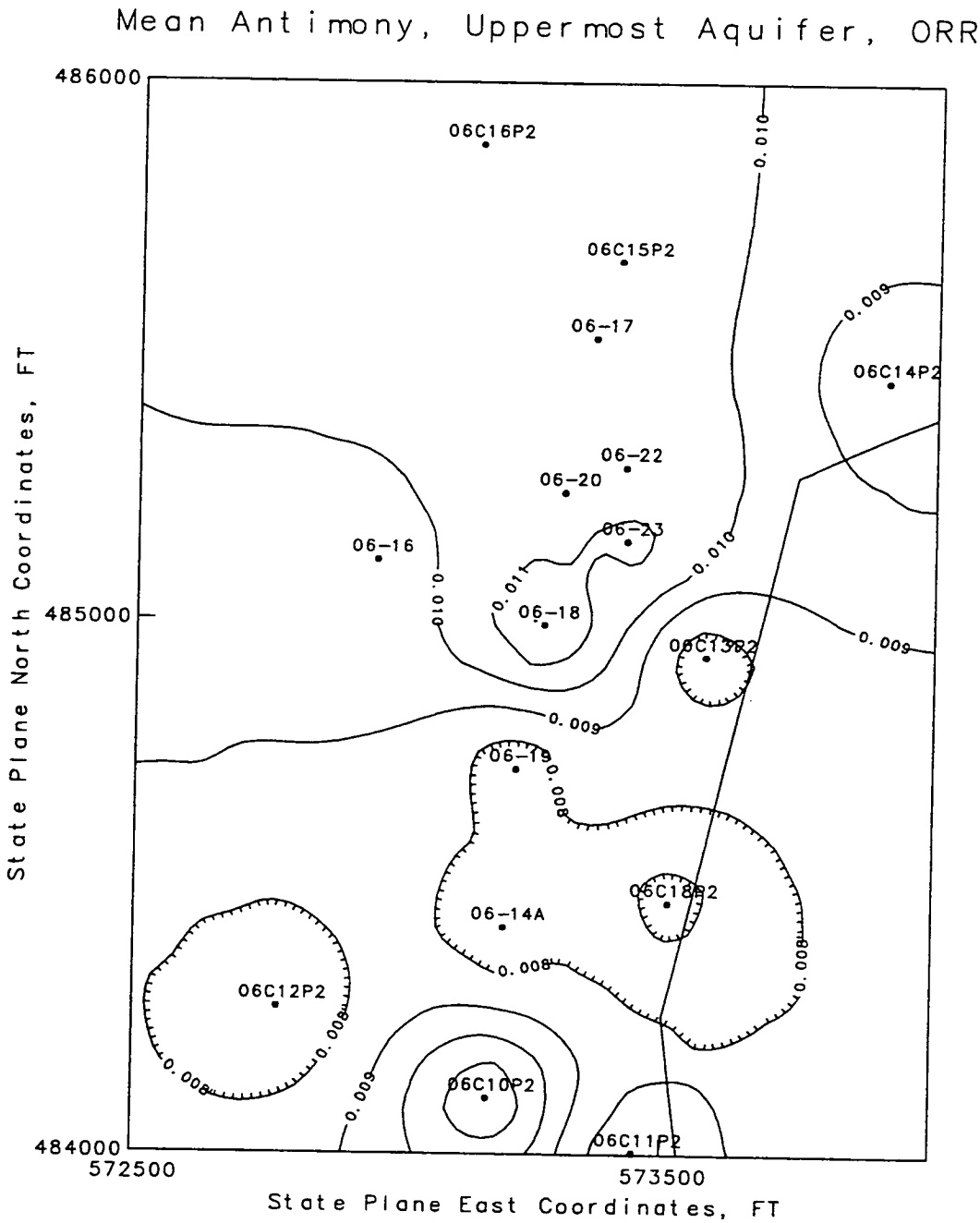
1.6
1.8
2.0
2.2

Mean Aluminum, Uppermost Aquifer, ORR

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State Plane East Coordinates, FT
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06-23
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06-18
06C13P2
06-19
06C18P2
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0.008
0.011

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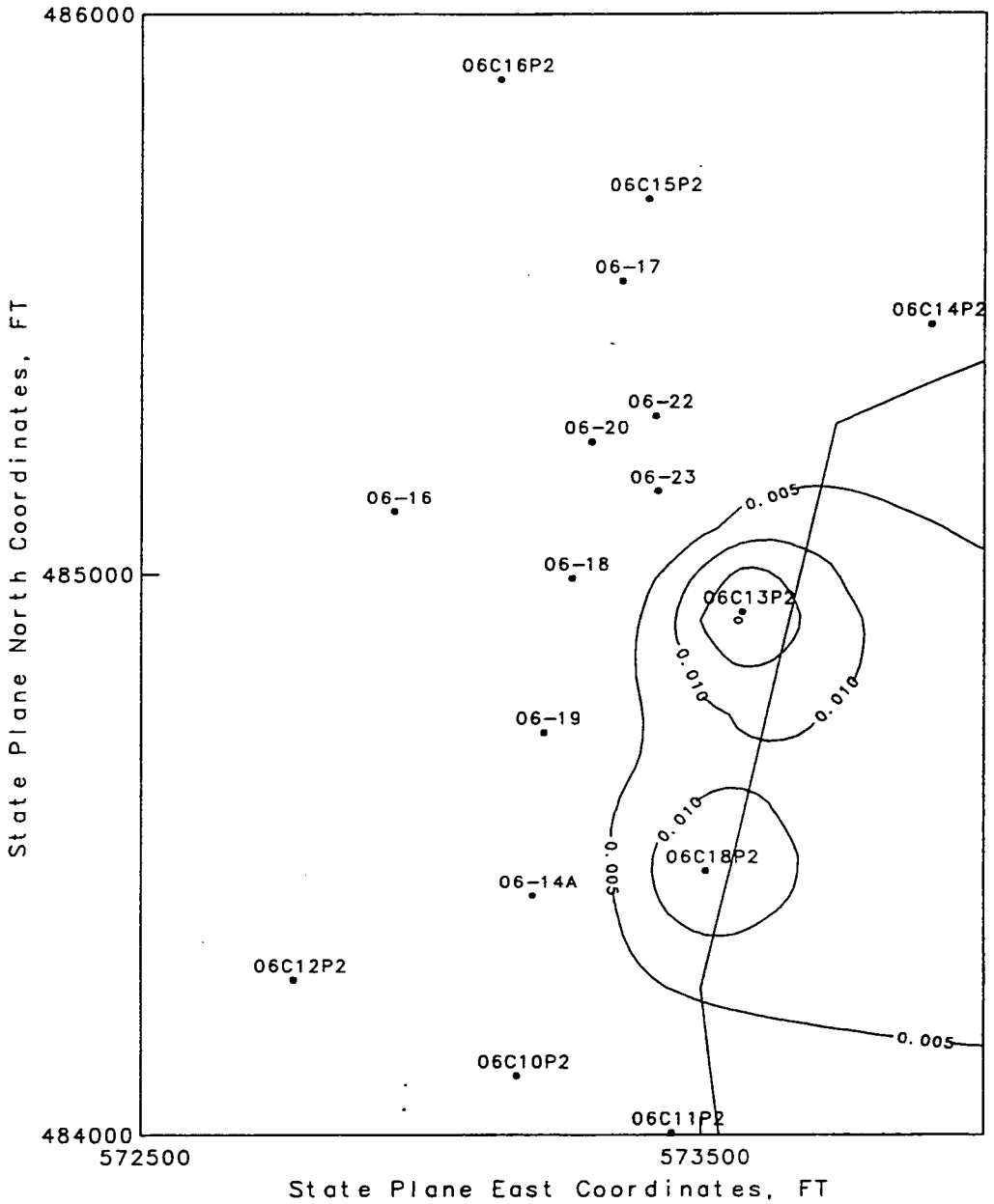

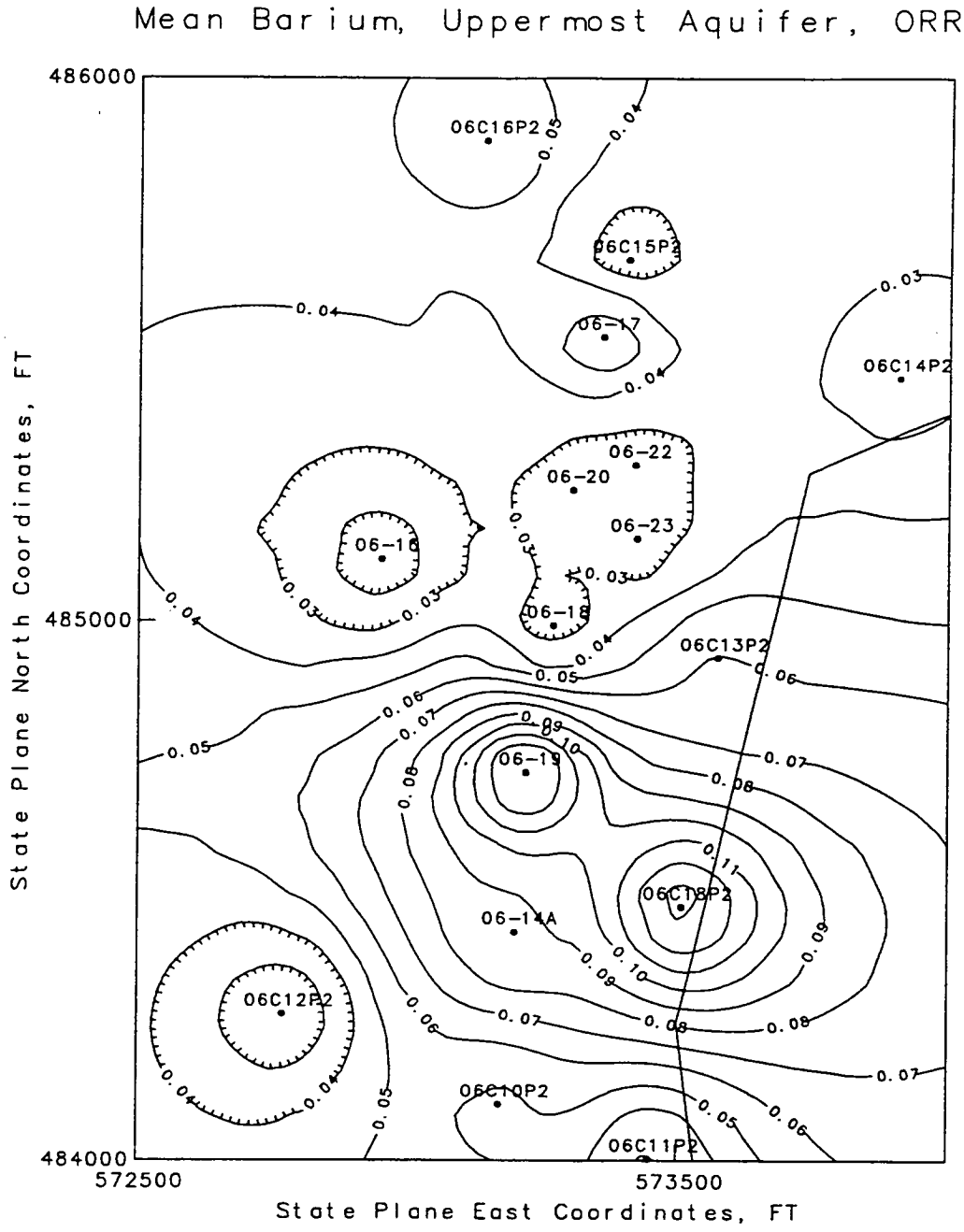
Mean Barium, Uppermost Aquifer, ORR
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06C18P2
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06C10P2
06C11P2
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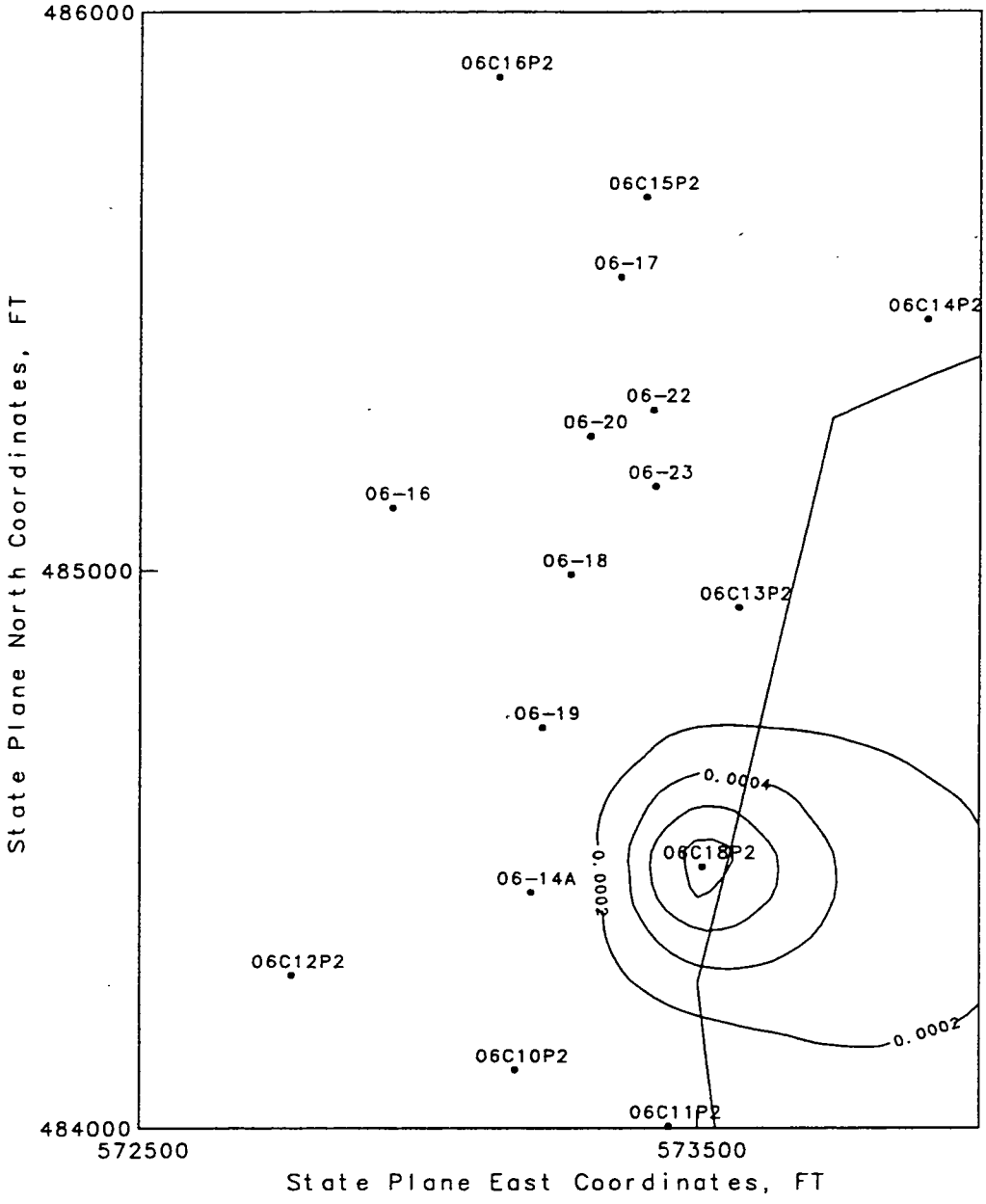
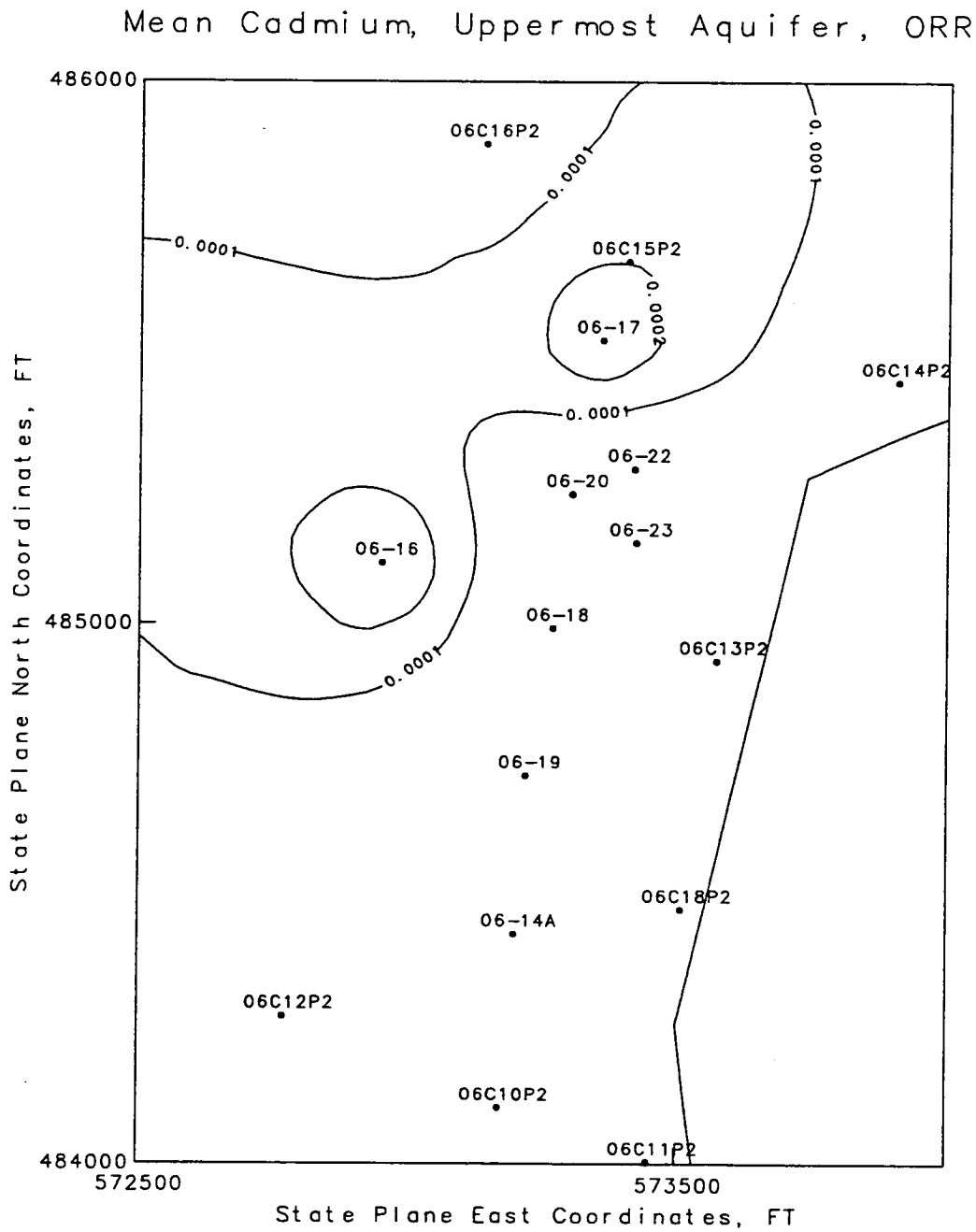
0.08
0.09
0.10
0.11

Mean Beryllium, Uppermost Aquifer, ORR




Mean Cadmium, Uppermost Aquifer, ORR
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State Plane North Coordinates, FT
State Plane East Coordinates, FT
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06C14P2
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06-19
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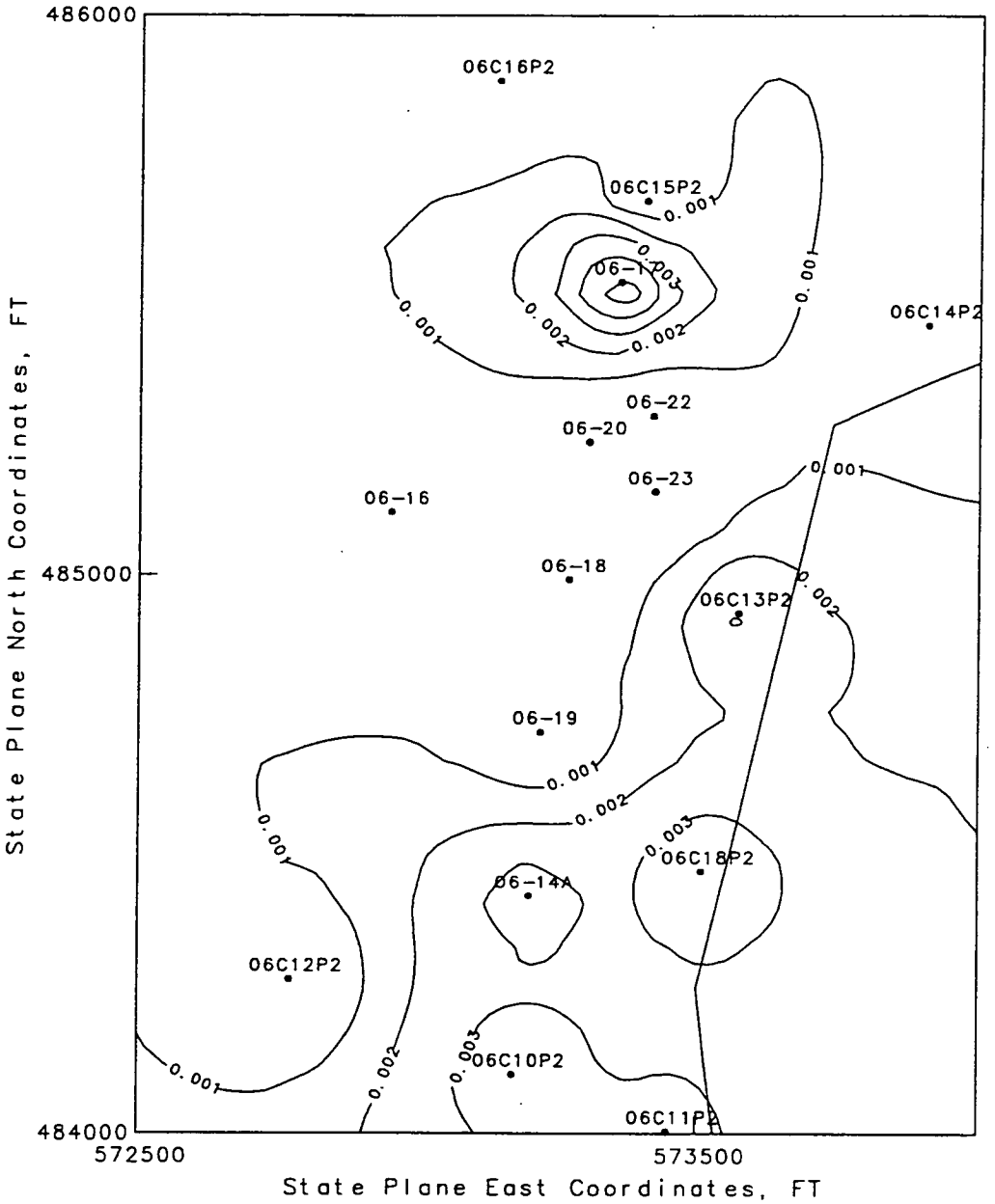
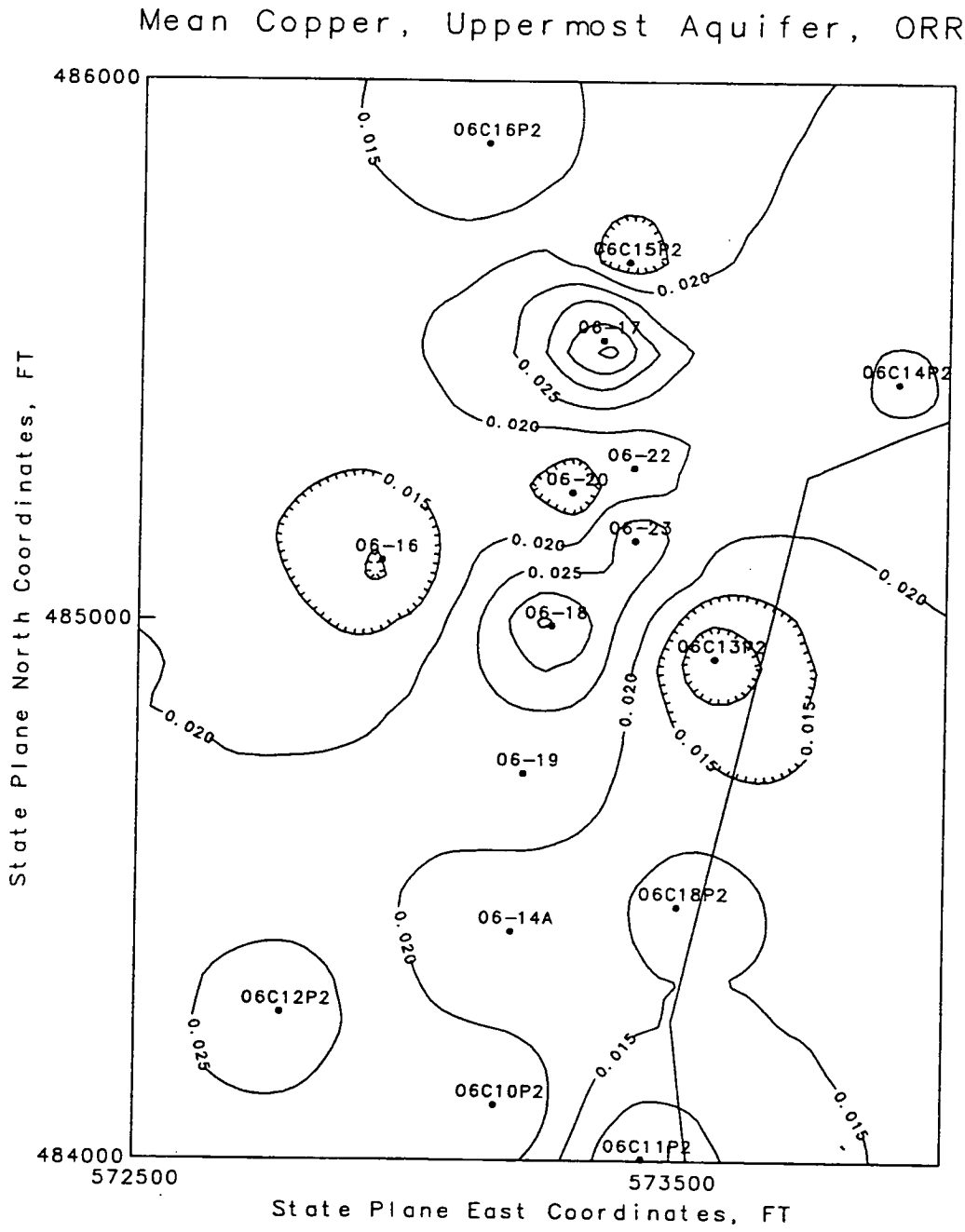
0.0002
0.0000

Mean Chromium, Uppermost Aquifer, ORR




Mean Copper, Uppermost Aquifer, ORR
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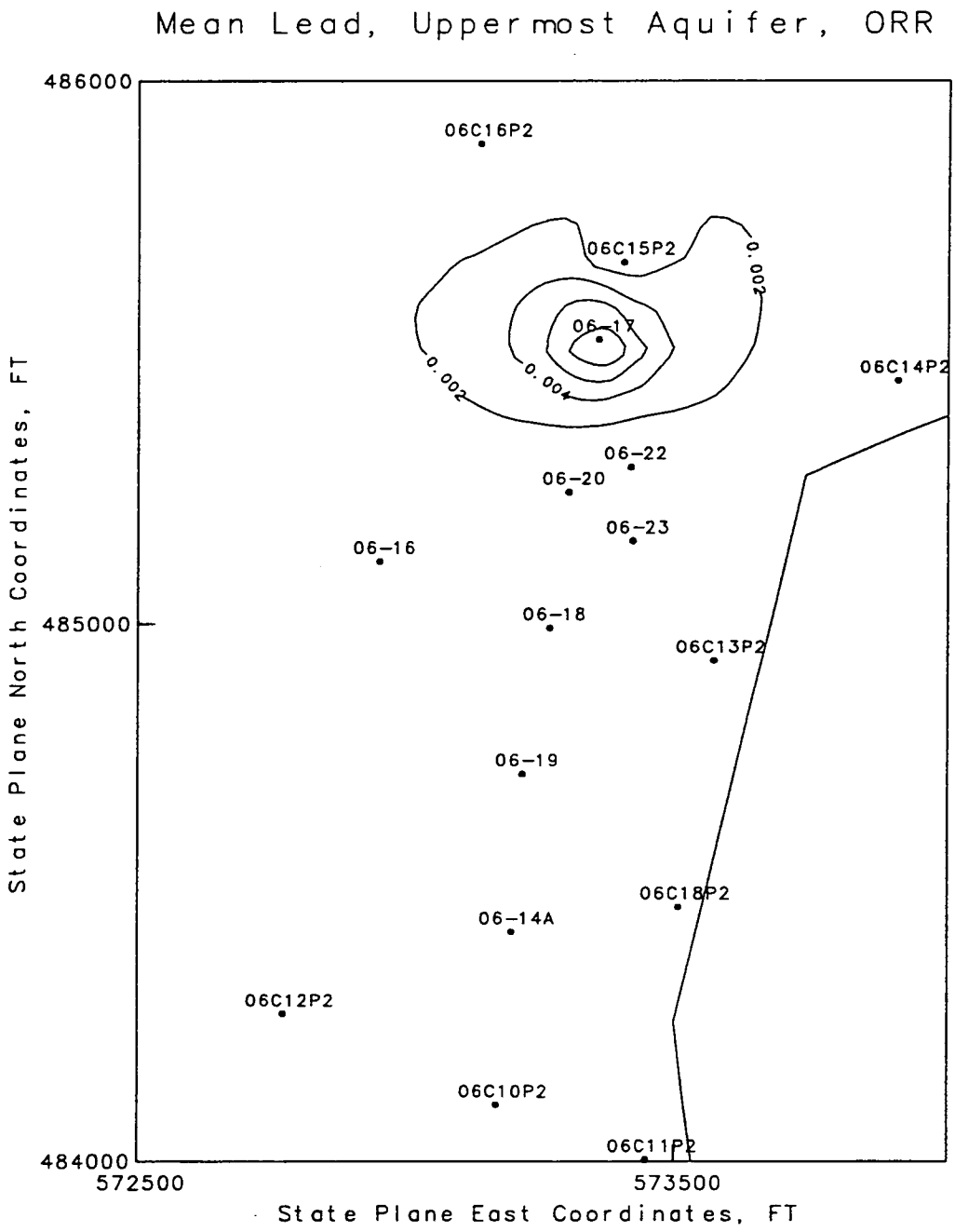
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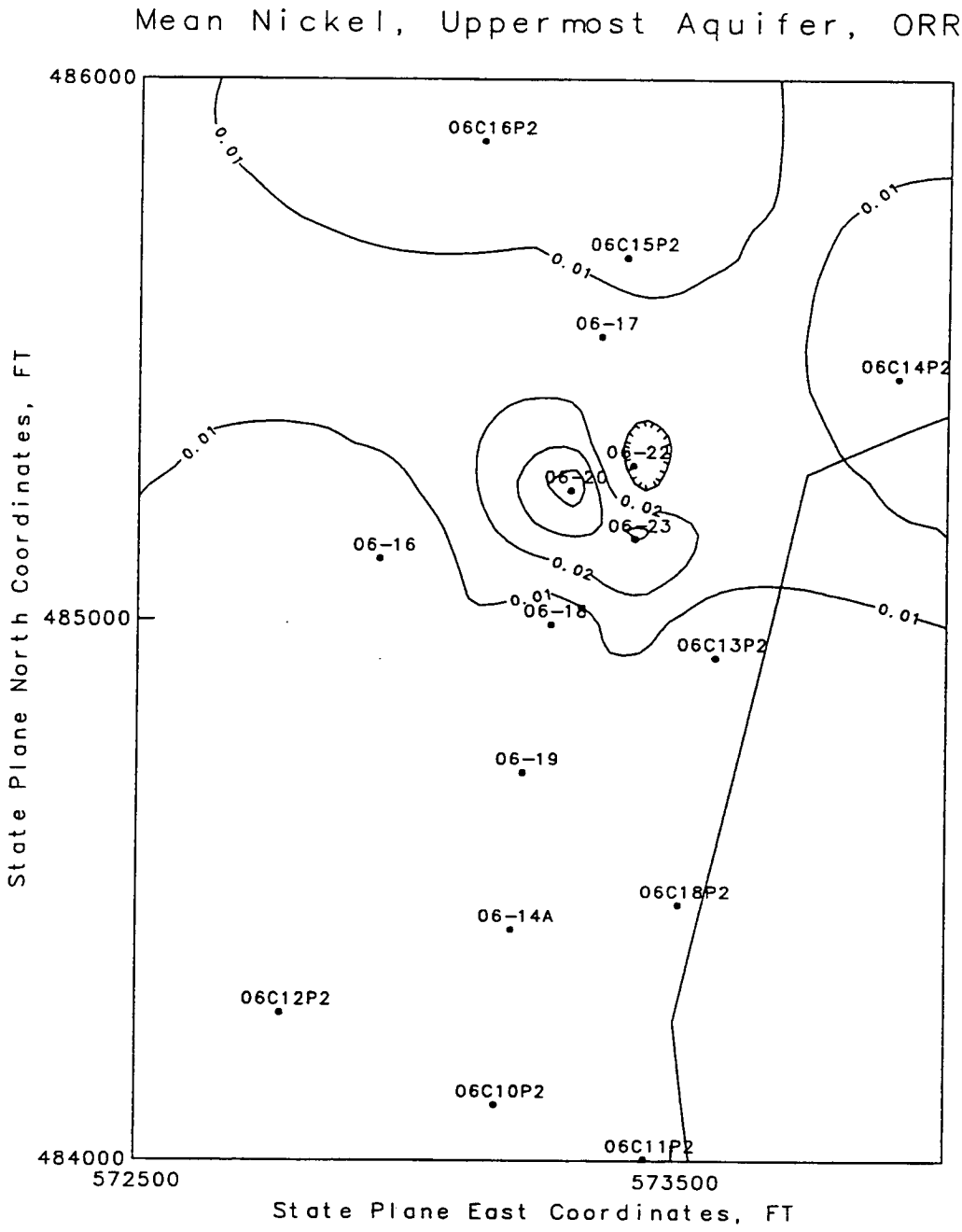
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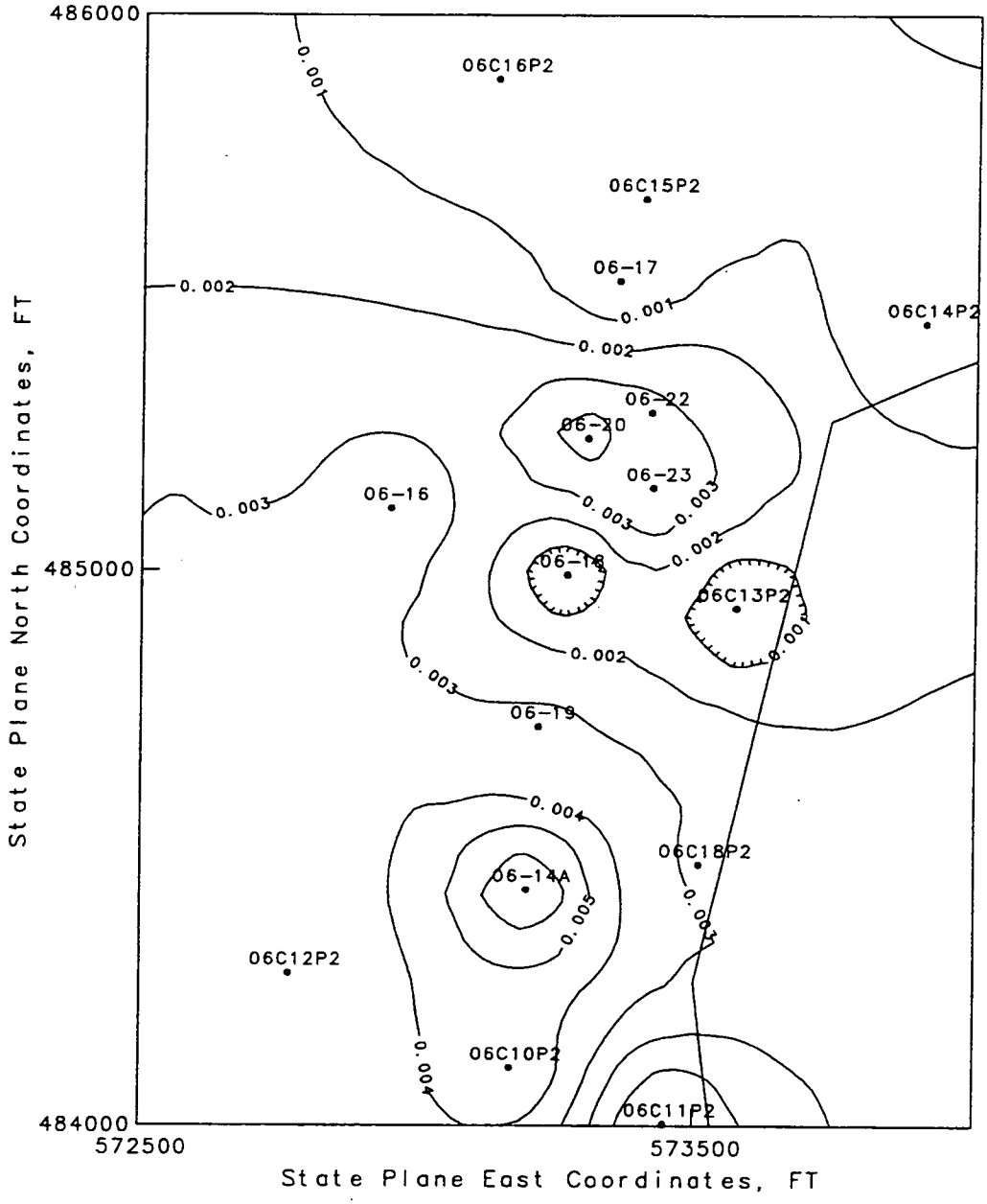
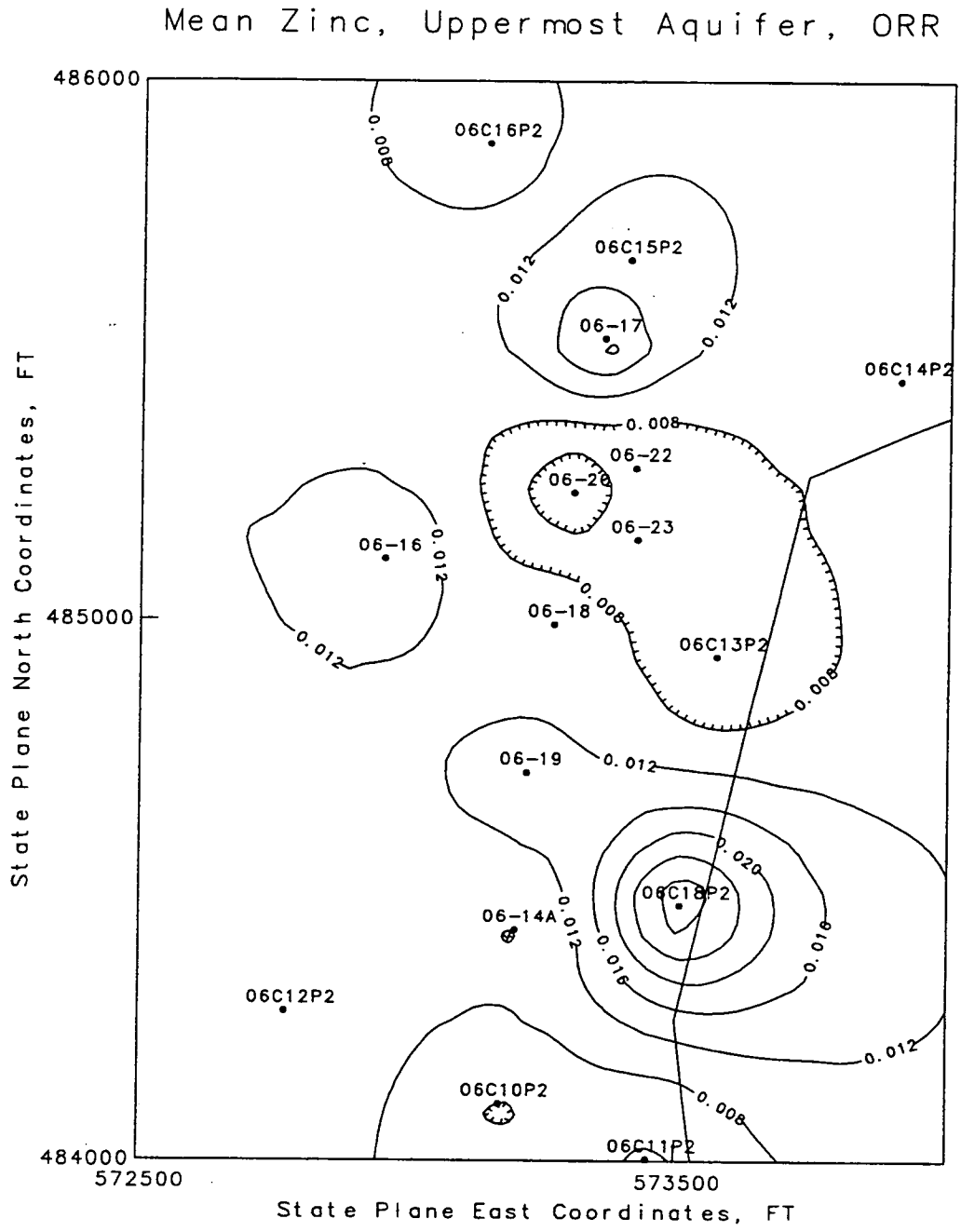
Mean Vanadium, Uppermost Aquifer, ORR

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State Plane East Coordinates, FT
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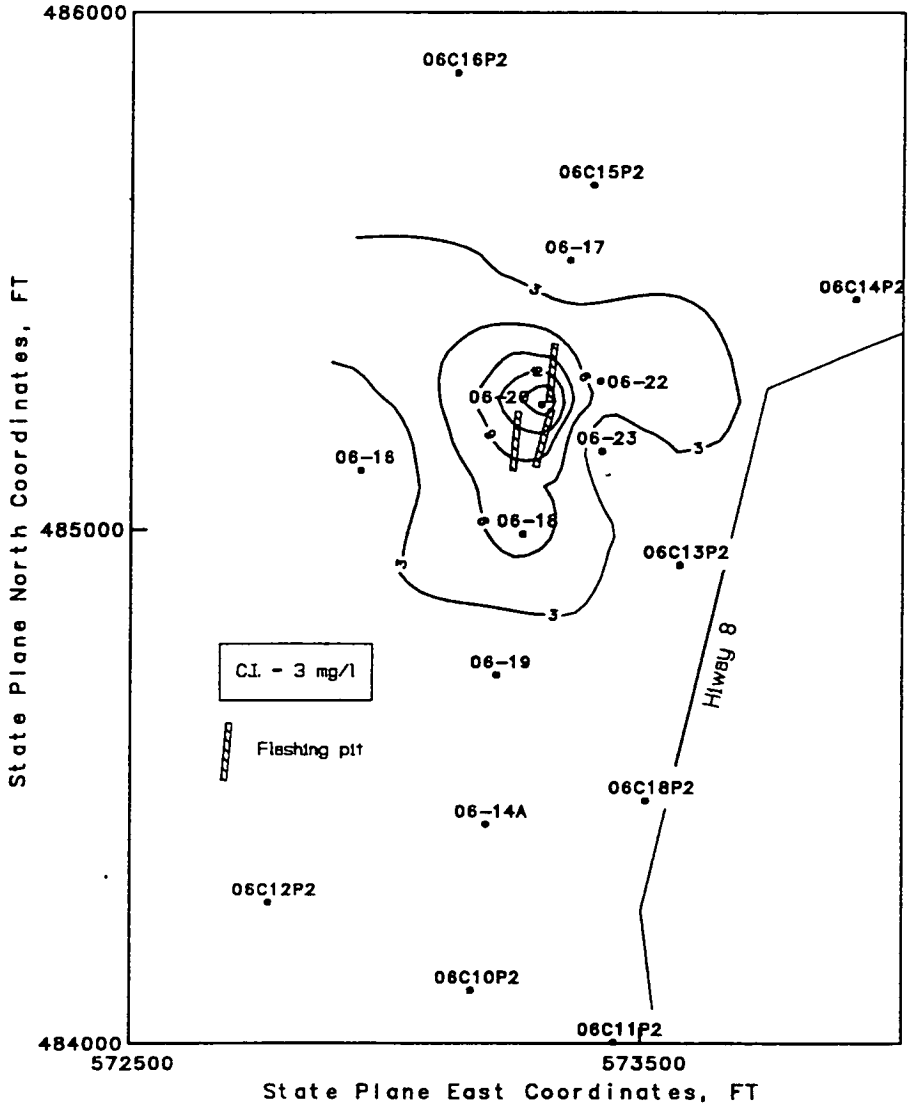
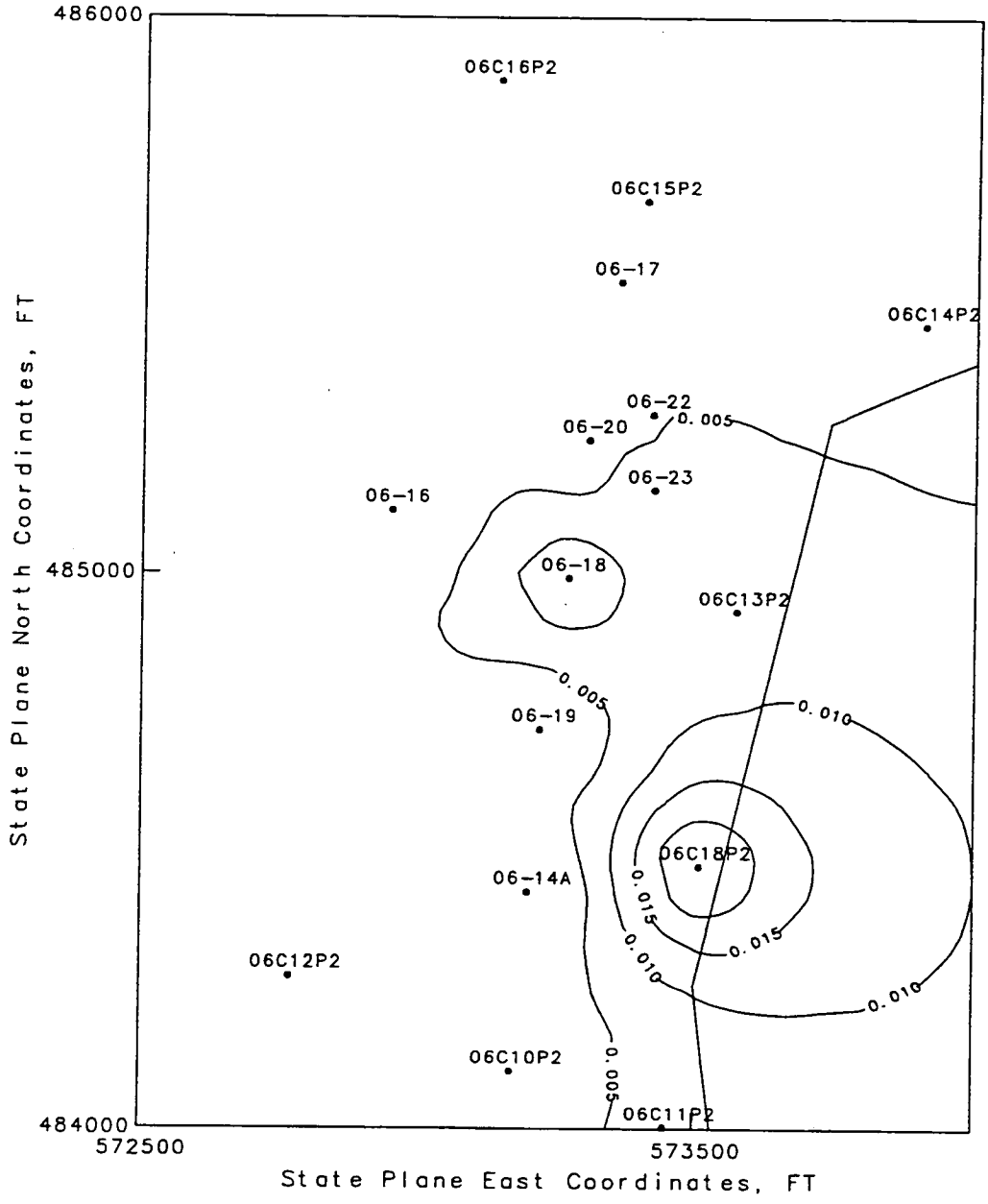
Nitrates, Uppermost Aquifer, Old Rifle Range



Nitrites, Uppermost Aquifer, Old Rifle Range



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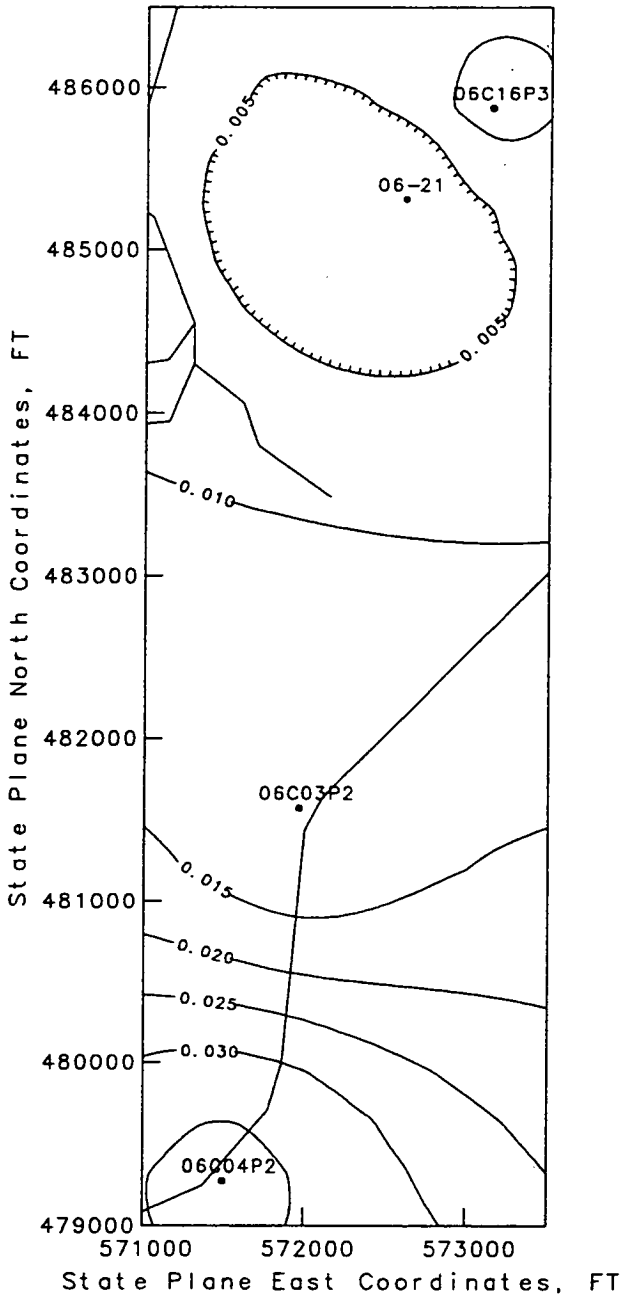

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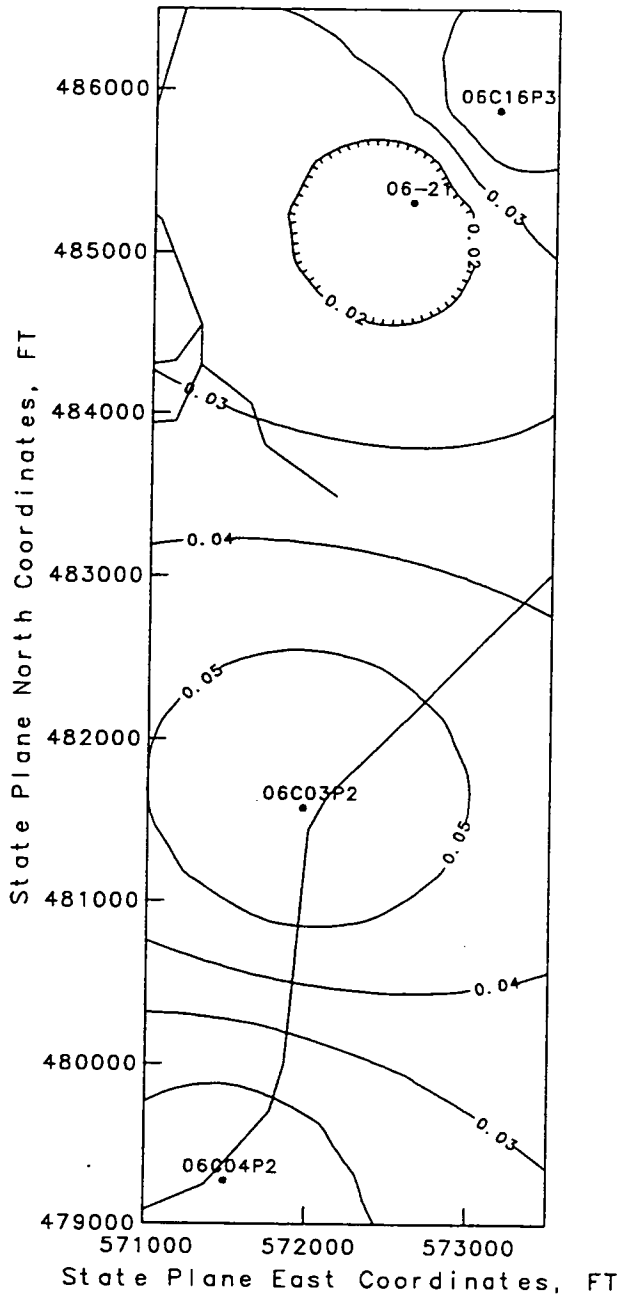

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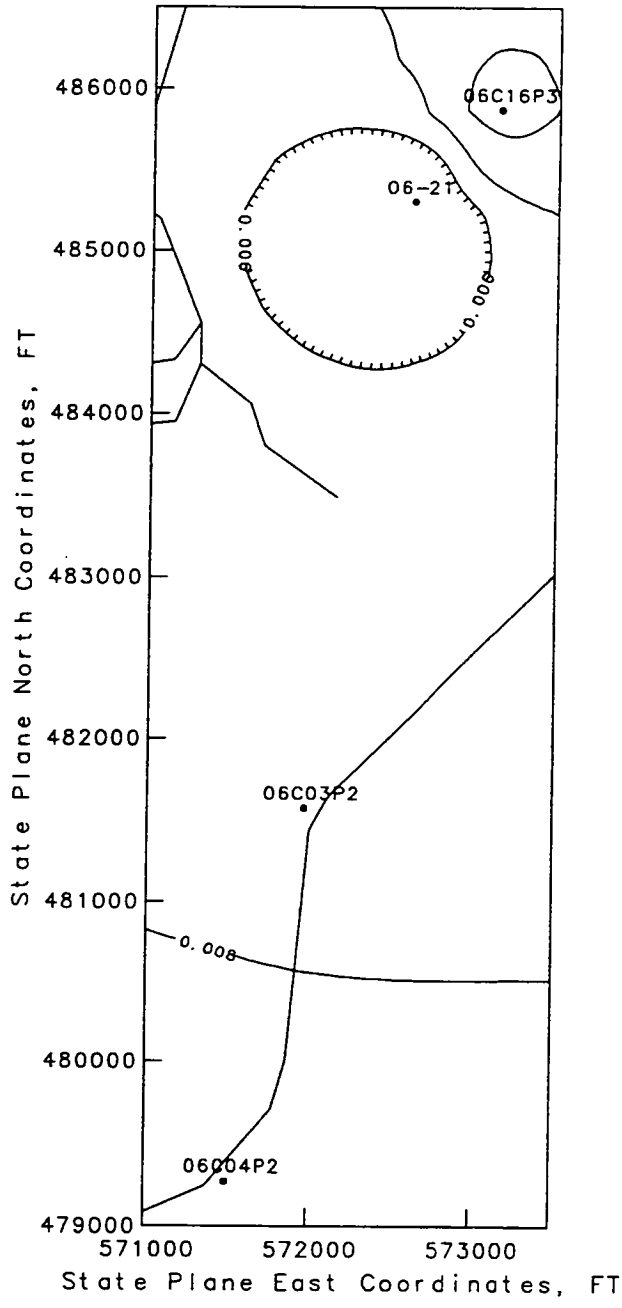

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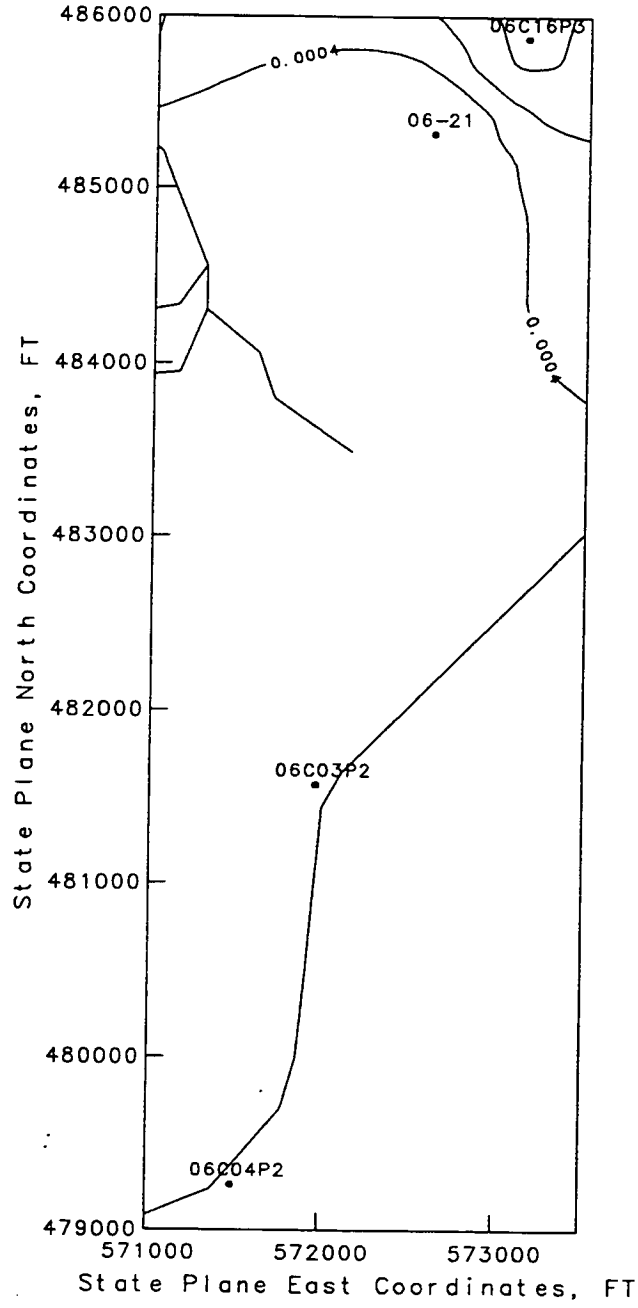
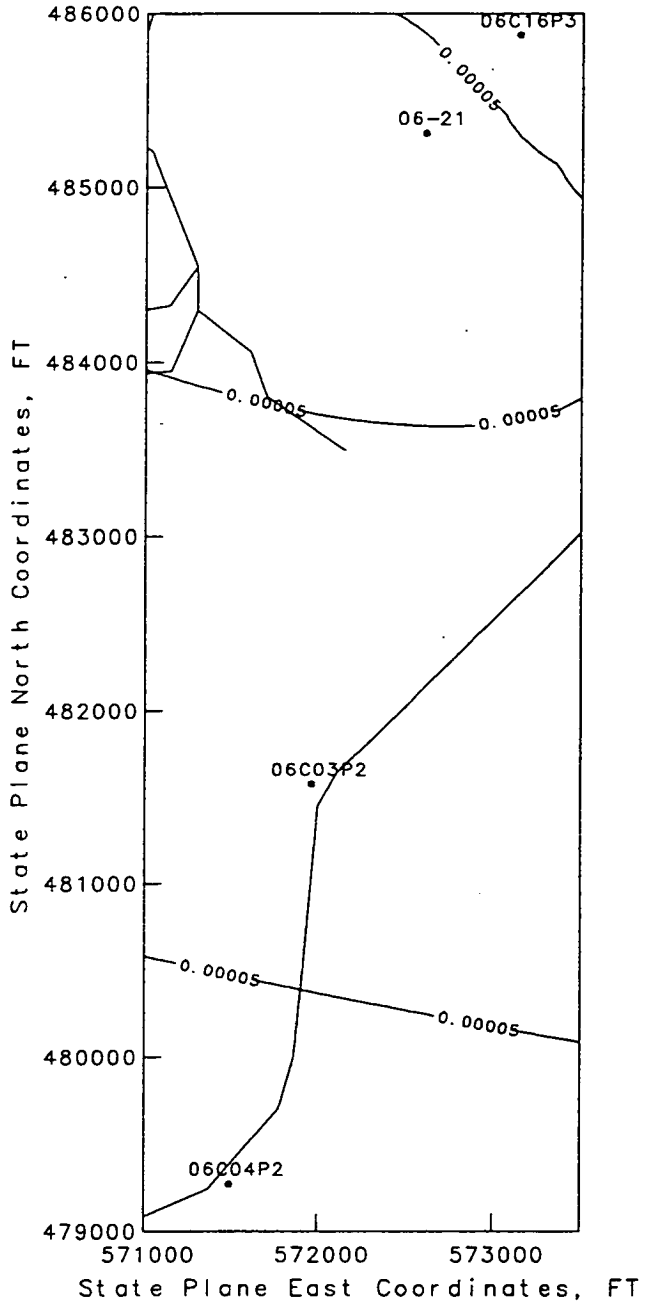


Mean Cadmium, Golconda/Haney



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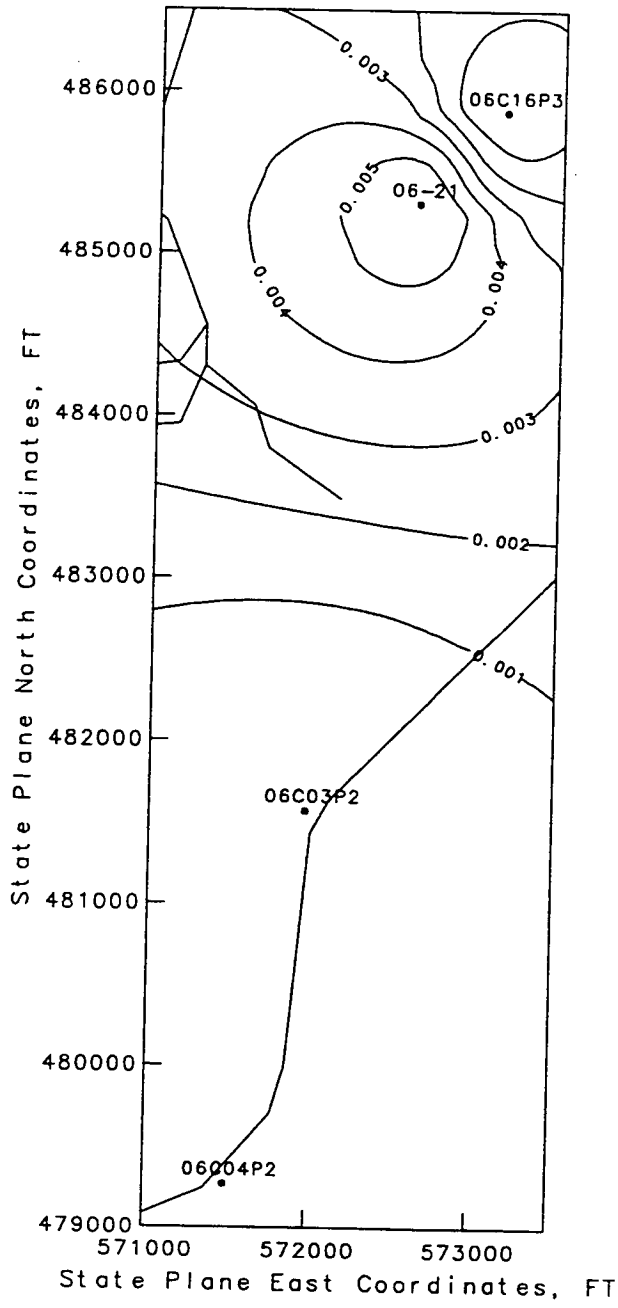

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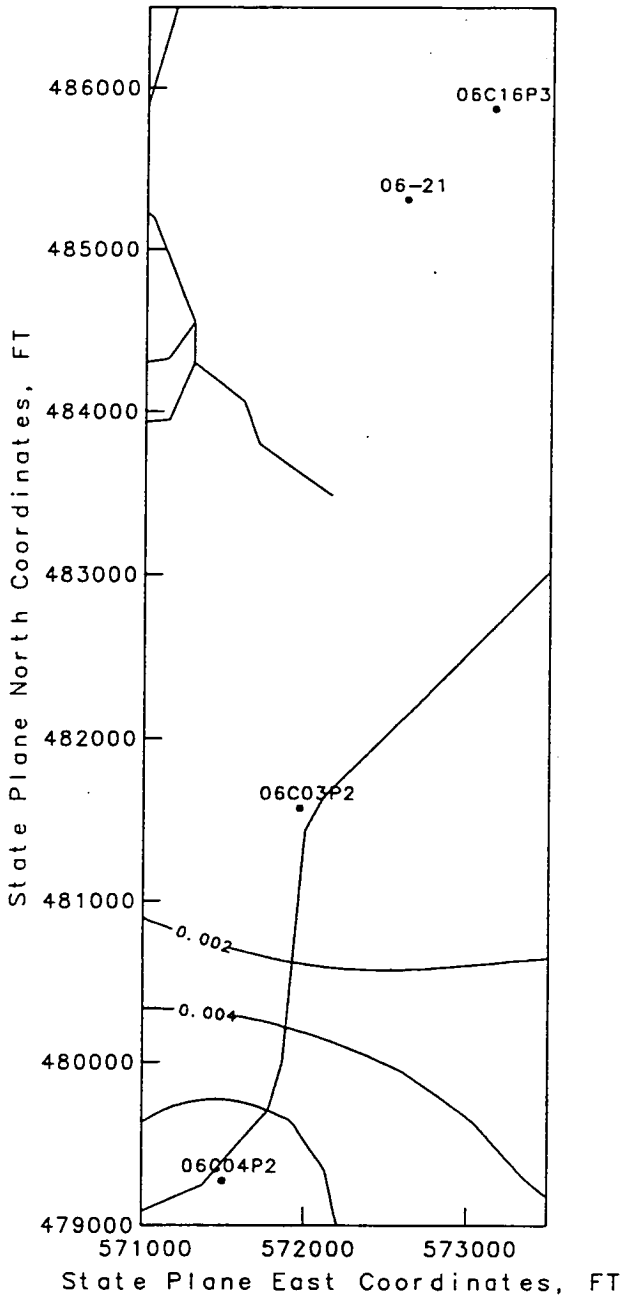

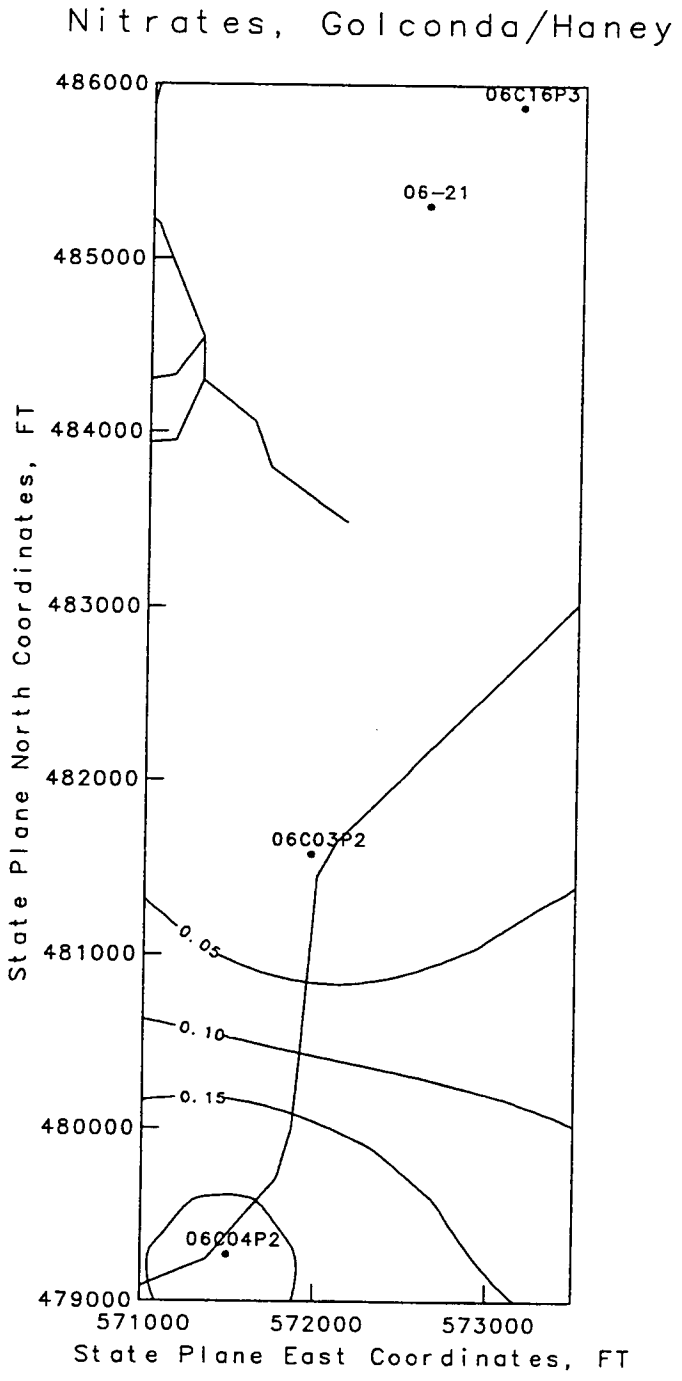
Nitrates, Golconda/Haney
486000
485000
484000
483000
482000
481000
480000
479000
State Plane North Coordinates, FT
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06-21
06C03P2
06C04P2
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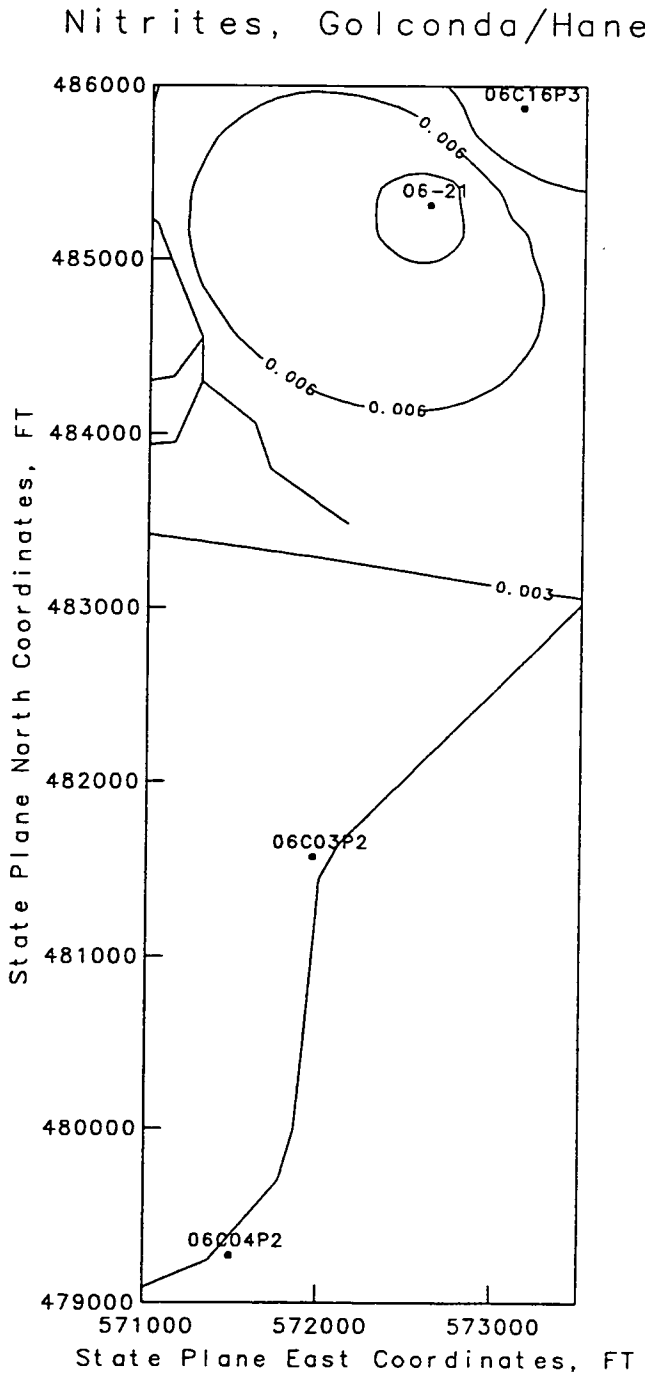
State Plane East Coordinates, FT


Nitrites, Golconda/Haney
486000
485000
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State Plane East Coordinates, FT
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06-21
06C03P2
06C04P2
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0.006
0.006
0.003

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U.S. Army Engineer Waterways Experiment Station
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12b. DISTRIBUTION CODE

13. ABSTRACT *(Maximum 200 words)*

A Resource Conservation and Recovery Act Facility Investigation for groundwater was conducted at the Demolition Area and Old Rifle Range, Naval Surface Warfare Center Crane, Indiana. The Demolition Area renders waste munitions inoperative by detonation in trenches and pits. The Old Rifle Range is used for open burning of explosives. Monitoring wells and borings supplied subsurface geological information to develop the hydrogeology of the sites. Wells were sampled periodically for most Appendix IX constituents and explosives. Four aquifers or water-bearing zones were monitored at the Demolition Area and Old Rifle Range. Groundwater flow in the Big Clifty/Beech Creek aquifer is generally to the south and southwest but locally, in the vicinity of the Old Rifle Range, flows to the east toward Turkey Creek. Groundwater in the Golconda/Haney limestone is restricted to the eastern side of the Demolition Area. Flow in the Golconda/Haney is mainly to the south and southwest. Groundwater in the shallow aquifer atop the Demolition Area is confined in isolated perched zones. Inorganic compounds were detected in monitoring wells at the Demolition Area. Certain explosives compounds were found in addition to inorganics at the Old Rifle Range. Organics other than explosives were not present in significant or verifiable quantities in three rounds of sampling and analysis.

14. SUBJECT TERMS

Crane	Groundwater contamination	Military Explosives	Wells
Explosives	Groundwater sampling	Monitoring Wells	
Geology	Hazardous waste	Navy	
Groundwater	Hydrogeology	RCRA	

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