APPENDIX A

LITHIUM WAREHOUSE SITE HISTORICAL CHARACTERIZATION

A.1. Lithium Warehouse Site Historical Characterization

A.2 Excerpts from Gas Centrifuge Geotechnical Investigation

A.3 Radiological Surveys

A.1. Lithium Warehouse Site Historical Characterization

The Lithium Warehouse site is located on the west side of Portsmouth Gaseous Diffusion Plant (PORTS) and includes Buildings X-744-S, X-744-T, and X-744-U that are used for lithium storage. The site is bounded on the north and east by Truck Access Road. The site is bounded on the south by the X-616 Effluent Control Facility. The X-6619 Sewage Treatment Facility is located west of the site, while the X-230J3 West Environmental Sampling Building and Containment Basin is located outside the north west corner of the site. A rail line and "C" Road enter the site from the north. The site is generally flat with a slight dip to the north and west.

Site evaluations were undertaken for the X-230J3, X-6619, X-740, and X-616 facilities located around the area. In addition, samples from around the X-744-S building were also obtained. Table A-1(a and b), A-2, and A-3 list detected results for surface and subsurface soil, sediment and groundwater, respectively, at sample locations inside the lithium warehouse site.

The RFI BRA characterized the exposure settings for current conditions and future use scenarios with respect to the general physical characteristics of Quadrant III and the characteristics of the populations on and near the quadrant. The pertinent exposure scenarios considered in this report are consistent with the current and projected local land uses of the site and surrounding area and with the DOE Ten-Year Plan presented to the PORTS Decision Team on February 4, 1997:

- industrial areas inside the limited-access (security fenced) area, landfills, and other currently industrialized areas,
- recreational/commercial from the remaining property between the security fence and the property boundary, and
- residential for locations at the DOE property boundary.

Exposure pathways, current on-site worker, future on-site worker, excavation worker, and recreational (where appropriate) exposure scenarios were evaluated. The SWMUs with HI values less than 1 and ELCR values less than $1x10^{-6}$ were determined by the PORTS Decision Team to require no further corrective action evaluation. A few selected SWMUs exceeding these limits were also determined by the PORTS Decision Team to require no further corrective action evaluation. The accepted exceedances generally result from (1) natural occurrences of inorganic constituents, (2) elevated inorganic values in constituents (metals) because of the presence of adsorbed metals in suspended clay and silt-sized particles in highly turbid groundwater samples, and (3) the lack of sediment background data for comparison with sediment analytical data. The current interpretation of metals in groundwater will be confirmed by data collected in accordance with the IGWMP being developed by DOE.

X-230J3 West Environmental Sampling Building and Intermittent Containment Basin

The X-230J3 West Environmental Sampling Building is an approximately 150 ft^2 structure that houses monitoring equipment and controls for the gates of the intermittent containment basin. Upon receiving notification of a spill, the emergency gates can be closed to impound the flow of the West Drainage Ditch before it crosses under Perimeter Road.

Discharges and spills from the northern half of X-326, from the western half of X-330, and from X-530, X-616, X-740, X-744S, X-744T, X-744U, X-745C, and X-6619 flow into storm sewers A and B, which discharge to two northern tributaries of the West Drainage Ditch. The two northern tributaries of the West Drainage Ditch discharge to X-230J3 and subsequently X-230J5.

During the PORTS Decision Team meeting on November 12, 1996, the Ohio EPA, the U.S. EPA, and DOE agreed to further characterize surface soil so that the potential risk associated with nitrobenzene detected in one sample collected north of this unit during the RFI could be clarified. Nitrobenzene was not detected in surface soil collected at that location in May 1997. This location is outside the Lithium warehouse site investigation.

No volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), uranium or technetium were detected in the groundwater at X230J3. Xylenes were detected upgradient and outside the unit but cannot be attributed to a release from this unit. Gross alpha and gross beta activities were detected, but are likely the result of turbidity in the sample because uranium and technetium were not detected. Previous sampling results suggest that releases from the soil to the groundwater have not occurred.

X-616 Effluent Control Facility/Former Chromium Sludge Lagoons

The X-616 Effluent Control Facility processed cooling water containing a chromium-based corrosion inhibitor until 1993. Treatment of the cooling water blowdown through pH adjustment using slaked lime and polymer coagulant generated a lime sludge that contained hydrated chromium hydroxide [$Cr(OH)_3$]. After the precipitate settled, it was transferred to surface impoundments. The sludge was allowed to compact and the supernatant was rerouted to the reduction precipitation process. The removal of the chromium-contaminated sludges and soils from the Surface Impoundments was completed on June 21, 1992 per the Closure plan. Groundwater in the vicinity of X-616 is currently sampled semiannually for post-closure monitoring.

Soil sampling was performed after completion of the closure of X-616. No VOCs, SVOCs, or PCBs were detected in the soil associated with X-616 after sludge and soil removal was completed. These results indicate that organic constituents have not been released to the soil. Analysis of the RFI data and results of the remediation activities at this unit show no contamination that could act as a continuing source of groundwater contamination by means of leaching from the vadose zone soils.

VOCs, primarily TCE, were detected at concentrations both above and below Practical Quantitation Limits (PQLs) in the groundwater associated with X616. Previous sampling results suggest that VOCs were released to the groundwater.

However, the Quadrant III RFI BRA identified a total non-cancer HI of less than 1 for all applicable current and future land-use scenarios. A total Excess Lifetime Cancer Risk (ELCR) of 8×10^{-5} was identified in the RFI for future on-site workers. This ELCR is driven by exposure to 1,1-dichloroethene in the groundwater from the Gallia water-bearing unit by means of ingestion. The potential exposure is within the 10^{-4} to 10^{-6} target range. Future excavation worker exposure can be controlled through proper health and safety practices.

VOCs detected from semiannual post-closure monitoring conducted at X-616 indicate a decreasing trend in concentrations: only one well (X616-20B) exceeded Maximum Contaminant Level (MCLs) (TCE at 14 µg/l) in 1996 (Energy Systems 1997). Continued post-closure monitoring of wells in the X-616 area is being developed through the IGWMP.

X-6619 Sewage Treatment Facility

The X-6619 Sewage Treatment Facility was constructed in 1980 and became operational in 1981. Raw sewage treated at the facility is collected from all areas of the plant site. The facility can process 800,000 gal/day of sanitary sewage by using an activated-sludge treatment process that includes aerobic

digestion, secondary clarification, and granular-media filtration for effluent polishing (tertiary treatment). Post chlorinating is used to produce a bacteriologically accepted effluent before discharge to the Scioto River through an underground pipeline. The effluent is monitored under a NPDES permit (Outfall 003). Other wastes generated at X-6619 are coarse materials (sand, gravel, wood, rags, etc.) that have been screened and removed during the initial filtering of solids from sewage. The coarse screenings are shipped off-site.

The Quadrant III RFI BRA identified a total non-cancer HI of less than 1 for all of the scenarios detailed for X-6619 (current on-site worker, future on-site worker, and excavation worker). Media-specific total ELCR risks of 1×10^{-5} and 9×10^{-5} were identified for current on-site workers and future on-site workers, respectively. These ELCR risks are within acceptable target risk levels per the U.S. EPA CERCLA guidance. The ELCRs are driven by exposure to arsenic in both soil and groundwater. It is important to note that these risk levels were calculated before establishment of a final background UTL for arsenic. All of the soil samples collected in the vicinity of the X-6619 detected arsenic below the final background UTL. The only groundwater sample result with arsenic above background was collected from the Berea. Arsenic was not detected above background levels in groundwater collected from nearby Gallia wells. Therefore, the arsenic in the Berea groundwater is not likely to be associated with contamination from facility activities because the arsenic would have had to migrate through the overlying Gallia water-bearing unit.

The vadose zone soils contaminant data (all soils above the water table, including deep soils) were screened for potential continuing sources of groundwater contamination by means of leaching (see Section 2.1.6). After this screening, the only contaminant that remained was methylene chloride. Methylene chloride was detected in 2 out of 11 samples collected at 8 locations at 5.9 and 6.8 µg/kg (PQL = 5.0 µg/kg). Because this is a common laboratory contaminant and was detected within 10 times the PQL, these two detections were eliminated from further consideration. Therefore, no continuing sources of groundwater contamination by means of leaching from vadose zone soils are present.

X-740 Waste Oil Handling Facility

The X-740 Waste Oil Handling Facility is approximately 50 ft by 120 ft and consists of a diked concrete pad with a roof and sheet metal walls on the north, south, and west sides. The east side of the facility is open-sided, with plastic sheeting windbreaks to protect the interior from weather. An oil-stained concrete pad for temporary drum storage is located approximately 200 ft northeast of the facility. During its period of operation from 1982 to 1992, the facility was used as a drum-staging area for approximately 8,000 gal/year of non-radionuclide-contaminated waste oils and 500 gal/year of non-radionuclide-contaminated waste solvents generated by various plant site activities. The drums were staged at the facility pending analysis of their contents before their final disposition. Empty drums that resulted from combining partially full drums were crushed in a hydraulic drum crusher in the northwest corner of the facility and disposed of at the X-735 Landfill. Effluent from the drum crusher was discharged to a tank/sump that was installed in early 1986 and is located beneath the drum crusher pad.

The Quadrant III RFI Phase I field investigation was conducted from June 1992 through August 1992. The Quadrant III confirmatory investigation was conducted in November and December 1992. Part of the Quadrant III confirmatory investigation was directed at characterization of soil and groundwater in the vicinity of an abandoned septic tank south of the X-109A building.

A RCRA closure plan was submitted by DOE in 1993 and approved by the Ohio EPA in June 1994. The closure of this unit included removal of the tank/sump associated with the drum crusher. In May 1993, soils beneath the excavated tank/sump were sampled to a depth of 2 ft below the grade of excavation (approximately 5 ft below ground surface). The initial X-740 closure activities were conducted

from September through November 1993 to determine the extent of soil and possible groundwater contamination associated with the tank/sump. The Quadrant III RFI Phase II field investigation for the X-740 area was combined with the additional X-740 closure activities conducted in September and October 1994. The Quadrant III RFI Phase I, the Quadrant III confirmatory, and the initial X-740 closure activities are all referred to as Phase I investigations. The combined Quadrant III RFI Phase II and additional X-740 closure activities are referred to as Phase II investigations.

During the Phase I investigations, five wells were installed and sampled in the vicinity of the X-740 facility. VOCs were detected above PQLs in three of the five wells. The three wells were resampled and five additional wells (including two Berea wells) were installed and sampled during the Phase II investigations. The nature and approximate extent of a VOC groundwater plume was delineated in the Gallia west of the X-740 Building (DOE 1996b). However, the need for additional wells (Gallia and Berea) west of the identified plume was recognized. In August and September 1997, all 10 wells in the X-740 area were resampled to update the plume configuration and provide data to evaluate the potential and rate of natural attenuation of the VOC plume. Low-flow sampling techniques were used to collect groundwater samples with low turbidity for more representative metals analyses. During the natural attenuation study, five temporary well screens using direct push technology were also installed and sampled to help determine the extent of the VOC plume. An additional Gallia and Berea well were installed approximately 700 ft west-southwest of the X-740 building and sampled in February 1998.

A RCRA Closure Plan for X-740 was submitted by DOE in 1993 and approved by the Ohio EPA in June 1994. The closure included decontamination of the floor and walls of the facility and the removal of the tank/sump and the surrounding contaminated soil. The initial closure activities were performed from September 1993 through November 1993.

Subsequent to the RFI sampling, additional sampling has been performed to support the risk-based RCRA closure of this unit. These data were included in the May 1996 risk-based RCRA closure plan for the X-740.

VOCs and SVOCs were detected at levels slightly above PQLs in soil. PAHs were detected at levels below PQLs and up to 2,900 µg/kg (naphthalene). Because no plant process uses PAHs, identification of specific sources is not feasible. Potential sources of PAHs in the surface soil include runoff from roadways and nearby units. No PCBs or pesticides were detected in the soil. Total uranium was detected at concentrations ranging from 2.3 to 2.9 mg/kg. No other radiological parameters were detected in the soil.

The Quadrant III RFI BRA identified a total non-cancer HI of 0.02 and a total ELCR of 1×10^{-6}. The human health risks from residual contamination in soil at the X-740 facility (building and tank) do not exceed the Ohio EPA target risk values for RCRA closures. In addition, TCLP analysis and evaluation of the PORTS soil-leaching model demonstrated that the residual soil contamination does not pose a threat to groundwater (DOE 1996a).

A VOC groundwater plume is present in the Gallia west of the X-740 Building. The primary constituent is TCE. All other constituents (primarily TCE breakdown products) occur within the boundaries of the TCE plume. TCE groundwater concentrations detected to date are highest approximately 100 ft west of the X-740 building (wells X740-03G and X740-09B) and decrease radially in all directions to below detection limits. A TCE concentration of 11,000 µg/L was detected at X740-03G during the Phase I investigations, but decreased to 3,100 µg/L during the Phase II investigations, and continued to decreased to 1,200 µg/L when sampled in September 1997. X740-09B is located adjacent to X740-03G, and is the only Berea well in the area with groundwater VOC (primarily TCE) detections. A TCE concentration of 1,200 µg/L was detected at X740-09B when it was originally

sampled during the Phase II investigations. The concentration increased to 3,400 µg/L (X740-09B Duplicate) during the natural attenuation sampling (September 1997) but decreased to 2,400 µg/L when resampled in February 1998. As discussed in the *Quadrant III RFI Final Report* (DOE 1996b), the Sunbury confining unit is absent in this part of the PORTS site and the Gallia and Berea groundwater are in connection. The historic VOC concentrations in all the wells surrounding X740-03G and X740-09B are below 100 µg/L (see Figure 2.2).

Since the installation of additional monitoring wells (X740-11G and X740-12B) west of X-740, in February 1998, the extent of the Gallia groundwater plume is well defined. The Gallia groundwater plume extends approximately 700 ft west of the X-740 building. Groundwater flow in the Gallia is primarily west toward the center tributary of the West Drainage Ditch. Berea groundwater flows predominately westward towards the Berea outcrops in the West Drainage Ditch. The TCE Plume is <5ug/L at the boundary of the investigation site or Truck Access Road.

X-744S, T, and U Warehouses

Lithium hydroxide is stored in the X-774S, X-774T, and X-744U warehouses. In 1984, storage deficiency notices were issued by the Ohio EPA and DOE because the lithium hydroxide had spilled from deteriorated cardboard drums. In 1988, the lithium hydroxide was repacked in 75-gal steel drums and the warehouses were repaired to prevent precipitation leakage.

In 1988, a soil gas survey indicated the presence of hydrocarbons in the vicinity of the construction field office southwest of X-744T. An unknown quantity of paint thinner was reportedly spilled into the soil in the X-744S, T, and U areas in 1989, after the warehouses were painted.

Environmental media sampled at the warehouse included surface soil (0 to 2 ft) and shallow soil (2 to 10 ft). VOCs were detected above PQLs in the soils associated with the warehouses. SVOCs (mostly PAHs) were detected below PQLs and Aroclor-1260 (a PCB) was detected both above and below PQLs. Because no plant process uses PAHs, identifying specific sources is not feasible. Potential sources of PAHs in the surface soil include runoff from roadways and nearby units. Previous sampling results suggest that VOCs and PCBs and possibly SVOCs have been released to the soils at this unit.

The vadose zone soils contaminant data (all soils above the water table, including deep soils) were screened for potential continuing sources of groundwater contamination by means of leaching. Tetrachloroethene was detected in 5 out of 21 samples, collected at 20 locations, at values ranging from 5.8 to 55 µg/kg. TCE was detected in 1 out of 22 samples collected at 20 locations, at a value of 5.5J µg/kg. The acceptable soil leaching values for Tetrachloroethene and trichloroethene for this soil type (Soil Type III) are 270 and 48 µg/kg, respectively (Ohio EPA 1996), thereby eliminating these two contaminants from further consideration. Aroclor 1260 was detected in 4 out of 26 samples collected at 23 locations, at values ranging from 120 to 190 µg/kg. Aroclor 1260 is relatively immobile and has little potential for leaching. Therefore, it was eliminated as a source for leaching. Bis(2-Ethylhexyl)phthalate was detected in 1 out of 22 samples collected at 20 locations, at a value of 1,400 µg/kg and was eliminated because it is a common laboratory contaminant and was detected within 10 times the PQL (330 µg/kg). Chlorobenzene was detected at 8.7 µg/kg in only one sample 0 to 2 ft deep, out of 22 samples collected at 20 locations. Therefore, this detection is not considered representative of the area, and chlorobenzene was eliminated as a significant source for leaching.

Fluoride was detected just above the background value (9.5 mg/kg) in 2 out of 22 samples collected at 20 locations, at 9.7 and 10.0 mg/kg. Because only two detections occurred and they were both very close to the background value, fluoride is not considered to be a significant leaching source. Arsenic was detected in 14 locations at values ranging from 2.3 to 18 mg/kg. Lead was detected in 16 locations at

values between 5.6 and 25 mg/kg. Selenium was detected above background (3 mg/kg) in 10 out of 16 samples collected at 14 locations, at values ranging from 5.2 to 6.5 mg/kg. Because all the detections were close to the background value (within 3.5 mg/kg), selenium was also eliminated as a significant leaching source. Zinc was detected above background (101 mg/kg) in 3 out of 16 samples collected at 14 locations, at values ranging from 110 to 290 mg/kg. Because zinc is a cation, it is relatively immobile unless disturbed by an acid spill. Zinc is thus not leachable by water and was eliminated from further consideration.

The VOCs detected in the soils associated with this unit are not the source of contamination in the groundwater in this area. The detection of VOCs in wells located upgradient (X-616 vicinity) of these warehouses indicates that the warehouses cannot be the source of contamination. Wells downgradient of these warehouses show no VOC contamination.

The following historical data was retrieved from the *Quadrant III Cleanup Alternatives Study/Corrective Measures Study* for the Portsmouth Gaseous Diffusion Plant, April 9, 1998.

Appendix Table A.1a
Historical Surface Soil Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH

SAMPLE ID	X744S-HA01-02	X744S-HA02-02	X744S-HA03-02	X744S-HA04-02	X744S-HA05-02	X744S-HA05-02D	X744S-HA06-02	X744S-HA07-02
SAMPLE DATE	4/28/92	4/28/92	4/29/92	4/29/92	4/29/92	4/29/92	4/29/92	4/29/92
SAMPLE DEPTH	0' - 2'	0' - 2'	0' - 2'	0' - 2'	0' - 2'	0' - 2'	0' - 2'	0' - 2'
INORGANICS								
ALUMINUM	16000 mg/kg	11000 mg/kg	19000 mg/kg		14000 mg/kg	18000 mg/kg	8600 mg/kg	13000 mg/kg
ARSENIC	14 J mg/kg	8.2 mg/kg	10 mg/kg		11 mg/kg	9 mg/kg	6.6 J mg/kg	8.9 J mg/kg
BARIUM	56 mg/kg	60 mg/kg	170 mg/kg		85 mg/kg	100 mg/kg	67 mg/kg	95 mg/kg
BERYLLIUM			0.9 mg/kg		0.71 mg/kg	0.8 mg/kg		0.75 mg/kg
CADMIUM								
CALCIUM	1400 mg/kg	18000 mg/kg	2400 mg/kg		27000 mg/kg	8300 mg/kg	69000 mg/kg	6400 mg/kg
CHROMIUM	23 mg/kg	15 mg/kg	25 mg/kg		19 mg/kg	22 mg/kg	10 mg/kg	15 mg/kg
COBALT	17 mg/kg	7.5 mg/kg	18 mg/kg		10 mg/kg	7.5 mg/kg	6.3 mg/kg	10 mg/kg
COPPER	21 mg/kg	10 mg/kg	22 mg/kg		17 mg/kg	14 mg/kg	8.4 mg/kg	11 mg/kg
FLUORIDE					7.1 mg/kg	5.7 mg/kg	4.3 J mg/kg	
IRON	34000 mg/kg	17000 mg/kg	31000 mg/kg		25000 mg/kg	25000 mg/kg	13000 mg/kg	18000 mg/kg
LEAD	22 mg/kg	25 mg/kg	20 mg/kg		24 mg/kg	15 mg/kg	16 J mg/kg	18 J mg/kg
LITHIUM	64 mg/kg	40 mg/kg	23 mg/kg	37 mg/kg	21 mg/kg	28 mg/kg	43 mg/kg	16 mg/kg
MAGNESIUM	2500 mg/kg	11000 mg/kg	3900 mg/kg		16000 mg/kg	6000 mg/kg	42000 mg/kg	4200 mg/kg
MANGANESE	420 mg/kg	400 J mg/kg	490 J mg/kg		350 J mg/kg	150 J mg/kg	570 J mg/kg	800 J mg/kg
MERCURY	0.059 mg/kg	0.053 J mg/kg	0.026 J mg/kg		0.022 J mg/kg	0.024 J mg/kg	0.023 mg/kg	0.031 mg/kg
NICKEL	17 mg/kg	12 mg/kg	27 mg/kg		18 mg/kg	18 mg/kg	8.4 mg/kg	14 mg/kg
POTASSIUM	1000 mg/kg	800 mg/kg	1700 mg/kg		1300 mg/kg	1500 mg/kg	640 mg/kg	620 mg/kg
SODIUM	260 mg/kg		80 mg/kg		77 mg/kg	91 mg/kg	78 mg/kg	86 mg/kg
VANADIUM	38 mg/kg	26 mg/kg	38 mg/kg		41 mg/kg	37 mg/kg	20 mg/kg	29 mg/kg
ZINC	71 mg/kg	290 J mg/kg	110 J mg/kg		61 J mg/kg	42 J mg/kg	64 J mg/kg	170 J mg/kg
PESTICIDES/PCBs								
AROCLOR-1260					120 ug/kg	100 ug/kg		
RADIONUCLIDES								
NEPTUNIUM-237		0 pCi/g						
PLUTONIUM-238		0 pCi/g						
PLUTONIUM-239/240		0 pCi/g						
URANIUM, TOTAL	3.7 mg/kg	3.5 mg/kg	3.4 mg/kg		3.2 mg/kg	3.4 mg/kg	2.8 mg/kg	3.2 mg/kg
SEMIVOLATILES								
BENZO(A)ANTHRACENE				9.5 J ug/kg				46 J ug/kg
BENZO(A)PYRENE		38 J ug/kg	13 J ug/kg	5.7 J ug/kg				57 J ug/kg
BENZO(B)FLUORANTHENE		52 J ug/kg	20 J ug/kg	4.6 J ug/kg				93 J ug/kg
BENZO(G,H,I)PERYLENE		21 J ug/kg						31 J ug/kg
BENZO(K)FLUORANTHENE		42 J ug/kg						67 J ug/kg
BENZOIC ACID								
BIS(2-ETHYLHEXYL)PHTHALATE							1400 ug/kg	48 J ug/kg
BUTYLBENZYLPHTHALATE							22 J ug/kg	
CHRYSENE		59 J ug/kg						91 J ug/kg
DI-N-BUTYLPHTHALATE								
DI-N-OCTYLPHTHALATE	23 J ug/kg							
FLUORANTHENE	29 J ug/kg	97 J ug/kg	34 J ug/kg	7.5 J ug/kg		7.2 J ug/kg	20 J ug/kg	50 J ug/kg
INDENO(1,2,3-CD)PYRENE		21 J ug/kg						34 J ug/kg
PHENANTHRENE								
PYRENE	36 J ug/kg	65 J ug/kg	26 J ug/kg	6 J ug/kg		6.4 J ug/kg	23 J ug/kg	64 J ug/kg
VOLATILES								
1,1-DICHLOROETHENE								
ACETONE	6.2 J ug/kg							
CHLOROBENZENE								
ETHYLBENZENE	1.1 J ug/kg	4.5 J ug/kg	5 J ug/kg					
METHYLENE CHLORIDE								
TETRACHLOROETHENE	4 J ug/kg	19 ug/kg		8.6 ug/kg	3.6 J ug/kg	2.3 J ug/kg	2.3 J ug/kg	4.4 J ug/kg
TRICHLOROETHENE								
XYLENES		1.3 J ug/kg						

Appendix Table A.1a
Historical Surface Soil Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X744S-HA08-02	X744S-HA09-02	X744S-HA10-02	X744S-HA11-02	X744S-HA12-02	X744S-HA13-02	X744S-HA14-02	X744S-HA16-02
SAMPLE DATE	4/30/92	4/30/92	4/30/92	4/30/92	4/30/92	4/30/92	5/11/92	5/11/92
SAMPLE DEPTH	0' - 2'	0' - 2'	0' - 2'	0' - 2'	0' - 2'	0' - 2'	0' - 2'	0' - 2'
INORGANICS								
ALUMINUM	13000 mg/kg			10000 mg/kg	7100 mg/kg		7200 mg/kg	9500 mg/kg
ARSENIC	14 J mg/kg			8.4 J mg/kg	9.8 J mg/kg		12 J mg/kg	12 J mg/kg
BARIUM	68 mg/kg			67 mg/kg	56 mg/kg		47 mg/kg	46 mg/kg
BERYLLIUM				0.59 mg/kg				
CADMIUM								0.57 mg/kg
CALCIUM	2200 mg/kg			59000 mg/kg	78000 mg/kg		88000 mg/kg	76000 mg/kg
CHROMIUM	18 mg/kg			13 mg/kg	10 mg/kg		16 mg/kg	14 mg/kg
COBALT	6.1 mg/kg			6.8 mg/kg	8.3 mg/kg		5.8 mg/kg	6.6 mg/kg
COPPER	8.3 mg/kg			7.2 mg/kg	13 mg/kg		11 mg/kg	9.8 mg/kg
FLUORIDE							6.3 mg/kg	6.4 mg/kg
IRON	31000 mg/kg			15000 mg/kg	15000 mg/kg		14000 mg/kg	21000 mg/kg
LEAD	17 J mg/kg			20 J mg/kg	10 J mg/kg		18 J mg/kg	12 J mg/kg
LITHIUM	34 mg/kg	32 mg/kg	13 mg/kg	49 mg/kg		19 mg/kg		
MAGNESIUM	1700 mg/kg			35000 mg/kg	18000 mg/kg		51000 mg/kg	44000 mg/kg
MANGANESE	160 J mg/kg			300 J mg/kg	400 J mg/kg		250 J mg/kg	210 J mg/kg
MERCURY	0.02 mg/kg			0.029 mg/kg	0.012 mg/kg		0.023 mg/kg	0.021 mg/kg
NICKEL	9.4 mg/kg			8.5 mg/kg	18 mg/kg		12 mg/kg	14 mg/kg
POTASSIUM	550 mg/kg			650 mg/kg	960 mg/kg		1100 mg/kg	1100 mg/kg
SODIUM				110 mg/kg	110 mg/kg		110 mg/kg	110 mg/kg
VANADIUM	35 mg/kg			26 mg/kg	20 mg/kg		21 mg/kg	26 mg/kg
ZINC	31 J mg/kg			49 J mg/kg	45 J mg/kg		84 mg/kg	45 mg/kg
PESTICIDES/PCBs								
AROCLOR-1260							160 ug/kg	190 ug/kg
RADIONUCLIDES								
NEPTUNIUM-237								
PLUTONIUM-238								
PLUTONIUM-239/240								
URANIUM, TOTAL	3.1 mg/kg			2.7 mg/kg	2.8 mg/kg			
SEMIVOLATILES								
BENZO(A)ANTHRACENE			46 J ug/kg					
BENZO(A)PYRENE			40 J ug/kg				31 J ug/kg	
BENZO(B)FLUORANTHENE			42 J ug/kg	27 J ug/kg			46 J ug/kg	
BENZO(G,H,I)PERYLENE			22 J ug/kg					
BENZO(K)FLUORANTHENE				22 J ug/kg			27 J ug/kg	
BENZOIC ACID				45 J ug/kg				
BIS(2-ETHYLHEXYL)PHTHALATE		43 J ug/kg		85 J ug/kg			34 J ug/kg	19 J ug/kg
BUTYLBENZYLPHTHALATE							14 J ug/kg	
CHRYSENE			60 J ug/kg				53 J ug/kg	
DI-N-BUTYLPHTHALATE							10 J ug/kg	
DI-N-OCTYLPHTHALATE								
FLUORANTHENE			96 J ug/kg	37 J ug/kg		36 J ug/kg	71 J ug/kg	9 J ug/kg
INDENO(1,2,3-CD)PYRENE			21 J ug/kg					
PHENANTHRENE			36 J ug/kg			20 J ug/kg	40 J ug/kg	
PYRENE			84 J ug/kg	34 J ug/kg		55 J ug/kg	72 J ug/kg	12 J ug/kg
VOLATILES								
1,1-DICHLOROETHENE							4.7 J ug/kg	
ACETONE								
CHLOROBENZENE							8.7 ug/kg	
ETHYLBENZENE								
METHYLENE CHLORIDE				2.5 J ug/kg				
TETRACHLOROETHENE		2.8 J ug/kg	17 ug/kg	55 ug/kg				5.8 ug/kg
TRICHLOROETHENE							5.5 J ug/kg	
XYLENES								

Appendix Table A.1b
Historical Subsurface Soil Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-SB01-16	X616-SB02-16	X744S-HA14-04	X744S-HA16-04
SAMPLE DATE	11/30/92	11/24/92	2/18/94	2/17/94
SAMPLE DEPTH	14' - 16'	14' - 16'	2' - 4'	2' - 4'
INORGANICS				
ALUMINUM	5500 mg/kg	5500 mg/kg		
ARSENIC	2.3 J mg/kg	5 J mg/kg		
BARIUM	54 mg/kg	38 mg/kg		
BERYLLIUM	0.91 mg/kg			
CADMIUM	0.58 mg/kg			
CALCIUM	840 mg/kg	760 mg/kg		
CHROMIUM	11 mg/kg	9.6 mg/kg		
COBALT	19 mg/kg	8 mg/kg		
COPPER	15 mg/kg	6.6 mg/kg		
IRON	42000 mg/kg	25000 mg/kg		
LEAD	7.4 J mg/kg	5.6 J mg/kg		
MAGNESIUM	1200 mg/kg	750 mg/kg		
MANGANESE	470 J mg/kg	190 J mg/kg		
NICKEL	36 mg/kg	13 mg/kg		
POTASSIUM	620 mg/kg	660 mg/kg		
SODIUM	220 mg/kg	190 mg/kg		
VANADIUM	34 mg/kg	24 mg/kg		
ZINC	87 mg/kg	41 mg/kg		
PESTICIDES/PCBs				
AROCLOR-1254			130 ug/kg	
AROCLOR-1260			140 ug/kg	1100 ug/kg
RADIONUCLIDES				
URANIUM, TOTAL	4.4 mg/kg	3.3 mg/kg		
VOLATILES				
ACETONE	9.8 J ug/kg	18 J ug/kg		

Appendix Table A.2
Historical Positive detections—Sediment Samples
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH

SAMPLE ID	WDD-SS06	WDD-SS07	WDD-SS08
SAMPLE DATE	4/23/92	4/23/92	4/23/92
INORGANICS (mg/kg)			
ALUMINUM	5700	7000 J	8900 J
ARSENIC	7.6 J	13 J	8 J
BARIUM	39	53	64
CALCIUM	8100	1700 J	5100 J
CHROMIUM	12	23	33
COBALT	8.9	14	14
COPPER	9	14	20
IRON	23000	21000	36000
LEAD	8.9 J	25 J	21 J
MAGNESIUM	4000	1400 J	3500 J
MANGANESE	720 J	510 J	400 J
MERCURY	0.022	0.041	0.029
NICKEL	11	17	14
POTASSIUM	460	670	810
SODIUM	61		82
VANADIUM	21	25	41
ZINC	60	250 J	240 J
PESTICIDES/PCBs (µg/kg)			
AROCLOR-1260		540	
RADIONUCLIDES (pCi/g)			
ALPHA, TOTAL			19
TECHNETIUM		2.2	
URANIUM, TOTAL	2.7	4.3	25.2
SEMIVOLATILES (µg/kg)			
2-METHYLNAPHTHALENE	110 J	200 J	360 J
ACENAPHTHENE	860	1500	2500
ACENAPHTHYLENE	21 J		
ANTHRACENE	1400	2500	4300
BENZO(A)ANTHRACENE	2700	7100	10000
BENZO(A)PYRENE	2400	5400	8900
BENZO(B)FLUORANTHENE	3000	4500	7400
BENZO(G,H,I)PERYLENE	1100	4000	5100
BENZO(K)FLUORANTHENE	1600	5100	6600
BIS(2-ETHYLHEXYL)PHTHALATE		130 J	
CHRYSENE	2700	8100	11000
DI-N-OCTYLPHTHALATE		95 J	
DIBENZ(A,H)ANTHRACENE	480	1000	1300
DIBENZOFURAN	500	900	1400
FLUORANTHENE	7200	23000	25000
FLUORENE	930	1500	2600
INDENO(1,2,3-CD)PYRENE	1100	3700	5100
NAPHTHALENE	180 J	410 J	750
PHENANTHRENE	4800	21000	19000
PYRENE	5100	30000 J	28000 J
VOLATILES (µg/kg)			
2-BUTANONE (MEK)			9.2 J
ACETONE		28 J	57 J
TETRACHLOROETHENE	4.8 J	5.1 J	
XYLENES		2 J	1.6 J
MISC. (%)			
PERCENT SOLIDS	100	64	66

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH

SAMPLE ID	X230J3-PZ04G	X230J3-PZ05B	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G
SAMPLE DATE	8/10/92	8/10/92	12/17/85	2/12/86	4/16/86	4/17/86	8/13/86	3/26/87
PARAMETER								
1,1,1-TRICHLOROETHANE								
2,4,5-T								
2,4-D								
ACETONE								
ALDRIN								
ALKALINITY								
ALKALINITY AS CACO3								
ALPHA ACTIVITY								
ALPHA, TOTAL								0.18 pCi/l
ALPHA, TOTAL (DISSOLVED)								1.35 pCi/l
ALPHA-BHC								
ANTIMONY								
ARSENIC	16 J ug/l	100 J ug/l						
ARSENIC (DISSOLVED)		31 J ug/l						
BARIUM	140 ug/l	130 ug/l						
BARIUM (DISSOLVED)	61 ug/l	66 ug/l						
BERYLLIUM								
BETA ACTIVITY								
BETA, TOTAL			46 pCi/l					
BETA, TOTAL (DISSOLVED)								
BETA-BHC								
BIS(2-ETHYLHEXYL)PHTHALATE	0.55 J ug/l	3.1 J ug/l						
BROMODICHLOROMETHANE								
BROMOFORM								
BUTYLBENZYLPHTHALATE								
CADMIUM						7 ug/L		
CADMIUM (DISSOLVED)								
CALCIUM								
Calcium (Dissolved)								
CARBON DISULFIDE								
CHLORIDE			540 mg/l	610 mg/l	600 mg/l		569 mg/l	535 mg/l
CHLOROFORM								
CHROMIUM	24 J ug/l	28 J ug/l		150 ug/L		40 ug/L	40 ug/L	60 ug/L
CHROMIUM (DISSOLVED)	11 J ug/l	11 J ug/l						
Chromium (Total)								
CIS-1,2-DICHLOROETHENE								
COBALT	24 J ug/l	32 J ug/l						
COBALT (DISSOLVED)	11 J ug/l							
CONDUCTIVITY								
COPPER								
CYANIDE								
DELTA-BHC								
DIBROMOCHLOROMETHANE								
DIETHYLPHTHALATE								
ENDOSULFAN I								
FLUORIDE			100 ug/L	100 ug/L		2100 ug/L	100 ug/L	
FREON 113								3 ug/l
HEPTACHLOR								
HEPTACHLOR EPOXIDE								

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X230J3-PZ04G	X230J3-PZ05B	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G
SAMPLE DATE	8/10/92	8/10/92	12/17/85	2/12/86	4/16/86	4/17/86	8/13/86	3/26/87
PARAMETER								
HEXAVALENT CHROMIUM								
IRON								330 ug/L
IRON (DISSOLVED)				3100 ug/L	2090 ug/L		860 ug/L	960 ug/L
IRON (TOTAL)								
LEAD	26 J ug/l							
LINDANE								
MAGNESIUM								
MAGNESIUM (DISSOLVED)								
MANGANESE								200 ug/L
MANGANESE (DISSOLVED)			150 ug/L	190 ug/L	280 ug/L		400 ug/L	430 ug/L
MANGANESE (TOTAL)								
MERCURY								
METHYLENE CHLORIDE								
NICKEL	69 J ug/l	51 J ug/l						
NICKEL (DISSOLVED)	47 J ug/l							
NICKEL (TOTAL)								
NITRATE			0.3 mg/l	0.3 mg/l		0.02 mg/l	0.4 mg/l	
PENTACHLORO-DIBENZO_B,E__1,4_DIOXIN								
pH			9 s.u.	6.9 s.u.	7 s.u.		6.9 s.u.	6.4 s.u.
POTASSIUM								
Potassium (Dissolved)								
RADIUM-226+228								
SELENIUM								
SILVER								
SODIUM								274000 ug/L
SODIUM (DISSOLVED)			438000 ug/L	420000 ug/L	308000 ug/L		255000 ug/L	307000 ug/L
SPECIFIC CONDUCTIVITY			1056 umhos	936 umhos	2860 umhos		500 umhos	2730 umhos
SULFATE			608 mg/l	618 mg/l	564.2 mg/l		604.1 mg/l	503.4 mg/l
TECHNETIUM								
TEMPERATURE								
THALLIUM								
TOTAL ORGANIC CARBON (TOC)			5.9 mg/l	6.96 mg/l	5.75 mg/l		5.56 mg/l	5.04 mg/l
TOTAL ORGANIC HALOGENS			43 ug/l	81.3 ug/l	62.6 ug/l		43.7 ug/l	85.8 ug/l
TP-SILVEX								
TRICHLOROETHENE								1.5 ug/l
Uranium								
URANIUM, TOTAL				1 ug/l				0.2 ug/l
URANIUM, TOTAL (DISSOLVED)								0.4 ug/l
VANADIUM	23 J ug/l	24 J ug/l						
WATER LEVEL ELEVATION IN FEET								
WELL DEPTH								
ZINC	89 J ug/l	71 J ug/l						
ZINC (DISSOLVED)	21 J ug/l							

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G
SAMPLE DATE	5/7/87	7/16/87	11/1/87	11/25/87	11/27/87	12/1/87	3/8/88	11/30/88
PARAMETER								
1,1,1-TRICHLOROETHANE								
2,4,5-T								
2,4-D								
ACETONE								
ALDRIN								
ALKALINITY								
ALKALINITY AS CACO3								
ALPHA ACTIVITY								
ALPHA, TOTAL	1.35 pCi/l	10.35 pCi/l	2 pCi/l			9 pCi/l	10 pCi/l	28 J pCi/l
ALPHA, TOTAL (DISSOLVED)	1.6 pCi/l	1.6 pCi/l				1.35 pCi/l		
ALPHA-BHC								
ANTIMONY								
ARSENIC								
ARSENIC (DISSOLVED)								
BARIUM								
BARIUM (DISSOLVED)								
BERYLLIUM								
BETA ACTIVITY								
BETA, TOTAL			12 pCi/l				15 pCi/l	24 J pCi/l
BETA, TOTAL (DISSOLVED)	18 pCi/l					54 pCi/l		
BETA-BHC								
BIS(2-ETHYLHEXYL)PHTHALATE								
BROMODICHLOROMETHANE								
BROMOFORM								
BUTYLBENZYLPHTHALATE								
CADMIUM							6 ug/L	
CADMIUM (DISSOLVED)								
CALCIUM								
Calcium (Dissolved)								
CARBON DISULFIDE								
CHLORIDE	445 mg/l	425 mg/l	625 mg/l			625 mg/l		
CHLOROFORM								
CHROMIUM		400 ug/L					1900 ug/L	
CHROMIUM (DISSOLVED)		40 ug/L						
Chromium (Total)								
CIS-1,2-DICHLOROETHENE								
COBALT								
COBALT (DISSOLVED)								
CONDUCTIVITY								
COPPER								
CYANIDE								
DELTA-BHC								
DIBROMOCHLOROMETHANE								
DIETHYLPHTHALATE								
ENDOSULFAN I								
FLUORIDE			200 ug/L					
FREON 113								
HEPTACHLOR								
HEPTACHLOR EPOXIDE								

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G
SAMPLE DATE	5/7/87	7/16/87	11/1/87	11/25/87	11/27/87	12/1/87	3/8/88	11/30/88
PARAMETER								
HEXAVALENT CHROMIUM								
IRON	3100 ug/L	5000 ug/L	11000 ug/L			11000 ug/L		
IRON (DISSOLVED)	1400 ug/L	2000 ug/L	1200 ug/L			1200 ug/L	6700 ug/L	
IRON (TOTAL)								
LEAD								
LINDANE								
MAGNESIUM								
MAGNESIUM (DISSOLVED)								
MANGANESE	510 ug/L	720 ug/L	530 ug/L			530 ug/L		
MANGANESE (DISSOLVED)	500 ug/L	480 ug/L	470 ug/L			470 ug/L	390 ug/L	
MANGANESE (TOTAL)								
MERCURY								
METHYLENE CHLORIDE								
NICKEL								
NICKEL (DISSOLVED)								
NICKEL (TOTAL)								
NITRATE			0.3 mg/l					
PENTACHLORO-DIBENZO_B,E__1,4_DIOXIN								
pH	6.8 s.u.	5.9 s.u.	6.4 s.u.		6.4 s.u.		6.3 s.u.	
POTASSIUM								
Potassium (Dissolved)								
RADIUM-226+228								
SELENIUM								
SILVER								
SODIUM	290000 ug/L	300000 ug/L	330000 ug/L			330000 ug/L		
SODIUM (DISSOLVED)	315000 ug/L	300000 ug/L	340000 ug/L			340000 ug/L	320000 ug/L	
SPECIFIC CONDUCTIVITY	2130 umhos	272 umhos	2410 umhos		2410 umhos		331 umhos	
SULFATE	451.4 mg/l	460 mg/l	625 mg/l			625 mg/l		868 J mg/l
TECHNETIUM								
TEMPERATURE								
THALLIUM								
TOTAL ORGANIC CARBON (TOC)	4.92 mg/l	4.8 mg/l	5.2 mg/l	5.2 mg/l			5.2 mg/l	
TOTAL ORGANIC HALOGENS	160.1 ug/l	76 ug/l	41.9 ug/l	41.9 ug/l			86.9 ug/l	
TP-SILVEX								
TRICHLOROETHENE								
Uranium								
URANIUM, TOTAL	0.4 ug/l	1 ug/l	0.4 ug/l			0.4 ug/l		9 ug/l
URANIUM, TOTAL (DISSOLVED)	0.6 ug/l	0.8 ug/l	0.4 ug/l			0.4 ug/l		
VANADIUM								
WATER LEVEL ELEVATION IN FEET								
WELL DEPTH								
ZINC								
ZINC (DISSOLVED)								

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G
SAMPLE DATE	3/3/90	5/22/90	9/11/90	2/5/91	5/13/91	10/2/91	11/19/91	1/3/92
PARAMETER								
1,1,1-TRICHLOROETHANE					2 ug/l			
2,4,5-T								
2,4-D								
ACETONE								
ALDRIN								
ALKALINITY								
ALKALINITY AS CACO3								
ALPHA ACTIVITY					14 pCi/l	115 pCi/l	239 pCi/l	
ALPHA, TOTAL								
ALPHA, TOTAL (DISSOLVED)								
ALPHA-BHC								
ANTIMONY								
ARSENIC								
ARSENIC (DISSOLVED)								
BARIUM					45 ug/L	581 ug/L	440 ug/L	
BARIUM (DISSOLVED)								
BERYLLIUM								
BETA ACTIVITY					28 pCi/l	322 pCi/l		
BETA, TOTAL								
BETA, TOTAL (DISSOLVED)								
BETA-BHC								
BIS(2-ETHYLHEXYL)PHTHALATE								
BROMODICHLOROMETHANE								
BROMOFORM								
BUTYLBENZYLPHTHALATE								
CADMIUM						4 ug/L	4 ug/L	
CADMIUM (DISSOLVED)								
CALCIUM								
Calcium (Dissolved)								
CARBON DISULFIDE							15 J ug/l	10 J ug/l
CHLORIDE								
CHLOROFORM								
CHROMIUM	500 ug/L	2300 ug/L	660 ug/L	530 ug/L	140 ug/L	2990 ug/L	12600 ug/L	
CHROMIUM (DISSOLVED)								
Chromium (Total)								
CIS-1,2-DICHLOROETHENE								
COBALT								
COBALT (DISSOLVED)								
CONDUCTIVITY								3010 uS/cm
COPPER								
CYANIDE								
DELTA-BHC								
DIBROMOCHLOROMETHANE								
DIETHYLPHTHALATE								
ENDOSULFAN I								
FLUORIDE								
FREON 113								
HEPTACHLOR								
HEPTACHLOR EPOXIDE								

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G
SAMPLE DATE	3/3/90	5/22/90	9/11/90	2/5/91	5/13/91	10/2/91	11/19/91	1/3/92
PARAMETER								
HEXAVALENT CHROMIUM								
IRON					13000 ug/L	449000 ug/L	434000 ug/L	
IRON (DISSOLVED)								
IRON (TOTAL)								
LEAD					31 ug/L	135 E ug/L		
LINDANE								
MAGNESIUM								
MAGNESIUM (DISSOLVED)								
MANGANESE					1070 ug/L	4380 ug/L	3860 ug/L	
MANGANESE (DISSOLVED)								
MANGANESE (TOTAL)								
MERCURY								
METHYLENE CHLORIDE								
NICKEL								
NICKEL (DISSOLVED)								
NICKEL (TOTAL)								
NITRATE								
PENTACHLORO-DIBENZO_B,E__1,4_DIOXIN								
pH								6.64 Std Unit
POTASSIUM								
Potassium (Dissolved)								
RADIUM-226+228								
SELENIUM								
SILVER								
SODIUM								
SODIUM (DISSOLVED)								
SPECIFIC CONDUCTIVITY								
SULFATE					574 mg/l	583 mg/l	788.5 mg/l	844.3 mg/l
TECHNETIUM						20 pCi/l		
TEMPERATURE								14 deg C
THALLIUM								
TOTAL ORGANIC CARBON (TOC)								
TOTAL ORGANIC HALOGENS								
TP-SILVEX								
TRICHLOROETHENE								
Uranium								
URANIUM, TOTAL						21 UG/L	18.6 N ug/l	1.7 ug/l
URANIUM, TOTAL (DISSOLVED)								
VANADIUM								
WATER LEVEL ELEVATION IN FEET								657.3 ft
WELL DEPTH								33.22 ft
ZINC								
ZINC (DISSOLVED)								

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G
SAMPLE DATE	2/15/92	3/14/92	4/12/92	7/23/92	11/19/92	2/10/93	5/6/93	8/2/93
PARAMETER								
1,1,1-TRICHLOROETHANE								
2,4,5-T								
2,4-D								
ACETONE								
ALDRIN								
ALKALINITY						89 mg/l	92 mg/l	83 mg/l
ALKALINITY AS CACO3								
ALPHA ACTIVITY				28 pCi/l		93 pCi/l		
ALPHA, TOTAL								
ALPHA, TOTAL (DISSOLVED)								
ALPHA-BHC								
ANTIMONY								
ARSENIC								
ARSENIC (DISSOLVED)								
BARIUM	248 ug/l		25.9 ug/l	90.1 J ug/l	54.3 ug/l	111 ug/l	39.2 ug/l	40 ug/l
BARIUM (DISSOLVED)								
BERYLLIUM								
BETA ACTIVITY				28 pCi/l				
BETA, TOTAL								
BETA, TOTAL (DISSOLVED)								
BETA-BHC								
BIS(2-ETHYLHEXYL)PHTHALATE								
BROMODICHLOROMETHANE								
BROMOFORM								
BUTYLBENZYLPHTHALATE								
CADMIUM	4.34 ug/l				4.4 ug/l	4.2 ug/l		
CADMIUM (DISSOLVED)								
CALCIUM						203000 ug/l	216000 ug/l	206000 ug/l
Calcium (Dissolved)								
CARBON DISULFIDE								
CHLORIDE						599.4 mg/l	663.6 mg/l	622.6 mg/l
CHLOROFORM								
CHROMIUM	2300 ug/l		679 ug/l	1010 J ug/l	359 ug/l	1540 ug/l	749 ug/l	1550 ug/l
CHROMIUM (DISSOLVED)								
Chromium (Total)								
CIS-1,2-DICHLOROETHENE								
COBALT								
COBALT (DISSOLVED)								
CONDUCTIVITY	3840 uS/cm	3460 uS/cm	3310 uS/cm		3180 uS/cm			
COPPER								
CYANIDE								
DELTA-BHC								
DIBROMOCHLOROMETHANE								
DIETHYLPHTHALATE								
ENDOSULFAN I								
FLUORIDE								
FREON 113								
HEPTACHLOR								
HEPTACHLOR EPOXIDE								

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G
SAMPLE DATE	2/15/92	3/14/92	4/12/92	7/23/92	11/19/92	2/10/93	5/6/93	8/2/93
PARAMETER								
HEXAVALENT CHROMIUM								
IRON	210000 ug/l		23900 ug/l	68500 J ug/l	48100 ug/l	74000 ug/l	32000 ug/l	38400 N ug/l
IRON (DISSOLVED)								
IRON (TOTAL)								
LEAD					12.8 J ug/l			35.5 ug/l
LINDANE								
MAGNESIUM						110000 ug/l	119000 ug/l	111000 ug/l
MAGNESIUM (DISSOLVED)								
MANGANESE	2610 ug/l		1780 ug/l	1870 J ug/l	1680 ug/l	2910 ug/l	1600 ug/l	1510 ug/l
MANGANESE (DISSOLVED)								
MANGANESE (TOTAL)								
MERCURY								
METHYLENE CHLORIDE					2.5 J ug/l			
NICKEL						8210 ug/l	2490 ug/l	2810 ug/l
NICKEL (DISSOLVED)								
NICKEL (TOTAL)								
NITRATE								
PENTACHLORO-DIBENZO_B,E__1,4_DIOXIN								
pH	6.5 Std Unit	6.45 Std Unit	6.37 Std Unit		5.82 Std Unit	6.22 Std Unit	6.22 Std Unit	6.15 Std Unit
POTASSIUM						3630 ug/l	4180 ug/l	3860 ug/l
Potassium (Dissolved)								
RADIUM-226+228								
SELENIUM								
SILVER								
SODIUM						299000 ug/l	312000 ug/l	295000 ug/l
SODIUM (DISSOLVED)								
SPECIFIC CONDUCTIVITY						2650 uS/cm	3760 uS/cm	3070 uS/cm
SULFATE	946.2 mg/l		1790.3 mg/l	815.4 mg/l	834000 ug/l	834.5 mg/l	928.3 mg/l	806.6 mg/l
TECHNETIUM	49 pCi/l		23 pCi/l	35 pCi/l				29 pCi/l
TEMPERATURE	15 deg C	12 deg C	13 deg C		13 deg C	12 deg C	14.5 deg C	16.4 deg C
THALLIUM								
TOTAL ORGANIC CARBON (TOC)								
TOTAL ORGANIC HALOGENS								
TP-SILVEX								
TRICHLOROETHENE								
Uranium								
URANIUM, TOTAL	8.7 ug/l		1 ug/l	3.17 ug/l		4.53 ug/l	1.2 ug/l	1.23 ug/l
URANIUM, TOTAL (DISSOLVED)								
VANADIUM								
WATER LEVEL ELEVATION IN FEET	657.9 ft	658.08 ft	658.37 ft		657.97 ft	659.1 ft	660.15 ft	659.88 ft
WELL DEPTH	33.24 ft	33.41 ft	33.42 ft		33.3 ft	33.4 ft	33.45 ft	33.36 ft
ZINC								
ZINC (DISSOLVED)								

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G
SAMPLE DATE	11/8/93	2/2/94	6/17/94	7/19/94	1/24/95	8/7/95	1/17/96	7/22/96
PARAMETER								
1,1,1-TRICHLOROETHANE								
2,4,5-T				0.026 ug/l				
2,4-D				0.026 ug/l				
ACETONE								
ALDRIN				0.052 ug/l				
ALKALINITY	82 mg/l	87 mg/l	90 mg/l		91 mg/l	94 mg/l		
ALKALINITY AS CACO3							89.5 mg/l	67 J mg/l
ALPHA ACTIVITY	48 pCi/l		34 pCi/l					
ALPHA, TOTAL								
ALPHA, TOTAL (DISSOLVED)								
ALPHA-BHC				0.052 ug/l				
ANTIMONY				105 ug/l				
ARSENIC								
ARSENIC (DISSOLVED)								
BARIUM	28.8 ug/l	43.8 ug/l	30 ug/l	28.8 ug/l	109 ug/l	24.2 ug/l	83.7 ug/l	
BARIUM (DISSOLVED)								
BERYLLIUM								
BETA ACTIVITY								
BETA, TOTAL								
BETA, TOTAL (DISSOLVED)								
BETA-BHC				0.052 ug/l				
BIS(2-ETHYLHEXYL)PHTHALATE								
BROMODICHLOROMETHANE								
BROMOFORM								
BUTYLBENZYLPHTHALATE								
CADMIUM								
CADMIUM (DISSOLVED)								
CALCIUM	218000 ug/l	136000 ug/l	193000 ug/l		20400 ug/l	211000 ug/l		220000 ug/l
Calcium (Dissolved)								
CARBON DISULFIDE								
CHLORIDE	794 mg/l	808 mg/l	540 mg/l		620 mg/l	753 mg/l	620 mg/l	541 mg/l
CHLOROFORM								
CHROMIUM	1660 ug/l	1520 ug/l	1330 ug/l	464 ug/l	3840 ug/l	266 ug/l	801 ug/l	1230 ug/l
CHROMIUM (DISSOLVED)								
Chromium (Total)								
CIS-1,2-DICHLOROETHENE								
COBALT				55.2 ug/l				
COBALT (DISSOLVED)								
CONDUCTIVITY					3470 uS	3250 uS		
COPPER				8.8 ug/l				
CYANIDE								
DELTA-BHC				0.052 ug/l				
DIBROMOCHLOROMETHANE								
DIETHYLPHTHALATE								
ENDOSULFAN I				0.052 ug/l				
FLUORIDE								
FREON 113								
HEPTACHLOR				0.052 ug/l				
HEPTACHLOR EPOXIDE				0.052 ug/l				

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G	X616-05G
SAMPLE DATE	11/8/93	2/2/94	6/17/94	7/19/94	1/24/95	8/7/95	1/17/96	7/22/96
PARAMETER								
HEXAVALENT CHROMIUM								
IRON	17200 ug/l	10300 ug/l	25600 ug/l		88200 ug/l	11800 ug/l	7350 N ug/l	2270 ug/l
IRON (DISSOLVED)								
IRON (TOTAL)								
LEAD	33.8 ug/l		18.6 ug/l	46.1 ug/l	73.1 ug/l	82.8 ug/l	28.2 ug/l	
LINDANE				0.052 ug/l				
MAGNESIUM	114000 ug/l	110000 ug/l	106000 ug/l		107000 ug/l	109000 ug/l	128000 ug/l	117000 ug/l
MAGNESIUM (DISSOLVED)								
MANGANESE	1570 ug/l	1580 ug/l	999 ug/l		1510 ug/l	866 ug/l	1340 ug/l	721 ug/l
MANGANESE (DISSOLVED)								
MANGANESE (TOTAL)								
MERCURY								
METHYLENE CHLORIDE								
NICKEL	2890 ug/l	2280 ug/l	1940 ug/l	1410 ug/l	2190 ug/l	1350 ug/l	1650 ug/l	967 ug/l
NICKEL (DISSOLVED)								
NICKEL (TOTAL)								
NITRATE								
PENTACHLORO-DIBENZO_B,E__1,4_DIOXIN				0.00282 J ug/L				
pH	6.36 Std Unit				6.15 Std Unit	6.26 Std Unit		
POTASSIUM	4050 ug/l	3660 ug/l	3480 ug/l		3730 ug/l	3760 N ug/l	4440 ug/l	3650 ug/l
Potassium (Dissolved)								
RADIUM-226+228								
SELENIUM				54.6 ug/l				
SILVER								
SODIUM	294000 ug/l	314000 ug/l	290000 ug/l		309000 J ug/l	318000 ug/l	319000 ug/l	306000 ug/l
SODIUM (DISSOLVED)								
SPECIFIC CONDUCTIVITY	3020 uS/cm							
SULFATE	1534 mg/l	1246 mg/l	684 mg/l		830 mg/l	799 mg/l	809 mg/l	591 mg/l
TECHNETIUM								
TEMPERATURE	13.1 deg C				10.1 deg C	14.2 deg C		
THALLIUM				325 ug/l				
TOTAL ORGANIC CARBON (TOC)								
TOTAL ORGANIC HALOGENS								
TP-SILVEX				0.026 ug/l				
TRICHLOROETHENE								
Uranium								
URANIUM, TOTAL	3.06 ug/l	1.2 ug/l	1.2 ug/l				1 ug/l	1.3 ug/l
URANIUM, TOTAL (DISSOLVED)								
VANADIUM				18.8 ug/l				
WATER LEVEL ELEVATION IN FEET	657.38 ft							
WELL DEPTH	33.38 ft							
ZINC				61.8 ug/l				
ZINC (DISSOLVED)								

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-05G	X616-05G	X616-05G	X616-05G	X616-13G	X616-13G	X616-13G	X616-13G
SAMPLE DATE	1/28/97	7/24/97	3/20/98	9/3/98	11/1/87	11/29/88	3/3/90	5/23/90
PARAMETER								
1,1,1-TRICHLOROETHANE								
2,4,5-T								
2,4-D								
ACETONE								
ALDRIN								
ALKALINITY	86 MG/L	92 MG/L	94 mg/L	91 mg/L				
ALKALINITY AS CACO3								
ALPHA ACTIVITY								
ALPHA, TOTAL					0.6 pCi/l	20 J pCi/l		
ALPHA, TOTAL (DISSOLVED)								
ALPHA-BHC								
ANTIMONY								
ARSENIC								
ARSENIC (DISSOLVED)								
BARIUM								
BARIUM (DISSOLVED)								
BERYLLIUM								
BETA ACTIVITY								
BETA, TOTAL					8 pCi/l	40 J pCi/l		
BETA, TOTAL (DISSOLVED)								
BETA-BHC								
BIS(2-ETHYLHEXYL)PHTHALATE								
BROMODICHLOROMETHANE								
BROMOFORM								
BUTYLBENZYLPHTHALATE								
CADMIUM								
CADMIUM (DISSOLVED)								
CALCIUM			226000 ug/L					
Calcium (Dissolved)	220000 UG/L	215000 UG/L		203000 ug/L				
CARBON DISULFIDE								
CHLORIDE	631 MG/L	789 MG/L	592 mg/L	588 mg/L	300 mg/l			
CHLOROFORM								
CHROMIUM							66 ug/L	45 ug/L
CHROMIUM (DISSOLVED)								
Chromium (Total)				943 ug/L				
CIS-1,2-DICHLOROETHENE								
COBALT								
COBALT (DISSOLVED)								
CONDUCTIVITY								
COPPER								
CYANIDE								
DELTA-BHC								
DIBROMOCHLOROMETHANE								
DIETHYLPHTHALATE								
ENDOSULFAN I								
FLUORIDE					200 ug/L			
FREON 113								
HEPTACHLOR								
HEPTACHLOR EPOXIDE								

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-05G	X616-05G	X616-05G	X616-05G	X616-13G	X616-13G	X616-13G	X616-13G
SAMPLE DATE	1/28/97	7/24/97	3/20/98	9/3/98	11/1/87	11/29/88	3/3/90	5/23/90
PARAMETER								
HEXAVALENT CHROMIUM								
IRON			1770 ug/L		1500 ug/L			
IRON (DISSOLVED)	3620 UG/L	1090 J UG/L		883 ug/L				
IRON (TOTAL)	3470 UG/L	2540 J UG/L						
LEAD								
LINDANE								
MAGNESIUM			124000 ug/L					
MAGNESIUM (DISSOLVED)	121000 UG/L	112000 UG/L		102000 ug/L				
MANGANESE			326 ug/L					
MANGANESE (DISSOLVED)	771 UG/L	389 UG/L		294 ug/L				
MANGANESE (TOTAL)	704 UG/L	457 UG/L		311 ug/L				
MERCURY								
METHYLENE CHLORIDE								
NICKEL			510 ug/L					
NICKEL (DISSOLVED)	1100 UG/L	538 UG/L		487 ug/L				
NICKEL (TOTAL)	985 UG/L	624 UG/L		491 ug/L				
NITRATE					0.5 mg/l			
PENTACHLORO-DIBENZO_B,E__1,4_DIOXIN								
pH					5.6 s.u.			
POTASSIUM			3460 ug/L					
Potassium (Dissolved)	3800 UG/L			3690 ug/L				
RADIUM-226+228					10 pCi/l			
SELENIUM								
SILVER								
SODIUM			304000 ug/L		350000 ug/L			
SODIUM (DISSOLVED)	321000 UG/L	285000 UG/L		251000 J ug/L	344000 ug/L			
SPECIFIC CONDUCTIVITY					3480 umhos			
SULFATE	841 MG/L	764 MG/L	765 mg/L	821 mg/L	1640.5 mg/l	1701.3 J mg/l		
TECHNETIUM								
TEMPERATURE								
THALLIUM								
TOTAL ORGANIC CARBON (TOC)					4.1 mg/l			
TOTAL ORGANIC HALOGENS					30.6 ug/l			
TP-SILVEX								
TRICHLOROETHENE								
Uranium								
URANIUM, TOTAL					0.3 ug/l	9 ug/l		
URANIUM, TOTAL (DISSOLVED)					1 ug/l			
VANADIUM								
WATER LEVEL ELEVATION IN FEET								
WELL DEPTH								
ZINC								
ZINC (DISSOLVED)								

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-13G	X616-13G	X616-13G	X616-13G	X616-13G	X616-13G	X616-13G	X616-13G
SAMPLE DATE	10/1/91	11/13/91	12/22/91	3/1/92	7/23/92	12/8/92	2/15/93	5/11/93
PARAMETER								
1,1,1-TRICHLOROETHANE								
2,4,5-T								
2,4-D								
ACETONE								
ALDRIN								
ALKALINITY							131 mg/l	129 mg/l
ALKALINITY AS CACO3								
ALPHA ACTIVITY						7 pCi/l		
ALPHA, TOTAL								
ALPHA, TOTAL (DISSOLVED)								
ALPHA-BHC								
ANTIMONY								
ARSENIC								
ARSENIC (DISSOLVED)								
BARIUM	14 ug/L		7 ug/L	10.8 ug/l	9.2 ug/l	9.3 E ug/l	8.4 ug/l	7.2 ug/l
BARIUM (DISSOLVED)								
BERYLLIUM								
BETA ACTIVITY								
BETA, TOTAL								
BETA, TOTAL (DISSOLVED)								
BETA-BHC								
BIS(2-ETHYLHEXYL)PHTHALATE								
BROMODICHLOROMETHANE								
BROMOFORM		1 ug/l						
BUTYLBENZYLPHTHALATE								
CADMIUM								
CADMIUM (DISSOLVED)								
CALCIUM							302000 ug/l	290000 ug/l
Calcium (Dissolved)								
CARBON DISULFIDE		75 J ug/l	70 J ug/l					
CHLORIDE							274.7 mg/l	288.6 mg/l
CHLOROFORM								
CHROMIUM			10 ug/L	3.3 ug/l		4.4 ug/l		8.1 ug/l
CHROMIUM (DISSOLVED)								
Chromium (Total)								
CIS-1,2-DICHLOROETHENE			3 ug/l					
COBALT								
COBALT (DISSOLVED)								
CONDUCTIVITY			3530 uS/cm	3560 uS/cm	4790 uS/cm	3000 uS/cm		
COPPER								
CYANIDE								
DELTA-BHC								
DIBROMOCHLOROMETHANE		2 ug/l						
DIETHYLPHTHALATE								
ENDOSULFAN I								
FLUORIDE								
FREON 113								
HEPTACHLOR								
HEPTACHLOR EPOXIDE								

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-13G	X616-13G	X616-13G	X616-13G	X616-13G	X616-13G	X616-13G	X616-13G
SAMPLE DATE	10/1/91	11/13/91	12/22/91	3/1/92	7/23/92	12/8/92	2/15/93	5/11/93
PARAMETER								
HEXAVALENT CHROMIUM								
IRON	6090 ug/L	1540 ug/L	1410 ug/L	3710 ug/l	393 ug/l	4320 J ug/l	1190 ug/l	266 ug/l
IRON (DISSOLVED)								
IRON (TOTAL)								
LEAD						7 J ug/l		
LINDANE								
MAGNESIUM							143000 ug/l	140000 ug/l
MAGNESIUM (DISSOLVED)								
MANGANESE	37 ug/L	12 ug/L	12 ug/L	20.7 ug/l		27.1 ug/l	6.8 ug/l	3.9 ug/l
MANGANESE (DISSOLVED)								
MANGANESE (TOTAL)								
MERCURY								
METHYLENE CHLORIDE								
NICKEL							8.3 ug/l	15.6 ug/l
NICKEL (DISSOLVED)								
NICKEL (TOTAL)								
NITRATE								
PENTACHLORO-DIBENZO_B,E__1,4_DIOXIN								
pH			6.31 Std Unit	6.26 Std Unit	6.57 Std Unit	6.16 Std Unit	6.34 Std Unit	6.19 Std Unit
POTASSIUM							8570 ug/l	8620 ug/l
Potassium (Dissolved)								
RADIUM-226+228								
SELENIUM								
SILVER								
SODIUM							335000 ug/l	324000 ug/l
SODIUM (DISSOLVED)								
SPECIFIC CONDUCTIVITY							3010 uS/cm	3520 uS/cm
SULFATE	1636.7 mg/l	1661 mg/l	1719 mg/l	1640 mg/l	1568 mg/l	1595.5 mg/l	1635.6 mg/l	1596 mg/l
TECHNETIUM		14 pCi/l	20 pCi/l		41 pCi/l	13 pCi/l		
TEMPERATURE			15 deg C	12 deg C	13 deg C	12 deg C	10.5 deg C	15.9 deg C
THALLIUM								
TOTAL ORGANIC CARBON (TOC)								
TOTAL ORGANIC HALOGENS								
TP-SILVEX								
TRICHLOROETHENE								
Uranium								
URANIUM, TOTAL	1 UG/L				1.11 ug/l		1.38 ug/l	1.03 ug/l
URANIUM, TOTAL (DISSOLVED)								
VANADIUM								
WATER LEVEL ELEVATION IN FEET			659.44 ft	660.17 ft	661.68 ft	660.3 ft	661.24 ft	662.25 ft
WELL DEPTH			32.8 ft	32.98 ft	33 ft	32.8 ft	32.99 ft	33 ft
ZINC								
ZINC (DISSOLVED)								

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-13G	X616-13G	X616-13G	X616-13G	X616-13G	X616-13G	X616-13G	X616-13G
SAMPLE DATE	8/3/93	11/9/93	2/3/94	6/21/94	7/21/94	1/25/95	8/2/95	1/15/96
PARAMETER								
1,1,1-TRICHLOROETHANE								
2,4,5-T								
2,4-D					0.026 ug/l			
ACETONE								
ALDRIN					0.054 ug/l			
ALKALINITY	130 mg/l	140 mg/l	136 mg/l	134 mg/l		125 mg/l	136 mg/l	
ALKALINITY AS CACO3								138.6 mg/l
ALPHA ACTIVITY								
ALPHA, TOTAL								
ALPHA, TOTAL (DISSOLVED)								
ALPHA-BHC					0.054 ug/l			
ANTIMONY					240 ug/l			
ARSENIC					91.5 ug/l			
ARSENIC (DISSOLVED)								
BARIUM	7.4 ug/l	6.6 ug/l	8.4 ug/l	6.6 ug/l	526 ug/l		8 ug/l	8.9 ug/l
BARIUM (DISSOLVED)								
BERYLLIUM					73.4 ug/l			
BETA ACTIVITY								
BETA, TOTAL								
BETA, TOTAL (DISSOLVED)								
BETA-BHC					0.054 ug/l			
BIS(2-ETHYLHEXYL)PHTHALATE								
BROMODICHLOROMETHANE								
BROMOFORM								
BUTYLBENZYLPHTHALATE								
CADMIUM					82.4 ug/l			
CADMIUM (DISSOLVED)								
CALCIUM	312000 ug/l	300000 J ug/l	194000 ug/l	314000 ug/l		300000 ug/l	334000 ug/l	303000 J ug/l
Calcium (Dissolved)								
CARBON DISULFIDE	2 ug/l	3 J ug/l	36 ug/l					
CHLORIDE	302.7 mg/l	263 mg/l	298 mg/l	323 mg/l		310 mg/l	346 mg/l	251 mg/l
CHLOROFORM								
CHROMIUM			5.1 ug/l		189 ug/l			5.7 ug/l
CHROMIUM (DISSOLVED)								
Chromium (Total)								
CIS-1,2-DICHLOROETHENE								
COBALT					343 ug/l			
COBALT (DISSOLVED)								
CONDUCTIVITY						3590 uS	3530 uS	
COPPER					387 ug/l			
CYANIDE					233 ug/L			
DELTA-BHC					0.054 ug/l			
DIBROMOCHLOROMETHANE								
DIETHYLPHTHALATE								
ENDOSULFAN I					0.054 ug/l			
FLUORIDE								
FREON 113								
HEPTACHLOR					0.054 ug/l			
HEPTACHLOR EPOXIDE					0.054 ug/l			

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-13G	X616-13G	X616-13G	X616-13G	X616-13G	X616-13G	X616-13G	X616-13G
SAMPLE DATE	8/3/93	11/9/93	2/3/94	6/21/94	7/21/94	1/25/95	8/2/95	1/15/96
PARAMETER								
HEXAVALENT CHROMIUM								
IRON	610 ug/l	285 ug/l	609 N ug/l	157 N ug/l		309 ug/l	439 ug/l	43.8 ug/l
IRON (DISSOLVED)								
IRON (TOTAL)								
LEAD	20 ug/l	33 ug/l			115 ug/l		44.2 ug/l	34.5 J ug/l
LINDANE					0.054 ug/l			
MAGNESIUM	143000 ug/l	137000 ug/l	110000 ug/l	140000 ug/l		140000 ug/l	151000 ug/l	133000 J ug/l
MAGNESIUM (DISSOLVED)								
MANGANESE	6.8 ug/l	5 ug/l	7.2 ug/l				3.8 ug/l	15.6 ug/l
MANGANESE (DISSOLVED)								
MANGANESE (TOTAL)								
MERCURY					3.4 ug/l			
METHYLENE CHLORIDE								
NICKEL		6.8 ug/l			241 ug/l			13.8 ug/l
NICKEL (DISSOLVED)								
NICKEL (TOTAL)								
NITRATE								
PENTACHLORO-DIBENZO_B,E__1,4_DIOXIN								
pH	6.04 Std Unit	6.28 Std Unit				6.28 Std Unit	6.27 Std Unit	
POTASSIUM	8630 ug/l	8040 ug/l	10600 JN ug/l	7330 ug/l		8810 ug/l	8560 ug/l	8660 ug/l
Potassium (Dissolved)								
RADIUM-226+228								
SELENIUM					108 ug/l			
SILVER					111 ug/l			
SODIUM	318000 ug/l	318000 ug/l	263000 ug/l	324000 ug/l		342000 J ug/l	360000 ug/l	315000 J ug/l
SODIUM (DISSOLVED)								
SPECIFIC CONDUCTIVITY	3420 uS/cm	3500 uS/cm						
SULFATE	1554.5 mg/l	1263 mg/l	1523 mg/l	1540 mg/l		1630 mg/l	1550 mg/l	1520 mg/l
TECHNETIUM	27 pCi/l							
TEMPERATURE	16.1 deg C	14.2 deg C				11.8 deg C	14.1 deg C	
THALLIUM					554 ug/l			
TOTAL ORGANIC CARBON (TOC)								
TOTAL ORGANIC HALOGENS								
TP-SILVEX					0.026 ug/l			
TRICHLOROETHENE								
Uranium								
URANIUM, TOTAL	1.04 ug/l	1.22 ug/l	1 ug/l	1.1 ug/l				
URANIUM, TOTAL (DISSOLVED)								
VANADIUM					320 ug/l			
WATER LEVEL ELEVATION IN FEET	661.4 ft	659.55 ft						
WELL DEPTH	32.98 ft	32.97 ft						
ZINC					946 ug/l			
ZINC (DISSOLVED)								

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-13G	X616-13G	X616-13G	X616-13G	X616-13G	X616-14G	X616-14G	X616-14G
SAMPLE DATE	7/18/96	1/21/97	7/29/97	3/13/98	9/2/98	11/1/87	11/28/88	3/3/90
PARAMETER								
1,1,1-TRICHLOROETHANE								
2,4,5-T								
2,4-D								
ACETONE								
ALDRIN								
ALKALINITY		126 MG/L	125 MG/L	123 mg/L	127 mg/L			
ALKALINITY AS CACO3	136 J mg/l							
ALPHA ACTIVITY								
ALPHA, TOTAL						0.7 pCi/l	47 J pCi/l	
ALPHA, TOTAL (DISSOLVED)								
ALPHA-BHC								
ANTIMONY								
ARSENIC								
ARSENIC (DISSOLVED)								
BARIUM								
BARIUM (DISSOLVED)								
BERYLLIUM								
BETA ACTIVITY								
BETA, TOTAL						11 pCi/l	40 J pCi/l	
BETA, TOTAL (DISSOLVED)								
BETA-BHC								
BIS(2-ETHYLHEXYL)PHTHALATE								
BROMODICHLOROMETHANE								
BROMOFORM								
BUTYLBENZYLPHTHALATE								
CADMIUM								
CADMIUM (DISSOLVED)								
CALCIUM	312000 ug/l			299000 ug/L				
Calcium (Dissolved)		295000 UG/L	305000 UG/L		304000 ug/L			
CARBON DISULFIDE								
CHLORIDE	330 mg/l	283 MG/L	255 MG/L	266 mg/L	271 mg/L	375 mg/l		
CHLOROFORM								
CHROMIUM								165 ug/L
CHROMIUM (DISSOLVED)								
Chromium (Total)								
CIS-1,2-DICHLOROETHENE								
COBALT								
COBALT (DISSOLVED)								
CONDUCTIVITY								
COPPER								
CYANIDE								
DELTA-BHC								
DIBROMOCHLOROMETHANE								
DIETHYLPHTHALATE								
ENDOSULFAN I								
FLUORIDE						200 ug/L		
FREON 113							9 P ug/l	
HEPTACHLOR								
HEPTACHLOR EPOXIDE								

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-13G	X616-13G	X616-13G	X616-13G	X616-13G	X616-14G	X616-14G	X616-14G
SAMPLE DATE	7/18/96	1/21/97	7/29/97	3/13/98	9/2/98	11/1/87	11/28/88	3/3/90
PARAMETER								
HEXAVALENT CHROMIUM								
IRON						1200 ug/L		
IRON (DISSOLVED)								
IRON (TOTAL)								
LEAD								
LINDANE								
MAGNESIUM	138000 ug/l			133000 ug/L				
MAGNESIUM (DISSOLVED)		141000 UG/L	151000 UG/L		138000 ug/L			
MANGANESE						60 ug/L		
MANGANESE (DISSOLVED)						50 ug/L		
MANGANESE (TOTAL)								
MERCURY								
METHYLENE CHLORIDE							3 J ug/l	
NICKEL								
NICKEL (DISSOLVED)								
NICKEL (TOTAL)								
NITRATE						0.4 mg/l		
PENTACHLORO-DIBENZO_B,E__1,4_DIOXIN								
pH						6.4 s.u.		
POTASSIUM	7910 ug/l			6940 J ug/L				
Potassium (Dissolved)		8320 UG/L	8540 UG/L		8010 ug/L			
RADIUM-226+228								
SELENIUM								
SILVER								
SODIUM	305000 ug/l			317000 ug/L		300000 ug/L		
SODIUM (DISSOLVED)		303000 UG/L	343000 UG/L		276000 J ug/L	300000 ug/L		
SPECIFIC CONDUCTIVITY						3550 umhos		
SULFATE	1830 mg/l	1440 MG/L	1480 MG/L	1540 mg/L	1490 mg/L	1527.7 mg/l	1527.7 J mg/l	
TECHNETIUM								
TEMPERATURE								
THALLIUM								
TOTAL ORGANIC CARBON (TOC)						2.9 mg/l		
TOTAL ORGANIC HALOGENS						23.4 ug/l		
TP-SILVEX								
TRICHLOROETHENE								
Uranium		1.2 UG/L	1.1 UG/L	1.21 ug/L				
URANIUM, TOTAL	1.1 ug/l					2 ug/l	16 ug/l	
URANIUM, TOTAL (DISSOLVED)						1 ug/l		
VANADIUM								
WATER LEVEL ELEVATION IN FEET								
WELL DEPTH								
ZINC								
ZINC (DISSOLVED)								

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-14G	X616-14G	X616-14G	X616-14G	X616-14G	X616-14G	X616-14G	X616-14G
SAMPLE DATE	5/17/90	9/12/90	1/31/91	5/13/91	10/2/91	11/14/91	12/3/91	1/3/92
PARAMETER								
1,1,1-TRICHLOROETHANE				2 ug/l				
2,4,5-T								
2,4-D								
ACETONE								
ALDRIN								
ALKALINITY								
ALKALINITY AS CACO3								
ALPHA ACTIVITY								
ALPHA, TOTAL								
ALPHA, TOTAL (DISSOLVED)								
ALPHA-BHC								
ANTIMONY								
ARSENIC								
ARSENIC (DISSOLVED)								
BARIUM				29 ug/L	173 ug/L	42 ug/L		
BARIUM (DISSOLVED)								
BERYLLIUM								
BETA ACTIVITY				33 pCi/l				
BETA, TOTAL								
BETA, TOTAL (DISSOLVED)								
BETA-BHC								
BIS(2-ETHYLHEXYL)PHTHALATE								
BROMODICHLOROMETHANE								
BROMOFORM								
BUTYLBENZYLPHTHALATE								
CADMIUM								
CADMIUM (DISSOLVED)								
CALCIUM								
Calcium (Dissolved)								
CARBON DISULFIDE								
CHLORIDE								
CHLOROFORM					1 ug/l			
CHROMIUM	11 ug/L	41 ug/L	56 ug/L	20 ug/L	50 ug/L	15 ug/L		
CHROMIUM (DISSOLVED)								
Chromium (Total)								
CIS-1,2-DICHLOROETHENE								
COBALT								
COBALT (DISSOLVED)								
CONDUCTIVITY								3470 uS/cm
COPPER								
CYANIDE								
DELTA-BHC								
DIBROMOCHLOROMETHANE							1 ug/l	
DIETHYLPHTHALATE								
ENDOSULFAN I								
FLUORIDE								
FREON 113								
HEPTACHLOR								
HEPTACHLOR EPOXIDE								

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-14G	X616-14G	X616-14G	X616-14G	X616-14G	X616-14G	X616-14G	X616-14G
SAMPLE DATE	5/17/90	9/12/90	1/31/91	5/13/91	10/2/91	11/14/91	12/3/91	1/3/92
PARAMETER								
HEXAVALENT CHROMIUM	22 ug/L							
IRON				13700 ug/L	100000 ug/L	24200 ug/L		
IRON (DISSOLVED)								
IRON (TOTAL)								
LEAD				45 ug/L				
LINDANE								
MAGNESIUM								
MAGNESIUM (DISSOLVED)								
MANGANESE				140 ug/L	743 ug/L	210 ug/L		
MANGANESE (DISSOLVED)								
MANGANESE (TOTAL)								
MERCURY								
METHYLENE CHLORIDE								
NICKEL								
NICKEL (DISSOLVED)								
NICKEL (TOTAL)								
NITRATE								
PENTACHLORO-DIBENZO_B,E__1,4_DIOXIN								
pH								6.37 Std Unit
POTASSIUM								
Potassium (Dissolved)								
RADIUM-226+228								
SELENIUM								
SILVER								
SODIUM								
SODIUM (DISSOLVED)								
SPECIFIC CONDUCTIVITY								
SULFATE				1490 mg/l	1639.8 mg/l	1570.8 mg/l		1633.6 mg/l
TECHNETIUM								
TEMPERATURE								14 deg C
THALLIUM								
TOTAL ORGANIC CARBON (TOC)								
TOTAL ORGANIC HALOGENS								
TP-SILVEX								
TRICHLOROETHENE					2 ug/l			
Uranium								
URANIUM, TOTAL				2 UG/L	9 UG/L	3.11 ug/l		3.02 ug/l
URANIUM, TOTAL (DISSOLVED)								
VANADIUM								
WATER LEVEL ELEVATION IN FEET								657.03 ft
WELL DEPTH								32.18 ft
ZINC								
ZINC (DISSOLVED)								

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-14G	X616-14G	X616-14G	X616-14G	X616-14G	X616-14G	X616-14G	X616-14G
SAMPLE DATE	2/16/92	3/14/92	6/11/92	7/23/92	12/7/92	2/9/93	5/5/93	7/30/93
PARAMETER								
1,1,1-TRICHLOROETHANE								
2,4,5-T								
2,4-D								
ACETONE								
ALDRIN								
ALKALINITY						146 mg/l	147 mg/l	145 mg/l
ALKALINITY AS CACO3								
ALPHA ACTIVITY					7 pCi/l		108 pCi/l	
ALPHA, TOTAL								
ALPHA, TOTAL (DISSOLVED)								
ALPHA-BHC								
ANTIMONY								
ARSENIC								
ARSENIC (DISSOLVED)								
BARIUM	26 ug/l		17.8 ug/l	49.1 ug/l	13 J ug/l	16 ug/l	14.5 ug/l	11.6 ug/l
BARIUM (DISSOLVED)								
BERYLLIUM								
BETA ACTIVITY								54 pCi/l
BETA, TOTAL								
BETA, TOTAL (DISSOLVED)								
BETA-BHC								
BIS(2-ETHYLHEXYL)PHTHALATE								
BROMODICHLOROMETHANE								
BROMOFORM								
BUTYLBENZYLPHTHALATE								
CADMIUM								
CADMIUM (DISSOLVED)								
CALCIUM						347000 ug/l	353000 ug/l	348000 ug/l
Calcium (Dissolved)								
CARBON DISULFIDE			7 ug/l				2 ug/l	3 ug/l
CHLORIDE						324 mg/l	357.2 mg/l	334 mg/l
CHLOROFORM			3 ug/l					
CHROMIUM	5.82 ug/l		3.2 ug/l					
CHROMIUM (DISSOLVED)								
Chromium (Total)								
CIS-1,2-DICHLOROETHENE								
COBALT								
COBALT (DISSOLVED)								
CONDUCTIVITY	3710 uS/cm	3700 uS/cm	3560 uS/cm	4940 uS/cm	3500 uS/cm			
COPPER								
CYANIDE								
DELTA-BHC								
DIBROMOCHLOROMETHANE								
DIETHYLPHTHALATE								
ENDOSULFAN I								
FLUORIDE								
FREON 113								
HEPTACHLOR								
HEPTACHLOR EPOXIDE								

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-14G	X616-14G	X616-14G	X616-14G	X616-14G	X616-14G	X616-14G	X616-14G
SAMPLE DATE	2/16/92	3/14/92	6/11/92	7/23/92	12/7/92	2/9/93	5/5/93	7/30/93
PARAMETER								
HEXAVALENT CHROMIUM								
IRON	8000 ug/l		2080 ug/l	18200 ug/l	2800 J ug/l	2420 ug/l	2280 ug/l	1930 ug/l
IRON (DISSOLVED)								
IRON (TOTAL)								
LEAD					2.5 J ug/l			
LINDANE								
MAGNESIUM						155000 ug/l	154000 ug/l	146000 ug/l
MAGNESIUM (DISSOLVED)								
MANGANESE	91.7 ug/l		60.1 J ug/l	154 ug/l	37.3 ug/l	36.7 ug/l	24.7 ug/l	27.9 ug/l
MANGANESE (DISSOLVED)								
MANGANESE (TOTAL)								
MERCURY								
METHYLENE CHLORIDE								
NICKEL								24.2 ug/l
NICKEL (DISSOLVED)								
NICKEL (TOTAL)								
NITRATE								
PENTACHLORO-DIBENZO_B,E__1,4_DIOXIN								
pH	6.81 Std Unit	6.41 Std Unit	6.48 Std Unit	6.83 Std Unit	6.35 Std Unit	6.4 Std Unit	6.26 Std Unit	6.68 Std Unit
POTASSIUM						6270 ug/l	6540 ug/l	5690 ug/l
Potassium (Dissolved)								
RADIUM-226+228								
SELENIUM								
SILVER								
SODIUM						274000 ug/l	277000 ug/l	251000 ug/l
SODIUM (DISSOLVED)								
SPECIFIC CONDUCTIVITY						3380 uS/cm	3340 uS/cm	3420 uS/cm
SULFATE	1672.6 mg/l		1489 mg/l	1489.6 mg/l	1529 mg/l	1502.1 mg/l	1552 mg/l	1554.5 mg/l
TECHNETIUM	78 pCi/l		15 pCi/l	20 pCi/l	15 pCi/l			
TEMPERATURE	14 deg C	12 deg C	13 deg C	14 deg C	15 deg C	12.5 deg C	13.8 deg C	15.9 deg C
THALLIUM								
TOTAL ORGANIC CARBON (TOC)								
TOTAL ORGANIC HALOGENS								
TP-SILVEX								
TRICHLOROETHENE								
Uranium								
URANIUM, TOTAL	3.4 ug/l		2 ug/l	3.05 ug/l	2 ug/l	2.04 ug/l	1.87 ug/l	2.13 ug/l
URANIUM, TOTAL (DISSOLVED)								
VANADIUM								
WATER LEVEL ELEVATION IN FEET	657.14 ft	657.98 ft	659.08 ft	659.28 ft	657.97 ft	658.93 ft	660.07 ft	658.83 ft
WELL DEPTH	32.22 ft	32.38 ft	32.4 ft	32.39 ft	32.46 ft	32.28 ft	32.36 ft	32.47 ft
ZINC								
ZINC (DISSOLVED)								

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-14G	X616-14G	X616-14G	X616-14G	X616-14G	X616-14G	X616-14G	X616-14G
SAMPLE DATE	11/4/93	2/3/94	6/21/94	7/21/94	7/29/94	1/26/95	8/3/95	1/15/96
PARAMETER								
1,1,1-TRICHLOROETHANE								
2,4,5-T				0.052 ug/l				
2,4-D				0.052 ug/l				
ACETONE								
ALDRIN				0.055 ug/l	0.051 ug/l			
ALKALINITY	156 mg/l	147 mg/l	146 mg/l			142 mg/l	146 mg/l	
ALKALINITY AS CACO3								155.5 mg/l
ALPHA ACTIVITY								
ALPHA, TOTAL								
ALPHA, TOTAL (DISSOLVED)								
ALPHA-BHC				0.055 ug/l	0.051 ug/l			
ANTIMONY				124 ug/l				
ARSENIC								
ARSENIC (DISSOLVED)								
BARIUM	17.1 ug/l	16 ug/l	13.6 ug/l	12.9 ug/l			16.6 ug/l	34.6 ug/l
BARIUM (DISSOLVED)								
BERYLLIUM								
BETA ACTIVITY								
BETA, TOTAL								
BETA, TOTAL (DISSOLVED)								
BETA-BHC				0.055 ug/l	0.051 ug/l			
BIS(2-ETHYLHEXYL)PHTHALATE								
BROMODICHLOROMETHANE								
BROMOFORM								
BUTYLBENZYLPHTHALATE								
CADMIUM								
CADMIUM (DISSOLVED)								
CALCIUM	346000 ug/l	202000 ug/l	346000 ug/l			370000 ug/l	385000 ug/l	334000 J ug/l
Calcium (Dissolved)								
CARBON DISULFIDE	17 ug/l							
CHLORIDE	313 mg/l	322 mg/l	351 mg/l			340 mg/l	398 mg/l	290 mg/l
CHLOROFORM								
CHROMIUM		9.5 ug/l						17.9 ug/l
CHROMIUM (DISSOLVED)								
Chromium (Total)								
CIS-1,2-DICHLOROETHENE								
COBALT								
COBALT (DISSOLVED)								
CONDUCTIVITY						3470 uS	3458 uS	
COPPER								
CYANIDE								
DELTA-BHC				0.055 ug/l	0.051 ug/l			
DIBROMOCHLOROMETHANE		2 ug/l						
DIETHYLPHTHALATE								
ENDOSULFAN I				0.055 ug/l	0.051 ug/l			
FLUORIDE								
FREON 113								
HEPTACHLOR				0.055 ug/l	0.051 ug/l			
HEPTACHLOR EPOXIDE				0.055 ug/l	0.051 ug/l			

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-14G	X616-14G	X616-14G	X616-14G	X616-14G	X616-14G	X616-14G	X616-14G
SAMPLE DATE	11/4/93	2/3/94	6/21/94	7/21/94	7/29/94	1/26/95	8/3/95	1/15/96
PARAMETER								
HEXAVALENT CHROMIUM								
IRON	8400 ug/l	9790 N ug/l	15100 N ug/l			4440 ug/l	8140 ug/l	3030 ug/l
IRON (DISSOLVED)								
IRON (TOTAL)								
LEAD	19.7 ug/l			17.7 ug/l				65.2 J ug/l
LINDANE				0.055 ug/l	0.051 ug/l			
MAGNESIUM	151000 ug/l	119000 ug/l	146000 ug/l			163000 ug/l	165000 ug/l	141000 J ug/l
MAGNESIUM (DISSOLVED)								
MANGANESE	68.9 ug/l	68.1 ug/l	74 ug/l				84.1 ug/l	187 ug/l
MANGANESE (DISSOLVED)								
MANGANESE (TOTAL)								
MERCURY								
METHYLENE CHLORIDE			2 ug/l					
NICKEL				8.8 ug/l			26 ug/l	16.2 ug/l
NICKEL (DISSOLVED)								
NICKEL (TOTAL)								
NITRATE								
PENTACHLORO-DIBENZO_B,E__1,4_DIOXIN								
pH	6.83 Std Unit					6.56 Std Unit	6.52 Std Unit	
POTASSIUM	6100 ug/l	10400 JN ug/l	6060 ug/l			5850 ug/l	6710 ug/l	6350 ug/l
Potassium (Dissolved)								
RADIUM-226+228								
SELENIUM								
SILVER								
SODIUM	258000 ug/l	207000 ug/l	251000 ug/l			294000 J ug/l	304000 ug/l	257000 J ug/l
SODIUM (DISSOLVED)								
SPECIFIC CONDUCTIVITY	3370 uS/cm							
SULFATE	1399 mg/l	1395 mg/l	1470 mg/l			1520 mg/l	1460 mg/l	1430 mg/l
TECHNETIUM								
TEMPERATURE	14.7 deg C					11.8 deg C	14.1 deg C	
THALLIUM				149 ug/l				
TOTAL ORGANIC CARBON (TOC)								
TOTAL ORGANIC HALOGENS								
TP-SILVEX				0.052 ug/l				
TRICHLOROETHENE								
Uranium								
URANIUM, TOTAL	2.68 ug/l	2 ug/l	2.4 ug/l			1.6 ug/l	1.9 ug/l	2.4 ug/l
URANIUM, TOTAL (DISSOLVED)								
VANADIUM				6.4 ug/l				
WATER LEVEL ELEVATION IN FEET	657.66 ft							
WELL DEPTH	32.33 ft							
ZINC				23.4 ug/l				
ZINC (DISSOLVED)								

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G
SAMPLE DATE	10/1/91	11/11/91	1/3/92	2/15/92	3/14/92	6/11/92	7/23/92	11/19/92	2/9/93	5/5/93	7/30/93	11/5/93
PARAMETER												
1,1,1-TRICHLOROETHANE												
2,4,5-T												
2,4-D												
ACETONE												
ALDRIN												
ALKALINITY									131 mg/l	130 mg/l	129 mg/l	140 mg/l
ALKALINITY AS CACO3												
ALPHA ACTIVITY		378 pCi/l				722 pCi/l	51 pCi/l			45 pCi/l		84 pCi/l
ALPHA, TOTAL												
ALPHA, TOTAL (DISSOLVED)												
ALPHA-BHC												
ANTIMONY												
ARSENIC												
ARSENIC (DISSOLVED)												
BARIUM	553 ug/L	323 ug/L		197 ug/l		397 ug/l	50.3 ug/l	189 ug/l	158 ug/l	30.7 ug/l	127 ug/l	49 ug/l
BARIUM (DISSOLVED)												
BERYLLIUM												
BETA ACTIVITY	439 pCi/l	256 pCi/l	98 pCi/l			544 pCi/l	120 pCi/l				54 pCi/l	105 pCi/l
BETA, TOTAL								88 pCi/l				
BETA, TOTAL (DISSOLVED)												
BETA-BHC												
BIS(2-ETHYLHEXYL)PHTHALATE												
BROMODICHLOROMETHANE												
BROMOFORM												
BUTYLBENZYLPHTHALATE												
CADMIUM								6.1 ug/l		16 ug/l		
CADMIUM (DISSOLVED)												
CALCIUM									227000 ug/l	229000 ug/l	202000 ug/l	212000 ug/l
Calcium (Dissolved)												
CARBON DISULFIDE												
CHLORIDE									522.6 mg/l	555 mg/l	502.3 mg/l	499 mg/l
CHLOROFORM												
CHROMIUM	390 ug/L	164 ug/L		98.6 ug/l		194 ug/l	22.9 ug/l	67 ug/l	71.7 ug/l	10.9 ug/l	77.4 ug/l	24.5 ug/l
CHROMIUM (DISSOLVED)												
Chromium (Total)												
CIS-1,2-DICHLOROETHENE												
COBALT												
COBALT (DISSOLVED)												
CONDUCTIVITY			3430 uS/cm	3700 uS/cm	3650 uS/cm	3480 uS/cm	3410 uS/cm	3300 uS/cm				
COPPER												
CYANIDE												
DELTA-BHC												
DIBROMOCHLOROMETHANE												
DIETHYLPHTHALATE												
ENDOSULFAN I												
FLUORIDE												
FREON 113												
HEPTACHLOR												
HEPTACHLOR EPOXIDE												

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G
SAMPLE DATE	10/1/91	11/11/91	1/3/92	2/15/92	3/14/92	6/11/92	7/23/92	11/19/92	2/9/93	5/5/93	7/30/93	11/5/93
PARAMETER												
HEXAVALENT CHROMIUM												
IRON	186000 ug/L	160000 ug/L		79800 ug/l		139000 ug/l	18000 J ug/l	81600 ug/l	40200 ug/l	7810 ug/l	38400 ug/l	9920 ug/l
IRON (DISSOLVED)												
IRON (TOTAL)												
LEAD	144 ug/L			23.7 ug/l		132 ug/l		36.5 J ug/l			56.7 ug/l	25 ug/l
LINDANE												
MAGNESIUM									130000 ug/l	126000 ug/l	116000 ug/l	119000 ug/l
MAGNESIUM (DISSOLVED)												
MANGANESE	2370 ug/L	1460 ug/L		807 ug/l		1480 ug/l	175 ug/l	908 ug/l	388 ug/l	78.7 ug/l	395 ug/l	310 ug/l
MANGANESE (DISSOLVED)												
MANGANESE (TOTAL)												
MERCURY												
METHYLENE CHLORIDE												
NICKEL									83 ug/l	27.3 ug/l	127 ug/l	35.5 ug/l
NICKEL (DISSOLVED)												
NICKEL (TOTAL)												
NITRATE												
PENTACHLORO-DIBENZO_B,E__1,4_DIOXIN												
pH			6.64 Std Unit	6.73 Std Unit	6.64 Std Unit	6.55 Std Unit	6.29 Std Unit	6.1 Std Unit	6.42 Std Unit	6.51 Std Unit	6.65 Std Unit	6.39 Std Unit
POTASSIUM									4290 ug/l	4500 ug/l	4160 ug/l	3540 ug/l
Potassium (Dissolved)												
RADIUM-226+228												
SELENIUM												
SILVER												
SODIUM									358000 ug/l	347000 ug/l	358500 ug/l	348000 ug/l
SODIUM (DISSOLVED)												
SPECIFIC CONDUCTIVITY									3310 uS/cm	3280 uS/cm	3220 uS/cm	3150 uS/cm
SULFATE	1014 mg/l	1011.1 mg/l	1055.4 mg/l	1047 mg/l		1019.2 mg/l	995.7 mg/l	966000 ug/l	1018.1 mg/l	1048 mg/l	1011.9 mg/l	889 mg/l
TECHNETIUM	173 pCi/l	14 pCi/l	16 pCi/l	33 pCi/l		16 pCi/l	19 pCi/l				27 pCi/l	
TEMPERATURE			14 deg C	15 deg C	13 deg C	13 deg C	15 deg C	14 deg C	12 deg C	15.7 deg C	15.7 deg C	14.5 deg C
THALLIUM												
TOTAL ORGANIC CARBON (TOC)												
TOTAL ORGANIC HALOGENS												
TP-SILVEX												
TRICHLOROETHENE												
Uranium												
URANIUM, TOTAL	11 UG/L	9.63 ug/l	4.73 ug/l	6.8 ug/l		26 ug/l	8.23 ug/l		3.15 ug/l	1.43 ug/l	2.38 ug/l	5.57 ug/l
URANIUM, TOTAL (DISSOLVED)												
VANADIUM												
WATER LEVEL ELEVATION IN FEET			659.13 ft	659.74 ft	659.98 ft	661.24 ft	661.43 ft	659.8 ft	660.97 ft	662.16 ft	661.3 ft	659.98 ft
WELL DEPTH			32.29 ft	32.38 ft	32.5 ft	32.7 ft	32.55 ft	32.35 ft	32.48 ft	32.43 ft	32.55 ft	32.42 ft
ZINC												
ZINC (DISSOLVED)												

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G
SAMPLE DATE	2/2/94	6/17/94	7/25/94	8/3/94	1/27/95	8/1/95	1/16/96	7/19/96	1/30/97	7/30/97	3/19/98	9/3/98
PARAMETER												
1,1,1-TRICHLOROETHANE												
2,4,5-T												
2,4-D				0.03 JP ug/l								
ACETONE												
ALDRIN				0.052 ug/l								
ALKALINITY	137 mg/l	134 mg/l			127 mg/l	128 mg/l			128 MG/L	120 MG/L	127 mg/L	126 mg/L
ALKALINITY AS CACO3							136.6 mg/l	126 J mg/l				
ALPHA ACTIVITY	58 pCi/l											
ALPHA, TOTAL												
ALPHA, TOTAL (DISSOLVED)												
ALPHA-BHC				0.052 ug/l								
ANTIMONY			56.2 ug/l									
ARSENIC												
ARSENIC (DISSOLVED)												
BARIUM	58 ug/l	96.7 ug/l	28.8 ug/l		197 ug/l	89.9 ug/l	28.6 ug/l					
BARIUM (DISSOLVED)												
BERYLLIUM			0.75 ug/l									
BETA ACTIVITY	60 pCi/l										37 pCi/L	
BETA, TOTAL												
BETA, TOTAL (DISSOLVED)												
BETA-BHC				0.052 ug/l								
BIS(2-ETHYLHEXYL)PHTHALATE												
BROMODICHLOROMETHANE												
BROMOFORM												
BUTYLBENZYLPHTHALATE												
CADMIUM												
CADMIUM (DISSOLVED)												
CALCIUM	135000 ug/l	196000 ug/l			205000 ug/l	177000 ug/l	196000 J ug/l	170000 ug/l			200000 ug/L	
Calcium (Dissolved)									204000 UG/L	122000 UG/L		174000 ug/L
CARBON DISULFIDE												
CHLORIDE	616 mg/l	478 mg/l			480 mg/l	501 mg/l	443 mg/l	348 mg/l	451 MG/L	323 MG/L	459 mg/L	390 mg/L
CHLOROFORM												
CHROMIUM	21.1 ug/l	46.7 ug/l	52.9 ug/l		64.6 ug/l	48.4 ug/l	21.1 ug/l					
CHROMIUM (DISSOLVED)												
Chromium (Total)												
CIS-1,2-DICHLOROETHENE												
COBALT			5.3 ug/l									
COBALT (DISSOLVED)												
CONDUCTIVITY					3330 uS	3110 uS						
COPPER			3.6 ug/l									
CYANIDE												
DELTA-BHC				0.052 ug/l								
DIBROMOCHLOROMETHANE												
DIETHYLPHTHALATE												
ENDOSULFAN I				0.052 ug/l								
FLUORIDE												
FREON 113												
HEPTACHLOR				0.052 ug/l								
HEPTACHLOR EPOXIDE				0.052 ug/l								

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G	X616-17G
SAMPLE DATE	2/2/94	6/17/94	7/25/94	8/3/94	1/27/95	8/1/95	1/16/96	7/19/96	1/30/97	7/30/97	3/19/98	9/3/98
PARAMETER												
HEXAVALENT CHROMIUM												
IRON	76 ug/l	31000 ug/l			65200 ug/l	17500 N ug/l	35.2 ug/l				978 ug/L	
IRON (DISSOLVED)												
IRON (TOTAL)									552 UG/L			
LEAD		75.3 ug/l			94.5 ug/l	85.5 ug/l	82.6 J ug/l					
LINDANE				0.052 ug/l								
MAGNESIUM	114000 ug/l	114000 ug/l			119000 ug/l	99200 ug/l	107000 J ug/l	94800 ug/l			119000 ug/L	
MAGNESIUM (DISSOLVED)									114000 UG/L	70900 UG/L		101000 ug/L
MANGANESE	154 ug/l	355 ug/l			648 ug/l	186 ug/l	111 ug/l					
MANGANESE (DISSOLVED)												
MANGANESE (TOTAL)												
MERCURY												
METHYLENE CHLORIDE												
NICKEL	36.3 ug/l	64.6 ug/l	49.6 ug/l		96.6 ug/l	52.5 ug/l	26.8 ug/l					
NICKEL (DISSOLVED)												
NICKEL (TOTAL)												
NITRATE												
PENTACHLORO-DIBENZO_B,E__1,4_DIOXIN												
pH					6.43 Std Unit	6.45 Std Unit						
POTASSIUM	4630 ug/l	3920 ug/l			4170 ug/l	3230 ug/l	4220 ug/l					
Potassium (Dissolved)									3780 UG/L			3960 J ug/L
RADIUM-226+228												
SELENIUM												
SILVER												
SODIUM	357000 ug/l	329000 ug/l			323000 J ug/l	369000 ug/l	354000 J ug/l	326000 ug/l			327000 ug/L	
SODIUM (DISSOLVED)									336000 UG/L	318000 UG/L		319000 ug/L
SPECIFIC CONDUCTIVITY												
SULFATE	1286 mg/l	890 mg/l			960 mg/l	879 mg/l	875 mg/l	770 mg/l	1030 MG/L	668 MG/L	936 mg/L	773 mg/L
TECHNETIUM												
TEMPERATURE					12.6 deg C	15.4 deg C						
THALLIUM			258 ug/l									
TOTAL ORGANIC CARBON (TOC)												
TOTAL ORGANIC HALOGENS												
TP-SILVEX												
TRICHLOROETHENE												
Uranium												
URANIUM, TOTAL	3.7 ug/l	3.6 ug/l			2.4 ug/l	1.2 N ug/l	1.5 ug/l	1.3 ug/l				
URANIUM, TOTAL (DISSOLVED)												
VANADIUM			19 ug/l									
WATER LEVEL ELEVATION IN FEET												
WELL DEPTH												
ZINC			88 ug/l									
ZINC (DISSOLVED)												

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B
SAMPLE DATE	11/1/87	11/30/88	3/3/90	5/22/90	9/11/90	12/26/90	5/14/91	10/3/91	12/6/91	1/8/92	3/1/92	7/30/92	12/3/92
PARAMETER													
1,1,1-TRICHLOROETHANE													
2,4,5-T													
2,4-D													
ACETONE													
ALDRIN													
ALKALINITY													
ALKALINITY AS CACO3													
ALPHA ACTIVITY							12 pCi/l		15 pCi/l		27 J pCi/l		
ALPHA, TOTAL	0.4 pCi/l	5 J pCi/l											
ALPHA, TOTAL (DISSOLVED)													
ALPHA-BHC													
ANTIMONY													
ARSENIC													
ARSENIC (DISSOLVED)													
BARIUM							89 ug/L	60 ug/L	63 ug/L	69 ug/L	75.3 ug/L	84.5 J ug/l	64.5 J ug/l
BARIUM (DISSOLVED)													
BERYLLIUM													
BETA ACTIVITY							23 pCi/l			7 pCi/l	38 J pCi/l		
BETA, TOTAL	17 pCi/l	14 J pCi/l											
BETA, TOTAL (DISSOLVED)													
BETA-BHC													
BIS(2-ETHYLHEXYL)PHTHALATE													
BROMODICHLOROMETHANE													
BROMOFORM													
BUTYLBENZYLPHTHALATE													
CADMIUM													
CADMIUM (DISSOLVED)	10 ug/L												
CALCIUM													
Calcium (Dissolved)													
CARBON DISULFIDE													
CHLORIDE													
CHLOROFORM													
CHROMIUM	120 ug/L		336 ug/L	360 ug/L	60 ug/L	18 ug/L	66 ug/L	61 ug/L	9 ug/L	27 ug/L	2.4 ug/L	10.5 ug/l	4.2 ug/l
CHROMIUM (DISSOLVED)													
Chromium (Total)													
CIS-1,2-DICHLOROETHENE													
COBALT													
COBALT (DISSOLVED)													
CONDUCTIVITY										1660 uS/cm	1900 uS/cm	7330 uS/cm	1745 uS/cm
COPPER													
CYANIDE													
DELTA-BHC													
DIBROMOCHLOROMETHANE													
DIETHYLPHTHALATE													
ENDOSULFAN I													
FLUORIDE	300 ug/L												
FREON 113													
HEPTACHLOR													
HEPTACHLOR EPOXIDE													

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B
SAMPLE DATE	11/1/87	11/30/88	3/3/90	5/22/90	9/11/90	12/26/90	5/14/91	10/3/91	12/6/91	1/8/92	3/1/92	7/30/92	12/3/92
PARAMETER													
HEXAVALENT CHROMIUM													
IRON	9800 ug/L						2420 ug/L	1700 ug/L	1170 ug/L	1280 ug/L	1720 ug/L	1760 J ug/l	720 J ug/l
IRON (DISSOLVED)													
IRON (TOTAL)													
LEAD	120 ug/L						17 ug/L	154 ug/L					3 J ug/l
LINDANE													
MAGNESIUM													
MAGNESIUM (DISSOLVED)													
MANGANESE	460 ug/L						269 ug/L	390 ug/L	419 ug/L	395 ug/L	510 ug/L	357 J ug/l	272 ug/l
MANGANESE (DISSOLVED)	370 ug/L												
MANGANESE (TOTAL)													
MERCURY													
METHYLENE CHLORIDE													
NICKEL													
NICKEL (DISSOLVED)													
NICKEL (TOTAL)													
NITRATE													
PENTACHLORO-DIBENZO_B,E__1,4_DIOXIN													
pH	6.7 s.u.									6.96 Std Unit	6.95 Std Unit	10.82 Std Unit	8.7 Std Unit
POTASSIUM													
Potassium (Dissolved)													
RADIUM-226+228	12 pCi/l												
SELENIUM													
SILVER													
SODIUM	190000 ug/L												
SODIUM (DISSOLVED)	200000 ug/L												
SPECIFIC CONDUCTIVITY	1649 umhos												
SULFATE		248.2 J mg/l					323 mg/l	271.9 mg/l	260.1 mg/l	227.6 mg/l	209.9 mg/l	279.9 mg/l	269.2 mg/l
TECHNETIUM													
TEMPERATURE										13 deg C	13 deg C	14 deg C	12 deg C
THALLIUM													
TOTAL ORGANIC CARBON (TOC)	3.3 mg/l												
TOTAL ORGANIC HALOGENS	13.5 ug/l												
TP-SILVEX													
TRICHLOROETHENE													
Uranium													
URANIUM, TOTAL	1 ug/l												
URANIUM, TOTAL (DISSOLVED)	0.9 ug/l												
VANADIUM													
WATER LEVEL ELEVATION IN FEET										657.63 ft	657.94 ft	659.65 ft	658.38 ft
WELL DEPTH										48.55 ft	48.7 ft	48.68 ft	48.95 ft
ZINC													
ZINC (DISSOLVED)													

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B
SAMPLE DATE	2/17/93	5/12/93	8/4/93	11/10/93	2/14/94	6/23/94	7/28/94	1/31/95	8/1/95	1/17/96	7/22/96	1/30/97
PARAMETER												
1,1,1-TRICHLOROETHANE												
2,4,5-T												
2,4-D												
ACETONE												
ALDRIN							0.052 ug/l					
ALKALINITY	237 mg/l	223 mg/l	216 mg/l	240 mg/l	228 mg/l	214 mg/l		231 mg/l	201 mg/l			219 MG/L
ALKALINITY AS CACO3										254.2 mg/l	218 J mg/l	
ALPHA ACTIVITY												
ALPHA, TOTAL												
ALPHA, TOTAL (DISSOLVED)												
ALPHA-BHC							0.052 ug/l					
ANTIMONY							46.9 ug/l					
ARSENIC												
ARSENIC (DISSOLVED)												
BARIUM	64.2 ug/l	57.8 ug/l	87.6 ug/l	79.5 ug/l	27 ug/l	55.5 ug/l	53.9 ug/l	67.3 ug/l	57.4 ug/l	59.2 ug/l		
BARIUM (DISSOLVED)												
BERYLLIUM												
BETA ACTIVITY										13 pCi/l		
BETA, TOTAL												19 pCi/L
BETA, TOTAL (DISSOLVED)												
BETA-BHC							0.052 ug/l					
BIS(2-ETHYLHEXYL)PHTHALATE							1 J ug/l					
BROMODICHLOROMETHANE												
BROMOFORM												
BUTYLBENZYLPHTHALATE							2 J ug/l					
CADMIUM												
CADMIUM (DISSOLVED)												
CALCIUM	98200 ug/l	109000 ug/l	102000 ug/l	112000 ug/l	95200 ug/l	107000 J ug/l		104000 ug/l	118000 ug/l		114000 ug/l	
Calcium (Dissolved)												106000 UG/L
CARBON DISULFIDE			6 ug/l	15 J ug/l	37 ug/l							
CHLORIDE	287.8 mg/l	302.4 mg/l	306.9 mg/l	266 mg/l	304 mg/l	299 mg/l		300 mg/l	403 mg/l	273 mg/l	269 mg/l	328 MG/L
CHLOROFORM												
CHROMIUM				4.3 ug/l		4.2 ug/l			25.2 ug/l	17.8 ug/l		
CHROMIUM (DISSOLVED)												
Chromium (Total)												
CIS-1,2-DICHLOROETHENE												
COBALT							6.4 ug/l					
COBALT (DISSOLVED)												
CONDUCTIVITY								1952 uS	1925 uS			
COPPER							3.8 ug/l					
CYANIDE												
DELTA-BHC							0.052 ug/l					
DIBROMOCHLOROMETHANE												
DIETHYLPHTHALATE							2 J ug/l					
ENDOSULFAN I							0.052 ug/l					
FLUORIDE												
FREON 113												
HEPTACHLOR							0.052 ug/l					
HEPTACHLOR EPOXIDE							0.052 ug/l					

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B	X616-19B
SAMPLE DATE	2/17/93	5/12/93	8/4/93	11/10/93	2/14/94	6/23/94	7/28/94	1/31/95	8/1/95	1/17/96	7/22/96	1/30/97
PARAMETER												
HEXAVALENT CHROMIUM												
IRON	1030 ug/l	349 ug/l	9250 ug/l	8380 ug/l	2810 ug/l	2630 ug/l		5630 ug/l	2370 ug/l	5060 N ug/l	1750 ug/l	
IRON (DISSOLVED)												396 UG/L
IRON (TOTAL)												1060 UG/L
LEAD					22.6 ug/l	38.7 ug/l	29.3 ug/l	25.6 ug/l	48.7 ug/l	28.5 ug/l		
LINDANE							0.052 ug/l					
MAGNESIUM	48900 ug/l	55400 ug/l	51100 ug/l	54800 ug/l	48800 ug/l	52400 ug/l		51700 ug/l	56900 ug/l	62100 ug/l	56500 ug/l	
MAGNESIUM (DISSOLVED)												52200 UG/L
MANGANESE	352 ug/l	407 ug/l	1240 ug/l	1260 ug/l	478 ug/l	547 ug/l		975 ug/l	494 ug/l	751 ug/l	410 ug/l	
MANGANESE (DISSOLVED)												295 UG/L
MANGANESE (TOTAL)												277 UG/L
MERCURY												
METHYLENE CHLORIDE												
NICKEL	13.2 ug/l	20.8 ug/l	42.7 ug/l	25.4 ug/l	16.1 ug/l	16.3 ug/l	13.1 ug/l		27 ug/l	28.9 ug/l		
NICKEL (DISSOLVED)												
NICKEL (TOTAL)												
NITRATE												
PENTACHLORO-DIBENZO_B,E__1,4_DIOXIN												
pH	6.69 Std Unit	6.77 Std Unit	6.68 Std Unit	7.08 Std Unit				6.7 Std Unit	6.6 Std Unit			
POTASSIUM	9100 ug/l	10200 ug/l	8090 ug/l	9090 ug/l	8180 ug/l	8180 N ug/l		8520 ug/l	8800 ug/l	9310 ug/l	8020 ug/l	
Potassium (Dissolved)												7490 UG/L
RADIUM-226+228												
SELENIUM												
SILVER												
SODIUM	186000 ug/l	203000 ug/l	191000 ug/l	196000 ug/l	198000 ug/l	193000 ug/l		190000 J ug/l	220000 ug/l	205000 ug/l	199000 ug/l	
SODIUM (DISSOLVED)												186000 UG/L
SPECIFIC CONDUCTIVITY	1780 uS/cm	2020 uS/cm	1821 uS/cm	1743 uS/cm								
SULFATE	267 mg/l	333.6 mg/l	293.3 mg/l	266 mg/l	294 mg/l	291 mg/l		310 mg/l	326 mg/l	310 mg/l	314 mg/l	262 MG/L
TECHNETIUM												
TEMPERATURE	11.1 deg C	15.1 deg C	16.4 deg C	15.2 deg C				11.2 deg C	14.9 deg C			
THALLIUM							157 ug/l					
TOTAL ORGANIC CARBON (TOC)												
TOTAL ORGANIC HALOGENS												
TP-SILVEX												
TRICHLOROETHENE							3 J ug/l					
Uranium												
URANIUM, TOTAL		1.24 ug/l	1.25 ug/l	1.55 ug/l	1.3 ug/l	1.8 ug/l		1.5 ug/l	1.1 N ug/l	1.5 ug/l		
URANIUM, TOTAL (DISSOLVED)												
VANADIUM							3 ug/l					
WATER LEVEL ELEVATION IN FEET	659.21 ft	660.37 ft	659.29 ft	657.59 ft								
WELL DEPTH	48.66 ft	48.7 ft	47.8 ft	48.86 ft								
ZINC							33.7 ug/l					
ZINC (DISSOLVED)												

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-19B	X616-19B	X616-19B	X616-20B	X616-20B	X616-20B	X616-20B	X616-20B	X616-20B	X616-20B	X616-20B	X616-20B	X616-20B
SAMPLE DATE	7/31/97	3/19/98	9/3/98	11/1/87	11/29/88	3/3/90	5/21/90	7/19/91	10/6/91	12/6/91	1/29/92	3/5/92	7/23/92
PARAMETER													
1,1,1-TRICHLOROETHANE													
2,4,5-T													
2,4-D													
ACETONE													
ALDRIN													
ALKALINITY	214 MG/L	219 mg/L	216 mg/L										
ALKALINITY AS CACO3													
ALPHA ACTIVITY									20 pCi/l	51 pCi/l			28 pCi/l
ALPHA, TOTAL				0.2 pCi/l									
ALPHA, TOTAL (DISSOLVED)													
ALPHA-BHC													
ANTIMONY													
ARSENIC													
ARSENIC (DISSOLVED)													
BARIUM				400 ug/L					215 ug/L	498 ug/L	220 ug/l	221 ug/l	12100 J ug/l
BARIUM (DISSOLVED)													
BERYLLIUM													
BETA ACTIVITY										53 pCi/l		16 J pCi/l	
BETA, TOTAL	19 pCi/L			17 pCi/l	5 J pCi/l								
BETA, TOTAL (DISSOLVED)													
BETA-BHC													
BIS(2-ETHYLHEXYL)PHTHALATE													
BROMODICHLOROMETHANE												2 ug/l	
BROMOFORM													
BUTYLBENZYLPHTHALATE													
CADMIUM													
CADMIUM (DISSOLVED)													
CALCIUM		100000 ug/L											
Calcium (Dissolved)	102000 UG/L		105000 ug/L										
CARBON DISULFIDE									35 J ug/l		2 J ug/l	2 ug/l	
CHLORIDE	286 MG/L	298 mg/L	294 mg/L	210 mg/l									
CHLOROFORM													
CHROMIUM		216 ug/L		150 ug/L		48 ug/L	110 ug/L		11 ug/L	84 ug/L	25.5 ug/l	13.4 ug/l	77.6 J ug/l
CHROMIUM (DISSOLVED)													
Chromium (Total)			233 ug/L										
CIS-1,2-DICHLOROETHENE								2 ug/l	2 ug/l	4 ug/l	12 J ug/l		
COBALT													
COBALT (DISSOLVED)													
CONDUCTIVITY											2650 uS/cm		
COPPER													
CYANIDE													
DELTA-BHC													
DIBROMOCHLOROMETHANE												2 ug/l	
DIETHYLPHTHALATE													
ENDOSULFAN I													
FLUORIDE				100 ug/L									
FREON 113													
HEPTACHLOR													
HEPTACHLOR EPOXIDE													

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-19B	X616-19B	X616-19B	X616-20B	X616-20B	X616-20B	X616-20B	X616-20B	X616-20B	X616-20B	X616-20B	X616-20B	X616-20B
SAMPLE DATE	7/31/97	3/19/98	9/3/98	11/1/87	11/29/88	3/3/90	5/21/90	7/19/91	10/6/91	12/6/91	1/29/92	3/5/92	7/23/92
PARAMETER													
HEXAVALENT CHROMIUM													
IRON		1950 ug/L		15000 ug/L					1670 ug/L	11300 ug/L	3440 ug/l	2540 ug/l	9280 J ug/l
IRON (DISSOLVED)													
IRON (TOTAL)	1050 N UG/L												
LEAD				50 ug/L									
LINDANE													
MAGNESIUM		51700 ug/L											
MAGNESIUM (DISSOLVED)	50800 UG/L		52700 ug/L										
MANGANESE				390 ug/L					320 ug/L	922 ug/L	311 ug/l	215 ug/l	842 J ug/l
MANGANESE (DISSOLVED)				350 ug/L									
MANGANESE (TOTAL)	251 UG/L												
MERCURY													
METHYLENE CHLORIDE													
NICKEL													
NICKEL (DISSOLVED)													
NICKEL (TOTAL)													
NITRATE				0.2 mg/l									
PENTACHLORO-DIBENZO_B,E__1,4_DIOXIN													
pH				6.2 s.u.							7.15 Std Unit		
POTASSIUM		7750 ug/L											
Potassium (Dissolved)	8300 UG/L		8310 J ug/L										
RADIUM-226+228													
SELENIUM													
SILVER													
SODIUM		182000 ug/L		140000 ug/L									
SODIUM (DISSOLVED)	188000 UG/L		188000 ug/L	170000 ug/L									
SPECIFIC CONDUCTIVITY				2172 umhos									
SULFATE	267 MG/L	371 mg/L	500 mg/L	780.4 mg/l	842 J mg/l				942.6 mg/l	1029.4 mg/l	1013 mg/l	967.8 mg/l	1050.6 mg/l
TECHNETIUM												15 J pCi/l	
TEMPERATURE											13 deg C		
THALLIUM													
TOTAL ORGANIC CARBON (TOC)				2.8 mg/l									
TOTAL ORGANIC HALOGENS				37.6 ug/l									
TP-SILVEX													
TRICHLOROETHENE				6 ug/l	6 ug/l			22 ug/l	16 ug/l	12 ug/l	8 J ug/l		33 ug/l
Uranium													
URANIUM, TOTAL				2 ug/l	3 J ug/l					1.25 ug/l	2.7 ug/l		
URANIUM, TOTAL (DISSOLVED)													
VANADIUM													
WATER LEVEL ELEVATION IN FEET											660.15 ft		
WELL DEPTH											44.34 ft		
ZINC													
ZINC (DISSOLVED)													

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-20B	X616-20B	X616-20B	X616-20B	X616-20B	X616-20B	X616-20B	X616-20B	X616-20B	X616-20B	X616-20B	X616-20B
SAMPLE DATE	12/9/92	2/9/93	5/10/93	8/2/93	11/5/93	2/2/94	6/23/94	7/26/94	8/2/94	1/31/95	8/7/95	1/22/96
PARAMETER												
1,1,1-TRICHLOROETHANE												
2,4,5-T												
2,4-D									0.024 P ug/l			
ACETONE									10 J ug/l			
ALDRIN									0.052 ug/l			
ALKALINITY		111 mg/l	112 mg/l	104 mg/l	124 mg/l	122 mg/l	113 mg/l			108 mg/l	129 mg/l	
ALKALINITY AS CACO3												120 mg/l
ALPHA ACTIVITY												
ALPHA, TOTAL												
ALPHA, TOTAL (DISSOLVED)												
ALPHA-BHC									0.052 ug/l			
ANTIMONY								58.2 ug/l				
ARSENIC												
ARSENIC (DISSOLVED)												
BARIUM	1930 ug/l	289 ug/l	89.2 ug/l	91.4 ug/l	62.3 ug/l	44.1 ug/l	117 ug/l	88.9 ug/l		91.1 ug/l	156 ug/l	55.2 ug/l
BARIUM (DISSOLVED)												
BERYLLIUM												
BETA ACTIVITY		49 pCi/l										
BETA, TOTAL												
BETA, TOTAL (DISSOLVED)												
BETA-BHC									0.052 ug/l			
BIS(2-ETHYLHEXYL)PHTHALATE												
BROMODICHLOROMETHANE												
BROMOFORM												
BUTYLBENZYLPHTHALATE												
CADMIUM											4 ug/l	
CADMIUM (DISSOLVED)												
CALCIUM		217000 ug/l	200000 ug/l	193000 ug/l	218000 ug/l	131000 ug/l	193000 J ug/l			169000 ug/l	200000 ug/l	180000 ug/l
Calcium (Dissolved)												
CARBON DISULFIDE												
CHLORIDE		193.5 mg/l	182.9 mg/l	185.8 mg/l	164 mg/l	288 mg/l	258 mg/l			190 mg/l	174 mg/l	134 mg/l
CHLOROFORM												
CHROMIUM	22.2 ug/l	3.4 ug/l	11.1 ug/l	4.9 ug/l	5.2 ug/l		7.2 ug/l	3.1 ug/l			7.1 ug/l	4.8 ug/l
CHROMIUM (DISSOLVED)												
Chromium (Total)												
CIS-1,2-DICHLOROETHENE			1 ug/l									
COBALT												
COBALT (DISSOLVED)												
CONDUCTIVITY	1761 uS/cm									2310 uS	2240 uS	
COPPER												
CYANIDE												
DELTA-BHC									0.052 ug/l			
DIBROMOCHLOROMETHANE												
DIETHYLPHTHALATE												
ENDOSULFAN I									0.052 ug/l			
FLUORIDE												
FREON 113												
HEPTACHLOR									0.052 ug/l			
HEPTACHLOR EPOXIDE									0.052 ug/l			

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-20B	X616-20B	X616-20B	X616-20B	X616-20B	X616-20B	X616-20B	X616-20B	X616-20B	X616-20B	X616-20B	X616-20B
SAMPLE DATE	12/9/92	2/9/93	5/10/93	8/2/93	11/5/93	2/2/94	6/23/94	7/26/94	8/2/94	1/31/95	8/7/95	1/22/96
PARAMETER												
HEXAVALENT CHROMIUM												
IRON	4100 J ug/l	1160 ug/l	2580 ug/l	1360 N ug/l	1170 ug/l	234 ug/l	2380 ug/l			3650 ug/l	4560 ug/l	644 ug/l
IRON (DISSOLVED)												
IRON (TOTAL)												
LEAD	4.6 ug/l			19.3 ug/l	15.1 ug/l		51.6 ug/l			39.5 ug/l	52.9 ug/l	25 ug/l
LINDANE									0.052 ug/l			
MAGNESIUM		100000 ug/l	98100 ug/l	90800 ug/l	98900 ug/l	84200 ug/l	90100 ug/l			81900 ug/l	88800 ug/l	86900 ug/l
MAGNESIUM (DISSOLVED)												
MANGANESE	351 ug/l	144 ug/l	125 ug/l	185 ug/l	470 ug/l	144 ug/l	227 ug/l			251 ug/l	134 ug/l	200 ug/l
MANGANESE (DISSOLVED)												
MANGANESE (TOTAL)												
MERCURY												
METHYLENE CHLORIDE												
NICKEL		25.8 ug/l	18 ug/l	47.4 ug/l			11.5 ug/l				18.9 ug/l	
NICKEL (DISSOLVED)												
NICKEL (TOTAL)												
NITRATE												
PENTACHLORO-DIBENZO_B,E__1,4_DIOXIN												
pH	5.93 Std Unit	6.31 Std Unit	6.26 Std Unit	6.01 Std Unit	6.66 Std Unit					6.3 Std Unit	6.34 Std Unit	
POTASSIUM		5800 ug/l	4540 ug/l	4930 ug/l	5260 ug/l	4790 ug/l	4640 ug/l			4650 ug/l	5350 N ug/l	5550 ug/l
Potassium (Dissolved)												
RADIUM-226+228												
SELENIUM												
SILVER												
SODIUM		202000 ug/l	213000 ug/l	200000 ug/l	203000 ug/l	198000 ug/l	206000 ug/l			193000 J ug/l	220000 ug/l	195000 ug/l
SODIUM (DISSOLVED)												
SPECIFIC CONDUCTIVITY		2220 uS/cm	2470 uS/cm	2160 uS/cm	2260 uS/cm							
SULFATE	997.2 mg/l	984.7 mg/l	1051.6 mg/l	938.6 mg/l	905 mg/l	1240 mg/l	936 mg/l			970 mg/l	902 mg/l	894 mg/l
TECHNETIUM												
TEMPERATURE	12 deg C	12.5 deg C	16.5 deg C	15.8 deg C	15.6 deg C					11.6 deg C	15.5 deg C	
THALLIUM												
TOTAL ORGANIC CARBON (TOC)												
TOTAL ORGANIC HALOGENS												
TP-SILVEX												
TRICHLOROETHENE	21 ug/l	22 ug/l	26 ug/l	22 ug/l	21 ug/l	20 ug/l	21 ug/l		15 ug/l	18 ug/l	16 ug/l	14 ug/l
Uranium												
URANIUM, TOTAL												
URANIUM, TOTAL (DISSOLVED)												
VANADIUM								4.6 ug/l				
WATER LEVEL ELEVATION IN FEET	660.81 ft	661.19 ft	662.24 ft	661.34 ft	660.6 ft							
WELL DEPTH	41.42 ft	41.62 ft	41.69 ft	41.71 ft	41.6 ft							
ZINC								42.7 ug/l				
ZINC (DISSOLVED)												

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G
SAMPLE DATE	3/3/90	5/17/90	9/12/90	12/28/90	5/7/91	10/2/91	11/19/91	12/22/91	3/1/92	7/23/92	11/12/92	2/8/93	5/10/93
PARAMETER													
1,1,1-TRICHLOROETHANE													
2,4,5-T													
2,4-D													
ACETONE													
ALDRIN													
ALKALINITY												195 mg/l	201 mg/l
ALKALINITY AS CACO3													
ALPHA ACTIVITY							124 pCi/l	23 pCi/l			33 pCi/l		
ALPHA, TOTAL													
ALPHA, TOTAL (DISSOLVED)													
ALPHA-BHC													
ANTIMONY													
ARSENIC													
ARSENIC (DISSOLVED)													
BARIUM					235 ug/L	331 ug/L	321 ug/L	78 ug/L	85.9 ug/l	17.1 ug/l	18.8 ug/l	26.1 ug/l	9.8 ug/l
BARIUM (DISSOLVED)													
BERYLLIUM													
BETA ACTIVITY					49 pCi/l			32 pCi/l	24 J pCi/l		22 pCi/l		
BETA, TOTAL													
BETA, TOTAL (DISSOLVED)													
BETA-BHC													
BIS(2-ETHYLHEXYL)PHTHALATE													
BROMODICHLOROMETHANE													
BROMOFORM													
BUTYLBENZYLPHTHALATE													
CADMIUM													3 ug/l
CADMIUM (DISSOLVED)													
CALCIUM												128000 ug/l	123000 ug/l
Calcium (Dissolved)													
CARBON DISULFIDE								40 J ug/l		12 ug/l			
CHLORIDE												46.7 mg/l	38.6 mg/l
CHLOROFORM													
CHROMIUM	43 ug/L	20 ug/L	140 ug/L	15 ug/L	96 ug/L	113 ug/L	108 ug/L	29 ug/L	23.2 ug/l	6.4 ug/l	13.1 J ug/l	9.4 ug/l	
CHROMIUM (DISSOLVED)													
Chromium (Total)													
CIS-1,2-DICHLOROETHENE													
COBALT													
COBALT (DISSOLVED)													
CONDUCTIVITY								2100 uS/cm	2160 uS/cm	2280 uS/cm	1990 uS/cm		
COPPER													
CYANIDE													
DELTA-BHC													
DIBROMOCHLOROMETHANE													
DIETHYLPHTHALATE													
ENDOSULFAN I													
FLUORIDE													
FREON 113													
HEPTACHLOR													
HEPTACHLOR EPOXIDE													

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G
SAMPLE DATE	3/3/90	5/17/90	9/12/90	12/28/90	5/7/91	10/2/91	11/19/91	12/22/91	3/1/92	7/23/92	11/12/92	2/8/93	5/10/93
PARAMETER													
HEXAVALENT CHROMIUM													
IRON					80500 ug/L	139000 ug/L	167000 ug/L	27100 ug/L	26200 ug/l	2070 J ug/l	2950 ug/l	2320 ug/l	217 ug/l
IRON (DISSOLVED)													
IRON (TOTAL)													
LEAD					89 ug/L	77 ug/L	41 ug/L		18 J ug/l				
LINDANE													
MAGNESIUM												64400 ug/l	62800 ug/l
MAGNESIUM (DISSOLVED)													
MANGANESE					764 ug/L	1240 ug/L	1500 ug/L	409 ug/L	339 ug/l	37 ug/l	44.1 ug/l	30.3 ug/l	9.4 ug/l
MANGANESE (DISSOLVED)													
MANGANESE (TOTAL)													
MERCURY													
METHYLENE CHLORIDE													
NICKEL												10.5 ug/l	8.5 ug/l
NICKEL (DISSOLVED)													
NICKEL (TOTAL)													
NITRATE													
PENTACHLORO-DIBENZO_B,E__1,4_DIOXIN													
pH								6.4 Std Unit	6.53 Std Unit	6.5 Std Unit	6.2 Std Unit	6.53 Std Unit	6.38 Std Unit
POTASSIUM												1700 ug/l	2000 ug/l
Potassium (Dissolved)													
RADIUM-226+228													
SELENIUM													
SILVER													
SODIUM											175000 ug/l	168000 ug/l	171000 ug/l
SODIUM (DISSOLVED)													
SPECIFIC CONDUCTIVITY												2100 uS/cm	1659 uS/cm
SULFATE					772 mg/l	776.6 mg/l	890.6 mg/l	1076.6 mg/l	1016.8 mg/l	815.4 mg/l	747000 ug/l	951.3 mg/l	667.2 mg/l
TECHNETIUM						1371 pCi/l		14 pCi/l	13 J pCi/l	22 pCi/l			
TEMPERATURE								16 deg C	14 deg C	18 deg C	16 deg C	14.5 deg C	16.6 deg C
THALLIUM													
TOTAL ORGANIC CARBON (TOC)													
TOTAL ORGANIC HALOGENS													
TP-SILVEX													
TRICHLOROETHENE													
Uranium													
URANIUM, TOTAL					4 UG/L	8 UG/L	16.8 N ug/l	2.77 ug/l	2.88 ug/l	1.78 ug/l			
URANIUM, TOTAL (DISSOLVED)													
VANADIUM													
WATER LEVEL ELEVATION IN FEET								654.67 ft	655.75 ft	656.85 ft	655.93 ft	656.23 ft	656.51 ft
WELL DEPTH								24.42 ft	24.64 ft	24.64 ft	24.66 ft	24.68 ft	24.65 ft
ZINC													
ZINC (DISSOLVED)													

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G
SAMPLE DATE	7/29/93	11/4/93	1/31/94	6/21/94	7/19/94	1/26/95	8/4/95	1/11/96	7/16/96	1/29/97	7/31/97	3/20/98
PARAMETER												
1,1,1-TRICHLOROETHANE												
2,4,5-T					0.026 ug/l							
2,4-D					0.026 ug/l							
ACETONE												
ALDRIN					0.052 ug/l							
ALKALINITY	201 mg/l	196 mg/l	205 mg/l	199 mg/l		189 mg/l	209 mg/l			207 MG/L	214 MG/L	204 mg/L
ALKALINITY AS CACO3								198 mg/l	141 J mg/l			
ALPHA ACTIVITY												
ALPHA, TOTAL												
ALPHA, TOTAL (DISSOLVED)												
ALPHA-BHC					0.052 ug/l							
ANTIMONY												
ARSENIC												
ARSENIC (DISSOLVED)												
BARIUM	14 ug/l	15.3 ug/l	12.2 ug/l	9 ug/l	39.8 ug/l		14.6 ug/l	17.3 ug/l	9.7 ug/l			
BARIUM (DISSOLVED)												
BERYLLIUM												
BETA ACTIVITY												
BETA, TOTAL												
BETA, TOTAL (DISSOLVED)												
BETA-BHC					0.052 ug/l							
BIS(2-ETHYLHEXYL)PHTHALATE												
BROMODICHLOROMETHANE												
BROMOFORM												
BUTYLBENZYLPHTHALATE												
CADMIUM												
CADMIUM (DISSOLVED)												
CALCIUM	118000 ug/l	157000 ug/l	109000 ug/l	109000 ug/l		134000 ug/l	118000 ug/l	135000 ug/l	96000 ug/l			108000 ug/L
Calcium (Dissolved)										105000 UG/L	92900 UG/L	
CARBON DISULFIDE			9 ug/l	2 ug/l			3 ug/l					
CHLORIDE	43.2 mg/l	52.9 mg/l	154 mg/l	37.8 mg/l		48 mg/l	43.4 mg/l	40.6 mg/l	28.9 mg/l	48.5 MG/L	28.6 MG/L	37 mg/L
CHLOROFORM												
CHROMIUM		6.2 ug/l		4.2 ug/l	17.2 ug/l	18.7 ug/l	11.2 ug/l	7.8 ug/l	61.2 ug/l			
CHROMIUM (DISSOLVED)												
Chromium (Total)												
CIS-1,2-DICHLOROETHENE												
COBALT					2.4 ug/l							
COBALT (DISSOLVED)												
CONDUCTIVITY						1826 uS	1482 uS					
COPPER					6.5 ug/l							
CYANIDE												
DELTA-BHC					0.052 ug/l							
DIBROMOCHLOROMETHANE												
DIETHYLPHTHALATE												
ENDOSULFAN I					0.052 ug/l							
FLUORIDE												
FREON 113												
HEPTACHLOR					0.052 ug/l							
HEPTACHLOR EPOXIDE					0.052 ug/l							

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G	X616-22G
SAMPLE DATE	7/29/93	11/4/93	1/31/94	6/21/94	7/19/94	1/26/95	8/4/95	1/11/96	7/16/96	1/29/97	7/31/97	3/20/98
PARAMETER												
HEXAVALENT CHROMIUM												
IRON	1730 ug/l	252 ug/l	186 ug/l	226 N ug/l		459 ug/l	1250 ug/l		16.7 ug/l			
IRON (DISSOLVED)												
IRON (TOTAL)												
LEAD					27.8 ug/l		26.5 ug/l	25.7 J ug/l				
LINDANE					0.052 ug/l							
MAGNESIUM	61400 ug/l	75900 ug/l	64000 ug/l	54200 ug/l		68100 ug/l	55200 ug/l	66500 ug/l	46700 ug/l			56500 ug/L
MAGNESIUM (DISSOLVED)										53200 UG/L	44900 UG/L	
MANGANESE	28.3 ug/l	23.8 ug/l	16.1 ug/l	9.9 ug/l			18.1 ug/l	22.5 ug/l	13.2 J ug/l			
MANGANESE (DISSOLVED)												
MANGANESE (TOTAL)												
MERCURY												
METHYLENE CHLORIDE												
NICKEL					23.1 ug/l		16.9 ug/l	11.2 ug/l	252 N ug/l			
NICKEL (DISSOLVED)												
NICKEL (TOTAL)												
NITRATE												
PENTACHLORO-DIBENZO_B,E__1,4_DIOXIN												
pH	6.5 Std Unit	6.4 Std Unit				6.5 Std Unit	6.62 Std Unit					
POTASSIUM	1800 ug/l	1920 ug/l	2750 ug/l	1610 ug/l		1720 ug/l	2230 ug/l	2430 ug/l	1400 ug/l			
Potassium (Dissolved)												
RADIUM-226+228												
SELENIUM												
SILVER												
SODIUM	164000 ug/l	184000 ug/l	177000 ug/l	148000 ug/l		180000 J ug/l	162000 ug/l	181000 J ug/l	140000 J ug/l			152000 ug/L
SODIUM (DISSOLVED)										150000 UG/L	131000 UG/L	
SPECIFIC CONDUCTIVITY	1675 uS/cm	1950 uS/cm										
SULFATE	674.6 mg/l	786 mg/l	951 mg/l	566 mg/l		750 mg/l	602 mg/l	742 mg/l	559 mg/l	608 MG/L	443 MG/L	523 mg/L
TECHNETIUM												
TEMPERATURE	17 deg C	17.4 deg C				15.4 deg C	17.2 deg C					
THALLIUM					266 ug/l							
TOTAL ORGANIC CARBON (TOC)												
TOTAL ORGANIC HALOGENS												
TP-SILVEX					0.026 ug/l							
TRICHLOROETHENE												
Uranium												
URANIUM, TOTAL												
URANIUM, TOTAL (DISSOLVED)												
VANADIUM					19.6 ug/l							
WATER LEVEL ELEVATION IN FEET	654.91 ft	654.6 ft										
WELL DEPTH	24.68 ft	24.58 ft										
ZINC					35.5 ug/l							
ZINC (DISSOLVED)												

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-22G	X616-23M	X616-23M	X616-23M	X616-23M
SAMPLE DATE	9/2/98	11/30/88	3/3/90	5/17/90	12/28/90
PARAMETER					
1,1,1-TRICHLOROETHANE					
2,4,5-T					
2,4-D					
ACETONE					
ALDRIN					
ALKALINITY	217 mg/L				
ALKALINITY AS CACO3					
ALPHA ACTIVITY					
ALPHA, TOTAL		14 J pCi/l			
ALPHA, TOTAL (DISSOLVED)					
ALPHA-BHC					
ANTIMONY					
ARSENIC					
ARSENIC (DISSOLVED)					
BARIUM					
BARIUM (DISSOLVED)					
BERYLLIUM					
BETA ACTIVITY					
BETA, TOTAL	70 pCi/L	34 J pCi/l			
BETA, TOTAL (DISSOLVED)					
BETA-BHC					
BIS(2-ETHYLHEXYL)PHTHALATE					
BROMODICHLOROMETHANE					
BROMOFORM					
BUTYLBENZYLPHTHALATE					
CADMIUM					
CADMIUM (DISSOLVED)					
CALCIUM					
Calcium (Dissolved)	110000 ug/L				
CARBON DISULFIDE					
CHLORIDE	32.4 mg/L				
CHLOROFORM					
CHROMIUM			45 ug/L	30 ug/L	12 ug/L
CHROMIUM (DISSOLVED)					
Chromium (Total)					
CIS-1,2-DICHLOROETHENE					
COBALT					
COBALT (DISSOLVED)					
CONDUCTIVITY					
COPPER					
CYANIDE					
DELTA-BHC					
DIBROMOCHLOROMETHANE					
DIETHYLPHTHALATE					
ENDOSULFAN I					
FLUORIDE					
FREON 113					
HEPTACHLOR					
HEPTACHLOR EPOXIDE					

Appendix Table A.3 Groundwater Historical Positive Detections
Proposed DUF6 Conversion Facility
DUF6 Conversion Facility Site Characterization
Portsmouth, OH
(Continued)

SAMPLE ID	X616-22G	X616-23M	X616-23M	X616-23M	X616-23M
SAMPLE DATE	9/2/98	11/30/88	3/3/90	5/17/90	12/28/90
PARAMETER					
HEXAVALENT CHROMIUM					
IRON					
IRON (DISSOLVED)					
IRON (TOTAL)					
LEAD					
LINDANE					
MAGNESIUM					
MAGNESIUM (DISSOLVED)	53000 ug/L				
MANGANESE					
MANGANESE (DISSOLVED)					
MANGANESE (TOTAL)					
MERCURY					
METHYLENE CHLORIDE					
NICKEL					
NICKEL (DISSOLVED)					
NICKEL (TOTAL)					
NITRATE					
PENTACHLORO-DIBENZO_B,E__1,4_DIOXIN					
pH					
POTASSIUM					
Potassium (Dissolved)					
RADIUM-226+228					
SELENIUM					
SILVER					
SODIUM					
SODIUM (DISSOLVED)	134000 J ug/L				
SPECIFIC CONDUCTIVITY					
SULFATE	507 mg/L	204.8 J mg/l			
TECHNETIUM					
TEMPERATURE					
THALLIUM					
TOTAL ORGANIC CARBON (TOC)					
TOTAL ORGANIC HALOGENS					
TP-SILVEX					
TRICHLOROETHENE					
Uranium	1.1 ug/L				
URANIUM, TOTAL		2 J ug/l			
URANIUM, TOTAL (DISSOLVED)					
VANADIUM					
WATER LEVEL ELEVATION IN FEET					
WELL DEPTH					
ZINC					
ZINC (DISSOLVED)					

A.2 EXCERPTS FROM GAS CENTRIFUGE GEOTECHNICAL INVESTIGATION

Gas Centrifuge Enrichment Plant

Portsmouth, Ohio

Vol. 1

Summary

Geotechnical Investigation

LAW ENGINEERING TESTING COMPANY
Geotechnical and Materials Engineers
2749 DELK ROAD, S.E. / MARIETTA, GEORGIA 30062 / (404) 971-9005

April 28, 1978

United States Department of Energy
P. O. Box E
Oak Ridge, Tennessee 37830

Attention: Mr. H. L. McCracken
Design Division Director, PPEEO

Subject: Summary of Report
Gas Centrifuge Enrichment Plant
Geotechnical Investigation
Portsmouth, Ohio
Job No. MK 7502
Communication #42

Gentlemen:

LAW ENGINEERING TESTING COMPANY has completed the geotechnical investigation for the proposed Gas Centrifuge Enrichment Plant, near Portsmouth, Ohio, in accordance with Department of Energy Contract Number EY-77-C-05-5614. This Summary (Volume 1) is a brief description of the investigation and our conclusions and recommendations. Volume 2 contains our complete Report, Volume 3 consists of Test Boring Records, and laboratory data comprises Volume 4. Minor revisions have been made to the Draft Report and Summary of Draft Report. Those volumes are superseded by the Final Report and this Summary.

We appreciate the opportunity of working with you on this project. Our work has been greatly facilitated by Department of Energy personnel at Oak Ridge and in the Portsmouth Area Office.

If you have questions or comments, please contact us.

Very truly yours,
LAW ENGINEERING TESTING COMPANY

Michael W. Montgomery

Michael W. Montgomery, P.E.
Project Manager
Reg. Ohio E-42874

MWM:lh

Gas Centrifuge Enrichment Plant

Portsmouth, Ohio

Vol. 2

Report

Geotechnical Investigation

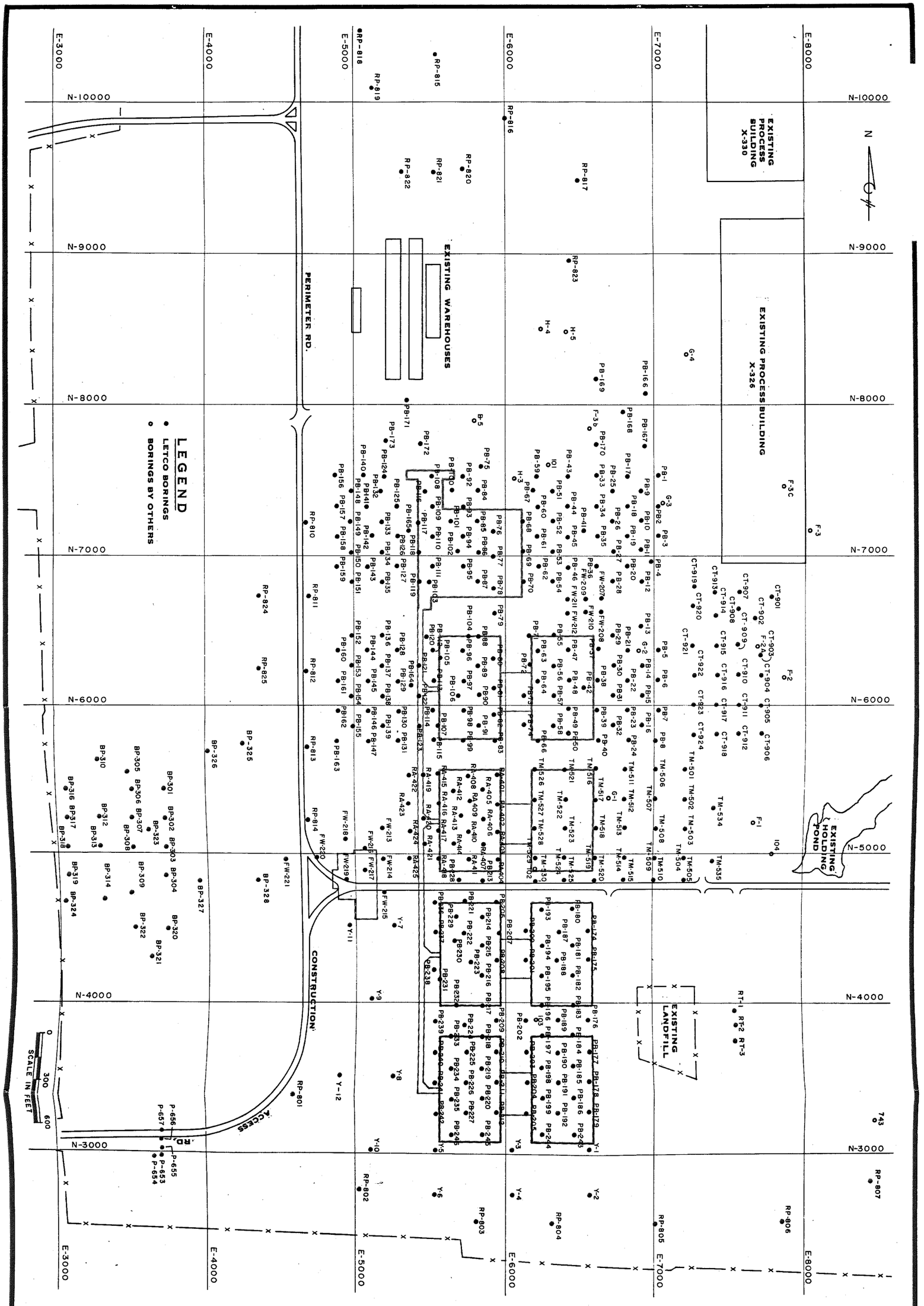
samples. Undisturbed samples were used for laboratory testing to determine engineering properties of the site soils.

All borings except some of those designated RP were extended to "refusal", at depths ranging from 3.5 to 49 feet, and averaging about 33 feet. Refusal means that further penetration is impossible by soil drilling techniques. It may indicate bedrock, rock lenses, or boulders. Eighty-seven borings were extended beyond refusal by rock coring techniques, ASTM D2113-70. In this manner, samples of the underlying rock strata were obtained for examination. Rock was cored to a depth of ten feet in 52 borings, while deeper cores ranging from 20 feet to 121 feet were taken in 22 borings.

Test Boring Records describing in detail conditions at each boring location are included in Volume 3. Soil and rock descriptions, standard penetration resistance, and the observed water level are shown. Water levels shown represent measurements made at least 24 hours after completion of the boring. Where water levels are not shown, caving of the boreholes prevented measurements.

2.1.3 Observation Wells and Piezometers: A number of borings have been utilized as observation wells or piezometers, to measure groundwater fluctuations. Observation wells consist of boreholes in which plastic pipes with slotted 10-foot bottom sections were inserted. The annulus between the pipe and borehole wall was filled with sand, and sealed with an impervious plug near the surface. Six observation wells, 301 to 306, have been installed by others in the area of interest. Water level measurements made in them weekly since October, 1975 have been furnished to us. Locations of these 6 wells are shown on Figure 2-2.

Piezometers are similar to observation wells except that they are sealed into a certain stratum so that the possibility of an artesian head or perched water level in



DEPARTMENT OF ENERGY

GAS CENTRIFUGE ENRICHMENT PLANT

MK 7502

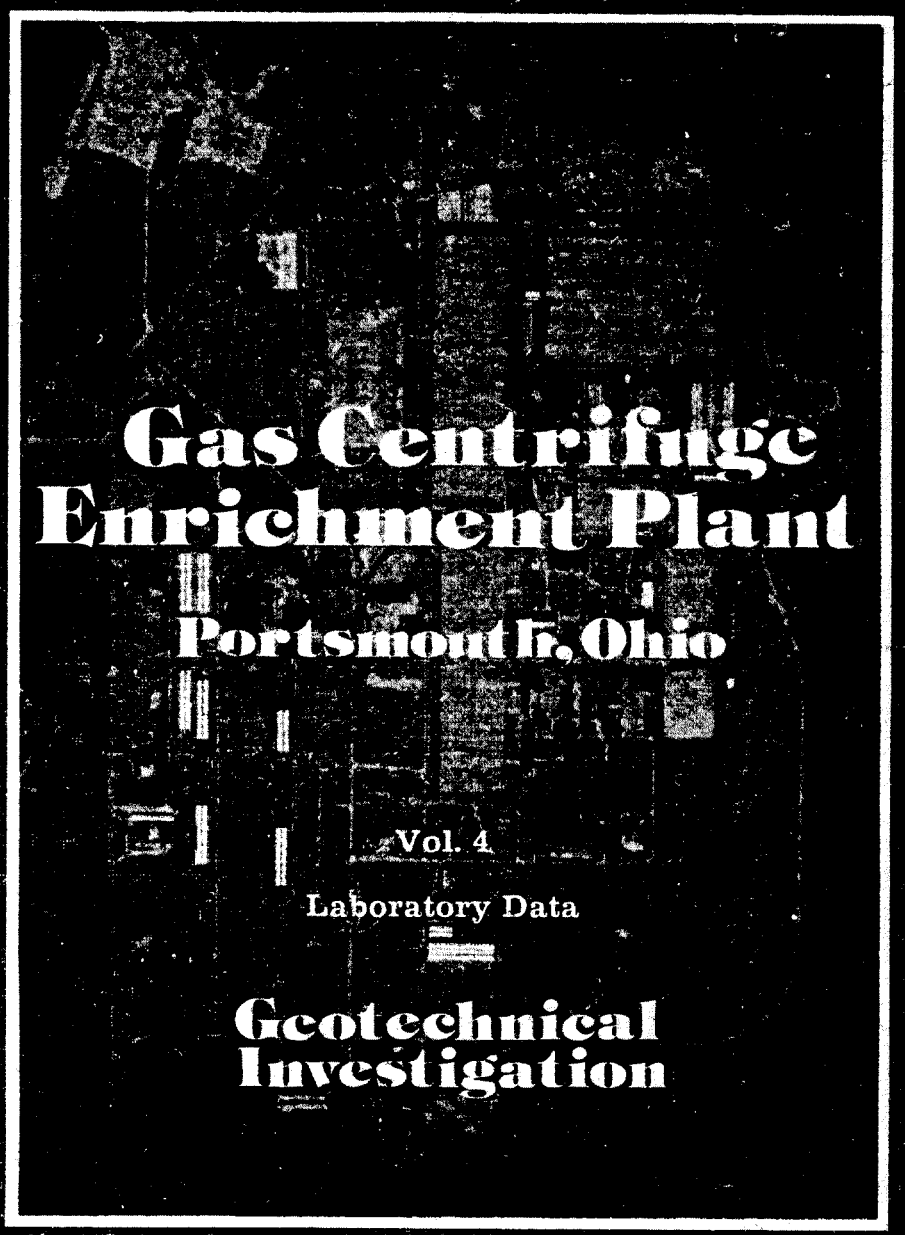
LAW ENGINEERING TESTING COMPANY

MARIETTA, GEORGIA

BORING PLAN

FIGURE 2-1

DWN BY: RLA CKD BY: JMS APPRVD BY: MM



Gas Centrifuge Enrichment Plant

Portsmouth, Ohio

Vol. 4

Laboratory Data

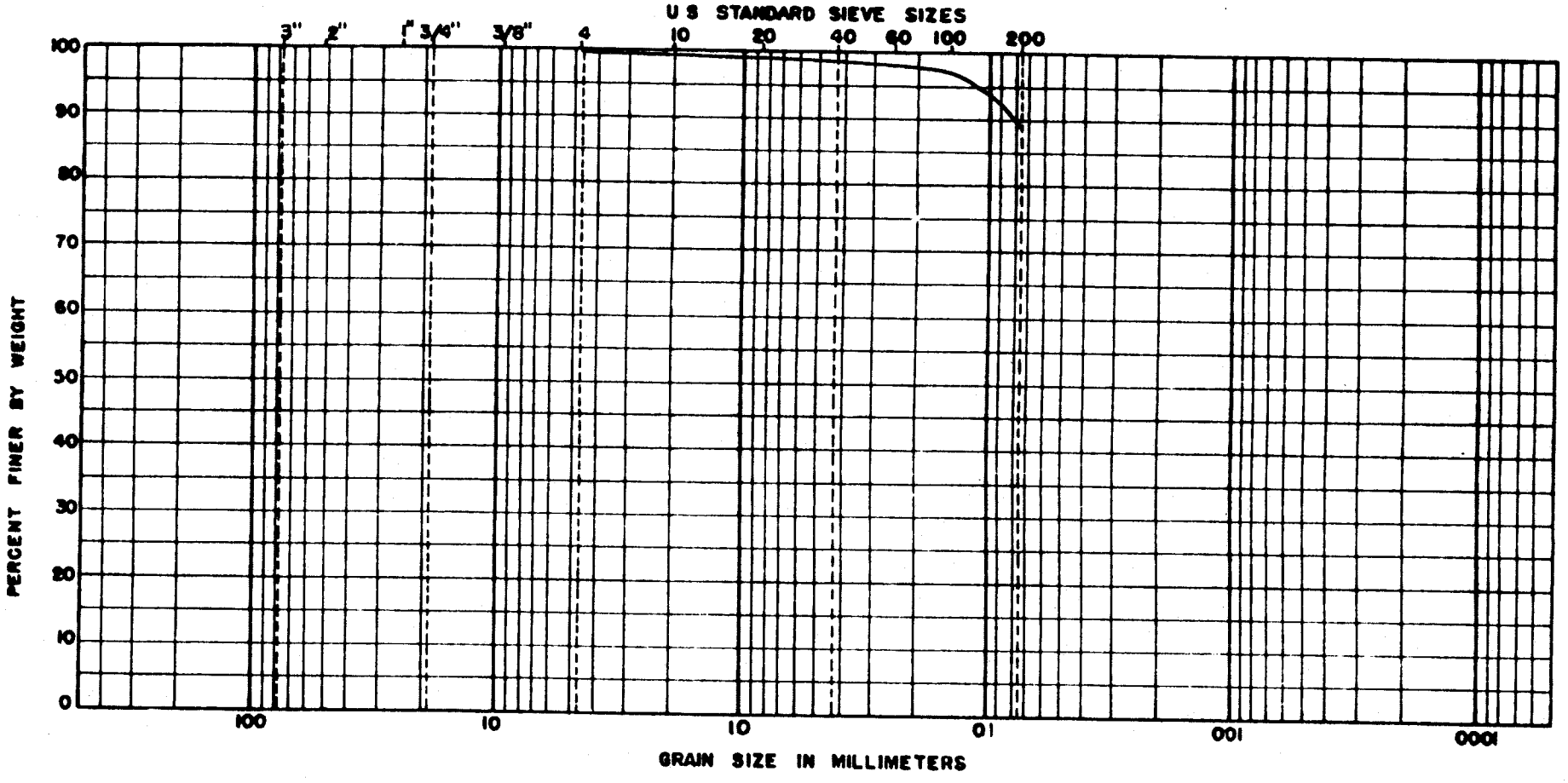
Geotechnical Investigation

TABLE 2-1
(Page 3 of 6)

Boring	North	East	Elevation	Boring	North	East	Elevation
PB-149	7230	4980	677.6	PB-186	3375	6455	669.0
PB-150	7020	4980	687.9	PB-187	4475	6350	662.7
PB-151	6830	4980	691.7	PB-188	4278	6350	663.2
PB-152	6470	4980	693.3	PB-189	3875	6350	667.4
PB-153	6270	4980	691.1	PB-190	3654	6344	668.2
PB-154	6070	4980	683.6	PB-191	3475	6350	668.2
PB-155	5870	4980	678.9	PB-192	3275	6350	665.9
PB-156	7530	4870	675.9	PB-193	4625	6245	660.6
PB-157	7330	4880	682.5	PB-194	4376	6245	663.2
PB-158	7130	4880	687.6	PB-195	4149	6245	663.7
PB-159	6930	4880	690.3	PB-196	3975	6245	666.5
PB-160	6370	4880	693.8	PB-197	3775	6245	663.8
PB-161	6170	4880	688.1	PB-198	3575	6245	665.9
PB-162	5970	4880	682.9	PB-199	3375	6245	666.9
PB-163	5765	4870	674.3	PB-200	4475	6140	661.6
PB-164	6130	5360	675.6	PB-201	4278	6140	663.5
PB-165	7170	5360	671.4	PB-202	3875	6140	664.9
PB-166	8070	6950	671.2	PB-203	3675	6140	662.8
PB-167	7730	6940	670.8	PB-204	3475	6140	666.1
PB-168	7950	6790	670.2	PB-205	3271	6127	661.5
PB-169	8170	6610	669.0	PB-206	4674	5938	662.5
PB-170	7740	6620	668.6	PB-207	4450	5940	657.0
PB-171	8030	5350	670.8	PB-208	4275	5940	661.8
PB-172	7750	5440	671.9	PB-209	3875	5940	664.7
PB-173	7760	5240	671.3	PB-210	3675	5940	656.8
PB-174	4475	6560	663.2	PB-211	3486	5938	663.1
PB-175	4275	6560	663.4	PB-211A	3475	5935	662.7
PB-176	3875	6560	671.3	PB-212	3275	5940	657.3
PB-177	3675	6560	671.3	PB-213	4794	5836	664.9
PB-178	3475	6560	670.6	PB-214	4575	5835	662.0
PB-179	3275	6560	670.5	PB-215	4375	5835	659.1
PB-180	4625	6455	663.9	PB-216	4175	5835	662.3
PB-181	4375	6455	663.2	PB-217	3975	5835	661.1
PB-182	4145	6455	663.7	PB-218	3775	5835	660.5
PB-183	3975	6455	670.4	PB-219	3575	5835	654.6
PB-184	3775	6455	669.3	PB-220	3375	5835	658.8
PB-185	3575	6455	669.6	PB-221	4684	5727	659.3

TABLE 2-1
(Page 6 of 6)

Boring	North	East	Elevation	Boring	North	East	Elevation
RP-811	6730	4693	695.0	BP-322	4442	3557	726.3
RP-812	6230	4666	689.8	BP-323	5167	3615	719.0
RP-813	5730	4665	679.5	BP-324	4670	3025	683.3
RP-814	5230	4666	669.5	BP-325	5735	4249	698.4
RP-815	10,306	5558	666.4	PB-326	5698	4011	698.2
RP-816	9885	6000	654.3	BP-327	4815	3940	703.9
RP-817	9485	6490	664.9	BP-328	4809	4346	682.1
RP-818	10,450	5030	661.8				
RP-819	10,100	5120	662.7	WT-301	13,570	10,320	723.3
RP-820	9560	5730	649.0	WT-302	13,870	10,160	728.5
RP-821	9540	5530	662.0	WT-303	13,590	9990	718.2
RP-822	9520	5325	644.0				
RP-823	8960	6430	668.0	RT-1	3950	7540	657.2
RP-824	6724	4358	704.1	RT-2	3850	7540	648.4
RP-825	6242	4355	700.0	RT-3	3750	7540	655.1
BP-301	5461	3702	695.2	P-653	2974	3701	589.7
BP-302	5275	3698	705.2	P-654	2975	3651	589.4
BP-303	5017	3683	707.9	P-655	3025	3707	606.7
BP-304	4773	3715	694.7	P-656	3084	3699	624.4
BP-305	5547	3483	683.5	P-657	3147	3698	624.9
BP-306	5445	3475	697.8				
BP-307	5250	3490	719.0				
BP-308	5036	3469	710.8				
BP-309	4737	3471	686.3				
BP-310	5606	3360	675.6				
BP-312	5250	3270	746.1				
BP-313	5050	3270	703.0				
BP-314	4698	3297	671.8				
BP-316	5450	3050	718.7				
BP-317	5267	3085	742.4				
BP-318	5050	3050	718.8				
BP-319	4850	3050	690.0				
BP-320	4456	3672	728.8				
BP-321	4321	3596	741.7				



BOULDERS	COBBLES	GRAVEL		SAND			FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT SIZES	CLAY SIZES

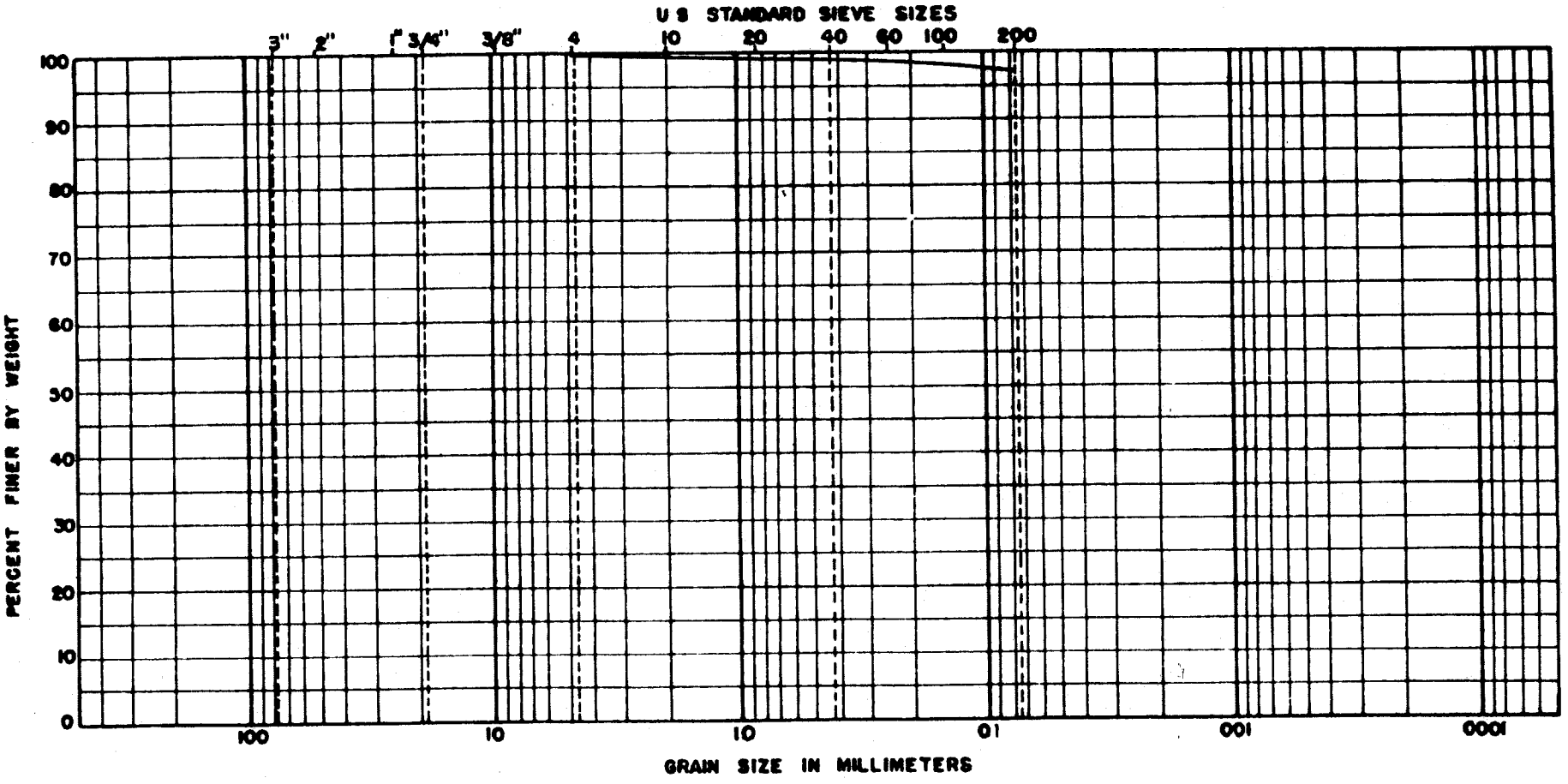
BORING NO	ELEV OR DEPTH	NAT WC	LL	PL	PI	DESCRIPTION OR CLASSIFICATION
PB-171	14-15.5 FT	21.7	NL	NP	-	VERY STIFF TAN SLIGHTLY CLAYEY SILT

GRAIN SIZE DISTRIBUTION

JOB NO. MK-7502

LAW ENGINEERING TESTING COMPANY

G-1



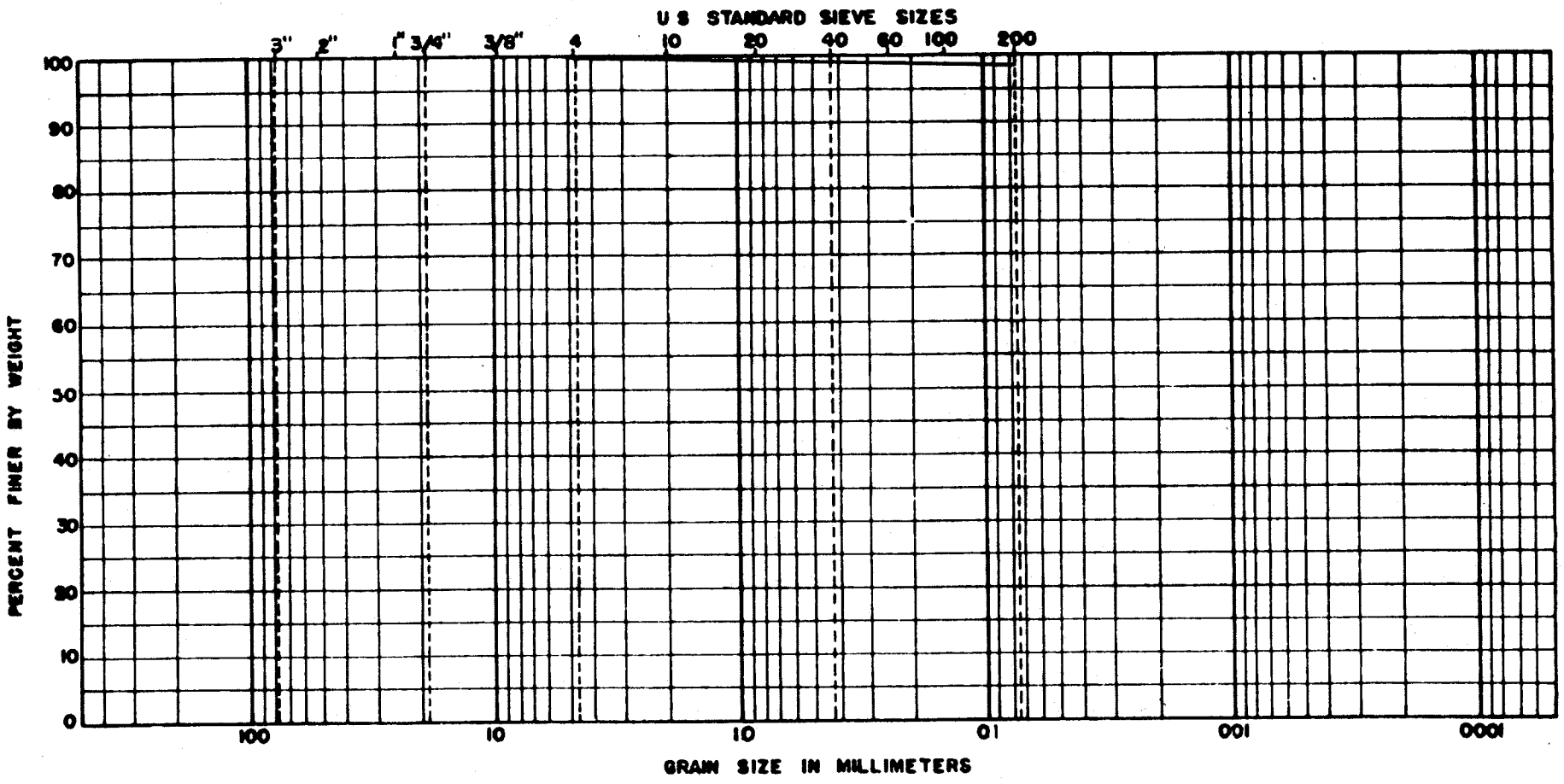
BOULDERS	COBBLES	GRAVEL		SAND			FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT SIZES	CLAY SIZES

BORING NO	ELEV OR DEPTH	NAT WC	L L	P L	P I	DESCRIPTION OR CLASSIFICATION
PB-173	1.5-3 FT	23.2	51	21	30	VERY STIFF BROWN LAMINATED SLIGHTLY SILTY CLAY

GRAIN SIZE DISTRIBUTION

JOB NO. MK-7502

LAW ENGINEERING TESTING COMPANY



BOULDERS	COBBLES	GRAVEL		SAND			FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT SIZES	CLAY SIZES

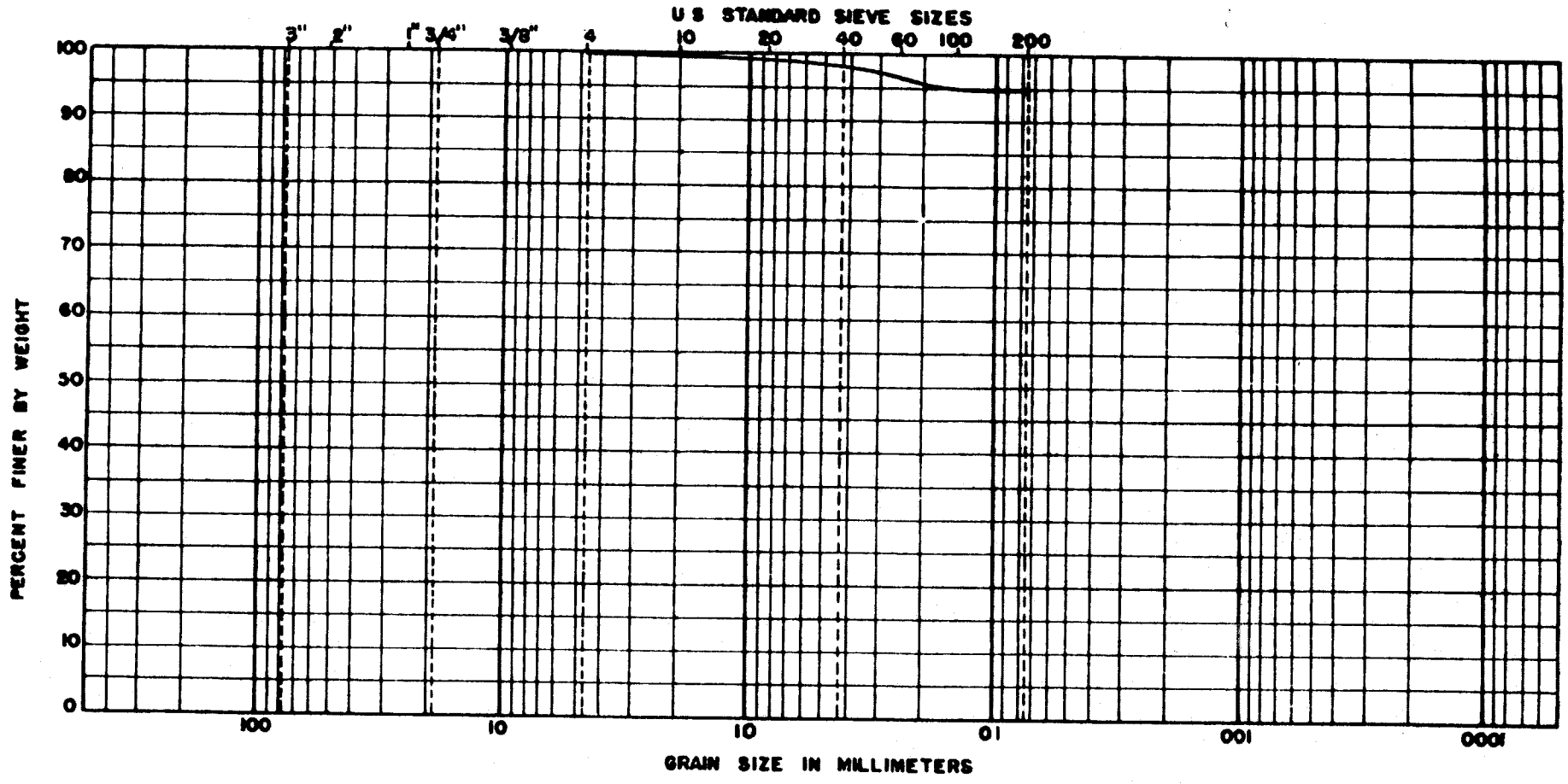
BORING NO	ELEV OR DEPTH	NAT WC	LL	PL	PI	DESCRIPTION OR CLASSIFICATION
PB-173	6-7.5 FT	27.6	56	26	30	STIFF BROWN LAMINATED PLASTIC CLAY

GRAIN SIZE DISTRIBUTION

JOB NO. MK-7502

LAW ENGINEERING TESTING COMPANY

G-1



BOULDERS	COBBLES	GRAVEL		SAND			FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT SIZES	CLAY SIZES

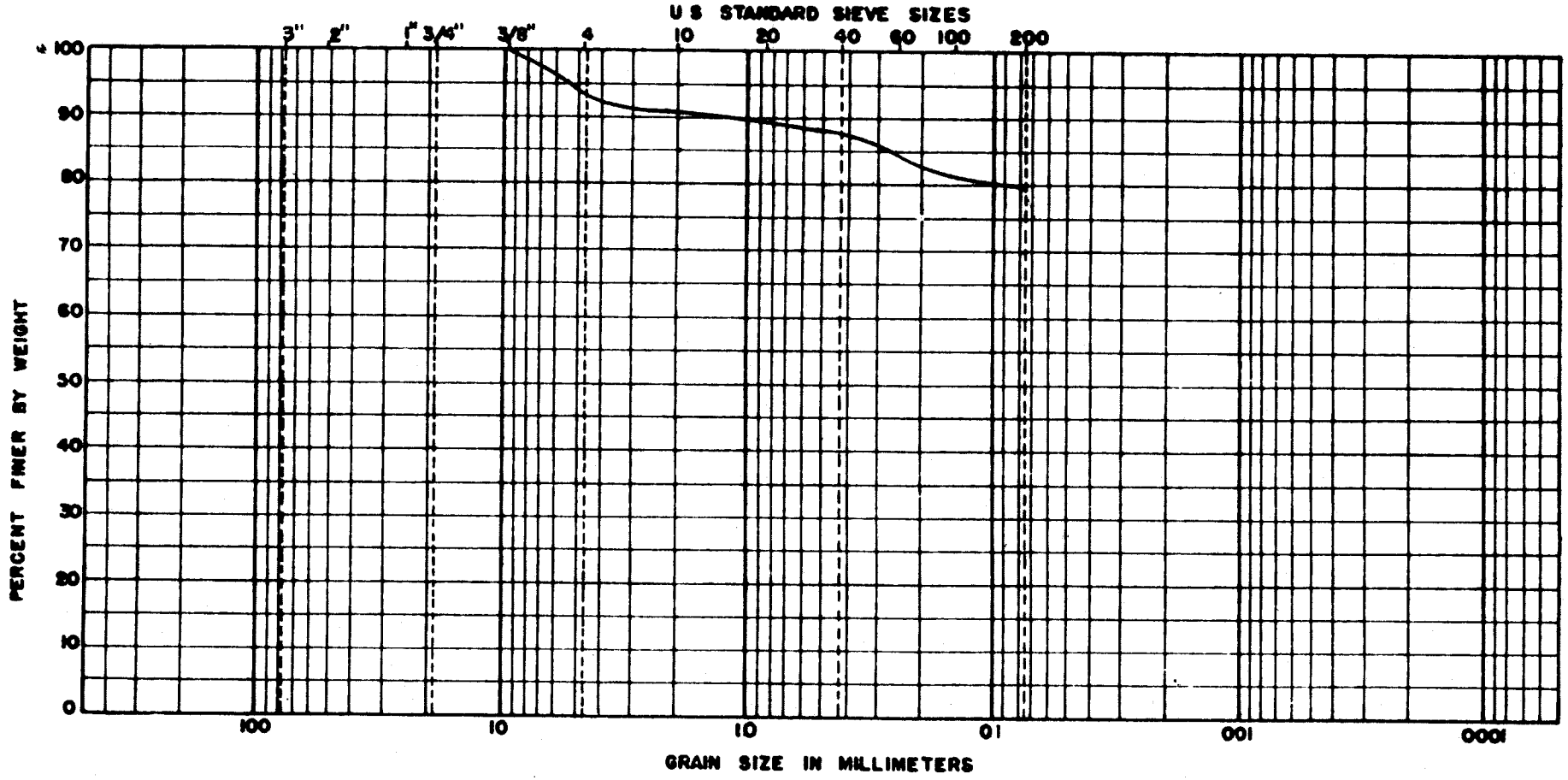
BORING NO	ELEV OR DEPTH	NAT WC	LL	PL	PI	DESCRIPTION OR CLASSIFICATION
PB-173	9-10.5 FT	25.5	53	23	30	VERY STIFF BROWN LAMINATED SLIGHTLY FINE SANDY CLAY

GRAIN SIZE DISTRIBUTION

JOB NO. MK-7502

LAW ENGINEERING TESTING COMPANY

G-1



BOULDERS	COBBLES	GRAVEL		SAND			FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT SIZES	CLAY SIZES

BORING NO	ELEV OR DEPTH	NAT WC	L L	P L	P I	DESCRIPTION OR CLASSIFICATION
PB-173	14-15.5 FT	17.4	32	17	15	HARD TAN AND GRAY MOTTLED SANDY SILTY CLAY WITH TRACE OF FINE GRAVEL

GRAIN SIZE DISTRIBUTION

JOB NO. MK-7502

LAW ENGINEERING TESTING COMPANY

G-1

Gas Centrifuge Enrichment Plant

Portsmouth, Ohio

Vol. 3

Test Boring Records

Geotechnical Investigation

ELEV. FT.MSL	DEPTH IN FEET	STRATA DESCRIPTION	SOIL PARAMETERS: FORMATION	SPT	MOISTURE CONTENT %	LIMITS % LL	LIMITS % PI	% FINES	ROCK PARAMETERS: REC / RQD	WTHR'NG AND JOINTS
670.8	0									
670.7		TOPSOIL	FILL							
		STIFF TAN AND GRAY SILTY CLAY (CL)		9						
666.8	5	STIFF DARK BROWN CLAYEY ORGANIC SILT (ML)								
664.8		STIFF TAN AND DARK GRAY SILTY CLAY (CL) WITH TRACE OF ORGANIC STAINING AND ODOR BELOW 9.0'		11						
	10			12						
	15			13						
652.8		STIFF TAN LAMINATED SILTY CLAY TO CLAYEY SILT (CL-ML) ▽	LAKE DEPOSIT	8						
	20									
647.8		VERY HARD GRAY SAND - SANDSTONE	*	50/1"						
646.7	25	B.T. @ 24.1', REFUSAL								
	30									
	35									
	40									

DATE STARTED 1/4/78
DATE COMPLETED 1/4/78
DRILLED BY SW
LOGGED BY RAC
CHECKED BY JDG
APPROVED BY MWM

REMARKS:
*BEREA SANDSTONE

DEPARTMENT OF ENERGY
GAS CENTRIFUGE ENRICHMENT PLANT

LAW ENGINEERING TESTING COMPANY
MK 7502

TEST BORING RECORD

PB-171

N 8030
E 5350

PAGE 1 OF 1

ELEV. FT.MSL	DEPTH IN FEET	STRATA DESCRIPTION	FORMATION	SPT	MOISTURE CONTENT %	LIMITS % LL	LIMITS % PI	% FINES	ROCK PARAMETERS REC / RQD	ROCK PARAMETERS WTHR'NG AND JOINTS
671.9	0	BROWN SANDY SILTY GRAVEL	FILL	7						
670.6		FIRM TAN AND GRAY SILTY CLAY WITH TRACE OF FINE GRAVEL (CL)								
	5			5						
	10	ORGANIC ODOR AT 11'		10						
660.4		VERY STIFF TAN AND GRAY SILTY CLAY WITH TRACE OF GRAVEL (CL)	LAKE DEPOSIT							
	15			15						
	20			27						
648.9		TAN AND GRAY MOTTLED SILTY FINE TO COARSE SANDY ANGULAR FINE TO COARSE SANDSTONE GRAVELLY CLAY (CL)	*							
	25			61						
644.9		TAN ANGULAR SANDSTONE GRAVEL - HARD SANDSTONE CORED BY SPOON	**							
642.8				50 / 1"						
	30	B.T. AT 29.1', REFUSAL								
	35									
	40									

DATE STARTED 1/4/78
DATE COMPLETED 1/4/78
DRILLED BY SW
LOGGED BY RAC
CHECKED BY JDG
APPROVED BY MWM

REMARKS:
*RIVER AND LAKE DEPOSIT
**BEREA SANDSTONE

DEPARTMENT OF ENERGY
GAS CENTRIFUGE ENRICHMENT PLANT

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MK 7502

TEST BORING RECORD

PB-172

N 7750
E 5440

PAGE 1 OF 1

ELEV. FT.MSL	DEPTH IN FEET	STRATA DESCRIPTION	FORMATION	SPT	MOISTURE CONTENT %	LIMITS % LL	LIMITS % PI	% FINES	ROCK PARAMETERS REC / RQD	ROCK PARAMETERS WTHR'NG AND JOINTS
671.3	0									
670.6		GRAVEL AND SAND (FILL)								
		VERY STIFF BROWN LAMINATED SLIGHTLY SILTY CLAY (CL-CH) WITH TRACE OF CONCRETIONS	LAKE DEPOSIT	15	23.2	51	30	98		
	5									
665.3		STIFF TO VERY STIFF BROWN LAMINATED PLASTIC CLAY (CH)		10	27.6	56	30	98		
	10			17	25.5	53	30	95		
659.3		HARD TAN AND GRAY MOTTLED SLIGHTLY FINE SANDY SILTY CLAY WITH TRACE OF CONCRETIONS (CL)								
	15			34	17.4	32	15	80		
654.3		VERY HARD BLACK LAMINATED SILTY CLAY - DECOMPOSED SHALE (CL)	*							
651.6	20	B.T. @ 19.7', REFUSAL		80/8"						
	25									
	30									
	35									
	40									

DATE STARTED 11/20/77
DATE COMPLETED 11/20/77
DRILLED BY SW
LOGGED BY EB
CHECKED BY JDG
APPROVED BY MWM

REMARKS:
*SUNBURY SHALE

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GAS CENTRIFUGE ENRICHMENT PLANT

LAW ENGINEERING TESTING COMPANY
MK 7502

TEST BORING RECORD

PB-173
N 7760
E 5240
PAGE 1 OF 1

ELEV. FT.MSL	DEPTH IN FEET	STRATA DESCRIPTION	FORMATION	SPT	MOISTURE CONTENT %	LIMITS % LL	LIMITS % PI	% FINES	ROCK PARAMETERS REC — RQD	ROCK PARAMETERS WTHR'NG AND JOINTS
666.4	0	VERY STIFF TO STIFF TAN-BROWN SILTY CLAY (CL) WITH ROOTS AND ORGANIC	FILL	18						
	5			13						
				19						
	10			9						
655.4		STIFF TAN, BROWN AND GRAY CLAYEY SILT (ML) LESS CLAYEY WITH DEPTH. FINE SANDY BELOW 19 FT.	LAKE DEPOSIT	13						
	15									
	20			10						
	25			12						
640.9		B.T. @ 25.5'								
	30									
	35									
	40									

DATE STARTED 2/6/78
DATE COMPLETED 2/7/78
DRILLED BY SW
LOGGED BY RAC
CHECKED BY EB
APPROVED BY MWM

REMARKS:

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GAS CENTRIFUGE ENRICHMENT PLANT

LAW ENGINEERING TESTING COMPANY
MK 7502

TEST BORING RECORD

RP-815

N 10,306
E 5,558

PAGE 1 OF 1

ELEV. FT.MSL	DEPTH IN FEET	STRATA DESCRIPTION	FORMATION	SPT	MOISTURE CONTENT %	LIMITS % LL	LIMITS % PI	% FINES	ROCK PARAMETERS REC / RQD	ROCK PARAMETERS WTHR'NG AND JOINTS
654.3	0									
653.8		TOPSOIL								
		VERY STIFF SLIGHTLY SANDY SILTY CLAY WITH BLACK STAINS AND TRACE OF WEATHERED SANDSTONE GRAVEL (CL)	LAKE DEPOSIT	20						
648.3	5			20						
		VERY STIFF TO HARD TAN-BROWN FINE SANDY CLAYEY SILT (ML)		31						
	10			18						
	15			18						
635.3	20	B.T. @ 19.0', REFUSAL		50/0"						
	25									
	30									
	35									
	40									

DATE STARTED 2/6/78
DATE COMPLETED 2/6/78
DRILLED BY SW
LOGGED BY RAC
CHECKED BY EB
APPROVED BY MWM

REMARKS:

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GAS CENTRIFUGE ENRICHMENT PLANT

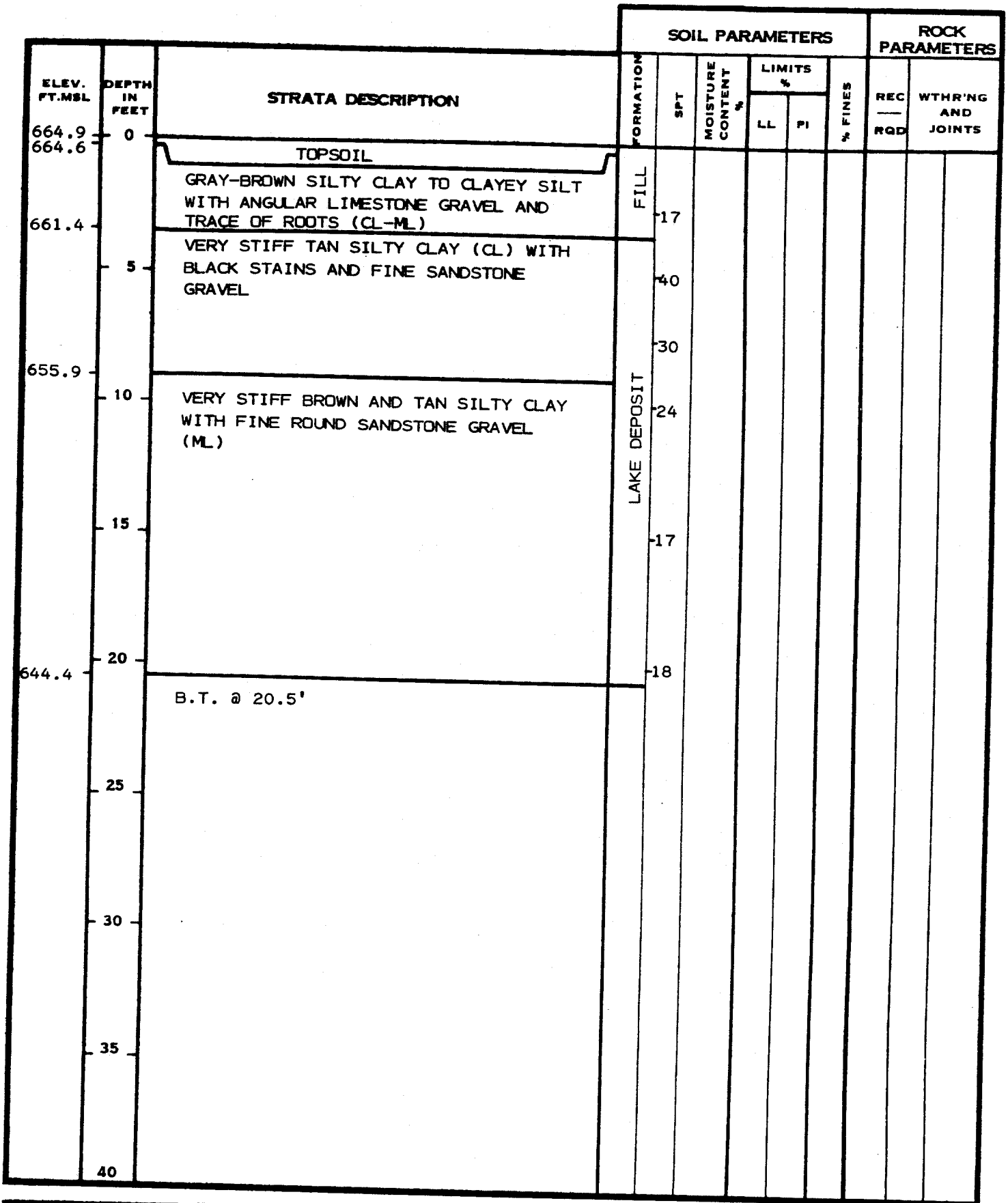
LAW ENGINEERING TESTING COMPANY

TEST BORING RECORD

RP-816

N 9885
E 6000

PAGE 1 1



DATE STARTED 2/6/78
DATE COMPLETED 2/6/78
DRILLED BY SW
LOGGED BY RAC
CHECKED BY EB
APPROVED BY

REMARKS:

DEPARTMENT OF ENERGY
GAS CENTRIFUGE ENRICHMENT PLANT

LAW ENGINEERING TESTING COMPANY
MK 7502

TEST BORING RECORD

RP-817

N 9485
E 6490

PAGE 1 OF 1

ELEV. FT.MSL	DEPTH IN FEET	STRATA DESCRIPTION	SOIL PARAMETERS: FORMATION	SPT	MOISTURE CONTENT %	LIMITS % LL	LIMITS % PI	% FINES	ROCK PARAMETERS: REC / RQD	WTHR'NG AND JOINTS
661.8	0									
661.5		TOPSOIL								
		STIFF TO VERY STIFF BROWN SILTY CLAY TO CLAYEY SILT (CL-ML)	LAKE DEPOSIT	11						
	5			26						
		IRON CONCRETIONS AT 7.5'		20						
652.8	10	VERY STIFF TAN SILTY CLAY WITH TRACE OF GRAVEL (CL)		17						
648.8		VERY DENSE BROWN AND TAN SILTY CLAYEY GRAVELLY SAND (SC)	*	100						
646.3	15	B.T. @ 15.5'								
	20									
	25									
	30									
	35									
	40									

DATE STARTED 2/5/78
DATE COMPLETED 2/5/78
DRILLED BY SW
LOGGED BY RAC
CHECKED BY EB
APPROVED BY MWM

REMARKS:
*RIVER DEPOSIT

DEPARTMENT OF ENERGY
GAS CENTRIFUGE ENRICHMENT PLANT

LAW ENGINEERING TESTING COMPANY
MK 7502

TEST BORING RECORD

RP-818

N 10,450
E 5030

PAGE 1 OF 1

ELEV. FT.MSL	DEPTH IN FEET	STRATA DESCRIPTION	FORMATION	SPT	MOISTURE CONTENT %	LIMITS % LL	LIMITS % PI	% FINES	ROCK PARAMETERS REC / RQD	ROCK PARAMETERS WTHR'NG AND JOINTS
662.7	0									
662.6		TOPSOIL								
661.7		BROWN SANDY SILT AND GRAVEL (FILL)		13						
	5	STIFF TO VERY STIFF TAN-BROWN SILTY CLAY (CL)		19						
655.2		VERY STIFF TAN, BROWN AND GRAY SILTY CLAY TO CLAYEY SILT (CL-ML) DARK GRAY ORGANIC SILT LAYER @ 10'	LAKE DEPOSIT	23						
	10			18						
650.2		FIRM TO STIFF TAN, BROWN, AND GRAY VERY SILTY CLAY (CL)								
	15			10						
	20			5						
639.2		VERY HARD TAN AND GRAY MOTTLED SANDY CLAYEY GRAVELLY SILT (ML)	*	50/4"						
638.5	25	B.T. @ 24.2', REFUSAL								
	30									
	35									
	40									

DATE STARTED 2/5/78
DATE COMPLETED 2/5/78
DRILLED BY SW
LOGGED BY RAC
CHECKED BY EB
APPROVED BY MWM

REMARKS:
*RIVER DEPOSIT

DEPARTMENT OF ENERGY
GAS CENTRIFUGE ENRICHMENT PLANT

LAW ENGINEERING TESTING COMPANY
MK 7502

TEST BORING RECORD

RP-819
N 10,100
E 5120
PAGE 1 OF 1

ELEV. FT.MSL	DEPTH IN FEET	STRATA DESCRIPTION	SOIL PARAMETERS: FORMATION	SPT	MOISTURE CONTENT %	LIMITS % LL	LIMITS % PI	% FINES	ROCK PARAMETERS: REC / RQD	WTHR'NG AND JOINTS
649.0	0	TOPSOIL								
648.7		FIRM TAN AND GRAY SILTY CLAY TO CLAYEY SILT (CL-ML)	LAKE DEPOSIT	7						
645.5	5	VERY STIFF GRAY AND TAN MOTTLED SILTY CLAY (CL)		30						
				19						
640.5	10	TAN SILTY CLAYEY SANDY ANGULAR SANDSTONE GRAVEL (GC-GM)	RIVER DEPOSIT	50 5"						
635.9		B.T. @ 13.1', REFUSAL		50 0"						
	15									
	20									
	25									
	30									
	35									
	40									

DATE STARTED 2/5/78
DATE COMPLETED 2/5/78
DRILLED BY SW
LOGGED BY RAC
CHECKED BY EB
APPROVED BY MWM

REMARKS:

DEPARTMENT OF ENERGY
GAS CENTRIFUGE ENRICHMENT PLANT

LAW ENGINEERING TESTING COMPANY
MK 7502

TEST BORING RECORD

RP-820

N 9560
E 5730

PAGE 1 OF 1

ELEV. FT.MSL	DEPTH IN FEET	STRATA DESCRIPTION	FORMATION	SPT	MOISTURE CONTENT %	LIMITS % LL	LIMITS % PI	% FINES	ROCK PARAMETERS REC / RQD	ROCK PARAMETERS WTHR'NG AND JOINTS
662.0	0									
661.7		TOPSOIL								
		VERY STIFF BROWN-TAN SILTY CLAY WITH SUBANGULAR SANDSTONE GRAVEL (CL)	FILL	23						
	5			24						
		HIGHLY ORGANIC @ 7.5'		15						
	10			15						
649.0		B.T. @ 13.0*								
	15									
	20									
	25									
	30									
	35									
	40									

DATE STARTED 2/4/78
DATE COMPLETED 2/4/78
DRILLED BY SW
LOGGED BY RAC
CHECKED BY EB
APPROVED BY MKM

REMARKS: *DRILL HIT CULVERT AT 13' SEE RP-821A

DEPARTMENT OF ENERGY
GAS CENTRIFUGE ENRICHMENT PLANT

LAW ENGINEERING TESTING COMPANY
MK 7502

TEST BORING RECORD

RP-821

N 9540
E 5530

PAGE 1 OF 1

ELEV. FT.MSL	DEPTH IN FEET	STRATA DESCRIPTION	FORMATION	SPT	MOISTURE CONTENT %	LIMITS % LL	LIMITS % PI	% FINES	ROCK PARAMETERS REC / RQD	ROCK PARAMETERS WTHR'NG AND JOINTS
662.0	0	TOPSOIL								
661.7		VERY STIFF TO STIFF TAN-BROWN SILTY CLAY (CL)	FILL	22						
	5			19						
				16						
	10	ORGANIC MATERIAL AND COARSE SUBANGULAR LIMESTONE GRAVEL @ 10 FT		14						
	15			14						
645.0		STIFF BROWN CLAYEY SILT TO SILTY CLAY (CL-ML)	LAKE DEPOSIT							
	20			13						
638.0	25	B.T. @ 24.0', REFUSAL		50/0"						
	30									
	35									
	40									

DATE STARTED 2/5/78
DATE COMPLETED 2/5/78
DRILLED BY SW
LOGGED BY RAC
CHECKED BY EB
APPROVED BY MMM

REMARKS:
DRILLED 11'N OF RP-821

DEPARTMENT OF ENERGY
GAS CENTRIFUGE ENRICHMENT PLANT

LAW ENGINEERING TESTING COMPANY

TEST BORING RECORD

RP-821A
N 9551
E 5530

ELEV. FT.MSL	DEPTH IN FEET	STRATA DESCRIPTION	SOIL PARAMETERS: FORMATION	SPT	MOISTURE CONTENT %	LIMITS % LL	LIMITS % PI	% FINES	ROCK PARAMETERS: REC / RQD	WTHR'NG AND JOINTS
644.0	0									
643.5		TOPSOIL								
		SOFT DARK BROWN AND GRAY CLAYEY SILT WITH FINE GRAVEL AND CONCRETIONS, AND ORGANIC ODOR	FILL	5						
640.5	5	TAN-BROWN SANDY COARSE SANDSTONE GRAVEL WITH GRAY SILTY CLAY (GC)	*	71/8"						
637.8		B.T. @ 6.2', REFUSAL		50/0"						
	10									
	15									
	20									
	25									
	30									
	35									
	40									

DATE STARTED 2/5/78
DATE COMPLETED 2/5/78
DRILLED BY SW
LOGGED BY RAC
CHECKED BY EB
APPROVED BY MRM

REMARKS:
*RIVER DEPOSIT

DEPARTMENT OF ENERGY
GAS CENTRIFUGE ENRICHMENT PLANT

LAW ENGINEERING TESTING COMPANY
MK 7502

TEST BORING RECORD

RP-822

N 9520
E 5325

PAGE 1 OF 1

ELEV. FT.MSL	DEPTH IN FEET	STRATA DESCRIPTION	FORMATION	SPT	MOISTURE CONTENT %	LIMITS % LL	LIMITS % PI	% FINES	ROCK PARAMETERS REC / RQD	ROCK PARAMETERS WTHR'NG AND JOINTS
668.0	0									
667.7		TOPSOIL								
		HARD TAN-BROWN LAMINATED VERY SILTY CLAY (CL)	LAKE DEPOSIT	44						
	5			33						
660.5										
659.0		HARD BROWN THINLY LAMINATED SLIGHTLY SILTY PLASTIC CLAY (CH)		30						
	10	VERY STIFF GRAY-BROWN SILTY CLAY WITH TRACE OF GRAVEL (CL)		26						
652.5	15									
		B.T. @ 15.5'		20						
	20									
	25									
	30									
	35									
	40									

DATE STARTED 2/6/78
DATE COMPLETED 2/6/78
DRILLED BY SW
LOGGED BY RAC
CHECKED BY EB
APPROVED BY

REMARKS:

DEPARTMENT OF ENERGY
GAS CENTRIFUGE ENRICHMENT PLANT

LAW ENGINEERING TESTING COMPANY

TEST BORING RECORD

RP-823

N 8960
E 6430

A.3 RADIOLOGICAL SURVEYS

ROUTINE/SPECIAL PURPOSE RADIOLOGICAL SURVEY

(circle one)

BUILDING: X744S LOCATION: INSIDE FLOOR

PURPOSE OF SURVEY: C VERIFICATION DATE: 10-13-00 TIME: 1330 SURVEY NO: 3255 RWP NO: NA

TECHNICIAN T. OSBORNE / [illegible] BADGE: 703865 TECHNICIAN L. Howard / [illegible] BADGE: 703848

α MODEL: 2221 INST NO.: 105905 CAL DUE DATE: 7-05-01 PROBE NO.: 115380 CAL DUE DATE: 7-03-01 ALPHA CF 11 TOTAL 8.4 REMOVABLE

βγ MODEL: 2221 INST NO.: 79555 CAL DUE DATE: 6-14-01 PROBE NO.: 116065 CAL DUE DATE: 6-14-01 BETA GAMMA CF 20 TOTAL 3.1 REMOVABLE

α MODEL: NA INST NO.: NA CAL DUE DATE: NA PROBE NO.: NA CAL DUE DATE: NA ALPHA CF NA TOTAL NA REMOVABLE

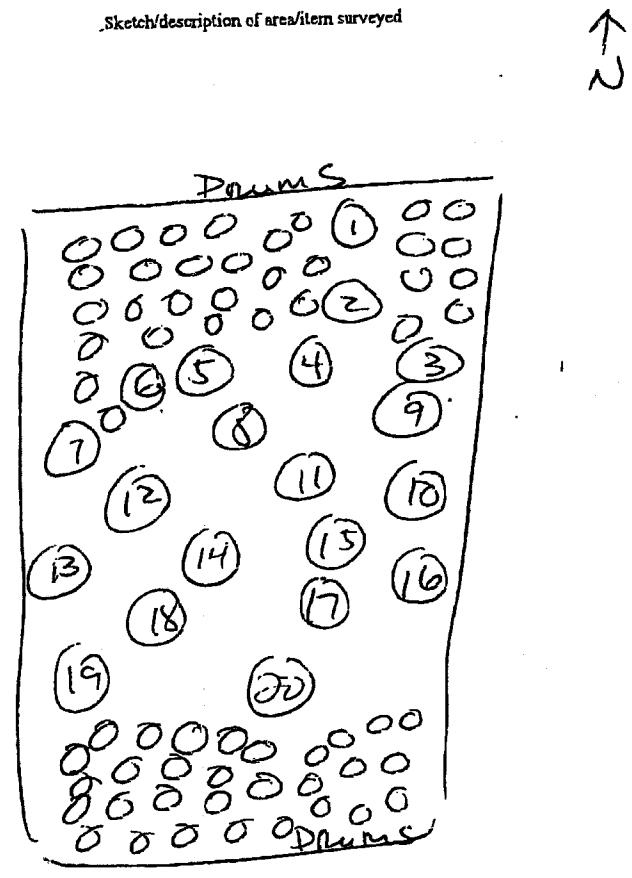
βγ MODEL: INST NO.: CAL DUE DATE: PROBE NO.: CAL DUE DATE: BETA GAMMA CF TOTAL REMOVABLE

α-βγ MODEL: INST NO.: CAL DUE DATE: PROBE NO.: CAL DUE DATE: ALPHA CF NA BETA/GAMMA EFF. FACTOR NA

SCALER /DOSE RATE METER: INST NO.: CAL DUE DATE.: ALPHA EFF: BETA/GAMMA EFF: NA

Bkg/Lc	1.44	1.34	45.550	45.82	Count Time = 12 sec
ITEM NO	Counts/TOTAL α dpm/100 cm²	Counts/REMOVABLE α dpm/100 cm²	Counts/TOTAL β,γ dpm/100 cm²	Counts/REMOVABLE β,γ dpm/100 cm²	SAMPLE LOCATION AND/OR REMARKS
1	0 <Lc	0 <Lc	11 <Lc	6 <Lc	FLOOR
2	0	1	12	4	
3	1	1	12	4	
4	1	1	9	5	
5	0	0	9	4	
6	0	0	8	3	
7	0	0	6	3	
8	1	0	5	2	
9	1	0	6	4	
10	1	1	8	8	
11	0	1	10	8	
12	1	0	7	4	
13	0	0	6	5	
14	0	1	10	3	
15	1	1	12	7	
16	1	0	4	4	
17	1	0	6	7	
18	0	0	11	6	
19	1	0	9	2	
20	1 <Lc	0 <Lc	9 <Lc	4 <Lc	FLOOR

Sketch/description of area/item surveyed



Dose rates are in mrem/hr unless denoted otherwise

HP Supervisor Review: [signature] / 10/18/00
signature / date

Rev.1 (9/22/00)

ROUTINE/SPECIAL PURPOSE RADIOLOGICAL SURVEY

(circle one)

BUILDING: X744 U LOCATION: INSIDE Floor

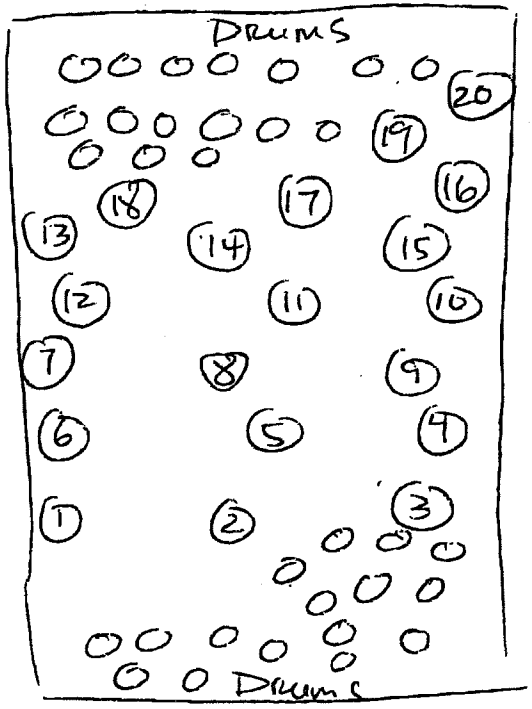
PURPOSE OF SURVEY: C VERIFICATION DATE: 10-13-00 TIME: 1600 SURVEY NO: 3254 RWP NO: NA

TECHNICIAN T. OSBORNE T Osborne BADGE: 703865 TECHNICIAN L. HOWARD L Howard BADGE: 703848

α MODEL: 2221	INST NO.: 105915	CAL DUE DATE: 7-05-01	PROBE NO.: 115380	CAL DUE DATE: 7-05-01	ALPHA CF 11	TOTAL 8.4	REMOVABL
βγ MODEL: 2221	INST NO.: 79555	CAL DUE DATE: 6-14-01	PROBE NO.: 116065	CAL DUE DATE: 6-14-01	BETA GAMMA CF 22	TOTAL 3.1	REMOVABL
α MODEL: NA	INST NO.: NA	CAL DUE DATE: NA	PROBE NO.: NA	CAL DUE DATE: NA	ALPHA CF NA	TOTAL NA	REMOVABL
βγ MODEL: ↓	INST NO.: ↓	CAL DUE DATE: ↓	PROBE NO.: ↓	CAL DUE DATE: ↓	BETA GAMMA CF ↓	TOTAL ↓	REMOVABL
α-βγ MODEL: ↓	INST NO.: ↓	CAL DUE DATE: ↓	PROBE NO.: ↓	CAL DUE DATE: ↓	ALPHA CF NA	BETA/GAMMA EFF. FACTOR NA	
SCALER /DOSE RATE METER: ↓	INST NO.: ↓		CAL DUE DATE.: ↓	ALPHA EFF: ↓	BETA/GAMMA EFF: NA		

Bkg/Lc	1 / 144	1 / 34	45 / 550	45 / 80	Count Time = 12 sec
ITEM NO	Counts/TOTAL α dpm/100 cm²	Counts/REMOVABLE α dpm/100 cm²	Counts/TOTAL β,γ dpm/100 cm²	Counts/REMOVABLE β,γ dpm/100 cm²	SAMPLE LOCATION AND/OR REMARKS
1	1 LLc	1 LLc	11 LLc	4 LLc	FLOOR
2	0	1	12	6	
3	0	1	9	6	
4	1	0	4 LLc	7	
5	1	1	15 1600	8	
6	0	0	12 LLc	3	
7	1	0	10	4	
8	0	0	10	5	
9	1	0	13	4	
10	1	1	14	4	
11	1	1	8	6	
12	0	0	9	3	
13	0	0	10	3	
14	0	0	9	4	
15	1	1	4	2	
16	1	0	6	8	
17	0	1	6	9	
18	1	1	11	3	
19	1	0	8	4	6
20	1 LLc	0 LLc	9 LLc	3 LLc	FLOOR

Sketch/description of area/item surveyed



Dose rates are in mrem/hr unless denoted otherwise

Rev.1 (9/22/00)

HP Supervisor Review: signature / date 10/18/00

Oct 18 00 11:15a Tetra Tech - PORTS (740) 897-2156

Oct 18 00 11:15a Tetra Tech - PORTS (740) 897-2156 p.5

ROUTINE/SPECIAL PURPOSE RADIOLOGICAL SURVEY

BUILDING: X744 SFU LOCATION: Exterior

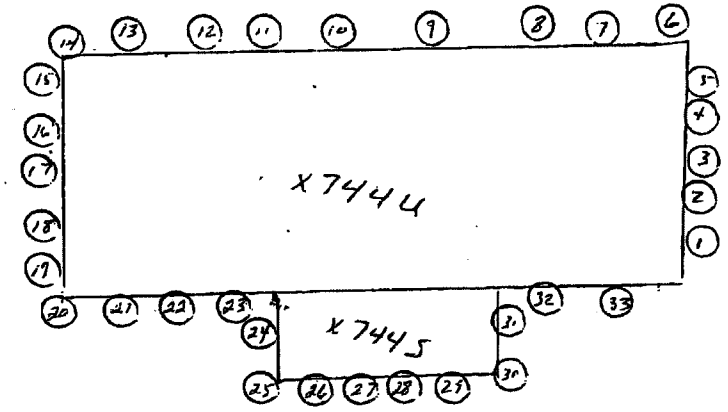
(circle one)
PURPOSE OF SURVEY: Characterization DATE: 10/7/00 TIME: 0900 SURVEY NO: FM-3193 RWP NO: N/A

TECHNICIAN MORRIS / [illegible] BADGE: 722612 TECHNICIAN Paul S. Bowen BADGE: 060571

α MODEL: 2221	INST NO.: 102063	CAL DUE DATE: 2/28/01	PROBE NO.: 142941	CAL DUE DATE: 2/28/01	ALPHA CF 13	TOTAL 10	REMOVAL
βγ MODEL: 2221	INST NO.: 105953	CAL DUE DATE: 4/6/01	PROBE NO.: 118866	CAL DUE DATE: 2/1/01	BETA GAMMA CF 30.1	TOTAL 4.5	REMOVAL
α MODEL:	INST NO.:	CAL DUE DATE:	PROBE NO.:	CAL DUE DATE:	ALPHA CF	TOTAL	REMOVAL
βγ MODEL:	INST NO.:	CAL DUE DATE:	PROBE NO.:	CAL DUE DATE:	BETA GAMMA CF	TOTAL	REMOVAL
α-βγ MODEL:	INST NO.:	CAL DUE DATE:	PROBE NO.:	CAL DUE DATE:	ALPHA CF	BETA/GAMMA EFF. FACTOR	
SCALER /DOSE RATE METER:	INST NO.:			CAL DUE DATE:	ALPHA EFF:	BETA/GAMMA EFF: N/A	

Bkg/Lc	1,463	1,476	40,743	40,715	Count Time = 1 min
ITEM NO	Counts/TOTAL α dpm/100 cm²	Counts/REMOVABLE α dpm/100 cm²	Counts/TOTAL β,γ dpm/100 cm²	Counts/REMOVABLE β,γ dpm/100 cm²	SAMPLE LOCATION AND/OR REMARKS
1-33	0 <Lc	0 <Lc	12 <Lc	10 <Lc	Exterior

Sketch/description of area/item surveyed



Dose rates are in mrem/hr unless denoted otherwise

HP Supervisor Review: [signature] 10/19/00
signature / date

Rev.1 (9/22/00)

(740) 897-2156 Tetra Tech - PORTS Oct 18 00 11:17a

ROUTINE/SPECIAL PURPOSE RADIOLOGICAL SURVEY

BUILDING: X744T LOCATION: NA

(circle one)

PURPOSE OF SURVEY: CHARACTERIZE DATE: 10/6/00 TIME: 0900 SURVEY NO: FM-3192 RWP NO: NA

TECHNICIAN: D PALMER / [illegible] BADGE: 36347 TECHNICIAN: N/A BADGE: NA

α MODEL: 2221	INST NO.: 73692	CAL DUE DATE: 2/26/01	PROBE NO.: 115436	CAL DUE DATE: 3/4/01	ALPHA CF: 11	TOTAL 8.5	REMOVA
βγ MODEL: 2221	INST NO.: 94919	CAL DUE DATE: 4/5/01	PROBE NO.: 141319	CAL DUE DATE: 2/11/01	BETA CF: 31	TOTAL 4.6	REMOVA
α MODEL:	INST NO.:	CAL DUE DATE:	PROBE NO.:	CAL DUE DATE:	ALPHA CF:	TOTAL	REMOVA
βγ MODEL: N/A	INST NO.:	CAL DUE DATE:	PROBE NO.: N/A	CAL DUE DATE: N/A	BETA CF: N/A	TOTAL N/A	REMOVA
α-βγ MODEL:	INST NO.: N/A	CAL DUE DATE: N/A	PROBE NO.:	CAL DUE DATE:	ALPHA CF:	BETA/GAMMA EFF. FACTOR 1	
SCALER/DOSE RATE METER:	INST NO.:	CAL DUE DATE:			ALPHA EFF:	BETA/GAMMA EFF: N/A	

Bkg/Lc	0 / 45	0 / 34	39 / 100	39 / 117	
ITEM NO	Counts TOTAL α dpm/100 cm²	Counts REMOVABLE α dpm/wipe	Counts TOTAL β,γ dpm/100 cm²	Counts REMOVABLE β,γ dpm/wipe	SAMPLE LOCATION AND/OR REMARKS
1-23	11 / <Lc (10/17/00)	10 / <Lc (10/17/00)	11 / <Lc	10 / <Lc	BUILDING
	/	/	/	/	
	/	/	/	/	
	/	/	/	/	
	/	/	/	/	
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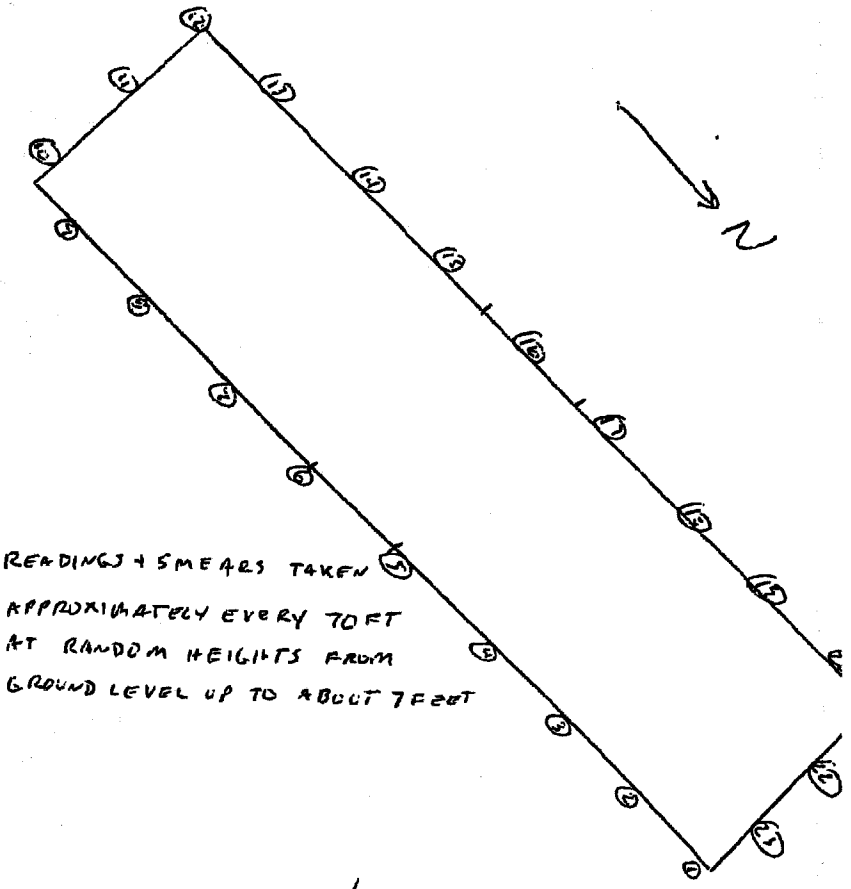
Sketch of area/item surveyed



Dose rates are in µrem/hr unless denoted otherwise

HP Supervisor Review: [signature] / 10/9/00 (signature / date)

Rev 1 (9/22/00)

Oct 18 00 11:18a Tetra Tech - PORTS (740) 897-2156 p.7

ROUTINE/SPECIAL PURPOSE RADIOLOGICAL SURVEY

BUILDING: X 1441 LOCATION: Interior

PURPOSE OF SURVEY: (circle one) Characterization DATE: 10-12-00 TIME: 1830 SURVEY NO: FM 3267 RWP NO: N/A

TECHNICIAN Paul S. Bowen / Carla B. BADGE: 060571 TECHNICIAN N/A / N/A BADGE: N/A

α MODEL: 2221 INST NO.: 103952 CAL DUE DATE: 4/6/01 PROBE NO.: 156277 CAL DUE DATE: 1/8/01 ALPHA CF 16.8 TOTAL 8.98 REMOV

βγ MODEL: 2221 INST NO.: 105940 CAL DUE DATE: 12/1/00 PROBE NO.: 049150 CAL DUE DATE: 2/18/01 BETA GAMMA CF 32 TOTAL 4.81 REMOV

α MODEL: N/A INST NO.: N/A CAL DUE DATE: N/A PROBE NO.: N/A CAL DUE DATE: N/A ALPHA CF N/A TOTAL N/A REMOV

βγ MODEL: N/A INST NO.: N/A CAL DUE DATE: N/A PROBE NO.: N/A CAL DUE DATE: N/A BETA GAMMA CF N/A TOTAL N/A REMOV

α-βγ MODEL: N/A INST NO.: N/A CAL DUE DATE: N/A PROBE NO.: N/A CAL DUE DATE: N/A ALPHA CF N/A BETA/GAMMA EFF. FACTOR: N/A

SCALER /DOSE RATE METER: N/A INST NO.: N/A CAL DUE DATE.: N/A ALPHA EFF: N/A BETA/GAMMA EFF: N/A

Bkgd:	3.2 / 79	3.2 / 60	45 / 846	45 / 1130	Count Time = 1 min
ITEM NO	Counts/TOTAL α dpm/100 cm²	Counts/REMOVABLE α dpm/100 cm²	Counts/TOTAL β,γ dpm/100 cm²	Counts/REMOVABLE β,γ dpm/100 cm²	SAMPLE LOCATION AND/OR REMARKS
1-96	2 <LL	2 <LL	12 <LL	14 <LL	Floor
	/	/	/	/	
	/	/	/	/	
	/	/	/	/	
	/	/	/	/	
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Sketch/description of area/item surveyed

N

(1) thru (96) on the floor

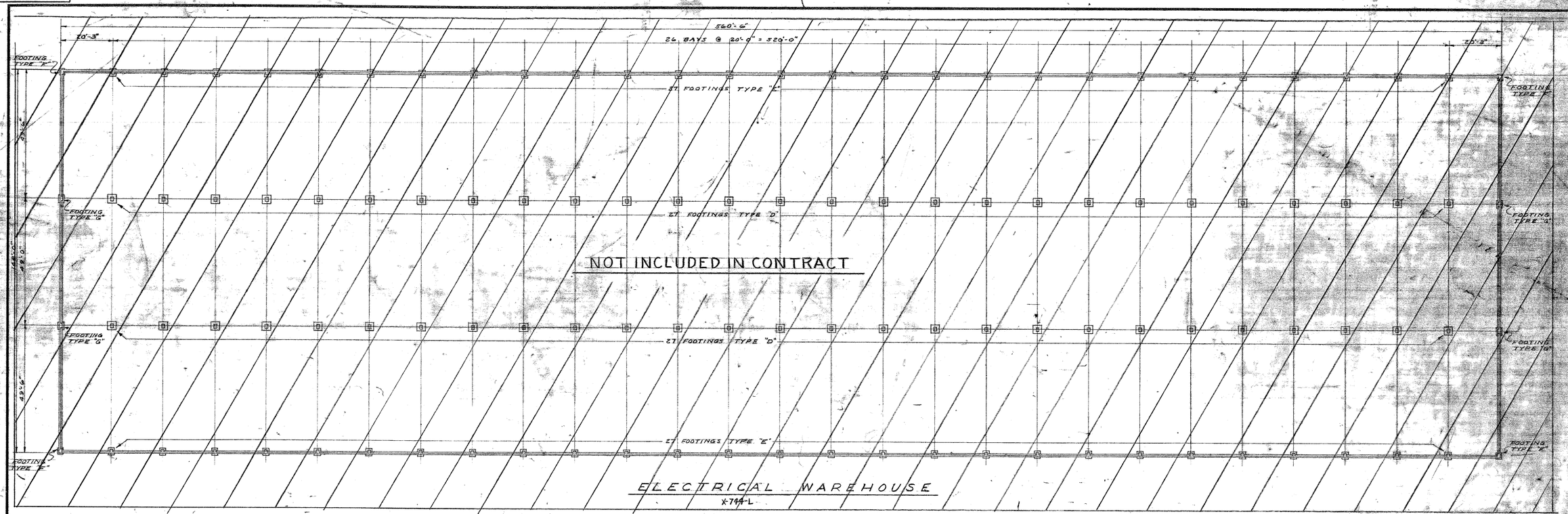
Dose rates are in µrem/hr unless denoted otherwise

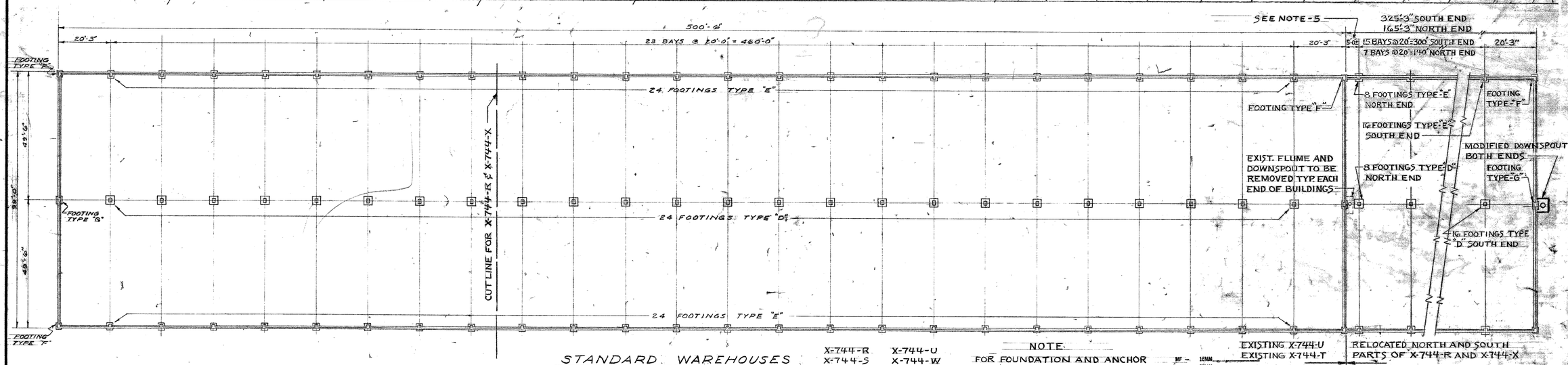
HP Supervisor Review: D Stowe 10/18/00
signature / date

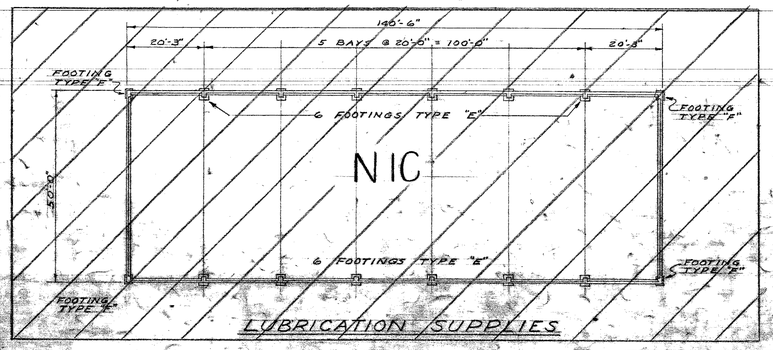
Rev.1 (9/22/00)

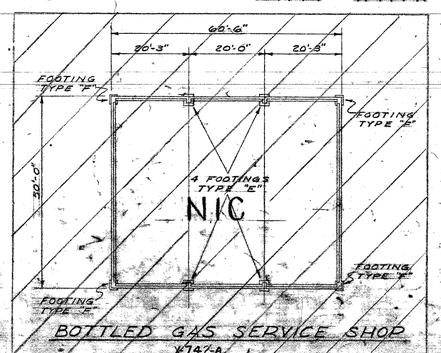
X-744-2001-C
SITE MAP
UNITED STATES
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
PORTSMOUTH AREA OFFICE
PIKETON, OHIO 45661
PROJECT ADDED ENRICHMENT PROGRAM
SUBPROJECT WAREHOUSE RELOCATION
TITLE SITE MAP
APPROVALS
J. MULHERN DRAWN 7/19/77
D.C. WRIGHT CHECKED 7/20/77
L.H. STRUNK CHIEF 7/27/77
A-E
ERDA ENGRG 7/27/77
SCALE AS SHOWN 1"=300'
PLANT PORTSMOUTH OHIO
BLDG X-744
DWG NO X-744-2001C
CLASS U
REV 2
2 CHANGED WHSE. X-752 RELOCATION SITE
1 CHANGED WAREHOUSE X-744-W RELOCATION SITE
REV DESCRIPTION
REVISION OR ISSUE PURPOSE
APPROVED-INITIALS & DATE
A-E ERDA
LEGEND
FENCE
UNDERGROUND LINE
OVERHEAD LINES
CENTER LINE
BOUNDARY, PLANT
CORRIDOR
FORMER FACILITY No. (X-000)
NOTES
1 ALL ROADS 20'-WIDE, AND ALL DRIVEWAYS 14'-WIDE EXCEPT AS NOTED.
2 ALL STORM SEWERS AND CULVERTS 54" DIA. OR GREATER, ARE SHOWN.
3 COORDINATES SHOWN FOR SECONDARY BUILDING FACES LONGER THAN 20'.
4 TRACK CENTERS 13'-UNLESS OTHERWISE NOTED.
5 13.8 KV LINES ARE 16.5' FROM CENTER LINE OF 20' ROADS, AND 75' FROM CENTER LINE OF 36' AND 40' ROADS, EXCEPT AS NOTED.
BUILDING
BUILDING (ROOF ONLY)
STRUCTURE (NOT A BUILDING)
STRUCTURE (SLAB ONLY)
RESERVOIR
AREA, UNFENCED
LEGEND (WAREHOUSES)
X-7--- NEW LOCATION
X-7--- EXISTING LOCATION
INSERT "A" X-605 and X-605-A
INSERT "B" X-608
INSERT "C" X-608-A
INSERT "D" X-608-B
NORTH LAGOON
MIDDLE LAGOON
SOUTH LAGOON
FIRING RANGE
OBSERVATION PLATFORM
PERIMETER ROAD
NORTH ACCESS ROAD
SOUTH ACCESS ROAD
EAST ACCESS ROAD
ENTRANCE ROAD
PRINCIPAL ACCESS ROAD
NORTH HOLDING POND X-230-L
X-230-K HOLDING POND
DON MARQUIS SUB STATION
X-333
X-330
X-326
X-744-K
X-744-W
X-752
X-744-S
X-744-X
X-744-Y
X-744-R
X-744-V
X-744-L
X-744-Z
X-744-N
X-744-P
X-745-A
X-745-C
X-530-A
X-700
X-705
X-720
SEQUENCE NO. 26574
UNCLASSIFIED/NOT UCNI
Anthony Sarageno ADC 4052
Review Date: 2/24/2000
21023

X-744-2003C









ALL PLANS SCALE - 1/16"=1'-0"

X-744-A

NOTES

1. CONTRACTOR TO ADJUST AS NECESSARY FOR SIDE AND ROOF PANELS OF BLDG. TO INTERFACE. CONTRACTOR SHALL REMOVE END PANELS; CUT PURLIN AND GIRT MEMBERS AS REQ'D AND CONTINOUS BUTT WELD WHEN CONNECTING BLDG. END TO END.
2. ALL CONCRETE FOUNDATION WALLS SHALL BE A MINIMUM 8" THICK.
3. ALL EXPOSED CONCRETE CORNERS TO HAVE 3/4" CHAMFER.
4. ALL FLOOR SLABS TO BE REINFORCED WITH 6"X6"-6/6 W.W. MESH.
5. REMOVE END PANELS TO FACILITATE CONNECTING BUILDINGS. (DO NOT REPLACE)

DESIGN DATA

SOIL PRESSURE	2500 PSF
CONCRETE	2500 PSI
REINF. STEEL	20000 PSI

UNCLASSIFIED/NOT UCNI
Anthony Saraceno ADC 4052
Review Date: 2/24/2000

SEQUENCE NO. 25576

REV	DESCRIPTION REVISION OR ISSUE PURPOSE	A-E	ERDA
	INFORMATION ONLY		

APPROVALS	DATE
J. MULHERN DRAWN	7/20/77
D.C. WRIGHT CHECKED	7/22/77
L.H. STRUNK CHIEF	7/21/77
A-E	
ERDA ENGR.	7/21/77

UNITED STATES
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
PORTSMOUTH AREA OFFICE
PIKETON, OHIO 45661

PROJECT ADDED ENRICHMENT PROGRAM
SUBPROJECT WAREHOUSE RELOCATION
TITLE FOOTING AND FLOOR PLAN

SCALE	DWG NO	PLANT	BLDG	SHT	OF	CLASS
AS SHOWN	X-744-2003C	PORTSMOUTH OHIO	X-744	SHT		U
						REV 0

21018

X-744-2004C

600'-0"

23 BAYS @ 20'-0" = 460'-0"

20'-3"

FOOTING TYPE 'A'

24 FOOTINGS TYPE 'B'

FOOTING TYPE 'B'

NIC

24 FOOTINGS TYPE 'D'

FOOTING TYPE 'C'

24 FOOTINGS TYPE 'E'

FOOTING TYPE 'F'

FOUNDATION PLAN - BUILDING "A"

SCALE 1/16" = 1'-0" X-744X

1253'-6"

6 BAYS @ 20'-0" = 120'-0"

20'-3"

10'-3"

FOOTING TYPE 'A'

FOOTINGS TYPE 'B'

FOOTING TYPE 'B'

N.I.C.

7 FOOTINGS TYPE 'D'

FOOTING TYPE 'C'

7 FOOTINGS TYPE 'E'

FOOTING TYPE 'F'

4 ORG. GALV. IRON PIPE SLEEVE (SEE TYP. WALL SEC. BELOW)

FOUNDATION PLAN - BUILDING "B"

SCALE 1/16" = 1'-0" X-744X

240'-6"

10 BAYS @ 20'-0" = 200'-0"

20'-3"

FOOTING TYPE 'A'

11 FOOTINGS TYPE 'B'

FOOTING TYPE 'B'

NIC

11 FOOTINGS TYPE 'D'

FOOTING TYPE 'E'

FOUNDATION PLAN

SCALE 1/16" = 1'-0"

FIN. FL. EL.

6"

4-#6 VERT

#3 TIES @ 12" C/C

1½" CL.

2'-0" TYP. ALL EXT COL. FTGS

3" CL.

12"

36"

2-#4 EA. WAY

ELEVATION

FOR PLAN SEE BELOW

TYPE "G" FOOTING

SCALE 3/4" = 1'-0"

2-¾"x12" MACH BOLTS 1½" PROJECTION

FTG TYPE "F"

4-¾"x12" MACH BOLTS 1½" PROJECTION

FTG TYPE "G"

ANCHOR BOLT SETTING-PLANS

SEE DWG. X-744-2007C FOR ADDITIONAL ANCHOR BOLT PLANS

DESIGN DATA

SOIL PRESSURE	2500 psf
CONCRETE	3500 PSI
REINF. STEEL	20000 psi

NOTE

ALL EXPOSED CONC. CORNERS TO HAVE ¾" CHAMFER.

ALL FL. SLABS TO BE REINFORCED WITH 6"x6"-6 W.W. MESH.

16MM

35MM

105MM

SEQUENCE NO. 21577

INFORMATION ONLY

UNCLASSIFIED/NOT UCNI

Anthony Saraceno ADC 4052

Review Date: 2/24/2000

21017

1'-6" 1'-6" 3'-0" 1'-6" 1'-6"

9'-0" 1'-6" 10'-0" 1'-6" 12'-0"

1½" 1½"

13" 6" 6" 13"

12"

3'-0"

PLAN

TYPE "F" FOOTING

SCALE 3/8" = 1'-0"

2'-4" 8" 12" 8"

COL. REINF. 4-#7 VERT. #3 TIES @ 12" c/c

FTG. REINF. 2-#4 EA. WAY

8" 8" 8" 8"

1½" 1½" 1½" 1½"

PLAN

TYPE "F" FOOTING

SCALE 3/8" = 1'-0"

COL. REINF. 4-#6 VERT. #3 TIES @ 12" c/c

FTG. REINF. 2-#4 EA. WAY

1'-0" 1'-6"

TYP. WALL FTG.

SCALE 3/4" = 1'-0"

GRADE EXT.

FIN. FL.

12"

1'-6"

4-#5 BARS CONT. LAP 30 DIA. AT SPLICES

12" CL.

8" MIN.

℄ OF 6" GALV. IRON PIPE SLEEVE

12" 6" 6" 12"

8" 8" 8"

1½" 1½"

PLAN

TYPE "G" FOOTING

4-¾"x12" MACH. BOLTS 1½" PROJECTION.

℄ OF COL

FTG TYPE "D"

℄ OF COL.

2-¾"x12" MACH BOLTS 1½" PROJECTION

BLDG. LINE

FTG. TYPE "E"

ANCHOR BOLT SETTING-PLANS

SEE DWG X-744-2007C FOR ADDITIONAL ANCHOR BOLT PLANS

1-#7 BARS VERT. #3 TIES @ 12" c/c

3" CL.

1½" CL.

2-#4 BARS EA. WAY

ELEVATION

TYPE "D" FOOTING

SCALE 1/4" = 1'-0"

NOTE: 12" WIDE SECTION OF FLOOR AT EACH COL. TO BE POURED BEFORE STEEL ERECTION TO PROVIDE NECESSARY TIE.

2-#8 x 4'-0" DOWELS

5'-4"

2-#8 x 6'-0 DOWELS

¼" PREMOLDED MASTIC JOINT FILLER ABOVE INT. COLUMN

5'-4"

½" PREMOLDED MASTIC JOINT FILLER AROUND BUILDING

2-#8 x 4'-0" DOWELS

1½" CL.

2-#8 BARS IN CENTER OF SLAB AT EA. COL.

2-#8 BARS IN CENTER OF SLAB AT EA. COL.

VAPOR BARRIER TYP. FOR ALL FLOOR SLABS

TYP. DETAIL OF TIE AT EACH RIGID FRAME

SCALE 1/2" = 1'-0"

REV	DESCRIPTION	A-E	ERDA
	REVISION OR ISSUE PURPOSE	APPROVED-INITIALS & DATE	

APPROVALS	DATE
J. MULHERN DRAWN	7/27/77
D.C. WRIGHT CHECKED	7/27/77
L.W. STRUNK CHIEF	7/27/77
A-E	
ERDA ENGRG.	7/27/77

UNITED STATES
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
PORTSMOUTH AREA OFFICE
PIKETON, OHIO 45661

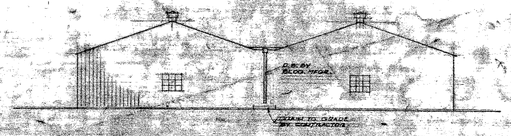
PROJECT ADDED ENRICHMENT PROGRAM

SUBPROJECT WARE HOUSE RELOC

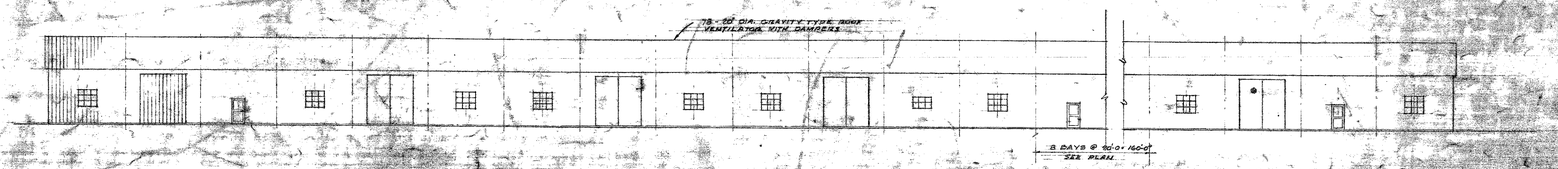
TITLE FOUNDATION DETAILS

PLANT	BLDG	SHT	OF	CLASS
PORTSMOUTH OHIO	X-744			U
SCALE AS SHOWN	DWG NO X-744-2004C	SHT		REV 0

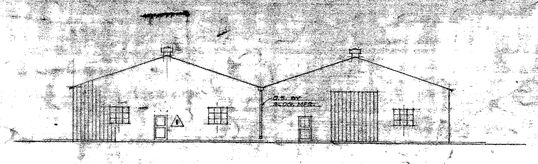
X-744-2005 C



END ELEVATION ~ BLDG. "A"
SCALE 1/16" = 1'-0"

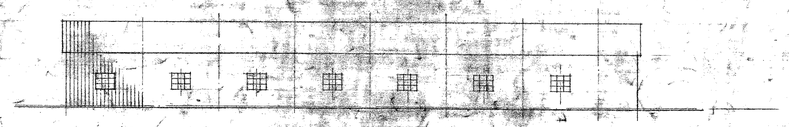


SIDE ELEVATION ~ BUILDING "A"
EXPENDABLE MATERIALS WAREHOUSE
SCALE 1/16" = 1'-0"
X-744-X
OPP. SIDE SIMILAR SEE PLANS

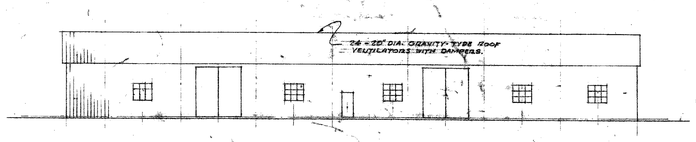


END ELEVATION ~ BLDG. "B"
OPPOSITE END ~ SAME REVERSED
SCALE 1/16" = 1'-0"

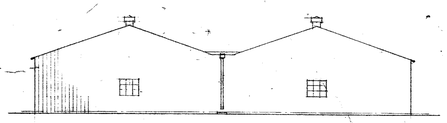
EQUIPMENT & PARTS WAREHOUSE
X-744-V



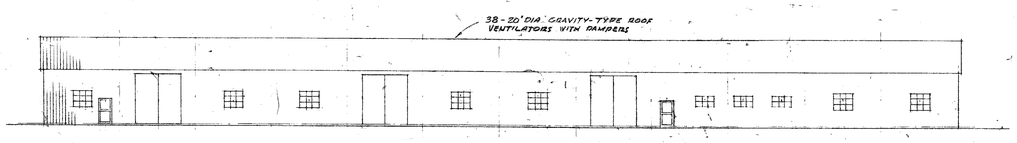
EAST ELEVATION ~ BUILDING "B"
SCALE 1/16" = 1'-0"



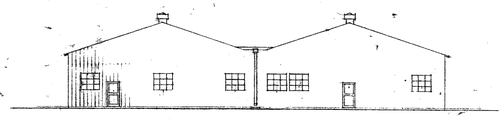
WEST ELEVATION ~ BUILDING "B"
SCALE 1/16" = 1'-0"



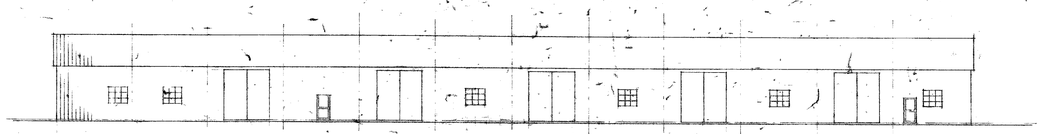
END ELEVATION
SCALE 1/16" = 1'-0"



SIDE ELEVATION ~ BUILDING "C"
SCALE 1/16" = 1'-0"



OPP. END ELEVATION
SCALE 1/16" = 1'-0"



OPP. SIDE ELEVATION ~ BUILDING "C"
SCALE 1/16" = 1'-0"

CENTRAL RECEIVING WAREHOUSE
X-746-A

FOR INFORMATION ONLY

ELEVATIONS SIMILAR TO RELOCATED WAREHOUSES

VALLEY, GUTTER, AND DOWNSPOUTS ALL SIMILAR TO BUILDING "B" - END ELEVATION.

MF - 16MM
35MM
105MM

SEQUENCE NO. 26528

INFORMATION ONLY

UNCLASSIFIED/NOT UCNI
Anthony Saraceno ADC 4052
Review Date: 2/24/2000

REV	DESCRIPTION	A-E	ERDA
	REVISION OR ISSUE PURPOSE	APPROVED-INITIALS & DATE	

APPROVALS	DATE
J. MULHERN DRAWN	7/22/77
D.C. WRIGHT CHECKED	7/27/77
L.H STRUNK CHIEF	7/27/77
A-E	
ERDA ENGR.	7/27/77

UNITED STATES
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
PORTSMOUTH AREA OFFICE
PIKETON, OHIO 45661

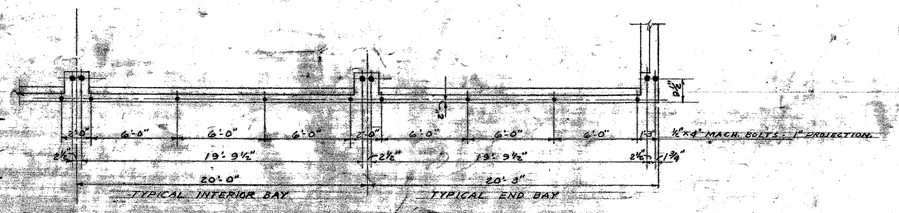
PROJECT ADDED ENRICHMENT PROGRAM
SUBPROJECT WAREHOUSE RELOCATION
TITLE ELEVATIONS

SCALE	DWG NO.	SHT	REV
AS SHOWN	X-744-2005C		0

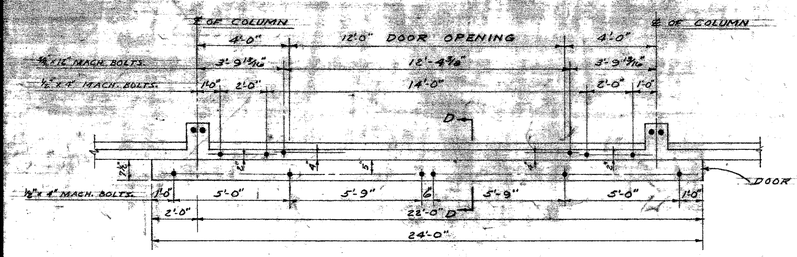
PLANT PORTSMOUTH OHIO | BLDG X-744 | SHT | OF | CLASS U

2013

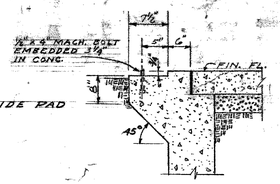
X-744-2007C



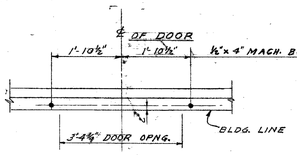
SIDE WALL ANCHOR BOLT LOCATION PLAN
NO SCALE



ANCHOR BOLT PLAN FOR DOUBLE SLIDE DOOR IN INTERIOR BAY
NO SCALE

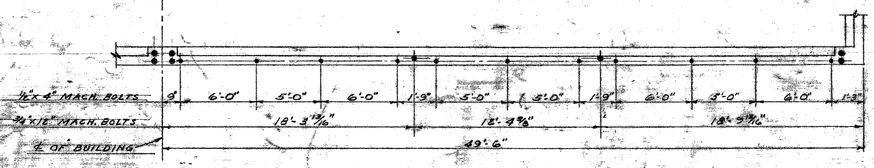


SECTION D-D
NO SCALE

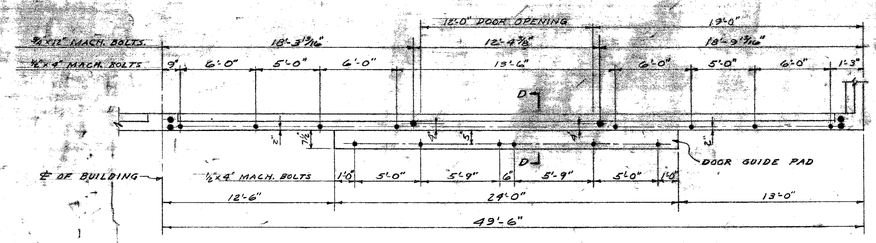


ANCHOR BOLT LOCATION AT HINGE DOORS.
NO SCALE

NOTE:
ANY STANDARD SPACED ANCHOR BOLTS FALLING WITHIN DOOR OPENING, TO BE OMITTED.
SEE ARCHITECTURAL PLANS (SHEET 1A) FOR LOCATION OF DOORS



END WALL ANCHOR BOLT LOCATION PLAN
NO SCALE



ANCHOR BOLT PLAN FOR DOUBLE SLIDE DOOR IN END WALL
NO SCALE

FOR INFORMATION ONLY

SEQUENCE NO

MF – 16MM
35MM
105MM
SEQUENCE NO 26580

INFORMATION ONLY

UNCLASSIFIED/NOT UCNI
Anthony Saraceno ADC 4052
Review Date: 2/24/2000

REV	DESCRIPTION REVISION OR ISSUE PURPOSE	A-E	ERDA APPROVED-INITIALS & DATE

APPROVALS	DATE
J.E. BROWN DRAWN	7/22/77
D.C. WRIGHT CHECKED	7/27/77
L.H. STRUNK CHIEF	7/27/77
A-E	
ERDA ENGRG.	7/21/77

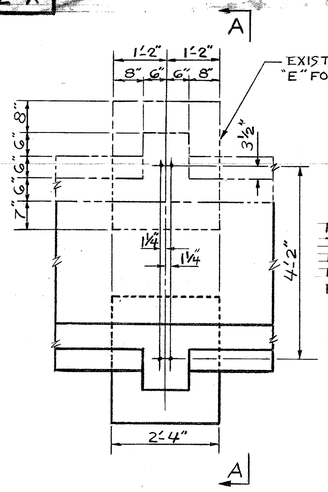
UNITED STATES
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
PORTSMOUTH AREA OFFICE
PIKETON, OHIO 45661

PROJECT ADDED ENRICHMENT PROGRAM
SUBPROJECT WAREHOUSE RELOCATION
TITLE FOUNDATION AND BOLT SPACING DETAILS

PLANT	BLDG		SHT	OF	CLASS
PORTSMOUTH OHIO	X-744				U
SCALE AS SHOWN	DWG NO X-744-2007C		SHT		REV O

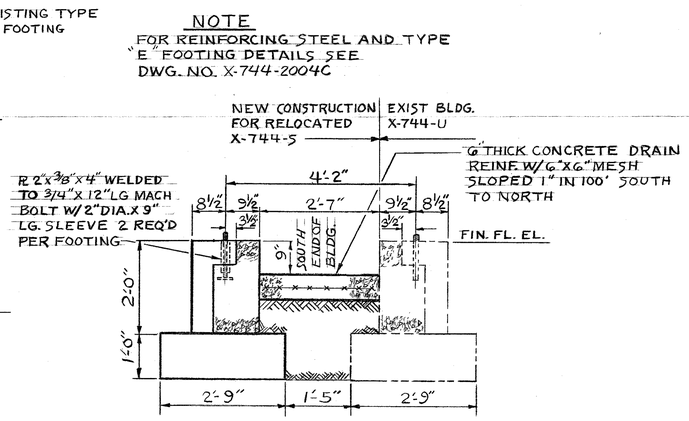
21011

X-744-2008C



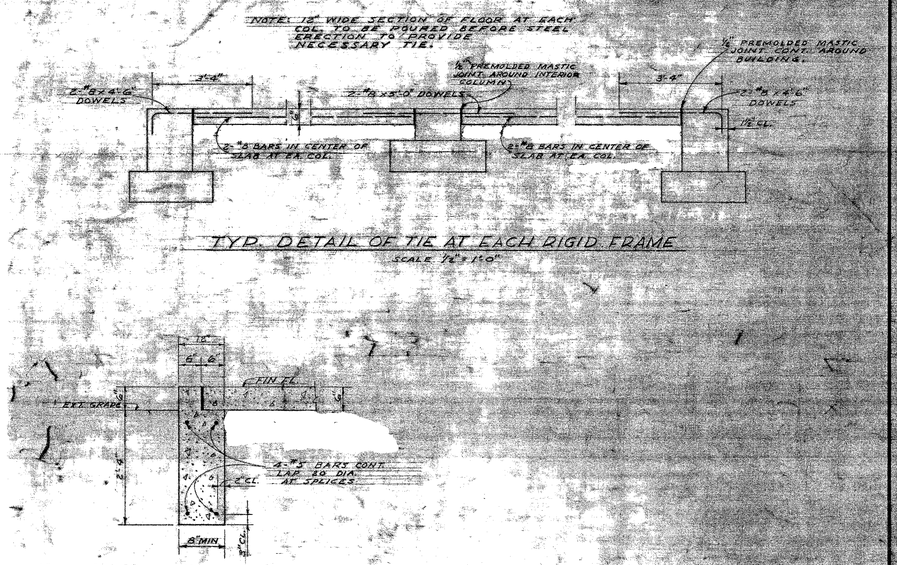
PLAN

NOTE
FOR REINFORCING STEEL AND TYPE "E" FOOTING DETAILS SEE DWG. NO. X-744-2004C



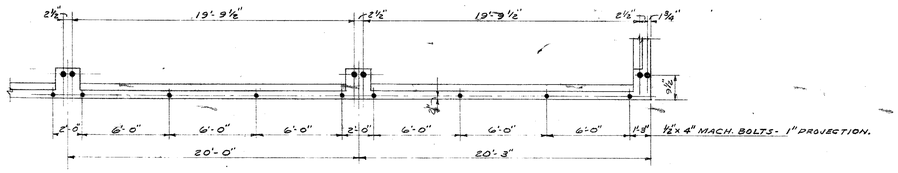
SECTION A-A

RELOCATED WAREHOUSE X-744-S
FOOTING & DRAIN - DETAIL
NO SCALE



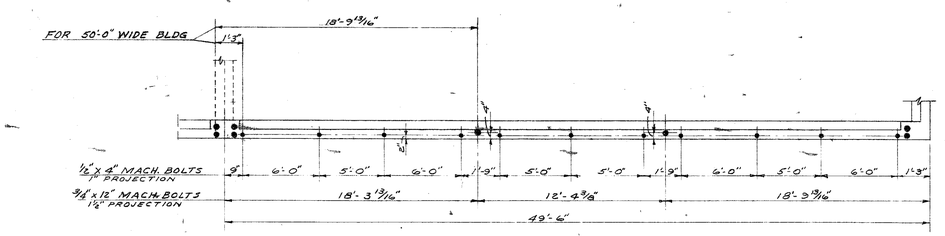
TYP. DETAIL OF TIE AT EACH RIGID FRAME
SCALE ¾"=1'-0"

TYP. WALL FTG.

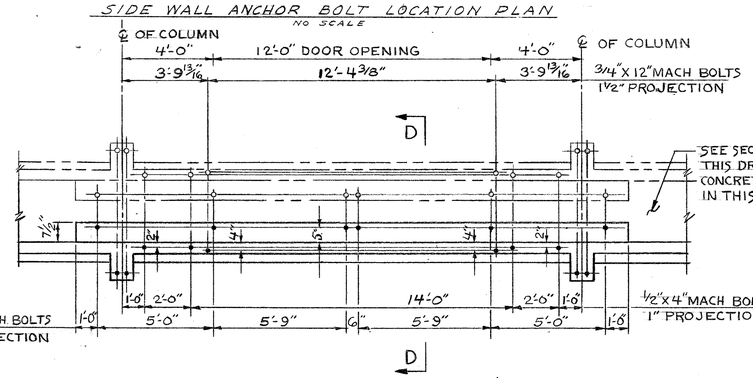


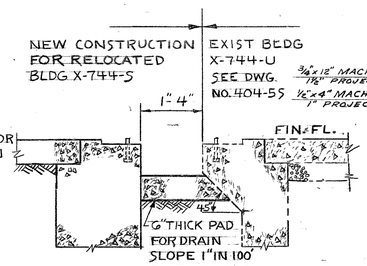
TYPICAL INTERIOR BAY TYPICAL END BAY

SIDE WALL ANCHOR BOLT LOCATION PLAN
NO SCALE

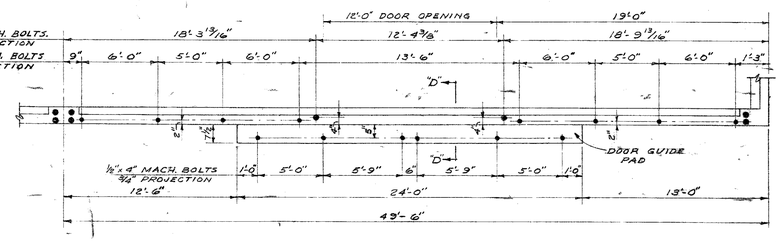


END WALL ANCHOR BOLT LOCATION PLAN
NO SCALE





SECTION D-D
NO SCALE

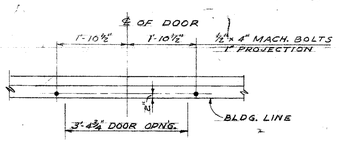


ANCHOR BOLT PLAN FOR DOUBLE SLIDE DOOR IN END WALL
NO SCALE

DESIGN DATA

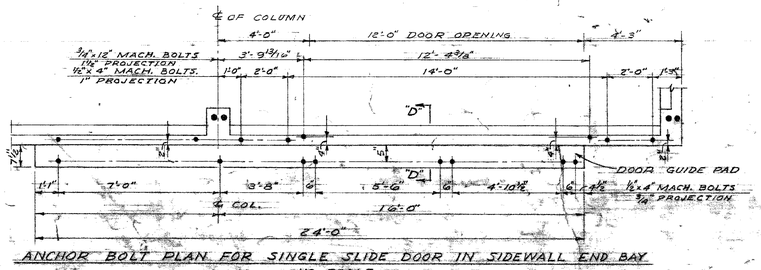
SOIL PRESSURE	2500 PSF
CONCRETE	2500 PSI
REINF. STEEL	20000 PSI

DOUBLE SLIDE DOOR IN INTERIOR BAY & DRAIN DETAIL
NO SCALE



ANCHOR BOLT LOCATION AT HINGE DOORS
NO SCALE

NOTES:
OMIT DOOR GUIDE PAD FOR 12'-0" WIDE OVERHEAD DOOR.
ANY STANDARD SPACED ANCHOR BOLTS FALLING WITHIN DOOR OPENING TO BE OMITTED.
SEE BUTLER SHOP DWGS. FOR LOCATION OF DOORS.



ANCHOR BOLT PLAN FOR SINGLE SLIDE DOOR IN SIDEWALL END BAY
NO SCALE

DF - 16MM
35MM
16MM
SEQUENCE NO. 26581
UNCLASSIFIED/NOT UCNI
Anthony Saraceno ADC 4052
Review Date: 2/24/2000

REV	DESCRIPTION REVISION OR ISSUE PURPOSE	A-E	ERDA APPROVED-INITIALS & DATE

INFORMATION ONLY

APPROVALS	DATE
J. MULHERN DRAWN	7-1877
D.C. WRIGHT CHECKED	7/27/77
L.H. STRUNK CHIEF	7/27/77
A-E	
ERDA ENGRG.	7/27/77

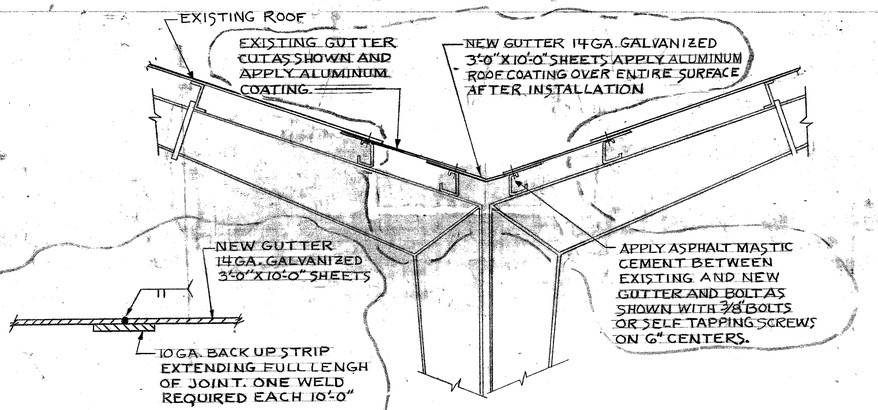
UNITED STATES
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
PORTSMOUTH AREA OFFICE
PIKETON, OHIO 45661

PROJECT ADDED ENRICHMENT PROGRAM
SUBPROJECT WAREHOUSE RELOCATION
TITLE FOOTING AND DRAIN DETAILS

PLANT	BLDG	SHT	OF	CLASS
PORTSMOUTH OHIO	X-744			U
SCALE	DWG NO	SHT		REV
AS SHOWN	X-744-2008C			0

21009

X-744

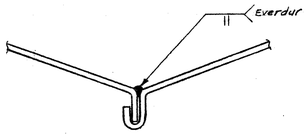


TYP. TRANSVERSE JOINT CONSTRUCTION
NO SCALE

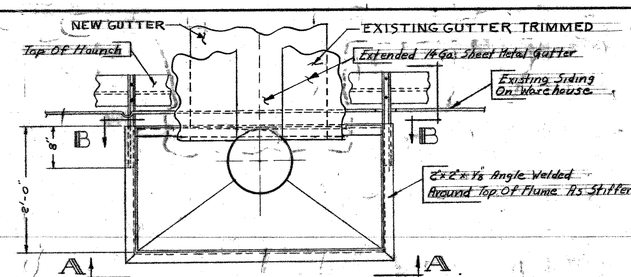
MODIFIED ROOF GUTTER

WAREHOUSES X-744-K, R, S, T, U, W & X
NO SCALE

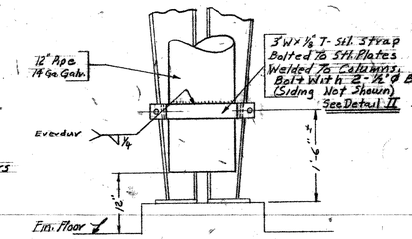
SEE DWG DX-744-8A FOR DIMENSIONS



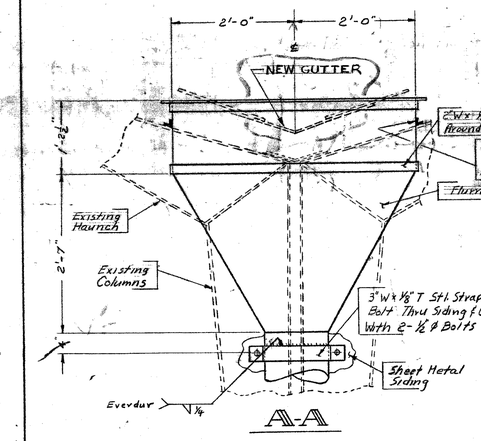
Detail - I



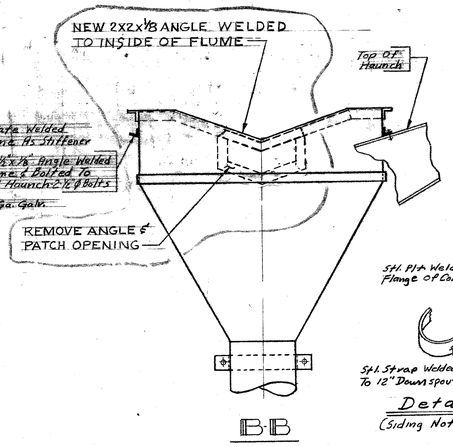
Top View Of Flume And Down Spout



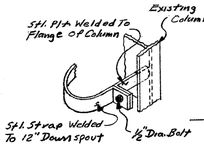
Continuation Of Down Spout



A-A

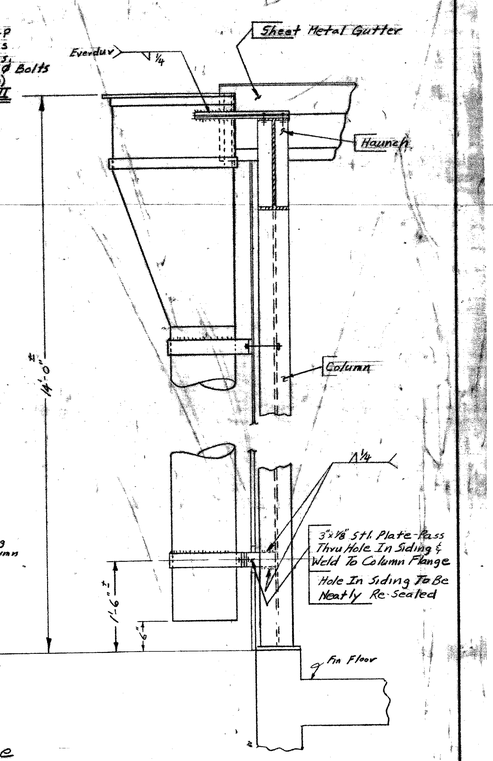


B-B

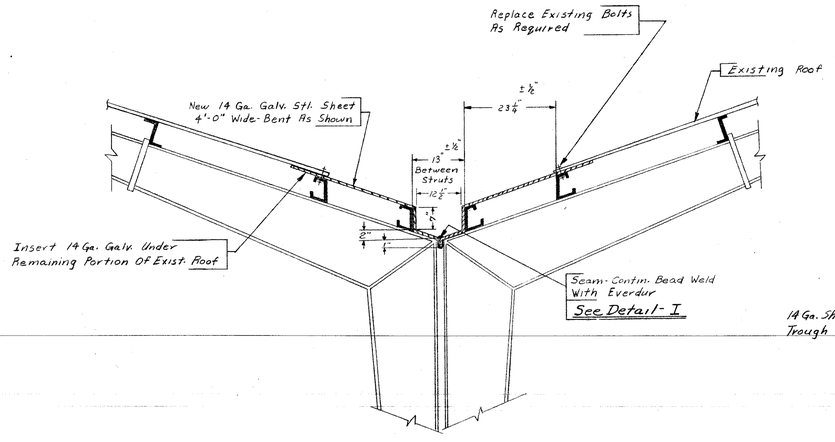


Detail - II
(Siding Not Shown)

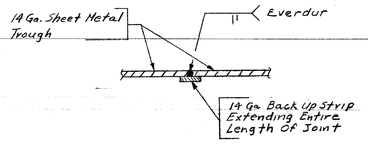
One (1) Required At Each End Of Each Warehouse
MODIFIED EXISTING FLUME & DOWNSPOUT FOR X-744-K, R, S, W & X
TOTAL OF 10 REQ'D



Side Elevation

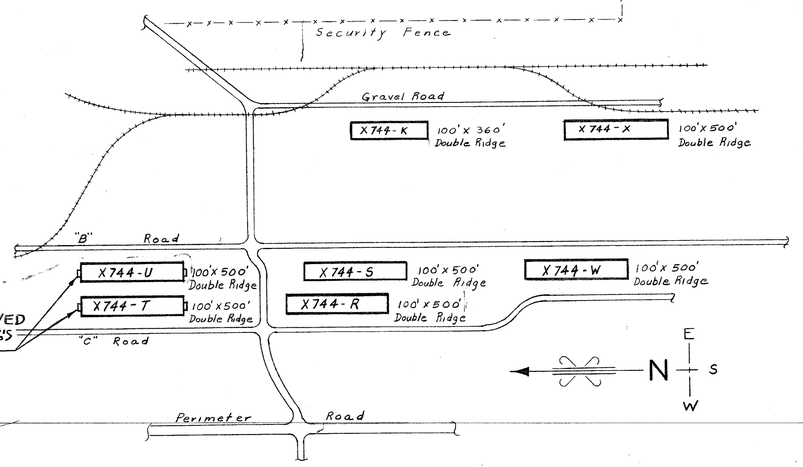


ROOF GUTTER AS BUILT



Typical Longitudinal Joint Construction

NOTE
EXISTING FLUMES AND DOWNSPOUTS TO BE REMOVED FROM BOTH ENDS OF BLDG'S X-744-U & X-744-T



Plot Plan
Warehouse Work Area

NOTES
1. CLOUDED AREAS ARE NEW OR MODIFIED CONSTRUCTION.
2. COAT WELDED AND PATCHED AREAS OF FLUMES INSIDE AND OUTSIDE WITH ALUMINUM ROOF COATING PER MIL. SPECIFICATIONS MIL-A-19903.

INFORMATION ONLY

SEQUENCE NO. 26582

UNCLASSIFIED/NOT UCNI
Anthony Saraceno ADC 4052
Review Date: 2/24/2000

REV	DESCRIPTION	A-E	ERDA
	REVISION OR ISSUE PURPOSE	APPROVED-INITIALS & DATE	

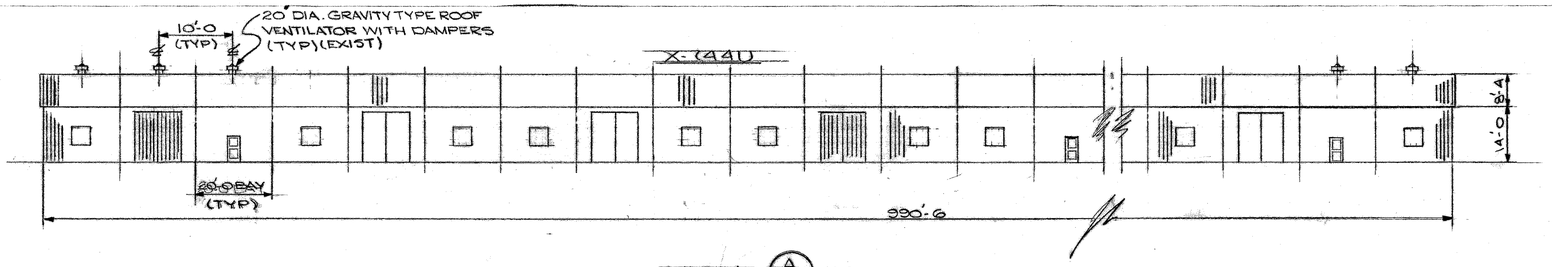
APPROVALS	DATE
J. MULHERN DRAWN	7-1977
D.C. WRIGHT CHECKED	7/27/77
L.H. STRUNK CHIEF	7/27/77
A-E	
ERDA ENGR.	7/27/77

UNITED STATES
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
PORTSMOUTH AREA OFFICE
PIKETON, OHIO 45661

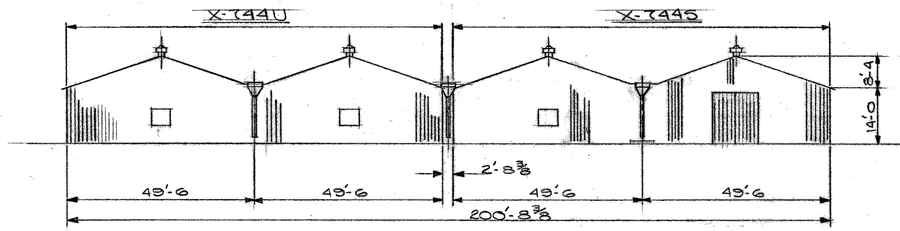
PROJECT ADDED ENRICHMENT PROGRAM
SUBPROJECT WAREHOUSE RELOCATION
TITLE FLUME AND DOWNSPOUT DETAILS

SCALE AS SHOWN | DWG NO X-744-2009C | PLANT PORTSMOUTH OHIO | BLDG X-744 | SHT | OF | SHT | CLASS U | REV 0

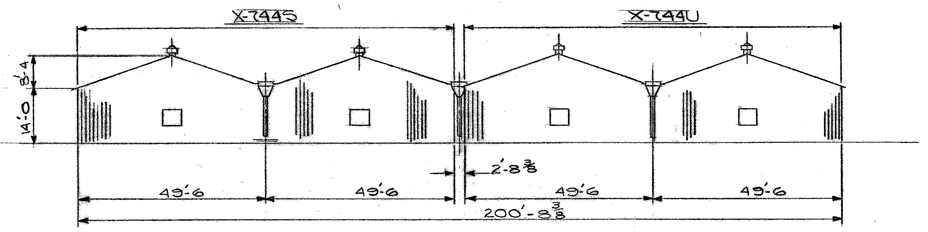
A-318 (6-62) REV.



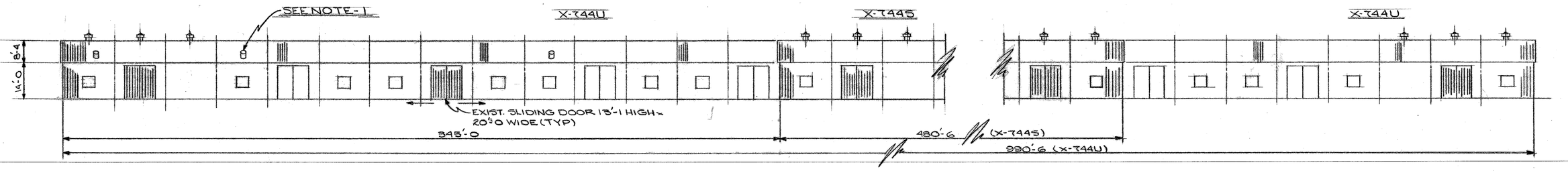
VIEW- A 15 25
(WEST ELEVATION)
SCALE- 1/16" = 1'-0



VIEW- B 15 25
(SOUTH ELEVATION)
SCALE- 1/16" = 1'-0



VIEW- C 15 25
(NORTH ELEVATION)
SCALE- 1/16" = 1'-0



VIEW- D 15 25
(EAST ELEVATION)
SCALE- 1/16" = 1'-0

N - O - T - E - S

1. EXISTING VENTS NOT LOCATED ON PEAK OF ROOF TO BE REMOVED AND THE OPENINGS COVERED WITH 26 GAGE GAL'V SHEET METAL PRIOR TO APPLYING SPRAY ON ROOF. (APPROX. 3 PLACES)

INFORMATION ONLY

UNCLASSIFIED/NOT UCNI
Anthony Saraceno ADC 4052
Review Date: 2/28/2000

NUMBER OF SECTION OR DETAIL
DRAWING ON WHICH SECTION OR DETAIL IS TAKEN
DRAWING ON WHICH SECTION OR DETAIL IS SHOWN
SECTION & DETAIL KEY

REV	DWN	ENG	SUPV	DESCRIPTION	DOE	MM-ES	DATE
1	Moore		LKM	As Built Changes		LKM	1/16/89
0	LA	J.W		CERTIFIED FOR CONSTRUCTION		JW	7/15/87

REVISION OR ISSUE PURPOSE — APPROVED – INITIALS AND DATE

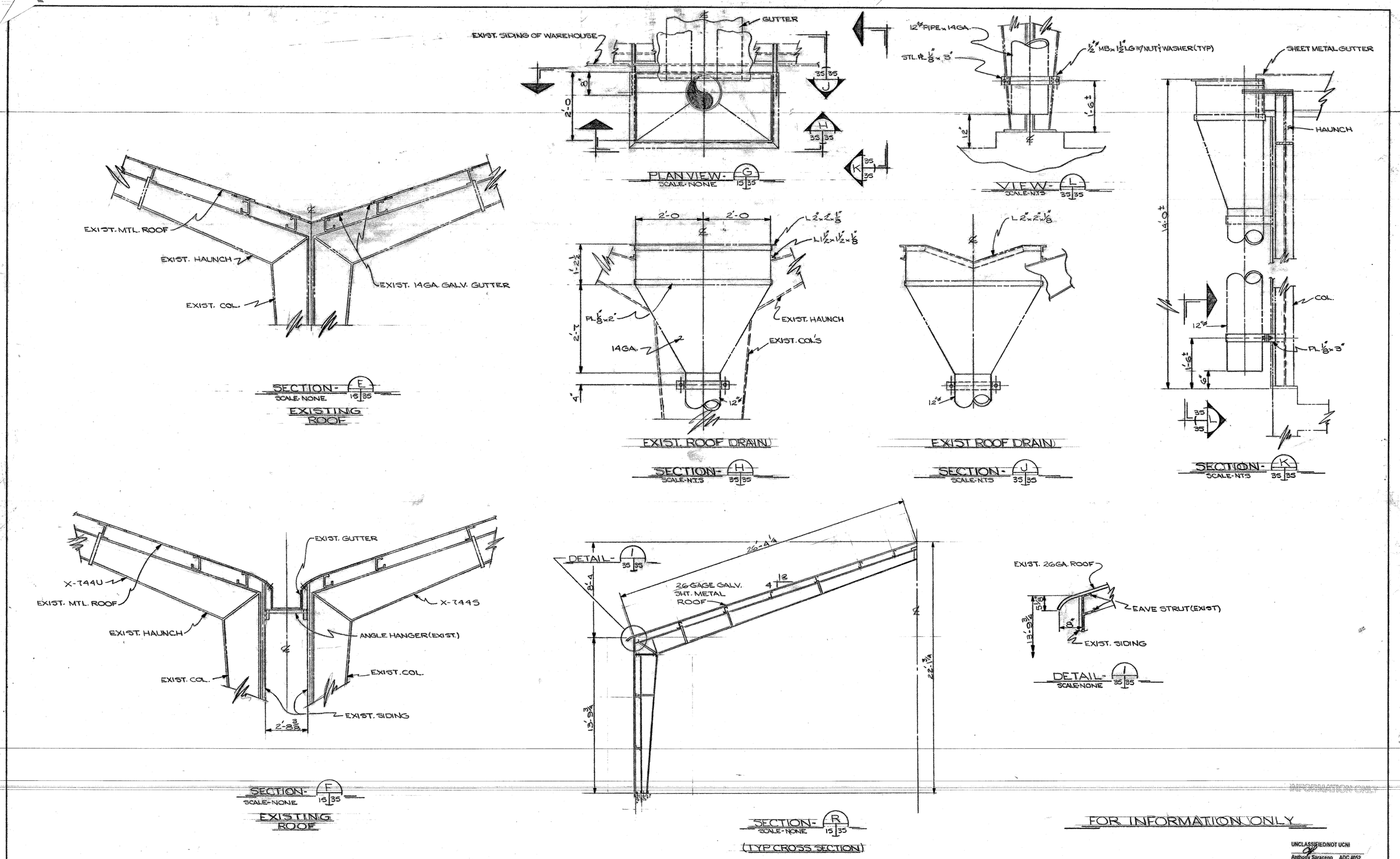
APPROVALS	DATE
L. ARTHUR DRAWN	4/1/87
J. HORTEL CHECKED	4/15/87
J. WINGO ENG	4/1/87
LK MEAD SUPV	4/22/87
MM-ES	
DOE	

UNITED STATES DEPARTMENT OF ENERGY

MARTIN MARIETTA — MARTIN MARIETTA ENERGY SYSTEMS, INC.
P. O. BOX 628 PIKETON, OHIO 45661
ACTING UNDER CONTRACT DE-AC05-76OR00001 WITH THE U. S. DEPARTMENT OF ENERGY

PROJECT 11353
SUBPROJECT
TITLE
REROOFING LITHIUM WAREHOUSE
X-744S & X-744U
ELEVATIONS
SCALE AS NOTED — DWG NO X-744S-25 — REV 1

11/1/88



FOR INFORMATION ONLY

INFORMATION ONLY

UNCLASSIFIED/NOT UCNI
Anthony Saraceno ADC 4052
Review Date: 2/28/2000

REV	DWN	ENG	SUPV	DESCRIPTION	DOE	MM-ES	DATE
1	[illegible]		LKM	As Built Changes		LKM	1/16/89
0	LA	J.W.		CERTIFIED FOR CONSTRUCTION		[illegible]	7/17/87

REVISION OR ISSUE PURPOSE — APPROVED – INITIALS AND DATE

APPROVALS	DATE
L. ARTHUR (DRAWN)	4/1/87
J. HORTEL (CHECKED)	4/15/87
J. WINGO (ENG)	4/1/87
L.K. MEAD (SUPV)	4/22/87
MM-ES	
DOE	

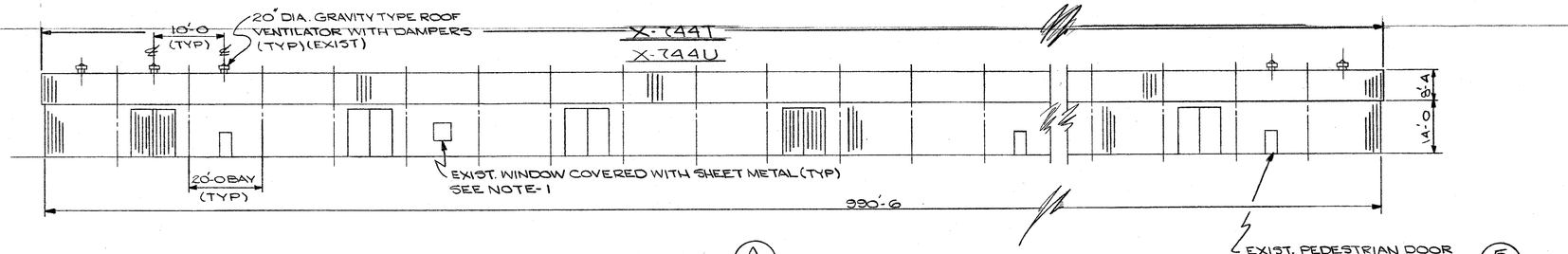
UNITED STATES DEPARTMENT OF ENERGY

MARTIN MARIETTA — MARTIN MARIETTA ENERGY SYSTEMS, INC.
P. O. BOX 628 PIKETON, OHIO 45661
ACTING UNDER CONTRACT DE-AC05-76OR00001 WITH THE U. S. DEPARTMENT OF ENERGY

PROJECT 11353
SUBPROJECT
TITLE REROOFING LITHIUM WAREHOUSE X-744S & X-744U ROOF & DRAIN DETAILS (EXISTING)
SCALE AS NOTED — DWG NO X-744S-3S — REV 1

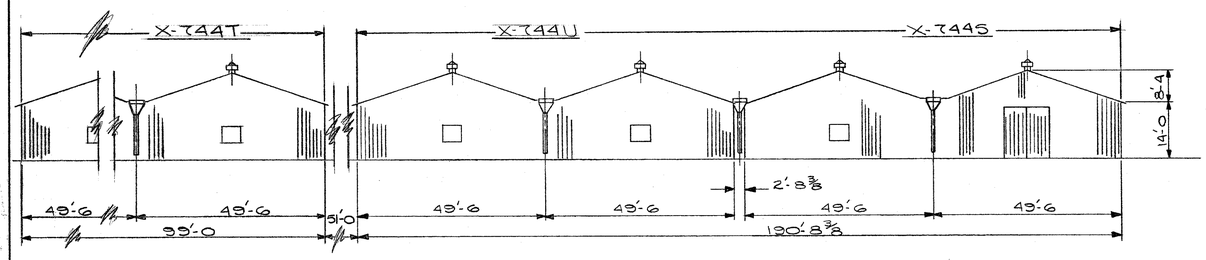
SECTION & DETAIL KEY
NUMBER OF SECTION OR DETAIL
DRAWING ON WHICH SECTION OR DETAIL IS TAKEN
DRAWING ON WHICH SECTION OR DETAIL IS SHOWN

21765



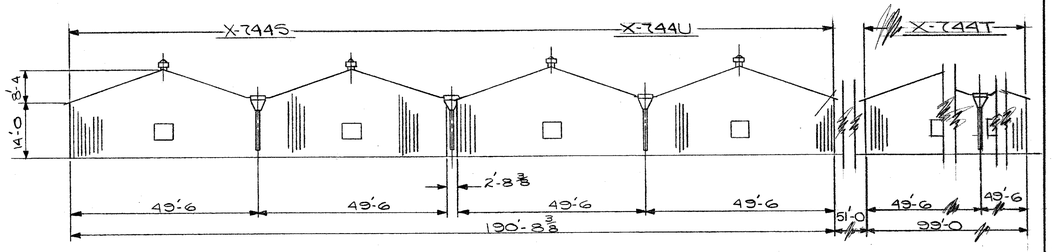
VIEW- A 55 65

(WEST ELEVATION)
SCALE- 1/16" = 1'-0



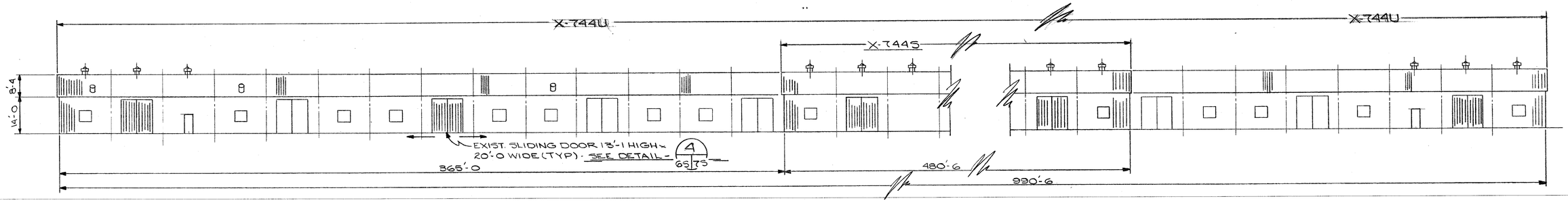
VIEW- B 55 65

(SOUTH ELEVATION)
SCALE- 1/16" = 1'-0



VIEW- C 55 65

(NORTH ELEVATION)
SCALE- 1/16" = 1'-0



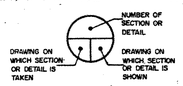
VIEW- D 55 65

(EAST ELEVATION)
SCALE- 1/16" = 1'-0

TOTAL EXIST. PEDESTRIAN DOORS - 24
TOTAL EXIST. SLIDING DOORS - 64
TOTAL EXIST. WINDOWS - 43

N - O - T - E - S

1. EXISTING WINDOWS ARE STANDARD COMMERICAL PROJECTED STEEL SASH WINDOWS. THESE SHALL BE REMOVED AND REPLACED WITH NEW CORRUGATED METAL SIDING.
2. ALL EXIST. STEEL SLIDING DOORS WILL BE REMOVED AND THREE ON EACH SIDE OF EACH BUILDING WILL BE REPLACED. ALL REMAINING OPENINGS FOR SLIDING DOORS WILL BE COVERED WITH NEW CORRUGATED METAL SIDING.
3. ALL EXIST. STEEL PEDESTRIAN DOORS WILL BE REMOVED AND THREE ON EACH SIDE OF EACH BUILDING WILL BE REPLACED. ALL REMAINING OPENINGS WILL BE COVERED WITH NEW CORRUGRATED METAL SIDING.



SECTION & DETAIL KEY

INFORMATION ONLY

UNCLASSIFIED/NOT UCNI
Anthony Saraceno ADC 4052
Review Date: 2/28/2000

REV	DWN	ENG	SUPV	DESCRIPTION	DOE	MM-ES	DATE
0	LA	J.W	LKM	CERTIFIED FOR CONSTRUCTION		Jw	5/3/88

REVISION OR ISSUE PURPOSE — APPROVED – INITIALS AND DATE

APPROVALS	DATE
L. ARTHUR DRAWN	12/3/87
J. HORTEL CHECKED	12/17/87
J. WINGO ENG	12/3/87
LK MEAD SUPV	2/17/88
MM-ES	
DOE	

UNITED STATES DEPARTMENT OF ENERGY

MARTIN MARIETTA — MARTIN MARIETTA ENERGY SYSTEMS, INC.
P. O. BOX 628 PIKETON, OHIO 45661
ACTING UNDER CONTRACT DE-AC05-76OR00001 WITH THE U. S. DEPARTMENT OF ENERGY

PROJECT LITHIUM STORAGE BUILDINGS
SUBPROJECT REPLACEMENT OF STEEL SIDING
TITLE ELEVATIONS OF EXISTING STORAGE BLDG'S X-744-S, T & U

SCALE AS NOTED — DWG NO X-744S-65 — REV 0

21757

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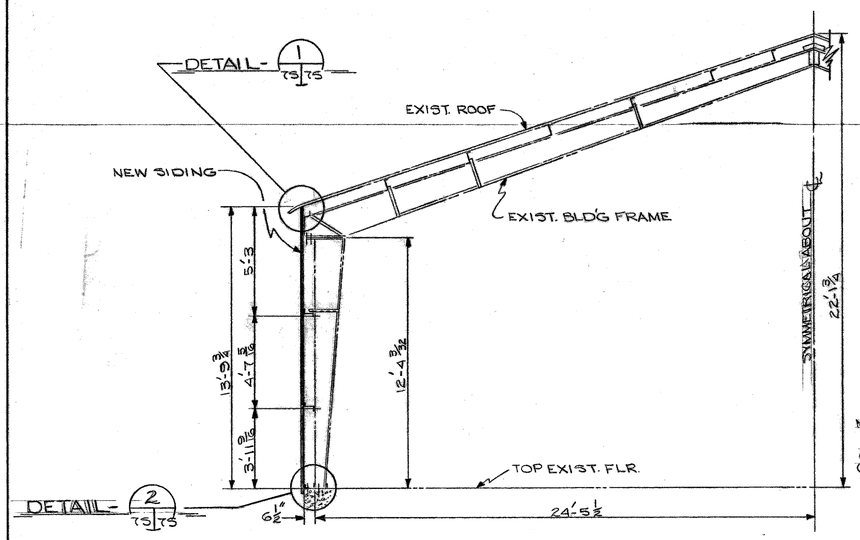
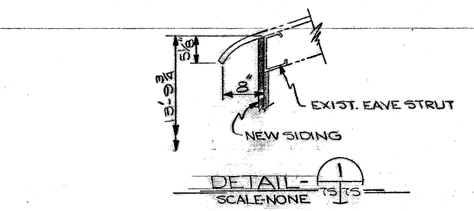
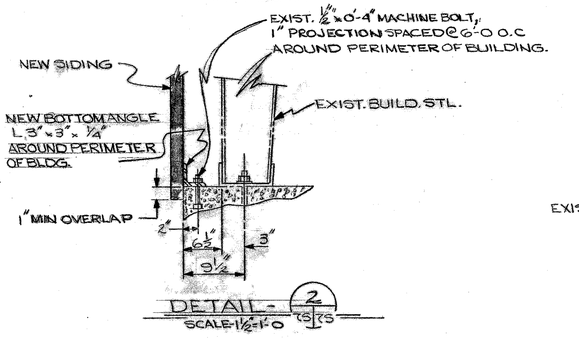
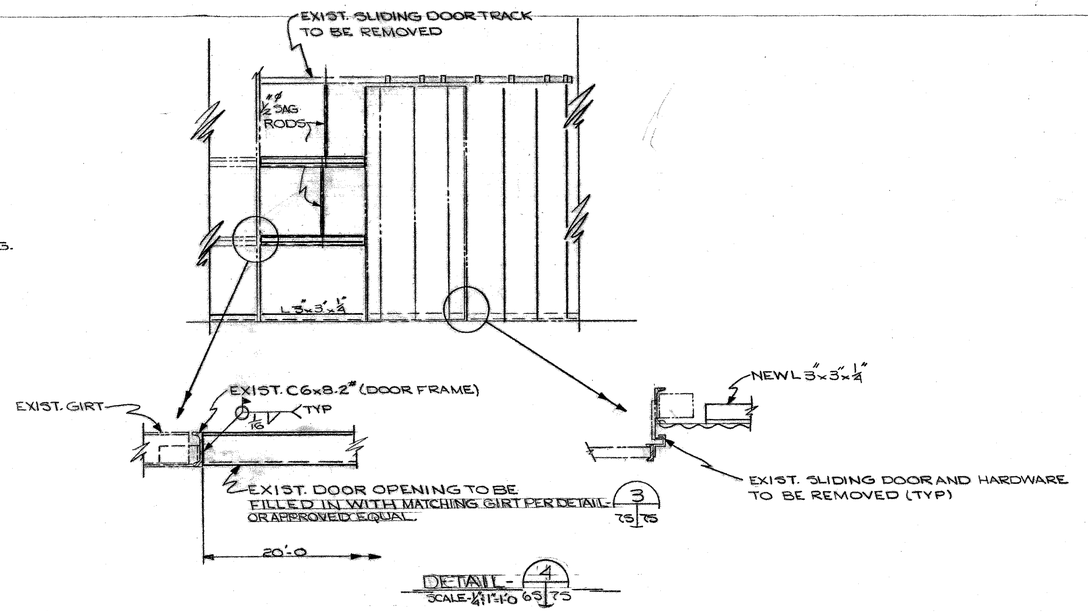
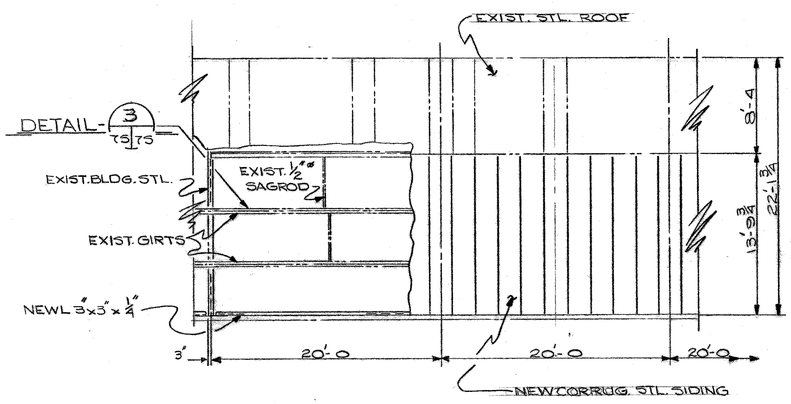


SECTION- E / 55 / TS
SCALE-NONE

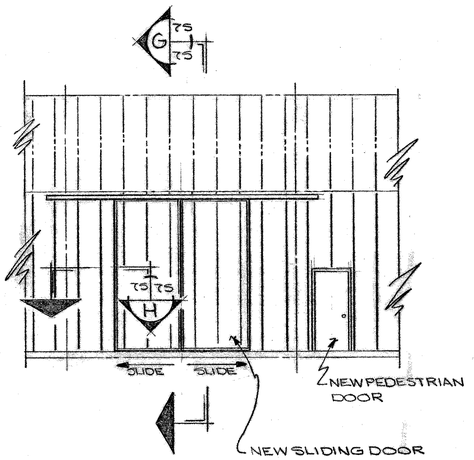


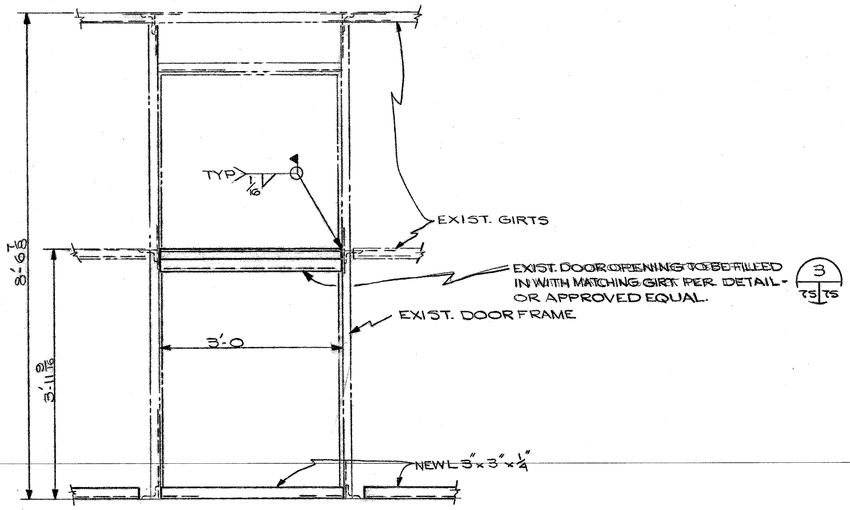




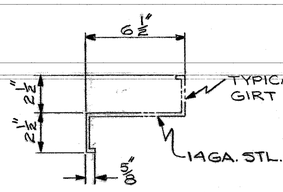


VIEW- F / 55 / TS
SCALE-NONE

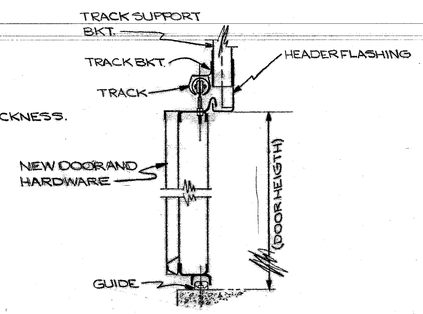




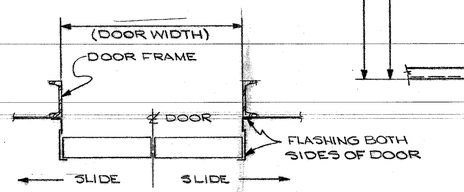
DETAIL- 5 / SCALE-1'-1'-0 / 65 / TS



DETAIL- 3 / TS / TS
SCALE-3"=1'-0



SECTION- G / TS / TS
SCALE-NONE



SECTION- H / TS / TS
SCALE-NONE

INFORMATION ONLY

UNCLASSIFIED/NOT UCNI
Anthony Saraceno ADC 4052
Review Date: 3/28/2000

SECTION & DETAIL KEY
DRAWING ON WHICH SECTION OR DETAIL IS TAKEN
NUMBER OF SECTION OR DETAIL
DRAWING ON WHICH SECTION OR DETAIL IS SHOWN

REV	DWN	ENG	SUPV	DESCRIPTION REVISION OR ISSUE PURPOSE	DOE APPROVED – INITIALS AND DATE	MM-ES	DATE
0	LKA	JW	LKM	CERTIFIED FOR CONSTRUCTION			5/3/88

APPROVALS	DATE
L ARTHUR DRAWN	12/1/87
J. HORTEL CHECKED	12/1/87
J. WINGO ENG	12/1/87
L K MEAD SUPV	2/19/88
MM-ES	
DOE	

UNITED STATES DEPARTMENT OF ENERGY
MARTIN MARIETTA ENERGY SYSTEMS, INC.
P. O. BOX 628 PIKETON, OHIO 45661
ACTING UNDER CONTRACT DE-AC05-76OR00001 WITH THE U. S. DEPARTMENT OF ENERGY
PROJECT LITHIUM STORAGE BUILDINGS
SUBPROJECT REPLACEMENT OF STEEL SIDING
TITLE SECTIONS AND DETAILS
SCALE AS NOTED | DWG NO X-1445-TS | REV 0

411555

☆ U.S. GOVERNMENT PRINTING OFFICE: 1985-461-233