

U.S. Army Corps of Engineers

FINAL CORRECTIVE ACTION PLAN - PART A

PHASE I SITE INVESTIGATION OF THE AIRPORT HYDRANT SYSTEM (BUILDING 728) FACILITY ID: 9025035 and 9025049

at

HUNTER ARMY AIRFIELD SAVANNAH, GEORGIA

under

Contract No. DACA21-93-D-0049 Delivery Order No. 11

August 1996

Submitted to:

U.S. ARMY CORPS OF ENGINEERS SAVANNAH, GEORGIA

Prepared by:

METCALF & EDDY, INC. ATLANTA, GEORGIA This Final CAP - Part A was prepared in accordance with the Statement of Work (SOW) prepared by the United States Army Corps of Engineers (USACE) for the investigation of Building 728, Pipeline A, and Pipeline B at Hunter Army Airfield. This Document was prepared under the supervision of David Wilderman, P.G., Project Manager. Requests for the document must be referred to Commander, U.S. Army Corps of Engineers, CESAS-PM-H, 100 West Oglethorpe Avenue, Savannah, Georgia 31401-3640.

This document was reviewed and approved by:

David M.Wilderman, P.G.

Project Manager Title

7.96 Date

Georgia Department of Natural Resources

Environmental Protection Division

Underground Storage Tank Management Program 4244 International Parkway, Suite 104, Atlanta, Georgia 30354 Lonice C. Barrett, Commissioner Harold Reheis, Director (404) 362-2698

CORRECTIVE ACTION PLAN PART A

Facility Name: <u>Hunter Army Airfield</u>	· · · · · · · · · · · · · · · · · · ·				
Street Address: <u>Building 728 and Northern Fuel I</u>					
City: <u>Savannah</u> County <u>Chatham</u>	Facility ID: <u>9025035 and 9025049</u>				
Submitted by UST Owner/Operator:	Prepared by:				
Name: <u>Mr. John Spears (DEH-AFZP-DEV)</u>	Name: David Wilderman				
Company: U.S. Army Corps of Engineers	Company: Metcalf & Eddy, Inc.				
Address: Building 1139	Address: 1201 Peachtree Street, NE				
	400 Colony Square, Suite 1101				
City: <u>Ft. Stewart</u> State: <u>GA</u>	City: <u>Atlanta</u> State: <u>GA</u>				
Zip Code: <u>31314-5000</u>	Zip Code: <u>30361</u>				
I. PLAN CERTIFICATION:					
A. UST Owner/Operator					
Name:					
Signature:	Date:				
3. Professional Engineer or Professional Geologis	st				
with State Rules and Regulations. As a registe qualified groundwater professional, as defined	a field work and preparation of this plan, in accordance ered geologist and/or engineer, I certify that I am a by the Georgia State Board of Professional Geologists. All plan and in all of the attachments are true, accurate ate Rules and Regulations.				
Name: David M. Wilderman, PG	Contraction of the second s				
Signature: LAChu-					
Date: <u>9.7.96</u>	GEO THE				
	Georgia Stamp or Sea				
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Please complete the following form, check all of the boxes below that apply, and attach supporting documentation (such as narrative, figures, tables, maps, boring/well logs, etc.) where specified and applicable. Supporting documentation should be three-hole punched and prepared in conformity with the attached guidance document "Underground Storage Tank (UST) Release: Corrective Action Plan - Part A (CAP-A Content, " GUST-7A.)

- II. INITIAL RESPONSE REPORT:
- A. Initial Abatement:
 - □ No Action Required
 - Further Release or Migration of Contaminants Prevented See supporting documentation SECTION II.A.
 - Fire and Safety Hazards from Vapors and/or Free Product Monitored and Mitigated
 - □ Other (specify) _

B. Free Product Removal:

No Free Product Identified as Originating from Release

Free Product (Non-Aqueous Phase Hydrocarbons) Removed by:

- □ Manual Bailing
- Passive Skimming
- Automated Skimming. See supporting documentation, Section II.B.
- Automated Total Fluids Pumping, with Treatment System and Approved Wastewater Discharge

Other (specify)

C. Tank History

Site Map Attached Identifying Former and/or Existing USTs - See Figures 1 and 2

□ Not Applicable

Initial Site Characterization: D.

		include the fo and Plates 1		ns on an attacl	ned site	map. See s	upporti	ng documentat	tion
	• Tank Pi	t Area	• Piping	Trenches		Dispensers			
	 Sewer L (if prese 		• Water	Lines	•	North Arro	w		
	• Sample	Locations (wi	th sample n	umbers and de	pths)				
	• Tanks w	ith ID#s, con	responding	to Notification	Form	7530-1			
	• Scale	<u>1</u> in = _	<u>100</u> ft						
1.	Regulated S	Substance Rele	eased - See	supporting doo	cumenta	ation SECTIO	ON II.I	0.1	
	📕 Gasolin	ne	Diesel		Kero	sene		Waste Oil	
	□ Other				-				
2.	Source of C	Contamination	- See suppo	orting docume	ntation	SECTION II	.D.2		
	Number of	USTs: in us	e <u>0;</u> cl	losed/removed		25			
	🗆 Existin	g UST System	a(s):	piping		🗆 Tank		□ other	
	Former	UST System	(s):	piping		🗆 Tank		🗆 other	
3.	Impacted E	nvironmental	Media - See	e supporting d	ocumer	ntation SECT	ION II	.D.3.	
	Ground	lwater (see Pl	ates 3A and	3B)					
	F	ree product							
	D D	issolved (BTI	EX and/or H	PAH) contamin	nation e	exceeding:			
		In-stream	n water qua	lity standards					
	C] Drinking	g Water Ma	ximum Contar	ninant l	Levels (MCL	s)		
	📕 Soil Ex	ceeding: (see	e Plates 2A	and 2B)					
	(1 10	BDL) above th	he groundw TEX and/or	ater table or a	ground	lwater sample	e from	low Detection the worst-case In-stream wat	
	ПТ	hresholds list	ed in Table	A, Rule 391-3	8-150	9			
	П	hresholds list	ed in Table	B, Rule 391-3	-1509	9			
	A I	Iternate Three	shold Levels	s (ATLs) (Ref	erence	GUST-CAPA	Appe	ndix I)	

- D. Initial Site Characterization (continued):
 - Drinking Water Supply Impacted
 - □ Surface Water Impacted
 - Attach Laboratory Analytical Data: the following items must be included See Appendix J
 - Laboratory Method
 Date of Sampling
 - Date of Analysis Detection Limits
 - Signed Chain of Custody
 Quality Control Data
 - 4. Local Water Resources See supporting documentation SECTION II.D.4.
 - Drinking Water Supplies Located In:

High or average groundwater pollution susceptibility area^{*}:

- Public water systems within 2.0 miles
- □ Non-public water systems within 0.5 mile

Low groundwater pollution susceptibility area^{*}:

- Public water systems within 1.0 mile
- □ Non-public water systems within 0.25 mile

* As defined by the Groundwater Pollution Susceptibility Map of Georgia.

- Surface Water Bodies: Distance (nearest) 300 feet (regardless of hydraulic gradient)
- Attach Documentation of Water Supply Survey and Field Reconnaissance see Table 13
- 5. Other Hydrogeologic Data (specify values) See supporting documentation SECTION II.D.5.
 - Depth to Groundwater (shallowest) <u>1.2 feet</u>
 - Groundwater Flow Direction Northwest
 - Hydraulic Gradient 0.010 (average)
- Corrective Action Completed Or In-Progress See supporting documentation SECTION II.D.6.
 - □ USTs/Source Removed (after confirmed release)
 - Excavation and Treatment/Disposal of Contaminated Backfill Material & Native Soils
 Attach manifests of proper soil disposal
 - Other (specify) <u>Automated Free Product Recovery system installed and operated</u> <u>since January 1996.</u>

- D. Initial Site Characterization (continued):
 - 7. Conclusions and Recommendations See supporting documentation SECTION II.D.7.
 - No Further Action Required, including the preparation or implementation of a Site Investigation Plan

OR

- Prepare Corrective Action Plan Part B, with a schedule for SIP implementation and submittal of CAP-Part B
- 8. Site Ranking

Environmental Sensitivity Score: <u>152,520,000</u> (see Appendix II)

- III. SITE INVESTIGATION PLAN: See supporting documentation SECTION III.
- A. Horizontal and Vertical Extent of Contaminants In:
 - Soil
 - Groundwater
 - Free product
 - Dissolved phase
 - Surface Water
- B. Vadose Zone and Aquifer Characteristics:
 - Vertical Soil Permeability (Optional)
 - □ Infiltration Rate (Optional)
 - Saturated Horizontal Hydraulic Conductivity
 - Total Organic Carbon (Optional)
 - Dissolved Iron (Optional)
 - Effective Porosity
 - Seepage Velocity
 - Grain-size Distribution (Optional)
 - Total Petroleum Hydrocarbons (Optional)
 - Pilot Test(s) (Optional)
 - □ Other (specify) _

IV. PUBLIC NOTICE:

- Certified Letters to Adjacent and Potentially Affected Property Owners and Local Officials
- Legal Notice in Newspaper, as pre-approved by EPD
- Other EPD Approved Method (specify): See supporting documentation, Section IV.

V. CLAIM FOR REIMBURSEMENT: (For GUST Trust Fund sites only) N/A

- GUST Trust Fund Application (GUST-36), must be attached if applicable
- Cost Proposal
 - □ Non-Reimbursable Costs

OR

- □ Reimbursable Costs
 - □ Invoices and Proofs-of-Payment, per GUST-91
 - Total Projected Costs to implement the Site Investigation Report (SIR) and prepare data for the Site Investigation Review Meeting, per GUST-91
- Payment Schedule for Reimbursement

SITE RANKING FORM

0

5

=

1. Soil Contamination

*

a. Total PAHs -Maximum Concentration

10 mg/kg = 50

 \Box 1 - 10 mg/kg = 25

 \Box 0.66 - 0.99 mg/kg = 10

< 0.660 =

- b. Total BTEX -Maximum Concentration
 □ > 150 mg/kg = 50
- \Box 50 149.9 mg/kg = 40
- \Box 10 49.9 mg/kg = 25
- 0.5 9.9 mg/kg = 10
- \Box 0.005 .499 mg/kg = 1

< 0.005 mg/kg = 0

c. Depth to Groundwater (bls = Below Land Surface)

□ 10' - 25' bls

- \blacksquare < 10' bls = 10
- \Box 25' 50' bls = 2
- \Box > 50' bls = 1

2. Groundwater Contamination

b. Dissolved Benzene -Free Product (Nonaqueous-phase a. Maximum Concentration liquid hydrocarbons) $\Box > 10,000 \, \mu g/L$ 250 2,000 > 6" = = \Box 1/8" = 6" 1,500 \Box 1,000 - 10,000 µg/L= 100 = $100 - 1,000 \ \mu g/L =$ 50 □ Sheen - 1/8" 250 = (MW11 290) \Box 5 - 100 µg/L 10 0 No free product = = \Box <5 µg/L 0 =

If (1.a.) + 1.b. + (2.a.) + 2.b is <1, and the CAP is complete, then no further action is required. Go to summary.

3. Distance from Contaminant Plume to Point of Withdrawal for Water Supply

A. Public *				B. Non-public			
Category	Number Identified	Score	Total	Category	Number Identified	Score	Total
Impacted	_0_X	100 =	0	Impacted	<u>0</u> X	100 =	_0_
< 500'	<u>1_x 0.5 x</u>	50 =	_50_	< 100'	<u>0</u> x 0.5 x	26 =	_0
500' - 1/4 mi.	<u>0</u> x 0.5 x	20 =	_0	100' - 500'	<u>0</u> x 0.5 x	10 =	_0_
1/4 mi - 1 mi	<u>2</u> x 0.5 x	10=	_20_	500' - 1/4 mi	0 x 0.5 x	6 =	<u>0</u> .
1 mi - 2 mi	<u>7</u> x 0.5 x	6 =	42	1/4 - 1/2 mi	<u>0</u> x 0.5 x	4 =	_0_
> 3 mi	N/A	0 =	0	> 1/2 mi	N/A	0 =	0
		A. Subtotal*	112		· · · · · ·	B. Subtotal	_0_

Note: If site is in lower susceptibility area, do not use the shaded area.

4. Distance from Contaminant Plume to Surface-Waters or Utility Trenches Below the Water Table

Impacted	=	100
< 500'	=	12
500' - 1,000'	=	6
> 1,000		1

- 5. Susceptibility Area Multiplier
 - If site is located in a Low Ground Water Pollution Susceptibility Area, and no points of withdrawal for water supply lie within 500' and no surface water bodies or submerged utility trenches lie within 500' of the source: = 0.5
 - All other sites = 1

SUMMARY

 $[(1.a. + 1.b.) X (1.c.) + (2.a. + 2.b.) X (3.a. + 3.b. + 4.)] X [(5.)] = \underbrace{152,520,000}_{\text{Environmental Sensitivity Score}} \\ [(50 + 10)x(10) + (2000 + 50) X (112 + 0 + 12)] X (1) \\ (60) (10) + (2050) (124) (1) \\ 600 + 254,200 \\ 152,520,000 \\ \end{tabular}$

* This score does not reflect that all public potable wells located within 1 mile of the study site develop water from a confined aquifer that is hydraulically isolated from contact with the impacted shallow aquifer at former Building 728. No private wells were identified within 0.5 mile of Building 728.

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SUPPORTING DOCUMENTATION CORRECTIVE ACTION PLAN - PART A EPD FACILITY ID No. 9025035 and 9025049

HUNTER ARMY AIRFIELD SAVANNAH, GEORGIA CONTRACT NO. DACA21-93-D-0049 DELIVERY ORDER NO. 0011

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LIST OF ACRONYMS

Liability Act

ACRONYMS (Continued)

MS/MSD	Matrix spike/matrix spike duplicate
MW	Monitoring Well
NAVD	North American Vertical Data
NGVD	National Geodetic Vertical Datum
NIST	National Institute of Sciences and Technology
NSF	National Sanitation Foundation
OD	Outside diameter
OVA	Organic Vapor Analyzer
PAH	Polynuclear Aromatic Hydrocarbons
PARCC	Precision, Accuracy, Representativeness, Completeness, and Comparability
ppb	Parts per billion
ppm	Parts per million
PRP	Potentially Responsible Party
PVC	Polyvinyl chloride
QA	Quality Assurance
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
QC	Quality Control
QCSR	Chemical data invalidation report
QM	Quarterly monitoring
QPR	Quarterly Progress Report
RCRA	Resource Conservation and Recovery Act
RF	Response Factor
RPD	Relative Percent Difference
SADL	South Atlantic Division Laboratory
SAV	Savannah District
SDG	Sample Delivery Group
SCS	Soil Conservation Service
SDWA	Safe Drinking Water Act
SI	Site Investigation
SL	Savannah Laboratories
SSI	Sensors & Software, Inc.
SOW	Scope of Work
SPH	Separate Phase Hydrocarbons
SSS	Split Spoon Sample
SPT	Standard Penetration Test
SVOC	Semivolatile organic compound
TAT	Technical Advisory Team
TB	Trip Blanks
TCLP	Toxicity Characteristic Leaching Procedure
TOC	Top of Casing
TRPH	Total Recoverable Petroleum Hydrocarbons
TVHC	Total Volatile Hydrocarbon Compounds

ACRONYMS (Continued)

UST	Underground storage tank
USACE	United States Army Corps of Engineers
USCS	Unified Soil Classification System
USEPA	United States Environmental Protection Agency
VOC	Volatile organic compound
WQS	Water Quality Standards

LIST OF REFERENCES

Arora, Ph.D., Ram (Editor) 1984, <u>Hydrogeologic Evaluation for Underground Injection</u> <u>Control in the Coastal Plain of Georgia, Hydrologic Atlas 10</u>, Department of Natural Resources, Environmental Protection Division, Georgia Geologic Survey.

Atlanta Testing & Engineering, 1992, Corrective Action Plan, Building No. 133 Area.

Atlanta Testing & Engineering, 1993, Corrective Action Plan, Building No. 710 Area.

Burroughs Quadrangle, Georgia, 7.5 Minute Series Topographic Map, 1988.

Clarke, John S., Hacke, Charles M. and Peck, Michael F., 1990, <u>Geology and Ground</u> <u>Water Resources of the Coastal Area of Georgia</u>, Department of Natural Resources, Bulletin 113, 106p.

Clark, William Z., and Zisa, Arnold C., 1976, <u>Physiographic Map of Georgia</u>, Georgia Department of Natural Resources.

Fetter, C. W., 1988, <u>Applied Hydrogeology</u>, Second Edition, Merrill Publishing Co., Columbus, Ohio, p. 126.

Furlow, James W., 1969, <u>Stratigraphy and Economic Geology of the Eastern Chatham</u> County Phosphate Deposit, Georgia State Division o Conservation, Bulletin 82, 40p.

Garden City Quadrangle, Georgia, 7.5 Minute Series Topographic Map, 1980.

Huddleston, Paul F., 1988, <u>A Revision of the Lithostratigraphic Units of the Coastal Plain of Georgia</u>, The Miocene through Holocene, Georgia Department of Natural Resources, Bulletin 104, 162p.

Isle of Hope Quadrangle, Georgia, 7.5 Minute Series Topographic Map, 1988.

Krause, R.E., Matthews, S.E., and H. E. Gill, 1984, <u>Evaluation of the Ground-Water</u> <u>Resources of Coastal Georgia</u>, Department of Natural Resources, Information Circular 62, 55p.

Miller, James A., 1986, <u>Hydrogeologic Framework of the Floridan Aquifer System in</u> <u>Florida and in parts of Georgia, Alabama, and South Carolina</u>, U.S. Geological Survey Professional Paper 1403-B, 91p.

Savannah Quadrangle, Georgia 7.5 Minute Series Topographic Map, 1978.

LIST OF REFERENCES (Continued)

U.S. Army Corps of Engineers, Savannah District, September 9, 1994, <u>Scope of Work, Site</u> <u>Investigation of the Airport Hydrant System (Vicinity of Building 728) and Completion of</u> <u>Confirmatory Sampling and Quarterly Monitoring at Two UST Sites (Buildings 710 and</u> <u>133).</u>

United States Department of Agriculture, Soil Conservation Service, March 1974, <u>Soil</u> <u>Survey of Bryan and Chatham Counties, Georgia</u>, U.S. Government Printing Office, Washington, D.C.

Georgia Department of Natural Resources, Environmental Protection Division, February 1995, <u>Underground Storage Tank Management</u>, Chapter 391-3-15.

The State of Georgia, 1995, Georgia Underground Storage Tank Act, Section 12-b.

Heath, Ralph, 1987, <u>Basic Groundwater Hydrology</u>, U.S. Geological Survey Water Supply Paper 2220, 84 p.

INTRODUCTION

Information presented in the following sections of this Supporting Documentation are arranged in the order they are referenced in the "GUST-CAPA.FOR" form, dated November 1995. The section titles in this Supporting Documentation are identical to the section titles on the form for simplicity of reference. Information required by the Georgia Environmental Protection Division is presented herein. Metcalf & Eddy, Inc. (M&E) was retained by the U.S. Army Corps of Engineers to conduct an investigation of the Building 728 and former Northern Fuel Battery Area at Hunter Army Airfield (HAAF). Also included in the investigation were the pipelines that serviced the Northern Fuel Battery; Pipeline A and Pipeline B. The layout of the investigation area is provided on Figure 1. The EPD Facility number for the four tanks at Building 728 is 9025035. Additional tanks associated with Building 728 include the Northern Fuel Battery Tanks which have an EPD Facility number of 9025049. All references to "the study area" in this CAP-Part A include storage tanks and the gathering pipelines associated with both EPD Facility 9025035 and 9025049.

Section II.A. Initial Abatement

The U.S. Army Corps of Engineers (USACE) directed the removal of all underground storage tanks at the Northern Fuel Battery and Building 728 in June 1994. The location of all underground storage tanks at these facilities is illustrated on Figure 2. Anderson Columbia Environmental, Inc. (ACE) was retained by the USACE to close 17 underground storage tanks (USTs) near the Northern Fuel Battery. During initial tank removal activities it was determined that 8 additional USTs were present and would require removal. A total of 25 USTs were removed by ACE under their contract. ACE prepared a report as required under Title 40 Part 280.72 of the Code of Federal Regulation and Georgia Underground Storage Tank Rule Chapter 391-3-15.11. A brief summary of ACE activities is provided in the following excerpt from their Delivery Order #33 Field Report.

On December 29, 1992, ACE personnel arrived on-site to sample the contents of the USTs. A product sample was collected from each tank and analyzed for EPA Methods 239.2 (Total Lead), 1010 (Flash Point), and 602 (BETX). These analyses provide ACE with a hazardous waste determination for the contents of the tank. A reconnaissance of the tank pit areas was made to help determine the sizes of the tanks and to provide ACE with information needed for proper tank removal and closure. The tank contents were removed and disposed of by the facility and not by ACE.

On June 20, 1994, ACE personnel arrived on-site to begin the removal of the tanks on Delivery Order #0033. This work was performed according to the approved sitespecific work plan under the field supervision of Mr. Ricky White (ACE) and Mr. Fred Gotthardt (COE). At this time, eight more tanks were discovered in a concrete vault located in the center of the area containing the twelve 25,000 gal. USTs in the vicinity of Building 728. The contents of these additional tanks were sampled.

During the tank removals, a total of 2623.91 tons of contaminated soil was removed, transported and incinerated. Manifests and a Certificate of Incineration can be found in Collection 7 [provided in the ACE Field Report].

On October 10, 1994, ACE personnel completed the work described in D.O. 0033 and demobilized from the site.

Section II.B. Free Product Removal

Metcalf and Eddy, Inc. (M&E) identified free product in one well, MW-8, at former Building 728 on August 3, 1995. Free product was measured at an initial thickness of 1.1 feet. M&E installed an automated free product recovery system in MW-8 in January 1996. Approximately 90 gallons of free product have been recovered as of July 1996. All recovered product and groundwater is stored on-site in a 275 gallon recovery tank. A schematic drawing of the recovery system and specification sheets for system components is provided in Appendix A. All recovered product will be reclaimed by a licensed nonhazardous waste hauler as soon as half of the capacity of the recovery tank is reached. Copies of the waste manifests will be available from the USACE project manager within 30 days of removing the recovered product from the site.

Section II.C. Tank History

BUILDING 728 UST AND PIPELINE LOCATIONS AND PAST USE

Hunter Army Airfield (HAAF) occupies approximately 5400 acres of land on the southwest side of Savannah, Chatham County, Georgia (see Figure 1). Information provided in the following sections pertains to M&E's investigation of the Building 728 area, Pipeline A, and Pipeline B. The Building 728 site, also referred to as the northern battery, consisted of a group of twelve 25,000-gallon tanks. Tanks were located within a fenced field near Buildings 728 and 723. The tanks were arranged in two parallel rows, each containing six tanks. Eight oil/water separators were located near the center of the "tank farm." A water control pit was also present within the northern portion of the fenced area. Four additional tanks were located approximately 100 feet southeast of the fenced area, next to Building 728 (see Figure 2). These 12,000-gallon tanks held aviation fuel and appear to have been part of the hydrant system. A total of 25 tanks and separators were removed in 1992 by ACE: 12 - 25,000 gallon; 4 - 12,000 gallon; 8 - 500 gallon; and 1 - 150 gallon tanks.

The fuel hydrant system at HAAF is comprised of Pipeline A and Pipeline B. Metcalf & Eddy obtained copies of a 1941 facility plan showing the location and layout of Pipelines A and B. The plan showed Pipeline A originating from the Northern Fuel Battery and extending southwest approximately 2,000 feet, where it splits forming a "Y" junction. The eastern split then continued an additional 580 feet where it terminated at a perpendicular angle into a line of five fueling pits. M&E's investigation was originally based on these 1941 facility plans. Field confirmation of the Pipeline A layout was conducted using ground penetrating radar and magnetometer surveys. The surveys confirmed the location of the pipeline in all areas except the western leg of the "Y" and its accompanying fueling pits.

However, another pipe was discovered extending approximately 350 feet west off the main pipeline in front of the existing hangars. The location of Pipeline A is provided on Figure 2. Pipeline A is reported to be 12-inch diameter and constructed of steel. The total length of Pipeline A was reported to be about 4,900 feet but only approximately 3,850 feet was confirmed by geophysics.

Pipeline B originates at a transfer pump house and is connected to fill couplings in the center of the railroad tracks adjacent to former Building 728. Pipeline B is shown on Figure 2. The pipeline extends southeast to the former eastern battery and then southwest past Hangar 860 terminating in the ramp area. Ten fueling pits were reported along the last segment of the pipeline. Pipeline B was reported to be 8-inch diameter and constructed of steel. The total length of Pipeline B is approximately 5,850 feet.

Historical Fuel System Use

During the 1940s, the underground storage tanks held aviation fuel which was reportedly pumped via Pipeline A to ten fueling pits at the runway. Pipeline A was a 12-inch line which entered the tank farm area on the southern side. Truck fill stand No. 2 was located on the opposite side of the railroad track from the northern battery. Communications with HAAF and Fort Stewart personnel indicate that fuel trucks were filled here with fuel brought to this location by rail (USACE, 1994).

Old drawings (1941) show eight fill couplings in the center of the railroad track which runs parallel to the site. Four of the couplings were connected to a pipeline which leads to a transfer pumphouse. Communications with HAAF and Fort Stewart personnel indicate that a pipeline, shown as Pipeline B on Figure 2, connected the transfer pumphouse to another tank farm (the eastern battery) near the airfield hangars. The drawings also show 10 fueling pits associated with the eastern battery. The pits were located south of the battery and were apparently oriented in linear fashion. However, no aerial photographs were available to document the exact number of fuel pits or their orientation.

Around 1957, the entire system was converted to store an alcohol/water mixture used as an aircraft de-icer. Later, some of the tanks near Building 728 were used to store waste oil. UST removal activities were completed in January 1994 by ACE in the Building 728 area. A total of 25 tanks were removed. Soil and groundwater samples were collected below the tank excavations in accordance with Georgia Environmental Protection Division (EPD) UST closure requirements. Contamination in soil and groundwater has been confirmed by the sampling. However no free product was found at this site.

The tanks in the Building 728 fenced area contained water and petroleum-contaminated water during the tank removal efforts. Two of the tanks adjacent to Building 728 contained water and waste oil, and the other two contained petroleum-contaminated water. No other investigations have been performed at this site. During tank removal activities, approximately 2634 tons of soil was removed and transported to Laidlaw Environmental Services for incineration. Tank excavations were backfilled with off-site borrow material. Prior to tank removal activities, the contents of each tank were sampled to obtain a waste characterization for disposal. A total of 43,140 gallons of hazardous and non-hazardous waste water was disposed of by Industrial Water Services, Inc. A UST closure report was previously submitted to the Georgia EPD by Ft. Stewart personnel (the responsible entity for reporting requirements at the Ft. Stewart/Hunter Army Airfield Complex).

Section II.D Initial Site Characterization

A methodical approach to conducting the field investigation was utilized to increase the accuracy of sample location selection. A thorough review of available historical information was conducted prior to any field activities. Drawings and historical records were used to identify the approximate location of the fuel pipelines associated with Building 728. Ground penetrating radar (GPR) and Electromagnetic (EM) surveys were then used to locate underground fuel pipelines and utility trenches that might influence contaminant migration. Accurate location of the pipelines was necessary to ensure that sampling was conducted as closes as possible to the potential sources of contamination. These geophysical surveys were

followed by collecting soil samples using a hand auger and groundwater samples using directpush (geoprobe) technology. The soil samples were analyzed by a laboratory using EPA methods and the geoprobe samples were analyzed in the field using a field gas chromatograph. These sample results were then used to locate permanent groundwater monitoring wells for the definition of soil and groundwater contamination. The results of the field effort are discussed in the following sections.

Electromagnetic, ground conductivity, and ground-penetrating radar (GPR) equipment was used to locate the pipelines. The geophysical surveys were conducted by Applied Engineering & Science, Inc. (AES). The scope of work involved locating approximately 10,800 total feet of pipeline. Shallow EM surveys measure ground conductivity and are capable of locating buried metallic objects, such as the steel pipelines at HAAF, due to the contrast in electrical properties with surrounding geologic materials. Shallow EM surveys are relatively easy, fast and inexpensive to complete. However, this type of EM equipment tends to be sensitive to surface and near-surface interferences such as buried materials, power lines, fences, buildings and other objects or generators of electromagnetic fields. Furthermore, resolution of the location of buried metallic objects decreases rapidly as the depth of burial increases. For these reasons, M&E conducted the EM survey first to locate as much of the pipelines as possible. In areas where interferences were too great to accurately locate the pipelines, the GPR survey was used.

Both pipelines were initially located with the EM-31 instrument. Despite interferences, the majority of Pipelines A and B were accurately located by the EM-31. Traverses were made at right angles across the pipelines (with the operator ensuring that the instrument length was maintained parallel to the pipeline and at an equal height above the ground). Generally, the EM-31 was carried at a height 6 inches above the ground surface. This provided additional sensitivity and resolution to the normal practice of carrying the instrument at waist height. The pipeline locations were marked in the field using survey flagging and paint marks. Generally, the traverses were made at 25-foot intervals along the pipelines. Exceptions were areas of interferences (buildings, fences, parked vehicles, etc.) over which the location of the pipelines was interpolated from reliable instrument locations on either side of the

interference. Because the purpose of the survey was field locating of the target pipelines, the EM-31 data were not recorded.

Geophysical Investigation - Pipeline A

The geophysical survey of Pipeline A was conducted during June 5-10, 1995. Pipeline A was located using both the EM-31 and GPR geophysical surveys. The layout of Pipeline A is provided on Plates 1A and 1B. A complete copy of the AES geophysical report is provided in Appendix B. A few areas where interference was noted include: short sections of the pipeline near buildings, fences, parked vehicles, a 100-foot section of the pipeline immediately north of the hangers adjacent to the airfield, and the western "T" branch of the pipeline on the tarmac. The sections of pipeline with building, fence, and vehicle interference were readily located with the GPR survey. The section of pipeline north of the hangers was covered with concrete containing steel bar reinforcement. This prevented the EM-31 from locating Pipeline A, but the GPR was effective.

The western "T" branch of Pipeline A could not be located with either the EM-31 or GPR. Multiple geophysical test lines were conducted covering not only the location of the western "T" branch as shown on HAAF base maps, but also the entire section of the tarmac in case the 1941 hydrant system map was incorrect (Appendix B, Plate 1). Although the GPR parameters for Pipeline A were clear in other locations, it is possible that the pipeline on this branch is significantly different than the rest of Pipeline A (i.e. different diameter, different depth and/or different material of construction). Therefore, multiple tests were conducted with the GPR in an attempt to locate a different target. These tests included different antenna frequencies, adjustments to signal gains, signal stacking, and recording time intervals. None of these efforts were successful in locating a pipeline in the area of the western "T" branch of Pipeline A (as shown on the 1941 HAAF site maps). There are three possible explanations for the absence of a geophysical response to the pipeline in this area:

- 1. The pipeline is not situated as shown on the 1941 HAAF site maps. This possibility seems unlikely because the mapped location of the pipeline was otherwise relatively accurate. In addition, the geophysical survey was conducted to cover an area which would include likely locations of this branch.
- 2. The western "T" branch of Pipeline A is not present (i.e. this part of the pipeline was never built or was built and later removed). M&E's review of available information on the pipeline did not indicate any alternative construction diagrams (as-built drawings) or removal plans for this branch of Pipeline A.
- 3. This branch of Pipeline A is of significantly different construction (depth, diameter, or materials) than the rest of the pipeline and for this reason cannot be located using the geophysical methods employed for this project. This possibility also seems unlikely, assuming that this branch of Pipeline A was constructed at the same time as the rest of the pipeline. Additional review of HAAF and Corps of Engineers records may provide information to support or refute this possibility.

While searching for the western "T" branch of Pipeline A, another geophysical target was located which runs parallel to the line of hangers on the tarmac (Appendix B, Plate 1). This target had a response on the GPR survey similar to a buried metallic pipeline, but the source was not confirmed by digging. This target extends from the location of the Pipeline A "Y" intersection northwest approximately 300 feet where the GPR signal for this target ended.

In general, the mapped location of Pipeline A was accurate. In addition to the discrepancies discussed above, the northeast-southwest section of the eastern "T" branch of Pipeline A was found to be slightly shorter (75 to 100 feet on each end) than shown on site maps.

Geophysical Investigation - Pipeline B

Pipeline B was also located with both the EM-31 and GPR geophysical surveys. In general, the EM-31 accurately located the pipeline with the exception of interference from buildings, fences, other buried metallic objects and parked vehicles. The EM-31 response to Pipeline B, which is a smaller diameter than Pipeline A, was also very weak on the final northeast-southwest section of the pipeline on the airfield tarmac. On this approximately 1,000-foot section of Pipeline B, the EM-31 was inaccurate by several feet and the pipeline location was marked using the GPR data.

The location of Pipeline B, shown on historical (1941) HAAF site maps, is generally accurate with only minor exceptions. The first deviation is immediately southeast of the former Northern Tank Battery. The location of Pipeline B is slightly different than shown on the 1941 HAAF maps, as indicated in Appendix B, Plate 1. The second deviation is approximately at the mid-point of the northwest-southeast section of the pipe as it approaches the former Eastern Battery near the profile marked "Huntab 6". Instead of being straight in this area as the site map shows, the pipeline actually makes a slight offset to miss a small building at the edge of the tarmac. The correct location is marked on this plate. The third deviation from the mapped location is on the final northeast-southwest section of the pipeline on the tarmac. This section of the pipeline was found to be approximately 200 feet shorter than originally mapped.

No geophysical surveys were required for the former Building 728 area. Historical records and previous reports generated for the facility were sufficient to locate former tanks, lines, and potentially contaminated areas. All sampling locations associated with the former Building 728 are illustrated on Plate 1A.

A Geoprobe sampling tool was used to collect groundwater samples for rapid chemical screening during the investigation. Groundwater sampling probes consisted of 4-foot sections, 3/4-inch outer diameter, of hardened drill steel attached to a Geoprobe screen point groundwater sampler. Groundwater samples were collected at depths of 5 to 15 feet bls.

The hollow probes with detachable drive points were advanced below the water table by hydraulically pushing and/or hammering the probes to the desired depths using truck-mounted hydraulics. Depth to the water table was estimated using nearby hand-auger data. If required, an air compressor and rock drill were used to drill through any asphalt or concrete. Once the sample was collected, the rods and screenpoint sampler were retrieved, disassembled, and decontaminated before being used at another location.

The geoprobe sampling rods were driven below the water table. Once at the desired depth, the rods were pulled back about 6 inches to expose the screen and water was allowed to collect in the probe. Water samples were collected using a stainless steel check valve attached to 1/4-inch inner diameter (ID) polytubing that was inserted into the sample probe. The water was retrieved by raising and lowering the check valve apparatus into the groundwater table, forcing a column of water up into the tubing.

Groundwater samples were collected in 40 mL VOA vials that were filled to exclude air and capped with Teflon-lined septa caps. In the analytical van, approximately half of the liquid in the bottle was decanted. The vials were then shaken vigorously and a sample of the headspace from the container was injected into the gas chromatograph (GC) in volumes of 1 to 1,000 mL depending on the VOC concentrations in the sample.

Indirect (headspace) analysis was used because of the large number of water and/or soil samples are to be analyzed daily. The method is more time efficient for the measurement of volatile organics than direct injection of the water or soil sample into the GC because there is less chance of semi-volatile and non-volatile contamination of the system. Depending upon the partitioning coefficient of a given compound, the indirect analysis method may be more sensitive than the direct injection method. The precision and accuracy of both methods are similar.

Section II.D.1. Regulated Substance Released

No reported releases have occurred from any of the 25 USTs associated with the Northern Fuel Battery, Building 728, or from Pipelines A and B. The field report generated by ACE indicated that soil removed underneath the tanks contained total benzene, toluene, ethylbenzene, and xylene (BTEX) values greater than 20 ppm and total petroleum hydrocarbons (TPH) values greater than 100 ppm. Groundwater samples collected from the excavation also indicated petroleum contamination with benzene levels exceeding the 5 part per billion (ppb) maximum contaminant level (MCL).

Section II.D.2. Source of Contamination

The ACE field report did not indicate which component of the fuel storage and dispensing system may have resulted in a loss of fuel to the environment. All USTs and piping associated with the Northern Fuel Battery and Building 728 have been removed. Pipelines A and B remain in place.

Section II.D.3. Impacted Environmental Media

Field Investigation Overview

A total of 110 hand auger soil borings, 44 geoprobe groundwater sampling points, and 30 groundwater monitoring wells were installed during the SI conducted at Pipeline A, Pipeline B, and Building 728. Although three separate areas were investigated, the approach was similar. Consequently, backup documentation such as soil boring logs, well development sheets, equipment calibration logs, etc. are grouped into appendices with information from each area. The geotechnical data are provided in Appendix C. All soil boring logs are provided in Appendix D. Field equipment calibration sheets are provided in Appendix F. All monitoring well schematics and monitoring well development sheets are provided in Appendix G and H,

respectively. Groundwater monitoring well and soil boring survey data can be found in Appendix I. Analytical data are presented in Appendix J.

Criteria for Evaluation of Groundwater

The State of Georgia Department of Natural Resources (DNR) Environmental Protection Division (EPD) has promulgated Instream Water Quality Standards (WQS) under Chapter 391-3-6. These standards, listed in Table 1, may be more stringent than the federal MCLs, as is the case for some metals and one PAH. The State Instream WQS are the criteria used to determine if contamination exists in the fresh waters of the State and may be applied as clean-up goals for surface water and groundwater which is not used for drinking water purposes. These standards will be used to evaluate the data collected on surface waters and groundwater collected at the HAAF. Federal standards such as the maximum contaminant level (MCL) or secondary drinking water standards will not be used to evaluate groundwater data because the shallow aquifer is not in contact with aquifers used locally for potable water supply.

Criteria for Evaluation of Soil

The State of Georgia DNR EPD has promulgated Soil Threshold Levels (STLs) under the Underground Storage Tank (UST) Management program, Chapter 391-3-15. These threshold levels are based on groundwater pollution susceptibility, the distance to drinking water sources, and the distances between the contaminated media and surface water bodies. As mentioned, the site is within a higher groundwater pollution susceptibility area (as defined by the EPD 1992 Geologic Survey Map). Although public water supply wells were identified within 2 miles of the study area, these wells are not believed to be hydraulically connected to the shallow aquifer. Therefore, Table B Soil Threshold Levels (391-3-15-.09) which are based on distance to surface water are used. Springfield Canal (locally known as Lamar Canal), is located within 500 feet of the petroleum contaminated soil identified at the Building 728 area. No surface water bodies exist within 500 feet of either Pipeline A or Pipeline B. Criteria for sites where surface water bodies exist less than 500 feet from the

petroleum contaminant source were selected for evaluating soil analyses from the Building 728 area. Alternatively, criteria for sites where surface water bodies are greater than 500 feet away from the petroleum contaminant source were selected for evaluating soil data from Pipeline A and Pipeline B investigations. Table 2 provides a list of applicable soil Georgia STLs.

Additional soil screening criteria often used by regulatory agencies to assess contamination are also presented in Table 2. These screening criteria will be used to evaluate soil data where no soil threshold level is available. Soil screening criteria include use of 100 times the MCLs, 20 times the Toxicity Characteristics Leaching Procedure (TCLP) leachate concentrations, and proposed RCRA action levels.

TCLP regulatory limits are based on laboratory generated leachate. Regulatory levels in soil were developed by applying a factor of 20 times the TCLP extract limit. The resultant concentration serves as a guidance for determining if the actual soil concentration could potentially exceed regulatory levels if TCLP is applied to the soil. This is based on the dry weight of the solid extracted and the weight of the extraction fluid (1:20 ratio) as described in the TCLP, 40 CFR part 261, Appendix II. RCRA action levels were obtained from the Proposed Rule on Corrective Action for Solid Waste Management Units (SWMU) at Hazardous Waste Management Facilities (FR 30798 Vol.55, July 27, 1990). These action levels are based on several criteria including health-based levels and are provided as guidelines for assessing health risks of environmental contaminants. The proposed rule has not yet been finalized.

Soil Screening Level (SSL) values are derived from proposed draft guidance from the EPA Office of Solid Waste and Emergency Response Soil Screening Guidance Document (December 1994). The listed SSL values are generic and are based on hypothetical site models that were developed for specific contaminants and exposure pathways at a site under a residential land use scenario. The resulting SSL values are expected to be protective for most site conditions across the nation. The SSL values represent concentrations of contaminants capable of migrating from soil to groundwater. Since the SSL values are

proposed and may eventually be used as preliminary remediation goals (PRG) or clean-up levels, they are listed where available.

Site-specific soil results were compared to the STLs for the volatile organic compounds (BTEX) listed by GA DNR EPD. Due to the absence of State threshold levels for metals and some PAH compounds, a range of screening criteria; 100 times the MCL, 20 times TCLP, proposed RCRA action levels and SSL values, were used in evaluating metals and PAHs in soils.

Background Soil and Groundwater Conditions

Background conditions are generally characterized by naturally occurring soil and groundwater conditions without contamination. Background locations are typically situated beyond plume boundaries and are located hydraulically upgradient of known contaminated areas. No specific background soil or groundwater locations were selected for this CAP - Part A investigation because little information was available on groundwater flow directions and the extent of contamination. There are, however, numerous sampling locations along the pipelines and Building 728 area where the sampling results (for BTEX, purgeable and extractable TPH, and PAH) were non-detect, and these results are taken to be representative of background conditions.

Local Geology

The local geology has been documented by the collection of soil samples from over 130 locations along the pipelines, Building 728, and nearby subsurface investigations at other UST sites. Depth of drilling was generally 14 feet below land surface (bls).

The lithology encountered was predominantly a dark gray to dark brown, very fine to medium sand, with variable silt and clay content. Approximately 75 percent of the samples contained less than 10 percent fines which prevented Atterburg limits testing. Moisture content averaged about 22 percent but ranged from 3.6 to 39.7 percent. Generally, the

samples with higher silt and clay content were within a few feet of the surface. Less silt and clay content was noted with depth. An area of higher fines and organics content was noted to exist toward the southeast portion of the site. Soil samples from 29 monitoring well locations (Plate 1A, B) were analyzed for grain size distribution and the results are presented in **Table 3**.

Summary of Analyses

The following sections provide analytical results of soil and groundwater samples collected from Pipeline A, Pipeline B, and the former Northern Fuel Battery/Building 728 Area.

PIPELINE A

Subsurface Investigation- Pipeline A

The subsurface investigation of Pipeline A included the installation of 36 hand auger borings, 11 geoprobe groundwater sampling points, and 5 groundwater monitoring wells. These sampling points were identified based on information obtained from the geophysical surveys of the pipeline. Each sampling location was selected with respect to areas which may be prone to fuel losses such as pipeline elbows, fuel pits, and distribution points. The following sections describe the aerial distribution of petroleum hydrocarbons in proximity to Pipeline A.

Soil Quality and Lithology- Pipeline A

Soil samples from 36 hand-auger borings were collected from June 12 to 29, 1995 at intervals along Pipeline A to assess potential pipeline leakage and local shallow geologic conditions. Sample locations were generally spaced 100 feet apart but some allowances were made for cultural interferences (see Plates 1A and 1B). The near-surface lithology determined from the hand-auger borings is a fine- to medium-grained sand with variable clay

and silt. The clay and silt amount generally decreases with depth. Sample depths were generally 4 feet (first wet sample) but ranged from 0.5 (auger refusal) to 6 feet.

Soil samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX), Gasoline Range Organics (GRO), Diesel Range Organics (DRO) and polynuclear aromatic hydrocarbons (PAHs). Trace concentrations (less than 1 ppm) of TPH were identified in 13 of the 36 soil sampling locations selected along Pipeline A. One sample, H728-HA15, contained 14 ppm extractable TPH. No constituents identified exceeded the State soil threshold levels. A summary of constituents identified in soil samples is provided in Table 4 and is illustrated on Plates 2A and 2B.

Two hand auger locations, HA35 and HA36, were not advanced to the desired depth due to subsurface obstructions. These two abandoned hand auger locations are positioned along the fuel spur, south of Building 842 and 843. Similar subsurface obstructions were encountered during the advancement of hand auger borings HA28 and HA29. However, soil samples were collected at shallow depths above the groundwater table for laboratory analyses from these two locations (HA28 and HA29 are located north of Strachan Drive directly adjacent to the pipeline). A geoprobe sampling tool was used to collect a subsurface soil sample near the two areas along the pipeline where hand auger borings could not be completed to desired depths. The geoprobe samples were collected near the water table at HA29 and HA36. These geoprobe sample results are discussed in the following section. No significant concentrations of hydrocarbon components were identified in either HP26 (located adjacent to HA29) or HP12 (located adjacent to HA36).

Geoprobe Groundwater Sampling- Pipeline A

Eleven geoprobe groundwater samples were collected during July 10-15, 1995 along Pipeline A to assess potential pipeline leakage (see Plates 1A and 1B). The spacing between geoprobe locations was approximately 500 feet along the pipeline and 200 feet apart along the fueling pits (one geoprobe at each fueling pit). Sample depths were generally 10 to 15 feet bls. Four locations were also sampled for soil screening using the field GC since a

hand-auger sample was not collected or was collected at a depth shallower than desired. These locations are hand-auger locations H728-HA31, 32, 35, and 36 and all were sampled at a depth of 5 feet. Of the four samples where a soil sample was analyzed, only H728-HPS36 reported a benzene concentration, at 2 μ g/L. All other BTEX analyses were nondetect.

The results of the geoprobe sampling are presented in Table 5. The majority of the analyses indicate no impact by BTEX or heavy volatile hydrocarbons (total volatile hydrocarbon compounds, TVHC C10-CX). The light fraction of TVHC (C1-C9) is probably methane. Two locations, H728-HP12 and H728-HP13, had benzene concentrations of 2 and 0.5 μ g/L, respectively.

Monitoring Well Installation - Pipeline A

Five monitoring wells (H728-MW7, 15, 16, 17, and 18) were installed along Pipeline A August 4-9, 1995. The locations were based upon the geoprobe results. No contaminated areas were identified using the Geoprobe or hand auger data. The wells were placed in areas where leaks or spills were likely, i.e. at fueling pits and a valve box. The location of all wells installed along Pipeline A is provided on Plates 1A and 1B.

Monitoring well depths range from 13.0 to 13.5 feet bls and are constructed with a 10-foot screen. The screen interval was placed in an attempt to bracket the water table.

Groundwater Quality - Pipeline A

Soil samples from hand auger borings and geoprobe groundwater samples were used in selecting locations for permanent groundwater monitoring wells along Pipeline A. Both soil analyses and in-field screening of geoprobe water samples suggest little petroleum contamination exists along Pipeline A. M&E selected five locations along the pipeline for the installation of permanent groundwater monitoring wells. These locations are provided on **Plates 3A and 3B**. Groundwater samples collected from each of the five monitoring wells

indicate no compounds above detection limits. Analytical laboratory reports for groundwater samples from these wells are summarized on Table 6.

PIPELINE B

Subsurface Investigation - Pipeline B

M&E personnel installed and sampled 54 hand auger borings, 18 geoprobe groundwater sampling points, and 12 groundwater wells during the investigation of Pipeline B. Laboratory analytical results of soil and groundwater samples collected along Pipeline B indicate petroleum compounds are present in both soil and groundwater. The pipeline originates from the rail spur near Building 728 and terminates approximately 2100 feet under the airfield tarmac, south of Building 860. A summary of the areal distribution of hydrocarbons identified in both soil and groundwater is provided in the following sections.

Soil Quality and Lithology - Pipeline B

Soil samples from 54 hand-auger borings were collected from June 12 to 29, 1995 at intervals along Pipeline B to assess potential leakage. Sample locations were generally spaced 100 feet apart but some allowances were made for interferences (see Plates 1A and 1B). Sample depths were generally 4 feet (first wet sample) but ranged from 1.0 (auger refusal) to 8 feet. The near-surface lithology determined from the hand-auger borings is a fine- to medium-grained sand with variable clay and silt. The clay and silt amount generally decreases with depth.

Soil samples were analyzed for BTEX, GRO, DRO, and PAHs. Petroleum hydrocarbons were identified in soil samples at several locations and depths along Pipeline B. Soil results are illustrated on Plates 2A and 2B.

As shown in Table 7, TPH levels were elevated in two locations (H728-HA88 and H728-HA89 at concentrations of 2200 and 1200 ppm, respectively). However, no individual

constituents exceeded health-based screening levels or Georgia thresholds in these samples, and consequently the general indicator TPH would not dictate the need for remediation.

No Georgia threshold levels were exceeded in any samples. Several PAHs were identified in selected locations including: H728-SB25 (9-foot depth), H728-SB26 (5-foot depth), H728-HA77 (4-foot depth), H728-HA78 (6-foot depth), H728-HA79 (6-foot depth), H728-HA85 (2-foot depth), H728-HA88 (2-foot depth), H728-HA90 (2-foot depth), H728-HA91 (2-foot depth), H728-HA98 (3-foot depth), H728-HA99 (3-foot depth), and H728-HA102 (1-foot depth). PAHs at these locations are significantly above background but are below the State threshold levels since the source is greater than 500 feet from a surface water body.

Geoprobe Groundwater Results - Pipeline B

Eighteen geoprobe locations were sampled for groundwater during July 10-15, 1995 with direct-push technology along Pipeline B to assess potential leakage (see Plates 1A and 1B). Spacings were approximately 500 feet apart along the pipeline and 200 feet apart along the fueling pits (one geoprobe at each fueling pit). Sample depths were generally 10 feet bls and the results were used to position permanent monitoring wells.

The results of the geoprobe sampling are presented in Table 8. From the table, location H728-HP34 is noted as having elevated benzene (5500 μ g/L). This location is downgradient of the former Eastern UST Battery. At a lower concentration, location H728-HP36 exhibited a benzene concentration of 55 μ g/L. Numerous other locations contained benzene concentrations of 7 μ g/L or less. The toluene, ethylbenzene, and xylene concentrations were non-detect for all samples. Elevated light fraction of TVHC (C1-C9) somewhat corresponds to elevated benzene but not in all cases, indicating possible presence of methane.

Monitoring Well Installation - Pipeline B

Twelve monitoring wells (H728-MW19 to H728-MW30) were installed along Pipeline B during August 6 to 15, 1995 (see Plates 1A and 1B). The locations were based upon the

geoprobe results and were placed at areas where leaks or spills were likely, i.e. at fueling pits and a UST area.

Monitoring well depths ranged from 12.5 to 14.1 feet deep and were constructed with a 10foot screen. The screen interval was placed in an attempt to bracket the water table.

Groundwater Quality - Pipeline B

Groundwater sampling of all monitoring wells occurred September 5-9, 1995. Twelve locations were selected for the installation of permanent groundwater monitoring wells along Pipeline B. The 12 monitoring wells located along Pipeline B were sampled and analyzed for BTEX and PAHs. The results of soil sampling and geoprobe groundwater sampling were used in determining the location of groundwater monitoring wells. No elevated concentrations of soluble petroleum hydrocarbons were identified in the northernmost 1200 feet of the pipeline shown on Plate 3A. Soluble hydrocarbons were detected in monitoring wells illustrated on Plate 3B. Table 9 provides a summary of groundwater sample analyses along the pipeline. Two sample locations (H728-MW25 and 26) exceeded the Georgia Instream Water Quality Standard of $0.0311 \mu g/L$ for certain PAH compounds. Location H728-MW26 contained four PAHs exceeding standards while location H728-MW25 contained only one. The four PAH compounds coelute in Method 8100 and cannot be quantified individually. Groundwater remediation would not be based on this fairly isolated occurrence.

BUILDING 728

Subsurface Investigation - Building 728

M&E personnel installed and sampled 20 hand auger borings, 15 geoprobe groundwater sampling points, and 13 permanent groundwater monitoring wells during the investigation of the Building 728 area. Petroleum fuel constituents were identified in subsurface soil and groundwater samples collected near the former northern battery underground fuel storage tanks located near Building 728. Elevated hydrocarbons and PAH concentrations were

identified in soil samples. Elevated metals and volatiles were identified in groundwater samples. In addition, free product was identified in MW-8; located near the northwest corner of the former northern battery USTs. The areal extent of hydrocarbons in both soil and groundwater is discussed in the following sections.

Soil Quality and Lithology - Building 728

Soil samples from 20 hand-auger borings were collected from June 12 to 29, 1995 at Building 728 Area to assess potential leakage around the USTs and railcar fueling pits (see **Plate 1A**). Sample locations were generally placed around former UST locations and railcar fueling pits. Sample depths were generally 3 feet (first wet sample) but ranged from 2 to 5 feet. The near-surface lithology determined from the hand-auger borings is a fine- to medium-grained sand with variable clay and silt. The clay and silt amount generally decreases with depth.

M&E personnel collected soil samples for analysis of volatile and semi-volatile organic compounds, and total petroleum hydrocarbons at Building 728. Samples in proximity to the former used oil tanks were also analyzed for inorganic parameters. Soil samples were analyzed for BTEX, GRO, DRO, and PAHs. Analytical results of soil samples indicate that both volatile hydrocarbon and PAH concentrations were elevated in several locations. Table 10 provides a summary of all analytical soil sampling data collected for Building 728. BTEX (the sum of benzene, toluene, ethylbenzene and xylene) ranged from non-detect (U) to 65 parts per million (ppm). One sample (HA9, 3 ft) exceeded the State threshold for benzene. PAHs ranged in concentration from U to 64.2 ppm. State thresholds were exceeded in locations HA2 (4 feet depth), HA9 (3 feet), HA11 (3 feet), HA125 (3 feet), and SB8 (5 feet). Concentrations of purgeable TPH ranged from U to 82,000 J ppm ("J" indicates an estimated quantity). The most common positive analytical results obtained at Building 728 were the purgeable TPH values. Plate 2A illustrates the areal distribution of hydrocarbons identified in soil samples. An enlarged plan section of the Building 728 area provides values of total BTEX, total PAH, purgeable TPH, and extractable TPH at each sampling location.

Geoprobe Groundwater - Building 728

Fifteen geoprobe locations (H728-HP1-11, HP19-22) were sampled for groundwater during July 10-15, 1995 with direct-push technology in the area of Building 728 to assess potential UST leakage. Locations were selected to be adjacent to former USTs and in upgradient and downgradient locations in order to define a possible contaminant plume. Sample depths were 10 feet below land surface and the results were used to position permanent monitoring wells.

The results of the geoprobe sampling are presented in Table 11. Numerous locations exhibited elevated BTEX concentrations, notably H728-HP6, HP9, and HP20. However, the concentrations decrease two orders-of-magnitude from H728-HP6 to HP20. Figure 3 shows a benzene isopleth map with the highest concentrations centered at H728-HP6. Contouring other compounds, i.e., toluene, ethylbenzene, or xylenes yielded similar results since location H728-HP6 had the highest concentration and H728-HP9 had the second highest concentration.

Monitoring Well Installation - Building 728

Thirteen monitoring wells (H728-MW1 to 14 except H728-MW7) were installed at the Building 728 area during August 4-9, 1995. The locations were based upon the geoprobe results and former UST locations. The well locations were selected to confirm geoprobe results, to fill in data gaps, and in downgradient positions to further define the extent of hydrocarbon contamination.

Monitoring well depths ranged from 12.3 to 14.0 feet and were constructed with a 10-foot screen. The screen interval was placed in an attempt to bracket the water table.

Groundwater Quality - Building 728

Groundwater sampling of all monitoring wells occurred September 5-9, 1995. The 13 monitoring wells located at the Building 728 area were sampled and analyzed for volatile

hydrocarbons and semi-volatile hydrocarbons using EPA methods 8020 and 8100, respectively, and in some locations (MW1 through MW5) 8 RCRA metals. Free product was identified in MW8 at an initial level of 1.1 feet and was therefore not sampled. Benzene and metals were identified in groundwater samples collected near Building 728. The unfiltered groundwater samples from MW1, MW2, MW3, MW4, and MW5 were analyzed for Resource Conservation and Recovery Act (RCRA) metals due to their close proximity to former used oil storage tanks.

Table 12 presents a summary of constituents identified in groundwater samples at Building 728. Concentrations of benzene, chromium, lead, and mercury exceeded federal maximum contamination limits (MCLs) and Georgia In-stream standards. The majority of wells installed at Building 728 were placed to identify the extent of soluble hydrocarbon contamination in groundwater. Plume definition was accomplished with relative success as the suspected source areas (former fuel tank and railroad spur) are nearly completely encircled by monitoring wells having no petroleum contamination. Analytical values for petroleum hydrocarbons identified in groundwater samples are illustrated on Plate 3A.

Section II.D.4. Local Water Resources

Potable Well Survey

Two potable water supply wells have been identified within a 1/2-mile radius and 14 potable water wells were identified within a 2-mile radius of the pipelines and are listed in Table 13. The wells are also plotted on Figures 4A and 4B.

Wells 285 and 286 are within the 1/2-mile radius but are not hydraulically connected with the surficial aquifer due to interbedded clay layers at depth (Clarke, et al, 1990). These two wells are cased down to 259 and 260 feet, respectively, and total depths are 504 and 555 feet, respectively. The other wells within the 2-mile radius are also deep with a total depth in excess of 300 feet. Figure 5 depicts a generalized hydrogeologic stratigraphic column of the Savannah area showing the confining units between potable well intake depths and the surficial aquifer. The residential area located north of Lynes Parkway, Staley Heights, is located within a 1/2 mile radius of Building 728. A windshield survey of Staley Heights conducted by M&E indicated no private potable wells are present.

Surface Water Bodies

Former Building 728 and the Former Northern Battery exist less than 500 feet from a manmade surface water drainage canal. The drainage feature is constructed of several subterranean culverts directly north of the Former Northern Battery. Flow in the system occurs toward the west/northwest and the culverts eventually discharge to an open drainage ditch approximately 300 feet northwest of the Former Northern Battery. An evaluation of nearby surface water bodies was also conducted along the Pipeline A and B study areas. No surface water bodies exist less than 500 feet from Pipelines A or B. One man-made lake, located 510 feet west of Pipeline A, does exist; however, it is used for emergency fire fighting water supply and not for human consumption.

The drainage feature located northwest of Former Building 728 is locally known as Lamar Canal. The canal empties into the Springfield Canal, approximately 1300 feet northwest of Former Building 728. Springfield Canal flows southwest and empties into the Forrest River; a tributary of the Little Ogeechee River.

Section II.D.5. Potentiometric Surface

All monitoring wells were gauged on September 5, 1995, except H728-MW14, which was gauged the next day. Table 14 lists the water level, elevations of top of casing (TOC) and the ground surface for all wells at Building 728 and Pipelines A and B. Figure 6 shows the potentiometric surface over the pipeline areas. Groundwater flow is north to north-northwest with a variable gradient. The gradient is 0.002 on the south end of the site, a generally flat area under concrete, but steepens to 0.018 near the northern portion of the study area. Groundwater in the study area is under water table conditions and is encountered between

1.2 to 8.4 feet bls, averaging 5.0. Groundwater flow is toward the northwest with a "sitewide" average gradient of approximately 0.005 ft/ft.

Groundwater flow is generally north-northwest near Building 728 with a gradient of 0.010. A buried culvert (storm drain) located north of Building 728 may affect the local groundwater flow. The culvert was previously an open ditch and could act as a preferential groundwater migration pathway.

Slug test results were reported for two areas on the HAAF property (AT&E 1992, 1993). Sixteen wells were tested with the average hydraulic conductivity (k) result being 2.2×10^{-3} cm/s (6.2 ft/day). Using the formula (Fetter, 1988):

$$v=\frac{ki}{n_e}$$

where:

v	=	seepage velocity
k	=	hydraulic conductivity
i	-	gradient
n,	=	effective porosity (assumed 0.20, Heath, 1987)

the seepage velocity is calculated to be 5.6 x 10^{-5} cm/s (0.16 ft/day).

Section II.D.6 Corrective Action Implemented or In-progress

See Section II.A. of this supporting documentation for a summary of corrective actions completed by ACE. Information on free product recovery operations at Former Building 728 is provided in Section II.B.

Section II.D.7. Conclusions and Recommendations

A total of 110 hand auger borings, 44 geoprobe groundwater sampling points, and 30 groundwater monitoring wells were installed during the investigation of Pipeline A, Pipeline B, and Building 728. A survey of potential receptors was conducted which identified potable wells and surface water bodies in proximity to the investigation areas. A review of potable well records indicated that they were screened at a significant distance below ground surface and are separated from the shallow aquifer by a confining unit. The potable wells, located near Building 728 and the former Eastern Battery, are therefore not considered potential receptors of surficial aquifer contamination. Two surface water bodies were located nearby Pipeline A and Building 728. Lamar Canal is located approximately 300 feet northwest of the Building 728 area, and it is most likely hydraulically connected to the shallow aquifer. A manmade lake was also identified, located approximately 510 feet west of Pipeline A; midway between the Building 728 area and HAAF tarmac pavement. No other potential receptors were identified during the investigation.

The GUST Rule, 391-3-15-.09, provides soil threshold levels for a number of petroleum compounds depending on groundwater susceptibility and location to potential receptors. The receptor survey indicated that two surface water bodies are the most likely receptors of contamination near Pipeline A and Building 728. Two sets of standards listed in Table B of the GUST Rule apply to the investigation areas: More stringent soil threshold levels were used to evaluate soil contamination at Building 728 and the northern reaches of Pipeline A because Springfield Canal is located less than 500 feet from the investigation areas. The southern portion of Pipeline A and the entire section of Pipeline B are greater than 500 feet of surface water bodies; and therefore, hydrocarbon concentrations identified in soil samples from these areas were evaluated using less stringent criteria listed in Table B of the GUST Rules.

No soil constituents exceeded the State soil threshold limits along the entire length of Pipeline A. PAH compounds were identified in three soil samples along the pipeline above background concentrations. However, no direct contact is known or suspected and leachate

to groundwater has not occurred as all constituents were undetected in the five groundwater samples. Consequently, no further action is considered appropriate for Pipeline A.

No surface water bodies were found to exist within 500 feet of Pipeline B. Soil contamination was identified in a number of soil boring locations along Pipeline B. Much of the contamination was centered around Building 860, HA77, HA85, and HA99. Although elevated TPH and PAHs were identified in soil, they do not exceed soil threshold concentrations identified in Table B of the GUST Rule. Several groundwater monitoring wells installed along Pipeline B also contained soluble hydrocarbon compounds. In large part, constituents were in the vicinity of Building 860. The instream WQS for chrysene/benzo(a)anthracene was exceeded at two locations (MW25 and MW26). The WQS was also exceeded for three other PAH constituents at MW26. The isolated occurrence of PAH constituents in these two wells is not significant enough to warrant groundwater remediation.

Concentrations of organic and inorganic contaminants in both soil and groundwater samples collected from the Building 728 area exceeded State and Federal regulatory action levels. The more stringent GUST soil threshold limits apply to Building 728 because of its location with respect to Lamar Canal. In addition to soil and groundwater contamination, free product was identified in MW8. The initial thickness of product measured in MW8 was 1.1 feet. Concentrations of dissolved metals, obtained near the former used oil tanks at Building 728, exceeded MCLs and State in-stream WQS.

Although contamination of both volatile and semivolatile hydrocarbons in soil exceeded threshold limits, soil contamination appears to be confined to the Building 728 area. Petroleum hydrocarbons present in groundwater also appear to be relatively confined within the Building 728 area. However, analytical results suggest some contamination migration has occurred toward the northwest; possibly along the drainage culvert located north of Building 728.

M&E recommends that addition soil borings and monitoring wells be installed to define the

vertical and horizontal extent of contamination in the Building 728 area. Surface water and sediment samples should also be collected from Lamar Canal and the man-made lake (west of Pipeline A) to determine if hydrocarbon and inorganic contaminants have impacted these media. A Site Investigation Plan (SIP) is provided in Section III.A. of this CAP-Part A Supporting Documentation which outlines additional proposed activities. The objectives of the expanded investigation will be to: (1) fully define the horizontal extent of subsurface hydrocarbon contamination, (2) define the vertical extent of contamination hydraulically downgradient of source areas, (3) determine if nearby receptors have been impacted by migrating petroleum hydrocarbon contaminants, (4) evaluate the potential existence of preferred subsurface migration pathways, and (5) evaluate the possible remedial responses. Information obtained from these additional investigative activities will be summarized in a CAP-Part B as specified in Georgia Rule 391-3-15 and submitted to the Georgia DNR EPD for review.

Section III - Site Investigation Plan

The primary purpose for continued site investigation is to define the horizontal and vertical extent of petroleum contamination in proximity to former Building 728. Nearby surface water features will also be sampled to determine if they have been adversely impacted by petroleum hydrocarbons identified at these two locations. The two locations on Pipeline B (near Building 860) where the In-stream Water Quality Standards for four PAH compounds were exceeded are not significant enough to require continued assessment or groundwater remediation. The following SIP outlines proposed sampling locations, investigative methodologies, and sample site selection rationale. A figure illustrating proposed sampling locations is also provided in the SIP.

Soil Investigation

Additional subsurface investigation is required at former Building 728/Northern Fuel Battery to define the extent of benzene and PAH compounds in soil. Additional monitoring wells will also be required to define the horizontal and vertical extent of contamination in

groundwater. Figure 7 provides an illustration of all proposed soil sampling points. In addition, areas where either benzene or PAH concentrations in soil exceed State threshold levels are indicated using hatch patterns.

A total of 14 hand augered soil borings are proposed with samples being collected at 3 feet below land surface. Hand augering locations are centered in three separate areas over the Building 728 site. Soil borings proposed south of former Building 728 are placed to define the extent of PAH contamination in soil. Two additional areas of PAH soil contamination were identified within the fenced boundary of the former Northern Fuel Battery. A small area on the eastern fence line of the former Fuel Battery will be investigated using three hand auger borings. A larger area located on the west fence line will be defined using six hand auger borings. Noteworthy are the locations of proposed monitoring wells within two of these locations where soil will also be sampled. Power auger soil borings will also be conducted in proximity to HA2; located on the eastern fence boundary. Soil samples will be collected above and below the water table (approximately 3 feet and 8 feet bls) at these monitoring well and power auger locations. The horizontal extent of soil containing benzene over the STL will be defined by the three hand augered soil borings located north and west of HA9.

Each soil sample will be analyzed using EPA methods 8020, 8260, and Modified 8015 GRO and DRO. Analytical results will be evaluated along with existing data to determine if the horizontal and vertical extent of petroleum contamination has been identified. These analytical results will also be used to evaluate potential soil treatment alternatives.

Shelby tube samples will be collected from three locations across the former Building 728 area to collect undisturbed soil samples near the water table. These undisturbed samples will be laboratory analyzed for a number of geotechnical parameters including effective porosity, vertical permeability, and grain size distribution. Laboratory analytical methods for determining total organic carbon, dissolved iron, and in situ microbial content will also be

performed. These analyses will allow Metcalf & Eddy to evaluate treatment alternatives and options for passive bioremediation.

Groundwater Monitoring Well Installation

Eleven shallow and two deep wells will be installed to define the horizontal and vertical extent of soluble hydrocarbons in groundwater. The monitoring wells will be installed in two main locations: south of former Building 728 and west of contamination identified on the west fence boundary of the former Northern Fuel Battery. The shallow groundwater monitoring wells will be constructed using similar methodologies employed during the CAP-Part A investigation. The locations of the shallow wells have been selected to define the downgradient extent of soluble hydrocarbons and identify the highest contaminated areas (free product). Each shallow well will be installed into the upper 15 feet of the unconfined aquifer.

Two soil samples will be collected from each monitoring well location as mentioned above. Analytical results of soil boring samples will be used to define the horizontal and vertical extent of impacted soil.

The vertical extent of soluble hydrocarbons will be assessed using two deep wells located south and northwest of Monitoring Well 8 (MW8). The southern well placement is between MW8 and the water supply well. The northwest well placement is downgradient of MW8. Each deep well will be completed with a 5-foot section of machine slotted well screen set from 25 to 30 feet bls. The annular space above the sand pack will be sealed using bentonite pellets and bentonite cement grout to the surface. This annular seal should be sufficient to isolate this deeper portion of the shallow aquifer exposed to the well screen from shallower zones. Each of the two deep wells are located at significant distances from suspected high contamination areas. Therefore, direct hollow stem augering methods should be sufficient to place a well screen to a depth of 30 feet while avoiding carrying contaminants from shallow to deep wells of the surficial aquifer. Soil samples will not be collected from the deep wells for laboratory analysis, only for lithologic description.

Each monitoring well will be developed following procedures outlined in the Phase I Site Investigation Work Plan prepared by Metcalf & Eddy for Building 728. Groundwater samples will be collected from all newly installed and existing monitoring wells following the development and stabilization periods. Each sample will be analyzed for soluble hydrocarbons using EPA method 8020 and 8260. Analytical results of these samples will be compared with previous groundwater sample results to assess the change in hydrocarbon concentration over time and define the vertical and horizontal extent of contamination. Groundwater analytical results will also be used to evaluate appropriate remedial alternatives for contaminated groundwater.

Surface Water and Sediment Investigation

Surface water and sediment samples will be collected from Lamar Canal. Metcalf & Eddy anticipates collecting three surface water and three sediment samples from locations adjacent to and downgradient of the former Northern Fuel Battery. One surface water and sediment sample will be collected from the drainage inlet directly north of the former Fuel Battery. Two surface water and sediment samples will be collected from the open ditch located approximately 300 feet northwest of the former Fuel Battery. Surface water and sediment samples will be analyzed using the same EPA methods as soil and groundwater to identify petroleum contamination.

M&E will perform eight slug tests in proximity to the Northern Fuel Battery to collect hydrogeologic information on the shallow aquifer. Information collected from the slug tests should be sufficient to determine the aquifer's hydraulic conductivity and estimate the aquifer's transmissivity. Values of hydraulic conductivity will be used with the hydraulic gradient to calculate groundwater velocity.

Metcalf & Eddy will prepare a detailed work plan to be used during this continued subsurface contamination assessment. The Work Plan will include sub-plans such as a Geologic Data Acquisition Plan (GDAP), Sampling and Analysis Plan (SAP), and Site Safety & Health Plan (SSHP). Procedures to be followed during field investigations, data validation, and reporting will be outlined in the Work Plan and supporting plans.

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TABLES

TABLE 1

STATE IN-STREAM STANDARDS FOR GROUNDWATER AND SURFACE WATER

BUILDING 728 AND AIRPORT HYDRANT SYSTEM INVESTIGATION HUNTER ARMY AIR FIELD

CONTAMINANT	GADNR-WQ STDS (ug/L) 3
INORGANICS	
ARSENIC	50
BARIUM	
CADMIUM	36
CHROMIUM (Total)	120*
LEAD	1.3*
MERCURY .	0.012
SELENIUM	5
SILVER	
VOLATILE ORGANICS	
BENZENE	71.28
ETHYL BENZENE	28,718
TOLUENE	200,000
TOTAL XYLENES	(E.)
SEMIVOLATILE ORGANICS	
ANTHRACENE	110,000
BENZO(a)ANTHRACENE	0.0311
BENZO(b)FLUORANTHENE	0.0311
BENZO(k)FLUORANTHENE	0.0311
BENZO(a)PYRENE	0.0311
CHRYSENE	0.0311
DIBENZ(a,h)ANTHRACENE	0.0311
FLUORANTHENE	370
FLUORENE	14,000
INDENO(1,2,3-c,d)PYRENE	0.0311
PYRENE	11,000

1 - Georgia DNR, EPD, Chapter 391-3-6.03, Water Quality Control, Instream Water Quality Standards, Section 5(d)(ii)&(iii) 5/29/94 (*) For hardness levels less than 100 mg/L. (Acceptable concentrations increase with increasing hardness).

(-) No criteria exists

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B
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SCREENING CRITERIA USED FOR EVALUATION OF SOILS

PHASE I SI-BUILDING 728, AIRPORT HYDRANT SYSTEM HUNTER ARMY AIR FIELD

SOIL CONTAMINANT	TGLP (1) LEVEL (ppm)	RCRA ACTION LEVEL mg/kg (2)	100 X MCL (3) (ppm)	CERCLA SSL (4) (mg/kg)	(mg/kg) < 500° TH LEVEL (5)	> 500' TH LEVEL. (6) (mg/kg)
INORGANICS						
ARSENIC	100	80	ŋ	15	-	-
BARIUM	2000	4000 (a)	32	32	¢	1
CADMIUM	20	40	9	9	1	y
CHROMIUM	100	400 (a)	19 (*)	(*) 61	į	1
LEAD	100	4	1		i.	a
MERCURY	4	20	¢	0	1	1
SELENIUM	20	i	e	3	1	4
SILVER	100	200	1	1	1	i.
VOM ATH E OBGANICS	A STATE AND A STATE		and the states of a state of			
BENZENE	NA	-		NA	0.017	012
ETHYLBENZENE	1	NA	4	NA	18	140
TOLUENE	T	NA	9	NA	115	500
TOTAL XYLENES	a.	NA	1	NA	700	200
SEMIVOLATILE ORGANICS			the state of the state of the	100 C		
ACENAPHTHENE	1	ī	1	-	NA	NA
ANTHRACENE	ł	ł	1	j.	NA	NA
BENZO (a) ANTHRACENE	1	Ĩ.	1	NA	0.66 (b)	NA
BENZO (a) PYRENE	i	1	NA	NA	0.66 (b)	NA
BENZO (b)FLUORANTHENE	į	1	1	NA	0.66 (b)	NA
BENZO (k)FLUORANTHENE	į	1	1	NA	0.66 (b)	NA
CHRYSENE	1	4	1	NA	0.66 (b)	NA
DIBENZ(a,h)ANTHRACENE	l	a	ù	NA	0.66 (b)	NA
FLUORANTHENE	1	į	1	980	NA	NA
FLUORENE	1	ī	1	160	NA	NA
INDENO(1,2,3-c,d)PYRENE	I	1	1	NA	0.66 (b)	NA
NAPHTHALENE	l	î	i.	30	NA	NA
PHENANTHRENE	į	ì	i	NA	NA	NA
PYRENE	1	ì	4	1400	NA	NA

1- TCLP LEVELS; Guidefines for contaminants in soils is based on: 40 CFR Part 268.41 Constituent Concentration in Waste Extract (CCWE) for non-wastewaters.

A factor of 20X the COWE is applied to determine it these offer a consentration could potentially exceed regulatory levels if TGLP were applied (20X TGLP extract finitis is a screening criteria or Adom Levels (appendix A, 40 CFR 264.521) Corrective Action for SWMUs at Hazardous Waster (20X TGLP extract finitis is a screening criteria or Adom Levels (appendix A, 40 CFR 264.521) Corrective Action for SWMUs at Hazardous Waster Managament Facilities, Proposed Rule FR30788 Vol. 55 no 145, July 27.1990.
(a) Chromium = Hexavalerin Chromium, Bartum = Ion/c Bartum
(b) Chromium = Hexavalerin Chromium, Bartum = Ion/c Bartum
(c) Thromium I and compounds (5) - soil struation nomentration
5 - Nomium VI and compounds (5) - soil struation nomentration
5 - Soil Threshold Levels (S) - soil struation nomentration
5 - Soil Threshold Levels (S) - soil struation nomentration
6 - Chromium VI and compounds (5) - soil struation nomentration
7 - Chromium VI and compounds (5) - soil struation nomentration
6 - Soil Threshold Levels Coll Sceening Levels based on migration from soil to groundwater
(b) - Estimated detection finit, since the calculated health-based threshold levels (S) - Soil Threaned Levels (S) - soil struation nomentration
6 - Soil Threahold Levels 7500 feet to surface water body - GA DNIR, EPD Chapter 391 - 3-15 - J09, UST Management, Table B
(b) - Estimated detection finit, since the calculated health-based threshold levels (S) - Soil Threahold condition (C) - No ordina solution nomentration
(c) - Chromium VI and compounds (5) - soil struation nomentration
7 - Chromium VI and compounds (5) - soil struation nomentration
7 - Chromium VI and compounds (5) - soil struation nomentration
8 - Soil Threshold Levels - Soil feet to surface water body - GA DNIR, EPD Chapter 391 - 3-15 - J09, UST Management, Table B
10 - Estimated detection finit, since the calculated health

BUIL	DING 728 a	TABLE and PIPELII		N SIZE ANA	LYSIS
			ze Distributi		6
Location	Depth ft,bgs	Gravel	Sand	Silt/Clay	USCS
H728-SB1	1-3	0	95.9	4.1	SP
H728-SB2	11-13	0	99.0	1.0	SP
H728-SB3	11-13	0	97.9	2.1	SP
H728-SB4	9-11	0	95.5	4.5	SP
H728-SB5	1-3	0	79.0	21.0	SM
H728-SB6	3-5	1.4	87.5	11.1	SP-SM
H728-SB7	No Sample (Collected			
H728-SB8	11-13	0	96.6	3.4	SP
H728-SB9	3-5	0	58.8	41.2	SC
H728-SB10	9-11	0	93.3	6.7	SP-SM
H728-SB11	5-7	0	66.8	33.2	SC
H728-SB12	5-7	7.7	83.4	8.9	SP-SM
H728-SB13	7-9	0	87.6	12.4	SM
H728-SB14	1-3	0	97.1	2.9	SP
H728-SB15	7-9	0	98.9	1.1	SP
H728-SB16	3-5	0	97.6	2.4	SP
H728-SB17	3-5	0	96.7	3.3	SP
H728-SB18	5-7	0	97.2	2.8	SP
H728-SB19	10-11	0	74.0	26.0	SM
H728-SB20	7-9	0	98.8	1.2	SP
H728-SB21	13	0	40.2	59.8	CL
H728-SB22	9-11	0	92.8	7.2	SP-SM
H728-SB23	9-11	0	94.9	5.1	SP-SM
H728-SB24	11-13	0	93.7	6.3	SP-SM
H728-SB25	5-7	29.0	66.4	4.6	SP
H728-SB26	1-3	0	92.5	7.5	SP-SM
H728-SB27	7-9	0	92.4	7.6	SP-SM
H728-SB28	5-7	0	85.4	14.6	SM
H728-SB29	9-11	0	90.9	9.1	SP-SM
H728-SB30	5-7	0.7	93.3	6.0	SP-SM

(728grain.wk1)

SUMMARY OF CONSTITUENTS DETECTED IN SOIL Hunter Army Airfield Pipeline A TABLE 4

SAMPLE ID SAMPLE DATE	SCREENING	H728-HA15 06/14/95	H728-HA16 06/14/95	H728-HA17 06/14/95	H728-HA18 06/15/95	H728-HA19* 06/15/95	H728-HA112* 06/15/95	H728-HA20 06/15/95
SAMPLE DEPTH MATRIX	CRITERIA (1)	1.0' SOIL	3.0' SOIL	4.0' SOIL	3:0' SOIL	1.0' SOIL	1.0' SOIL	5.0' SOIL
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	та/ка	та/ка	mg/kg
BTEX		2.0	r 7	D	D	D	п	D
PURGEABLE TPH	Ţ	n	D	7	0	2	n	7
EXTRACTABLE TPH	1	14	2	D	D	D	D	D
РАН	(q) V/N	D	D	n		Þ	Þ	þ
Chrysene & Benzo(a)anthracene(2)					0.44			
SAMPLE ID		H728-HA21	H728-HA22	H728-HA23	H728-HA24	H728-HA25	H728-HA26	H728-HA27*
SAMPLE DATE	SCREENING	06/15/95	06/15/95	06/15/95	06/15/95	06/16/95	06/16/95	06/16/95
SAMPLE DEPTH	CRITERIA (1)	4.0	5.0'	4.0	4.0'	4.0	1.0'	4.0
MATRIX		SOIL	SOIL	SOIL	SOIL	SOIL	SolL	SOIL
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
BTEX •		D	D	D	D	D	þ	п
PURGEABLE TPH	1	n	D	C	D	n	7	n
EXTRACTABLE TPH	ı	D	n	n	n	D	D	2
PAH	N/A(b)	Ū.		n	n	5	D	n
Benzo(b,k)fluoranthene(2)			0.93					
Benzo(a)pyrene Chrysene & Benzo(a)anthracene(2)			0.40					
SAMPLE ID	SOIL	H728-HA113*	H728-HA28	H728-HA29	H728-HA30	H728-HA31	H728-HA32	H728-HA33
SAMPLE DATE	SCREENING	06/16/95	06/16/95	06/16/95	06/19/95	06/19/95	06/19/95	06/16/95
MATRIX		SOIL	SOIL	N't	SOIL		0.100	0.5 N
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
BTEX		C	D	D	n	D	C	D
PURGEABLE TPH	1	D	5	П	5	D	0.66	D
EXTRACTABLE TPH	1	> :	∍:	ב:	∍:	2	5	D
PAH		D T	0	0	0	n	n	N

(1) - (b) N/A - NOT APPLICABLE. THE HEALTH BASED THRESHOLD LEVEL EXCEEDS THE EXPECTED SOIL CONCENTRATION UNDER FREE PRODUCT CONDITIONS.
 (2) - THESE CONSTITUENTS CANNOT BE INDIVIDUALLY CONFIRMED BECAUSE THEY COELUTE IN METHOD 8100
 (-) - NO CRITERIA EXISTS

- DENOTES SAMPLE/DUPLICATE PAIRS
 J - RESULT ESTIMATED
 U - ALL PARAMETERS ARE UNDETECTED

SUMMARY OF CONSTITUENTS DETECTED IN SOIL Hunter Army Airfield TABLE 4 (Cont.) Pipeline A

SAMPLE ID SAMPLE DATE SAMPLE DEPTH MATRIX UNITS	SOIL SCREENING CRITERIA (1) mg/kg	H728-HA34 06/16/95 1:0' SOIL mg/kg	H728-HA35 SolL mg/kg	H728-HA36 SoiL mg/kg	H728-HA37 06/16/95 4.0' SOIL mg/kg	H728-H448 06/19/95 2.0" SOIL mg/kg	H728-H449 06/19/95 5.0' SOIL mg/kg	H728-HA50 06/19/95 4.0' SOIL ma/kg
BTEX PURGEABLE TPH EXTRACTABLE TPH PAH	ŢŦ		A A A A A	N N N N N N N N N N N N	ככככ	ר ב מינ מינ	с. <mark>8</mark> .с	2 ⁶ 6 2 2
SAMPLE ID SAMPLE DATE SAMPLE DEPTH MATRIX UNITS	SOIL SCREENING CRITERIA (1) mg/kg	H728-HA51* 06/19/95 4.0' SOIL mg/kg	H728-HA115* 06/19/95 4.0' Soit mg/kg	H728 - HA52 06/19/95 5.0' S.0!L mg/kg	H728-HA53 06/19/95 3.0' SOIL mg/kg	H728-HA54 06/19/95 3.0 SOIL mg/kg	H728-HA55 06/19/95 3.0' SolL mg/kg	
BTEX PURGEABLE TPH EXTRACTABLE TPH PAH Benzo(b,k)fluoranthene(2) Benzo(a)pyrene Chrysene & Benzo(a)anthracene(2) Fluoranthene Pyrene	- - N/A(b)	282823 C 82	د c ⁸ د	с с 2 ² с	<u>ح 8</u> ح	ב ב 3 ³ כ	CC 8 C	
SAMPLE ID SAMPLE DATE SAMPLE DEPTH MATRIX UNITS	SOIL SCREENING CRITERIA (1) mg/kg	H728 – HA56 06/19/95 6.0' SOIL mg/kg	H728-HA57 06/19/95 5.0' SOIL mg/kg	H728 - HA58 06(19)95 5.0' SOIL mg/kg	H728 - HA59 06/20/95 6.0' SOIL mg/kg	H728 HAG0* 06(20)95 3.0' SOIL mg/kg	H728-HA116* 06/20/95 3.0' SOIL mg/kg	
BTEX PURGEABLE TPH EXTRACTABLE TPH PAH	1.1	0.56 U U	2222	ה ב 85.0 ס 39	ט ניט ניט	ר ני ר ר ר	ת ה 22 סיבי	
 (1) - (b) N/A - NOT APPLICABLE. THE HEALTH BASED THRESHOLD LEVEL EXCEEDS THE EXPECTED SOIL CONCENTRATION UNDER FREE PRODUCT CONDITIONS. (2) - THESE CONSTITUENTS CANNOT BE INDIVIDUALLY CONFIRMED BECAUSE THEY COELUTE IN METHOD 8100 (-) - NO CRITERIA EXISTS 	SED THRESHOLD LEVE VS. JALLY CONFIRMED BEC	L EXCEEDS THE EXPECT AUSE THEY COELUTE IN	TED SOIL CONCENTRA	NOL	 DENOTES SAMPLE/DUPLICATE PAIRS RESULT ESTIMATED ALL PARAMETERS ARE UNDETECTED WAL = DABAMETER NOT ANALYZET 	 DENOTES SAMPLE/DUPLICATE PAIRS RESULT ESTIMATED ALL PARAMETERS ARE UNDETECTED ARAMETER NOT ANAT VYED 		

TABLE 4 (Cont.) Pipeline A Hunter Army Airfield SUMMARY OF CONSTITUENTS DETECTED IN SOIL

SAMPLE DATE SAMPLE DEPTH MATRIX UNITS	SCREENING CRITERIA (1) mg/kg	08/02/95 3.0 – 5.0' SOIL	08/04/95 7.0' SOIL mg/kg	08/04/95 6.0 SOIL mg/kg	08/08/95 7.0 SOIL mg/kg	Ву/Бш 1.0; 50;80	08/09/95 7.0' Mg/kg	08/09/95 7.0 mg/kg
BTEX		n	ņ	D	D	D	D	5
PURGEABLE TPH	4	D	5	0.26	D	Л	0	2
EXTRACTABLE TPH	1	2	D	n	D	J	n	2
PAH		2	n	n	5	D	C	n

(1) - (a) SOIL SCREENING CRITERIAFOR SOILS
 (-) - NO CRITERIA EXISTS

BENOTES SAMPLE/DUPLICATE PAIRS
 ALL PARAMETERS ARE UNDETECTED

	I	IPELINE A G	PIPELINE A GEOPROBE RESULTS (µg/L)	TS (μg/L)		
Groundwater Sample	Benzene	Toluene	Ethyl-Benzene	Xylene	TVHC(C1-C9)	TVHC (C10-CX)
H728-HP14-12	<1	<2	<2	<5	14	<4
H728-HP15-12'	<0.5	< 0.7	<0.9	<2	54	<2
H728-HP16-12'	<0.5	< 0.7	<0.9	<2	56	<2
H728-HP17-12'	<0.5	<0.7	<0.9	<2	32	<2
H728-HP12-15'	2	<0.7	√	<2	680	<2
H728-HP18-12'	< 0.8	<1	<2	<3	16	<3
H728-HP13-15'	0.5	0.6	<1	<2	490	<2
H728-HP23-10°	<0.5	< 0.7	<1	<2	130	<2
H728-HP24-10°	<0.5	<0.7	<1	<2	310	<2
H728-HP25-10'	<0.5	< 0.7	$\overline{\nabla}$	<2	17	<2
H728-HP26-10'	<0.5	<0.7	<1	<2	43	<2
H728-HPS-31-5'	<0.5	<0.7	<1	<2	11	<2
H728-HPS-32-5'	<0.5	0.7	<1	<2	7	<2
H728-HPS-36-5'	5	< 0.7	<0.9	<2	11	<2
H728-HPS-35-5'	<0.5	< 0.7	<0.9	<2	80	<2

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All concentrations are in micrograms per liter (μ g/L) CX - All detectable hydrocarbon compounds with more than 10 carbon bonds identifiable during the field screening activities.

SUMMARY OF CONSTITUENTS DETECTED IN GROUNDWATER Hunter Army Airfield **Pipeline A** TABLE 6

SAMPLE DATE SAMPLE DEPTH MATRIX UNITS	WATER WATER WATER WATER WATER WATER WATER WATER WATER	09/07/95 09/07/95 2.9 - 12.9 WATER ug/L	3.0 - 13.0' 09/07/95 3.0 - 13.0' WATER ug/L	n728-mw17 09/07/95 3.0 - 13.0° WATER ug/L	/ H/28-MW18 09/07/95 3.0 - 13.0 WATER Ug/L
BTEX	D	D	C	n	5
PAH	0	0	0	0	n

(1) - GEORGIA DEPARTMENT OF NATURAL RESOURCES, IN - STREAM WATER QUALITY STANDARDS
 (-) - NO REGULATORY OR ACTION LEVEL LISTED

+ DENOTES SAMPLE/DUPLICATE PAIRS
 NS - PARAMETER NOT SAMPLED
 J - RESULT ESTIMATED
 U - ALL PARAMETERS ARE UNDETECTED

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SUMMARY OF CONSTITUENTS DETECTED IN SOIL Hunter Army Airfield Pipeline B TABLE 7

SAMPLE DEPTH MATRIX UNITS	CRITERIA (1) mg/kg	2.0' SOIL mg/kg	3.0' SOIL mg/kg	3.0' SolL mg/kg	3.0' SOIL mg/kg	3.0' SOIL TIOS	3.0' SOIL mg/kg
BTEX		n	D	n	C	D	r 7
PURGEABLE TPH	1	D	D	D	D	n	D
EXTRACTABLE TPH	1	D	D	D	D	D	35
PAH		0	n	U	n	n	ŋ

SAMPLEID SAMPLEDATE SAMPLEDEPTH MATRIX UNITS	SOIL SCREENING CRITERIA (1) mg/kg	H728-HA43 06/16/95 3.0' SOIL mg/kg	H728-HA44 05/16/95 5.0' SOIL mg/kg	H728-HA45 06/18/95 5.0' SOIL mg/kg	H728 - HA46 06/18/95 5.0' SOIL mg/kg	H728-HA47 06/18/95 2.0' SOIL mg/kg
BTEX		רח	c	ΓŊ	5	רח
PURGEABLE TPH	1)	D	n	D	P
EXTRACTABLE TPH	1	D	18	D	16	n
PAH		2	D	n	п	n

(1) - (a) SOIL SCREENING CRITERIAFOR SOILS (-) - NO CRITERIA EXISTS

- DENOTES SAMPLE/DUPLICATE PAIRS
 J - RESULT ESTIMATED
 U - ALL PARAMETERS ARE UNDETECTED

SUMMARY OF CONSTITUENTS DETECTED IN SOIL Hunter Army Airfield TABLE 7 (Cont.) Pipeline B

	SOL	H728-HA61	H728-HA62	H728-HA63	H728-HA64	H728-HA65	H728-HA66
SAMPLE DATE SAMPLE DEPTH MATRIX UNITS	SCREENING CRITERIA (1) marka	06/20/95 4.0' SOIL marka	06/20/95 5.0' SOIL ma/ka	06/20/95 6.0' SOIL marka	06/20/95 3.0' SOIL marika	06/20/95 8.0' SOIL marka	06/20/95 2.0' SOIL
BTEX	D		D	Rugan D	Ryjem	n Ry/Riti	Ry/Riti
PURGEABLE TPH	ł	0.35	0.47	D	0.56		0.64
EXTRACTABLE TPH	ì	D	D	D	D	D	n
PAH		D	U	n	n	n	n
SAMPLE ID	SOIL	H728-HA67	H728-HA68	H728-HA69	H728-HA70	H728-HA71*	H728-HA117*
SAMPLE DATE	SCREENING	06/20/95	06/21/95	06/21/95	06/21/95	06/21/95	06/21/95
SAMPLE DEPTH	CRITERIA (1)	6.0'	4.0'	3.0'	6.0'	3.0'	3.0'
MATRIX		SOIL	IUS	aus	SOIL		SOIL

SAMPLE ID	SOIL	H728-HA67	H728-HA68	H728-HA69	H728-HA70	H728-HA71*	1H7
SAMPLEDATE	SCREENING	06/20/95	06/21/95	06/21/95	06/21/95	06/21/95	
SAMPLE DEPTH	CRITERIA (1)	6.0'	4.0'	3.0'	6.0'	3.0'	
MATRIX		SOL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS	mg/kg	mg/kg	mg/kg	mg/kg		mg/kg	mg/kg
BTEX		D	D	n	D	n	n
PURGEABLE TPH	1	2.0	2.2	D	n	C	0
EXTRACTABLE TPH	1	D	D	r n	r n	n J	L J
PAH		n	D	n	D	n	п

(1) - (a) SOIL SCREENING CRITERIAFOR SOILS (-) - NO CRITERIA EXISTS

- DENOTES SAMPLE/DUPLICATE PAIRS
 J - RESULT ESTIMATED
 U - ALL PARAMETERS ARE UNDETECTED

SUMMARY OF CONSTITUENTS DETECTED IN SOIL Hunter Army Airfield TABLE 7 (Cont.) Pipeline B

H H H IPH N(A) (b) U (a) anthracene(2) ne (a) anthracene(2) (a) anthracene(2) (a) anthracene(2) (b) U U U U U U U U U U U U U U U U U U U	SAMPLE ID SAMPLE DATE SAMPLE DEPTH	SOIL SCREENING CRITERIA (1)	H728-HA72 06/21/95 6.0'	H728-HA73 06/21/95 6.0'	H728-HA74 06/21/95 6.0'	H728-HA75 06/21/95 6.0'	H728-HA76 06/21/95 8.0'	H728-HA77 06/21/95 4.0'
PH U	MATRIX UNITS	mg/kg	SOIL SOIL	Ba/kg SOIL	SOIL mg/kg	SOIL mg/kg	SOIL mg/kg	SOIL mg/kg
PH - U	BTEX		D	C	D	D	þ	Þ
TPH U	PURGEABLE TPH	ī	n	D	n	n	D	D
nthene(2) NA (b) U	EXTRACTABLE TPH	1	ר ח	r 7	U J	L J	12 J	1.7 J
nthene(2) – – – – – – – – – – – – – – – – – – –	PAH	(d) A/N	D	D	D	n	D	
lene – – – – – – – – – – – – – – – – – –	Benzo(b,k)fluoranthene(2)							91
20(a)anthracene(2) I)pyrene & thracene(2) - & Anthracene(2) -	Benzo(g,h,i)perylene	Ţ						21
zo(a)anthracene(2) I) pyrene & thracene(2) - & Anthracene(2) -	Benzo(a) pyrene							46
1	Chrysene & Benzo(a) anthracene(2)							12
1	Fluoranthene							130
1	Fluorene							32
1	Indeno(1,2,3-cd)pyrene &							
1	Dibenzo(ah)anthracene(2)							42
1	Naphthalene							12
	Phenanthracene & Anthracene(2)	ı						210
	Pyrene							110
	SAMPLE ID	SOIL	H728-HA78	H728-HA79*	H728-HA118*	H728-HA80	H728-HA81	H728-HA82
SOIL H728-HA78 H728-HA79* H728-HA118* H728-HA80 H728-HA81	SAMPLE DAIE	SCHEENING	06/16/95	06/21/95	06/21/95	06/16/95	06/18/95	06/18/95

SAMPLE ID	SOIL	H728-HA78	H728-HA79*	H728-HA118*	H728-HA80	H728-HA81	H728-HA82
SAMPLE DATE	SCREENING	06/16/95	06/21/95	06/21/95	06/16/95	06/18/95	06/18/95
SAMPLE DEPTH	CRITERIA (1)	6.0'	6.0	6.0'	6.0	4.0	2.0,
MATRIX		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
BTEX		'n	.10	-	-	÷	-
)	>	2	,	2	0
PURGEABLE TPH	1	0	D	Ð	D	D	D
EXTRACTABLE TPH	1	D	13 J	15 J	D	0	D
PAH	N/A (b)				þ	D	0
Benzo(b,k)fluoranthene(2)		0.42	0.62	0.82			
Pyrene				0.41 J			

(1) - (b) N/A - NOT APPLICABLE. THE HEALTH BASED THRESHOLD LEVEL EXCEEDS THE EXPECTED SOIL CONCENTRATION UNDER FREE PRODUCT CONDITIONS.
 (2) - THESE CONSTITUENTS CANNOT BE INDIVIDUALLY CONFIRMED BECAUSE THEY COELUTE IN METHOD 8100
 (-) - NO CRITERIA EXISTS

- DENOTES SAMPLE/DUPLICATE PAIRS
 J - RESULT ESTIMATED
 U - ALL PARAMETERS ARE UNDETECTED

TABLE 7 (Cont.) Pipeline B Hunter Army Airfield SUMMARY OF CONSTITUENTS DETECTED IN SOIL

ABLE TPH - 0 <th0< th=""> 0 <th0< t<="" th=""><th>SERSLE TPH - U <thu< th=""> U U</thu<></th><th>SAMPLE DEPTH MATRIX MATRIX</th><th>SCREENING CRITERIA (1) ma/ka</th><th>06/22/95 3.0' SOIL mr/kn</th><th>06/22/95 6.0' SOIL</th><th>06/22/95 2.0' SOIL morker</th><th>06/22/95 2.0' SOIL mailed</th><th>06/22/95 4.0' SOIL</th><th>06/22/95 5.0' SOIL motion</th></th0<></th0<>	SERSLE TPH - U <thu< th=""> U U</thu<>	SAMPLE DEPTH MATRIX MATRIX	SCREENING CRITERIA (1) ma/ka	06/22/95 3.0' SOIL mr/kn	06/22/95 6.0' SOIL	06/22/95 2.0' SOIL morker	06/22/95 2.0' SOIL mailed	06/22/95 4.0' SOIL	06/22/95 5.0' SOIL motion
SEABLE TPH - U <thu< th=""> U U</thu<>	ERBLE TFH - U <thu< th=""> U U<</thu<>			D	n	n n			
ACTABLE TPH - U <thu< th=""> U U <thu< td=""><td>ACTABLE TPH NA (b) U <thu< th=""> U U</thu<></td><td>PURGEABLE TPH</td><td>1</td><td>0</td><td>D</td><td>D</td><td>D</td><td>C</td><td>5</td></thu<></thu<>	ACTABLE TPH NA (b) U <thu< th=""> U U</thu<>	PURGEABLE TPH	1	0	D	D	D	C	5
(L)(Muoranthene(2)) MA (b) U U S00 U S00 U S00	UL U U U Sol U <thu< th=""> U U U</thu<>	EXTRACTABLE TPH	1	D	D	D	D	D	n
SOIL H728-HA88 H728-HA89 H728-HA90 H728-HA91 SCREENING 06/22/95 06/27/95 06/27/95 06/27/95 CRITERIA (1) 2.0° 2.0° 5.0° 2.0° SCREENING 06/22/95 06/27/95 06/27/95 06/27/95 CRITERIA (1) 2.0° 2.0° 5.0° 2.0° RoolL SOIL Mg/kg mg/kg mg/kg 06/27/95 Mg/kg Mg/kg mg/kg mg/kg mg/kg 06/27/95 06/27/95 Tool 10 0.0059 U U U 2.0° Tool 2.3 3.6 U U 22 NA (b) 0.0059 1.200 J U 22 NA 1 1 0 22 - 2200 J 1.200 J U 22 - - 2200 J 0.44 21 - - 2200 J 0.26 21 - -	Soll H728-HA88 H728-HA89 H728-HA89 H728-HA81 H728-HA82 H728-HA81 H728-HA82 H627 H728-HA82 H428 H728-HA82 H728-HA82 H428 H728-HA82 H728-HA82 H428 H728-HA82 H428 H728 H428 H H438 H H H H H H H H H H H H H H H	PAH	(d) N/N	D	D		D	D	D
TE SOIL H728-HA85 H728-HA85 H728-HA91 H30 H728-HA91 CPTH SCOL SCOL SCOL 06/27/95 06/27/95 06/27/95 06/27/95 EPTH SCOL	SOL H728 - HA88 H728 - HA89 H728 - HA89 H728 - HA89 H728 - HA89 H728 - HA91 H728 - HA92 O6/27/95 O/0 U U U U U U U U U U U U U U U U U <th< td=""><td>Benzo(b,k)fluoranthene(2) Chrysene & Benzo(a)anthracene(2)</td><td></td><td></td><td></td><td>590 500</td><td></td><td>-</td><td></td></th<>	Benzo(b,k)fluoranthene(2) Chrysene & Benzo(a)anthracene(2)				590 500		-	
TE SOIL H728-HA88 H728-HA90 H728-HA91 TE SOIL WT28-HA89 H728-HA90 H728-HA91 EPTH SCREENING o6/27/95 06/27/95 06/27/95 EPTH SOIL SOIL SOIL SOIL mg/kg mg/kg o6/22/95 06/27/95 06/27/95 ETPH SOIL SOIL SOIL SOIL BLE TPH Na/kg mg/kg mg/kg mg/kg NA (b) 0.0059 U U U Coolof 0.0074 3.6 U U 22 Anthene(2) - 2.0 1200 J U 22 ETPH N/A (b) 0.0074 3.6 U U 22 Constribute(2) - - 2200 J U U 22 Secolal 1200 J U U U 22 11 Secolal - 2.3 3.6 U 0	SOIL H728-HA83 H728-HA83 H728-HA83 H728-HA91 H728-HA91 H728-HA92 GREENING 06/27/95 06/27/95 06/27/95 06/27/95 06/27/95 06/27/95 RITEHA (1) S.U S.U S.U S.U S.U S.U S.U S.U mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg 00 140 (b) 0.0059 U U U U U U 700 (b) 0.0074 3.6 U U U U U U U 700 (b) 0.0074 3.6 U								
E DATE SCREENING 06/22/95 06/22/95 06/27 00/2 0/2	OREENING 06/22/95 06/22/95 06/22/95 06/27/95 0/26 0/27 0/27 0/27 0/27 0/27 0/27 0/27 0/27 0/27 0/27	SAMPLE ID	SOIL	H728-HA88	H728-HA89	H728-HA90	H728-HA91	H728-HA92	H728-HA93
Current Current <t< td=""><td>markation z.u solu z.u solu</td><td>SAMPLE DATE</td><td>SCREENING</td><td>06/22/95</td><td>06/22/95</td><td>06/27/95</td><td>06/27/95</td><td>06/27/95</td><td>06/27/95</td></t<>	markation z.u solu	SAMPLE DATE	SCREENING	06/22/95	06/22/95	06/27/95	06/27/95	06/27/95	06/27/95
mg/kg solut solut <th< td=""><td>mg/kg woll <t< td=""><td>SAMPLE DEFIN</td><td>(I) AINTINA</td><td>0.2</td><td>0.2</td><td>0.0</td><td>0.2</td><td>0.1</td><td>4.0</td></t<></td></th<>	mg/kg woll woll <t< td=""><td>SAMPLE DEFIN</td><td>(I) AINTINA</td><td>0.2</td><td>0.2</td><td>0.0</td><td>0.2</td><td>0.1</td><td>4.0</td></t<>	SAMPLE DEFIN	(I) AINTINA	0.2	0.2	0.0	0.2	0.1	4.0
nzene 140 (b) 0.0059 U <thu< th=""> <thu< th=""> U</thu<></thu<>	140 (b) 0.0059 U <thu< th=""> U <thu< th=""> <thu< th=""> <thu<< td=""><td>UNITS</td><td>mg/kg</td><td>soll mg/kg</td><td>mg/kg</td><td>soll mg/kg</td><td>soll mg/kg</td><td>solL mg/kg</td><td>soll. mg/kg</td></thu<<></thu<></thu<></thu<>	UNITS	mg/kg	soll mg/kg	mg/kg	soll mg/kg	soll mg/kg	solL mg/kg	soll. mg/kg
nzene 140 (b) 0.0059 ABLE TPH - 2.3 3.6 U U 22 ABLE TPH - 2.3 3.6 U U 22 ABLE TPH - 2.3 3.6 U U 22 hthylene - 2000 J 1200 J U 22 hthylene - 100 Hthylene - 2200 J 1200 J U 22 hthylene - 1200 J U 22 1.13 1.3 2.1 1.2.3-cd)pyrene & 2.2 1.6 1.1 1.2.3-cd)pyrene & 2.2 y(naphthalene (2) - 16 1.1 1.2.3-cd)pyrene & 1.1 1.3.3-cd)pyrene & 1.1 1.3.3-cd)pyrene & 1.1 1.3.3-cd)pyrene & 1.1 1.3.3-cd)pyrene & 1.1 1.3.3-cd)pyrene & 1.	140 (b) 0.0059 700 (b) 0.0074 - 2.3 - 2.3 - 2.3 - 2.3 - 2.00 J N(A (b) 0.0074 - 2.3 N(A (b) 0.0074 - 2.0 - 2.0 - 0.0 - 0.0 - 0.44 - 0.44 - 1.0 - 1.1 - 1.1 - 1.1 - 0.82 - 1.1 - 0.82 - 1.1 - 0.45 - 1.4 - 0.98 - 0.98 - 0.45 - 1.4	BTEX			D	r n	C	þ	D
ABLE TPH 700 (b) 0.0074 3.6 U U 22 CTABLE TPH - 2.3 3.6 U U 22 Mhylene - 2200 J 1200 J U 22 Ahle TPH - 2200 J 1200 J U 22 Ahluoranthene(2) - 2200 J U 0.44 2.1 Jh.)perylene - - 200 J 1.0 0.44 2.1 Jhyrene - - 1.200 J U 0.44 2.1 1.0 Jhyrene - - 1.200 J U 0.44 2.1 1.3 1.3 2.1 2.1 2.1 1.0 1.3 1.3 1.3 2.1 2.1 2.1 1.1 1.3 2.1 2.1 1.1 1.3 2.2 2.2 2.2 2.1 1.3 1.3 2.2 2.2 2.2 2.2 2.1 1.3 2.2 2.2 2.2 2.2 <	700 (b) 0.0074 3.6 U U 0.66 - 2.3 2.6 U 0.66 N(A (b) 22 U 0 - 1.0 22 U 0 - 1.1 1.0 1.0 - 1.1 1.0 1.0 - 1.1 1.0 1.1 - 1.6 1.1 1.0 1.0 - 1.1 1.0 1.0 - 1.1 1.0 1.0 - 1.1 1.0 1.0 - 1.1 1.0 0.65 - 1.1 1.0 0.66 - 1.1 1.0 0.44 - 1.1 1.0 0.45 - 1.4 1.0 0.45 - 1.	Ethylbenzene	140 (b)	0.0059					
SEABLE TPH - 2.3 3.6 U U ACTABLE TPH - 2200 J 1200 J U 22 aphthylene - 2200 J 1200 J U 22 aphthylene - 200 J 1200 J U 22 0(b,K)fluorarthene(2) - - 0.44 0(a,K)fluorarthene(2) - 1.0 2.1 0(a,K)fluorarthene(2) - 1.0 2.1 0(a,K)fluorarthene - 1.0 2.1 0(a,K)fluorarthene(2) - 1.0 2.1 anthene - - 1.0 o(1,2,3-cd)pyrene & - 1.6 1.1 anthene - - 1.6 anthene - - 1.1 0(1,2,3-cd)pyrene & - 1.1 0(1,2,3-cd)pyrene & - 1.1	- 2.3 3.6 U U 0 0.66 N(A (b) 22 U 0 22 U 0 - 1.0 22 U 0 - 1.1 1.0 1.0 22 U 0 - 1.1 1.0 1.0 1.0 2.1 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	Xylenes	(q) 00 <i>L</i>	0.0074					
ACTABLE TPH - 2200 J 1200 J U 22 aphthylene - 200 J U 22 aphthylene - - 0.44 0(b,k)fluoranthene(2) - 0.44 0(b,k)fluoranthene(2) - 0.44 0(a,k)fluoranthene(2) - 1.0 2.1 0(a)tyrene - 1.0 1.0 anthene 0(1,2,3-cd)pyrene & 1.1 1.1 anthene - 16 1.1 anthene 0.12,3-cd)pyrene & 1.1	MA (b) 2200 J 1200 J U 22 U - - - - - - 10 0.44 1.0 - 1.0 1.0 1.1 - 1.1 1.2 1.1 - 0.82 1.1 - 0.82 1.2 - 0.98 0.45 - 1.4 0.45	PURGEABLE TPH	4	2.3	3.6	2	D	0.66	D
N(A (b) N(A (b) 0 0 44 aphthylene - 0(b,k)luorarthene(2) 2.1 2.1 o(b,k)perylene - 1.0 1.0 1.0 o(a)pyrene - 1.3 2.1 2.1 anthone - - 1.3 1.3 anthone - - 1.3 2.2 anthone - 1.6 1.1 1.1 o(1,2,3-cd)pyrene & - 1.6 1.2 1.1 thylnaphthatene - - 0.82 1.2	MA (b) 0.44 U 0.44 U 1.0 0.45 U 1.1 U 0.45 U 1.1 U 0.45 U 1.1 U 0.45 U 1.4 U 0.45 U	EXTRACTABLE TPH	1	2200 J	1200 J	D	22	9	5
rthene(2)		PAH	(d) A/N		Ð			D	2
1 1 1 1 1 1 1 1 1 1	1	Acenaphthylene					0.44		
 16 0.02 252 200 0.02 200 0.02 200 200 200 200 200		Benzo(b,k)fluoranthene(2)					2.1		
16	 0.82 14 J	Benzo(g,h,i)perylene	I.				1.0		
16		Benzo(a)pyrene					1.3		
ne &		Chrysene & Benzo(a)anmacene(z)		Q.T			2.2		
ne a ene(2) - 0.82	0.82 0.98 3.8 14 J	Fluoranthene		9					
0.82	0.82 0.98 3.8 14 J	Dihenzo(a, 2, 3- cd) pyrene &							
		1 - Methylnanhthalane	1			0.82	4		
	- L 41 -	2-Methylnaphthalene	4			0.98			
	- 14 J	Naphthalene				3.8			
a & Anthracene(2)		Phenanthrene & Anthracene(2)	1				0.45		
14 0		Pyrene		L 14 J			1.4		
ESHOLD LEVEL EXCEEDS THE EXPECTED SOIL CONCENTRATION		UNDER FREE PRODUCT CONDITIONS.	NS.	UNDER FREE PRODUCT CONDITIONS.			U - ALL PARAMETERS ARE UNDETECTED	IS ARE UNDETECTED	

SUMMARY OF CONSTITUENTS DETECTED IN SOIL Hunter Army Airfield TABLE 7 (Cont.) **Pipeline B**

SAMPLE DATE SAMPLE DEPTH MATRIX UNITS	SCREENING CRITERIA (1) mg/kg	H728-HA94 06/27/95 3.0' SOIL mg/kg	H728-HA95 06/27/95 4.0 SOIL mg/kg	H728-H A36 06/27/95 3.0' SOIL mg/kg	H728-HA97 06/27/95 4.0' SOIL mg/kg	H728- HA93 06/27/95 3.0' SOIL mg/kg	H728 - HA99 06/27/95 3.0' SOIL mg/kg
BTEX PURGEABLE TPH EXTRACTABLE TPH PAH Acenaphthylene Benzo(b,k)fluoranthene(2) Benzo(b,k)fluoranthene(2) Benzo(a)pyrene Chrysene & Benzo(a)anthracene(2) Fluoranthene Indeno(1,2,3-cd)pyrene &	(d) N 		5585 5	222	2222	U J 14 6.41 0.84 0.84	⊃⊃8 <u>5</u> 28,685
Dibenzo(a,h)anthracene(2) Phenanthrene & Anthracene(2) Pyrene	1					0.61 0.73	7.7 5.3 20
SAMPLE ID SAMPLE DATE SAMPLE DEPTH MATRIX UNITS	SOIL SCREENING CRITERIA (1) mg/kg	H728-HA100 06/27/95 4.0' SOIL mg/kg	H728-HA101 06/27/95 3.0' SOIL mg/kg	H728 – HA102* 06/27/95 1.0' SOIL mg/kg	H728 – HA103 06/27/95 3.0' SOIL mg/kg	H728 – HA104 06/27/95 3.0' SOIL mg/kg	H728 - HA120* 06/27/95 1.0' SOIL mg/kg
BTEX PURGEABLE TPH EXTRACTABLE TPH PAH Benzo(b,k)fluoranthene(2) Benzo(a)pyrene Chrysene & Benzo(a)anthracene(2) Fluoranthene Teluoranthene & Anthracene(2) Phenanthrene & Anthracene(2) Phenanthrene & Anthracene(2) Phenanthrene & Anthracene(2)	N/A (b)	כככ	כככ	2222	222	222	3,5,2,5,5 4,1,44,1,4 4,1,4 4,1,44,1,4 4,1,4 4,1,44,1,4 4,1,4 4
 (1) - (b) STATE UST CRITERIA FOR ORGANICS IN SOILS N/A - NOT APPLICABLE. THE HEALTH BASED THRESHOLD LEVEL EXCEEDS THE EXPECTED SOIL CONCENTRATION	Soils Ed Threshold Level E DNS, Y COMERMED REA	EVEL EXCEEDS THE EXPECTED SOIL CONCENT FD RECAUSE THEY COFFLITE IN METHOD 8100) SOIL CONCENTRATIO	N	 DENOTES SAMPLE/DUPLICATE PAIRS RESULT ESTIMATED M.1. PARAMETERS ARE INNECTED 	DENOTES SAMPLE/DUPLICATE PAIRS RESULT ESTIMATED	

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TABLE 7 (Cont.) Pipeline B Hunter Army Airfield SUMMARY OF CONSTITUENTS DETECTED IN SOIL

SAMPLE DATE Sample depth Matrix Units	SCREENING CRITERIA (1) mg/kg	08/06/95 7.0' SOIL mg/kg	08/06/95 7.0° SOIL mg/kg	06/08/95 7.0 SOIL	08/08/95 5.0'L mg/kg	08/06/95 5.0' SOIL mg/kg.	08/06/95 7.0' SOIL mg/kg
BTEX		D	c	D	D	D	D
PURGEABLE TPH	ţ	n	2		83	n	D
EXTRACTABLE TPH	1	n	2	n	D	D	0
PAH		U	0	n	, n	3	11

NOTE: SOIL BORINGS CORRESPOND TO MONITORING WELL LOCATIONS (1) - SOIL SCREENING CRITERIA FOR SOILS (-) - NO CRITERIA EXISTS

U - ALL PARAMETERS ARE UNDETECTED

SUMMARY OF CONSTITUENTS DETECTED IN SOIL Hunter Army Airfield TABLE 7 (Cont.) Pipeline B

SAMPLE ID SAMPLE DATE	SOIL SCREENING	H728-SB25 08/07/95	H728-SB26 08/07/95	H728-SB27 08/07/95	H728-SB28 08/07/95	H728-SB29* 08/07/95	H728-SB53* 08/07/95	H728-SB30 08/15/95
SAMPLE DEPTH MATRIX	CRITERIA (1)	9.0' SOIL	5.0° SOIL	3.0' SolL	5.0' SOIL	7.0' SOIL	7.0' SOIL	7.0' SOII
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
BTEX				n	D	D	D	D
Benzene	0.12 (b)	0.0067	0.041 J					0
Ethylbenzene	140 (b)	0.018	0.034 J					
Toluene	500 (b)	0.0064						
Xylenes	(q) 00 <i>L</i>	0.0099	D.019 J					
PURGEABLE TPH	1	1.6	20 J	n	D	D	n	n
EXTRACTABLE TPH	1	8000	960	19	n	3	n	n
PAH	(d) A/A			C	0	n	0	n
Acenaphthene	1	61	33					
Acenaphthylene		35						
Benzo(b,k)fluoranthene(2)		250	62					
Benzo(g,h,i)perylene	ī	68	15					
Benzo(a) pyrene		120	31					
Chrysene & Benzo(a)anthracene(2)		380	110					
Fluoranthene		510	180					
Fluorene		240	82					
Indeno(1,2,3-cd)pyrene &								
Dibenzo(a,h)anthracene(2)		72	19					
1 - Methylnaphthalene	1	64	13					
2 – Methylnaphthalene	1	100	17					
Naphthalene		81	10					
Phenanthrene & Anthracene(2)	j	880	360					
Pvrene		410	150					

(1) - (b) STATE UST CRITERIAFOR ORGANICS IN SOILS
 N/A - NOT APPLICABLE. THE HEALTH BASED THRESHOLD LEVEL EXCEEDS THE EXPECTED SOIL CONCENTRATION UNDER FREE PRODUCT CONDITIONS.
 (2) - THESE CONSTITUENTS CANNOT BE INDIVIDUALLY CONFIRMED BECAUSE THEY COELUTE IN METHOD 8100
 (-) - NO CRITERIA EXISTS

 - DENOTES SAMPLE/DUPLICATE PAIRS
 J - RESULT ESTIMATED U - ALL PARAMETERS ARE UNDETECTED

	P	IPELINE B	TABLE 8 GEOPROBE F	RESULTS		
Groundwater Sample	Benzene	Toluene	E-Benzene	Xylene	TVHC (C1-C9)	TVHC (C10-CX
H728-HP28-10'	2	<1	<2	<4	5200	<3
H728-HP27-10'	<1	<2	<2	<5	160	<4
H728-HP29-10'	< 0.5	<0.7	<1	<2	46	<2
H728-HP30-10'	2	<0.7	<1	<2	30	<2
H728-HP31-10'	< 0.9	<1	<2	<4	11	<3
H728-HP32-10'	< 0.5	< 0.7	<1	<2	12	<2
H728-HP44-7'	< 0.8	<1	<2	<3	5700	<3
H728-HP43-6.5'	7	<1	<2	10	690	<3
H728-HP42-10'	< 0.8	<1	<2	<3	300	<3
H728-HP38-7'	< 0.8	<1	<2	<3	16	<3
H728-HP35-7'	2	<1	<2	<3.	4800	<3
H728-HP34-10'	5500	<70	<91	< 200	190000	<170
H728-HP33-10'	1	<1	<2	<3	40	<3
H728-HP36-10'	55	<7	<9	< 20	20000	<17
H728-HP37-10'	<2	<4	<5	< 10	5300	<9
H728-HP39-10'	5	<1	<2	<3	78	<3
H728-HP40-10'	< 0.8	<1	<2	<3	490	<3
H728-HP41-10'	<1	<2	<2	<5	3700	<4

All concentrations are in micrograms per liter $(\mu g/L)$

SUMMARY OF CONSTITUENTS DETECTED IN GROUNDWATER Hunter Army Airfield **Pipeline B** TABLE 9

SAMPLE ID SAMPLE DATE SAMPLE DEPTH MATRIX UNITS	WQS (1) WATER Ug/L	GAUNN H728-MW23 H728-MW23 H728-MW23 H728-MW24 WQS (1) 09/06/95 09	n/28-mw20 09/06/95 3:0 - 13:0 WATER ug/L	n/20-mw21 09/06/95 3.2 - 13.3 WATER ug/L	H (28 - MW 22 09/06/95 2.5 - 12.5' WATER ug/L	H /28-MW23 09/06/95 3.0 - 13.0 WATER Ug/L	H/28-MW24 09/06/95 3.0 - 13.0' WATER WATER
BTEX		D	n	D		D	D
Benzene	71.28				6.6		
PAH		n	D		D	þ	D
Fluoranthene	370			14			
Phenanthrene & Anthracene(3)	110,000			24			
Pyrene	11,000			15			

(1) - GEORGIA DEPARTMENT OF NATURAL RESOURCES, IN-STREAM WATER QUALITY STANDARDS
 (2) - COMPOUNDS ARE COELUTING, LEVELS ARE CORRESPONDING AS PRESENTED
 (-) - NO REGULATORY OR ACTION LEVEL LISTED

* – DENOTES SAMPLE/DUPLICATE PAIRS NS – PARAMETER NOT SAMPLED J – RESULT ESTIMATED U – ALL PARAMETERS ARE UNDETECTED

SUMMARY OF CONSTITUENTS DETECTED IN GROUNDWATER Hunter Army Airfield TABLE 9 (Cont.) Pipeline B

SAMPLE DEPTH 3.4 - 13.4' 3. MATRIX WATER WATER UNITS watter watter UNITS ug/L ug/L BTEX 71.28 5.8 Benzene 28,718 3.5 Ethylbenzene 28,718 3.5 Zoluene 2.6 - Xylenes - 120 Benzo(a)pyrene 0.0311 0.0311	3.4 W					CELIOIEO
ug/L ne enzene 28,718 200,000 s phthene (a)pyrene 0.0311	ug/L	4.1 – 14.1 WATER	3.2 - 13.2' WATER	3.8 - 13.8' WATER	2.8 - 12.8' WATER	3.0 - 13.0' WATER
ne 71.28 enzene 28,718 te 200,000 te – – – – – – – – – – – – – – – – – – –	5	ng/L	ng/L	Ng/L	ng/L	T/6n
ene 71.28 Denzene 28,718 200,000 es				D		C
Denzene 28,718 ne 200,000 es	5.9	1.9				
ne 200,000 es	3.6					
es – – – – – – – – – – – – – – – – – – –	2.5	1.8	1,4		5.1	
aphthene o(a)pyrene						
0.0311			D	D	D	D
0.0311	120	27				
		[32 J]				
Benzo(g,h,i)perylene		15				
Benzo(b,k)fluoranthene(2) 0.0311		[140]				
acene(2)	[100]	[200]				
370	150	150				
Fluorene 250	270	87				
Indeno(1,2,3-cd)pyrene &						
Dibenzo(a,h)anthracene(2) 0.0311		[33]				
Naphthalene – 970	006	110				
Phenanthrene & Anthracene(2) 110,000 120	120	350				
Pyrene 11,000 110	110	120				
1-Methylnaphthalene - 210	200	34				
[2-Methylnaphthalene] - 290	280	57				
			*			
			NE DADADA		ICA IE FAIRS	
(2) - COMPOUNDS ARE COELUTING, LEVELS ARE CORRESPONDING AS PRESENTED	NDING AS PRESEN	VIED	J - RESULT ESTIMATED	J - RESULT ESTIMATED	Ē	
 (-) – NO REGULATORY OR ACTION LEVEL LISTED 			U - ALL PARAN	U – ALL PARAMETERS ARE UNDETECTED	NDETECTED	

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(2) - COMPOUNDS ARE COELUTING, LEVELS ARE CORRESPONDING AS PRESENTED
 (-) - NO REGULATORY OR ACTION LEVEL LISTED
 [] - REGULATORY LEVEL EXCEEDED

SUMMARY OF CONSTITUENTS DETECTED IN SOIL Building 728 Hunter Army Airfield TABLE 10

<u> </u>		mg/kg	BAIL mg/kg	aur. mg/kg	ooir mg/kg	soll.	soil mg/kg
initial 18 (b) 200 (b) SEABLE TPH 18 (b) 200 (c) 200 (c) SEABLE TPH 19 0 54 5600 8400 54 5500 5600 8400 SEABLE TPH - - 190 54 55 54 55 ACTABLE TPH - - 190 54 55 54 55 ere & Berzo(a)anthracene(2) 0.65 (b) 0.65 (b) 0.1 1,2 1,3 0.5 ere & Berzo(a)anthracene(2) 0.65 (b) 90 (c) 4,3 0.5	BTEX		n	D	n		רח
est ACTABLE TPH 700 (b) 230 2600 8400 ACTABLE TPH - 190 54 55 ACTABLE TPH - 190 54 55 Active & Benzo(a)anthracene(2) 0.66 (b) 0.1 1 2.1 1 anthene - - 4.3 0.5 attryinaphthalene - - 4.3 0.5 attryinaphthalene - - 320 5.6 0.5 attryinaphthalene - - - 0.5 5.6 0.5 attryinaphthalene - - - 3.2 0.5 0.5 attryinaphthalene - - - 3.2 0.5 0.5 attryinaphthalene - - - - 3.2 0.5 0.5 0.5 attryinaphthalene - - - - 3.2 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.1 <td< td=""><td>Ethylbenzene</td><td>18 (b)</td><td></td><td>í.</td><td>6</td><td>0.0087</td><td></td></td<>	Ethylbenzene	18 (b)		í.	6	0.0087	
SEABLE TPH - 230 2600 8400 ACTABLE TPH - 190 54 55 anthene - 190 54 55 anthene - 190 54 55 anthene - - 4.3 0.5 anthene - - 32 0.5 50 anthracene(2) - - 32 0.5 50 anthracene(2) - - - 32 0.5 50 anthracene(2) - - - - 5.0 5.0 5.0 anthracene(2) - - - 3.2 0.5 5.0 anthracene(2) - - - 5.0 5.0 5.0 5.0 anthracene(2) - - - 5.0 5.0 5.0 5.0 A - - - - 0.1 0 0.1 CHIE DATE	Xylenes	(q) 002				0.08	
ACTABLE TPH - 190 54 55 and the arrest of anthracene(2) anthracene(2) anthracene(2) 0.66 (b) 0.66 (b) 14.3 0.5 anthrene - - 0.56 (b) 14.3 0.5 anthrene - - 1400 (c) 14.3 0.5 anthracene(2) - - 5.6 0.5 5.6 0.5 anthracene(2) - - 5.0 5.6 0.5 5.0 5.6 0.5 anthrene & Anthracene(2) - 1400 (c) 14728-HAF H728-HAF H728-HAF 14728-HAF - - 5.0	PURGEABLE TPH	ł	230	2600	8400	14	350
ene & Benzo(a)anthracene(2) 0.55 (b) 0 12.1] anthene = 90 (c) 4.3 0.5 arthylnaphthalene = 5.6 3.2 0.5 arthracene(2) = 5.6 5.6 5.6 arthracene(2) = 5.6 5.6 5.6 arthracene(2) = 0.017 (b) 5.0 5.0 5.0 arte EDATT = 0.017 (b) 5.0 5.0 5.0 5.0 arte enere = 0.017 (b) 5.0 5.0 5.0 5.0 benzene = 0.017 (b) 0.0 0 0.0 0.0 0.0 cere = 0.0 0 0 0 0 0.0 0 0 0 0 0	EXTRACTABLE TPH	ų	190	54	55	12	92
nthracene(2) 0.56 (b) 980 (c) 12.1 1.2.1 acene(2) - - 4.3 0.5 acene(2) - 5.6 0.5 0.5 acene(2) - 5.0 5.0 0.5 CRITERIA (1) 5.0 5.0 5.0 5.0 SCIL mg/kg mg/kg mg/kg 0.012 0.012 no (11 0 0 1 0 0.012 0.012 0.012 (2) 33,000 1200 1.4 0.012 0.012 0.012 (2) - 0 0 0 0 0 0 (2) - - - 0 0 0 0 0 0 0	PAH		D			2	
B80 (c) 4.3 0.5 acene(2) - 4.3 0.5 - - 3.2 0.5 - - 3.2 0.5 - - 3.2 0.5 - - 3.2 0.5 - - 3.2 0.5 - - 3.2 0.5 - - - 3.2 - - - 3.2 - - - - - - - - - - - - - - - - - - - - - - - - - - 0.012 - - - - - - 0.5 - - - - - 0.012 - - - - - - - 0.012 </td <td>Chrysene & Benzo(a)anthracene(2)</td> <td>0.66 (b)</td> <td></td> <td>[2.1]</td> <td></td> <td></td> <td></td>	Chrysene & Benzo(a)anthracene(2)	0.66 (b)		[2.1]			
acene(2)	Fluoranthene	980 (c)		4,3			
Intere & Anthracene(2) - 5.6 Intere & Anthracene(2) 1400 (c) 32 EDATE SOIL H728-HA6 H728-HA7 H728-HA8 EDATE SOIL NT28-HA6 H728-HA7 H728-HA8 EDATE Soil Soil 5.0 5.0 5.0 EDEPTH Soil Soil Soil Soil Soil Soil CRITERIA<(1)	2-Methylnaphthalene	1			0.5		
Idol (c) 32 ED SOIL H728-HAF H728-HAF ED SOIL H728-HAF H728-HAF ED SOIL SOIL 06/13/95 06/14/95 ED SOIL SOIL M728-HAF H728-HAF ED SOIL SOIL 06/13/95 06/14/95 CRITERIA<(1)	Phenanthrene & Anthracene(2)	T		5.6			
ATE SOIL H728-HA6 H728-HA7 H728-HA8 ATE SCREENING 06/13/95 06/13/95 06/14/95 EPTH SCREENING 06/13/95 06/14/95 06/14/95 CRITERIA (1) S.OIL SOIL SOIL SOIL mg/kg mg/kg mg/kg mg/kg 001 ne . . . SOIL SOIL ne ne ABLE TPH ILE TPH .	Pyrene	1400 (c)		3.2			0.38
EDATE SCREENING 06/13/95 06/14/95 06/14/95 06/14/95 06/14/95 5.0°		SOIL	H728-HA6	H728-HA7	H728-HA8	H728-HA9	H728-HA10*
E DEPTH 5.0° 5.0° 5.0° 5.0° 5.0° 5.0° 5.0° 5.0°		SCREENING	06/13/95	06/13/95	06/14/95	06/14/95	06/14/95
Construction Solution		CRITERIA (1)	5.0'	5.0	5.0'	3.0'	2.0'
mg/kg mg/kg mg/kg mg/kg mg/kg inzene 0.017 (b) U U 0.012 U inzene 18 (b) 1.4 0.015 0.015 U U S 700 (b) 33,000 1200 3.4 U			SOIL	SOIL	SOIL	SOIL	SOIL
ne enzene s iEABLE TPH ACTABLE TPH ACTABLE TPH (bk)fluoranthene(2)		mg/kg	mg/kg	mg/kg	mg/kg >>	mg/kg	mg/kg
ne 0.017 (b) 1.4 0.012 [enzene 18 (b) 1.4 0.012 1.4 0.015 1.4 0.0	RTEX		п				
zene 18 (b) 18 (b) 18 (b) 0.012 0.012 ABLE TPH - 700 (b) 33,000 1.4 0.015 3.4 CTABLE TPH - 2700 1200 3.4 1 0.015	Benzene	0.017 (b)				[0.067]	0.010
ABLE TPH 700 (b) 1.4 0.015 ABLE TPH - 2700 1200 3.4 - 2700 180 11 U U U U	Ethvibenzene	18 (b)			0.012	0.097	0.0081
- 33,000 1200 3.4 - 2700 180 11 U U U U	Xylenes	(q) 002		1.4	0.015	0.69	0.013
- 2700 180 11 U U U 0.66 (b)	PURGEABLE TPH	1	33,000	1200	3.4	280	570
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EXTRACTABLE TPH	J	2700	180	H	16	n
	PAH		n	D	D	D	C
	Benzo(b,k)fluoranthene(2)	0.66 (b)					
	Chrysene & Benzo(a)anthracene(2)	0.66 (b)					
Fluoranthene 980 (c)	Fluoranthene	980 (c)					
threne & Anthracene(2)	Phenanthrene & Anthracene(2)	1					
	Pyrene	1400 (c)					

(-) - NO CRITERIA EXISTS [] - REGULATORY CRITERIA EXCEEDED

SUMMARY OF CONSTITUENTS DETECTED IN SOIL Hunter Army Airfield TABLE 10 (Cont.) Building 728

SAMPLE ID SAMPLE DATE	SOIL	H728-HA111* 06/14/95	H728-HA11 06/14/95	H728-HA12 06/14/95	H728-HA13 06/14/95	H728-HA14 06/14/95
SAMPLE DEPTH	CRITERIA (1)	50, 50	3.0'	4.0°	2.0'	3.0'
UNITS	Ba/kg	Ballen	mg/kg	Ba/lem	mg/kg	BA/Bm
BTEX				D		
Benzene	0.017 (b)	2600.0	0.011			
Ethylbenzene	18 (b)	10 A 10 A 10	0.013		0.036 J	
Toluene	115 (b)					7.1
Xylenes	(q) 00 <i>L</i>	0.012	0.023		0.059 J	5.8
PURGEABLE TPH	Ţ	2.5	3600	D	100	2100
EXTRACTABLE TPH	1	D	87	D	170	310
PAH		D		D	ŋ	n
Benzo(b,k)fluoranthene(2)	0.66 (b)		0.58			
Chrysene & Benzo(a)anthracene(2)	(q) 99:0		[1.2]			
Fluoranthene	980 (c)		2.0			
Phenanthrene & Anthracene(2)	1		2.4			
Pyrene	1400 (c)		1.4			

(1) - (b) STATE UST CRITERIA FOR ORGANICS IN SOILS
 - (c) CERCLA SSL USED BECAUSE NO STATE CRITERIA EXISTS FOR THESE COMPOUNDS
 - (c) CERCLA SSL USED BECAUSE NO STATE CRITERIA EXISTS FOR THESE COMPOUNDS
 - THESE CONSTITUENTS CANNOT BE INDIVIDUALLY CONFIRMED BECAUSE THEY COELUTE IN METHOD 8100
 - NO CRITERIA EXISTS
 - REGULATORY CRITERIA EXCEEDED

J - RESULT ESTIMATED U - ALL PARAMETERS ARE UNDETECTED

SUMMARY OF CONSTITUENTS DETECTED IN GROUNDWATER Building 728 Hunter Army Airfield TABLE 12 (Cont.)

SAMPLE ID SAMPLE DEPTH SAMPLE DEPTH MATRIX UNITS	GADNR WQS (1) WATER Ug/L	GADNR H728-MW12 H728-MW13*H728-MW33* H728-MW14 WQS (1) 09/07/95 09/07/95 09/07/95 09/07/95 2.9 - 12.9' 4.0 - 14.0' 4.0 - 14.0' WATER WATER WATER WATER WATER WATER ug/L ug/L ug/L ug/L ug/L	H728-MW13*H728-MW33 09/07/95 09/07/95 4.0 - 14.0 4.0 - 14.0 WATER WATER Ug/L Ug/L Ug/L	H728-MWS3* 09/07/95 4.0 - 14.0 WATER ug/L	H728-MW14 09/07/95 4.0 - 14.0 WATER ug/L
BTEX			2	D	D
Ethylbenzene	28,718	3.6			
Xylenes	1	7.5			
PAH	-		5	2	D
Naphthalene	1	12			
Phenanthrene & Anthracene(2)	110.000				

(1) - GEORGIA DEPARTMENT OF NATURAL RESOURCES, IN-STREAM WATER QUALITY STANDARDS

(2) – COMPOUNDS ARE COELUTING, LEVELS ARE CORRESPONDING AS PRESENTED (-) – NO REGULATORY OR ACTION LEVEL LISTED

* – DENOTES SAMPLE/DUPLICATE PAIRS
 NS – PARAMETER NOT SAMPLED
 J – RESULT ESTIMATED
 U – ALL PARAMETERS ARE UNDETECTED

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TABLE 10 (Cont.) Building 728 Hunter Army Airfield SUMMARY OF CONSTITUENTS DETECTED IN SOIL

Solu Solu Solu Solu mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg 1100 J 2200 J 410 560 J 410 560 J 410 560 J 12 12 12 12 12 12 12 12 12 12 12 12 11 3.1 3.1 3.1 3.1 3.1 11 3.1 3.1 3.1 3	Solu Solu <th< th=""></th<>
Classifier U <thu< th=""> <thu<< th=""><th>U U 2200 J 18 J 3000 J 560 J 18 J 3000 J 560 J 19 3200 J 18 J 3000 J 19 3200 J 19 3200 J 210 J U U U U U U U U U U U U U U U U I 25 J 12 24 12 24 12 24 12 24 12 335 3.1 18 18 18 18 18 18 18 18 11 12 11 11</th></thu<<></thu<>	U U 2200 J 18 J 3000 J 560 J 18 J 3000 J 560 J 19 3200 J 18 J 3000 J 19 3200 J 19 3200 J 210 J U U U U U U U U U U U U U U U U I 25 J 12 24 12 24 12 24 12 24 12 335 3.1 18 18 18 18 18 18 18 18 11 12 11 11
SEABLE TPH - 82,000 J 1400 J 2200 J ACTABLE TPH - 730 59 410 560 Actable TPH - - 730 3200 J 3200 J 3200 J O(b k)fluoranthene - - 0.56 (b) 3800 J 3200 J 3200 J 122 O(a) pryrene - - 0.56 (b) 0.56 (b) 1.2 1.2 Anthene - - 0.366 (b) 0.366 (b) 3.1 3.1 anthene - - 0.36 (b) 0.36 (b) 3.1 3.1 anthene - - 0.36 (b) 0.36 (b) 3.1 3.1 anthene - - 0.36 (b) 0.36 (b) 3.1 3.1 anthene - - 0.39 (b) 0.36 (b) 3.1 3.1	2200 J 18 J 3000 J 560 J 19 51 560 J 210 J 0 12 [5.1] 1.2 [5.4] 3.1 2.4 1.2 3.5 3.1 3.7 2.4 1.2 3.5 3.1 2.4 1.2 3.5 3.1 3.1 2.4 1.2 3.5 3.1 1.2 1.2 3.5 3.1 1.2 1.2 5.4 1.2 5.4 1.2 5.4 1.2 5.4 1.2 5.4 1.2 5.4 1.2 5.4 1.2 5.4 1.2 5.4 1.2 5.4 5.4 5.1 1.2 5.4 5.4 5.1 5.4 5.4 5.1 5.4 5.1 5.4 5.4 5.4 5.1 5.4 5.4 5.4 5.4 5.4 5.4 5.4 5.4 5.4 5.4
ACTABLE TPH - 730 59 410 560 1 - 1500 J 3800 J 3200 J 3200 J 3200 J 0(b,k)fluoranthene - - 1500 J 3800 J 3200 J 3200 J 3200 J 0(b,k)fluoranthene - - 0.66 (b) - 1.2 1.2 0(g,h,i)perylene - 0.66 (b) 0.66 (b) 0.66 (b) 3.1 1.2 0(g),pyrene - 0.66 (b) 0.9 0.9 3.1 3.1 anthene - - 0.9 0.9 3.1 3.1 anthene - - 0.9 1.2 3.1 3.1 anthene - - 0.9 0.9 3.1 3.1 anthene - - 0.9 2.4 2.4 anthene - - 0.9 2.4 2.4 attylinaphthalene - - 3.9 2.4 2.4	560 19 51 3200 J 210 J U U U U U U U U U U U U U U U U U U
1 - 1500 J 3200 J 3200 J 3200 J 0(b,k)tluoranthene - 0.66 (b) - 1.2 0(g,h,i)perylene - - 1.2 0(g,h,i)perylene 0.66 (b) - 1.2 0(g,h,i)perylene 0.66 (b) 0.66 (b) 1.2 0(a)pyrene 0.66 (b) 0.66 (b) 1.2 1.2 0.66 (b) 0.99 3.1 anthene - 0.9 3.1 anthene - 0.9 3.1 anthene - 0.9 3.1 anthene - 0.9 3.1 attylnaphthalene - 0.99 1.5 1.1 2.5 1.1 2.4 2.5 1.1 2.5 1.2	3200 J 210 J 760 J [5.1] [5.4] 3.1] [5.4] 3.1] [3.7] 2.4] 1.2] 3.5] 3.5] 3.6 J U U U U U U U U U U U U U U U U U U
0(b.k)fluoranthene 0.66 (b) >(g,h,j)perylene - >(g,h,j)perylene - >(a)pyrene 0.66 (b) >(a)pyrene 0.66 (b) anthene 0.66 (b) anthene 0.66 (b) anthene 0.99 anthene 0.99 anthene 0.99 anthene 0.93 anthene 1.5 anthene 2.5	U U U U 12 12 12 155] 12 31 31 33 12 35 35 31 12 35 35 35 35 31 12 35 35 31 12 35 35 31 12 35 31 12 35 31 12 35 31 12 35 31 31 31 31 31 31 31 31 31 31 31 31 31
0.66 (b) 0.66 (b) - - - 0.66 (b) 0.66 (b) 0.66 (b) - 0.9 - 0.9 - 0.9 - 0.9 - 0.9 - 0.9 - 0.9 - 0.9 - 0.99 - 0.99 - 0.99 - 0.99 - 0.99 - 0.99 - 0.99 - 0.99 - 0.99 - 0.99 - 0.99 - 0.99 - 0.99 - 3.9 - 2.5 - 1.1	[51] 12 12 [54] 31 31 31 24 12 35 33 35 31 18
- - Intracene(2) 0.66 (b) 0.66 (b) 0.66 (b) - 0.9 - 0.9 - 0.9 - 0.9 - 0.9 - 0.9 - 0.9 - 0.9 - 0.99 - 0.99 - 0.99 - 0.99 - 0.99 - 0.99 - 0.99 - 0.99 - 0.99 - 0.99 - 0.99 - 0.90 - 0.90 - 0.90 - 0.90 - 1.15 - 0.90 - 1.11	1.2 [554] [54] 3.1 3.1 1.2 3.5 3.1 1.8 1.8
Intracene(2) 0.66 (b) 0.66 (b) 0.66 (b) 0.66 (b) 0.66 (b) 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.9	[25] 54] 31 [54] 31 [37] 24 [12] 3.1 3.1 3.1 3.1 1.8 1.1 1.1
Inthracene(2) 0.66 (b) 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	[54] 31 34 24 12 35 3.1 3.1 1.8
ne &	3.1 2.4 1.2 3.1 3.1 1.8
ne & 0.66 (b) 0.99 1.5 1.1 30 (c) 2.5 1.1	[3.7] 2.4 1.2 3.1 3.1 1.8
ene(2) 0.66 (b) 0.99 1.5 1.4 2.5 1.1 1.1 2.5 1.1 2.5 1.1 1.1 2.5 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1	[3.7] 2.4 1.2 3.1 3.1 1.8
- 0.99 - 1.5 - 3.9 1.1 30 (c) 2.5 1.1	2.4 1.2 3.1 3.1 1.8
- 3.9 1.5 30 (c) 2.5 1.1	1.2 3.5 1.8
30 (c) 2.5 1.1	3.5 3.1 1.8
c .	3.5 3.1 1.8
<u>5.</u>	3.1 1.8
1400 (c) 0.86	1.8
PRIORITY POLLUTANT METALS	1,8
5 - 100 (a) 1.7	
3.2 7.1 18	20 7.3 16
1.7 1.9 3.3 3.2	3.2 4.3
6.1 J 17 J 28 J 28 J	28 J 9.1 J 56 J
	0.052

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Hunter Army Airfield SUMMARY OF CONSTITUENTS DETECTED IN SOIL TABLE 10 (Cont.) Building 728

SAMPLE ID SAMPLE DATE SAMPLE DEPTH MATRIX UNITS	SOIL SCREENING CRITERA (1) mg/kg	H728581 08/01/95 3.0 SOIL mg/Ag	H728-SB2 08/01/95 7.0' SOIL mg/kg	H728-SB3 08/01/95 3.0 - 5.0' SOIL mg/kg	H728-SB4* 08/02/95 3.0 - 5.0 SOIL mg/kg	H728-SB50* 08/02/95 3.0 - 5.0 SolL mg/kg	H728-SB5 08/01/95 5.0 - 7.0 SOIL mg/kg
BTEX PURGEABLE TPH EXTRACTABLE TPH TRPH PAH	111	22222	⊐⊃ã€⊐	0.84 U 23 U	⊂%⊂5%⊂	n;;∪&u	22242
PRIORITY POLLUTANT METALS Barium Chomium Lead Mercury	32 - 4000 (a) 10 - 400 (a) 1.5 - 100 (a) 0.2 - 20 (a)	11 1.9 2.1 0.017	11 3.7 7.6 0.036	9.4 7.1 5.7 0.087	11 2.5 2.0033	21 3.8 22 0.041	A
SAMPLE ID SAMPLE DATE SAMPLE DEPTH MATRIX UNITS	SOIL SCREENING CRITERIA (1) mg/kg	H728-SB6 08/02/95 5.0' SOIL mg/kg	H728-SB8 08/02/95 5.0' SOIL mg/kg	H728-SB9 08/03/95 7.0' SOIL mg/kg	H728–SB10 08/03/95 5.0' SOIL mg/kg	H728-SB11 08/03/95 7.0' SOIL mg/kg	
BTEX PURGEABLE TPH EXTRACTABLE TPH PAH Acenaphthene Berzo(b.k)fluoranthene(2)	1 1 1 0 0.66 (d)	100 100	U 46,000 1700 2.2 1 3.7 1	2222	2222	2222	
Chrysene & Benzo(a)anthracene(2) Fluoranthene Fluorene 1 - Methylnaphthalene 2 - Methylnaphthalene Naphthalene Phenanthrene & Anthracene(2) Pyrene	0.66 (b) 980 (c) 160 (c) - 30 (c) 30 (c) - 1400 (c)	0.73 0.59 0.59 0.59	[6.9] 9.4 1.1 1.0 7.4 7.4				

NOTE: SOIL BORINGS CORRESPOND TO MONITORING WELL LOCATIONS (1) - (a) SOIL SCREENING CRITERIA FOR INORGANICS IN SOILS

(b) STATE UST CRITERIA FOR ORGANICS IN SOILS

(c) CERCLASSL USED BECAUSE NO STATE CATTERIA EXISTS FOR THESE COMPOUNDS
 (2) - THESE CONSTITUENTS CANNOT BE INDIVIDUALLY CONFIRMED BECAUSE THEY COELUTE IN METHOD 8100
 (-) - NO CRITERIA EXISTS

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* – DENOTES SAMPLE/DUPLICATE PAIRS

J - RESULT ESTIMATED

U - ALL PARAMETERS ARE UNDETECTED NA - PARAMETER NOT ANALYZED [] - REGULATORY CRITERIA EXCEEDED

TABLE 10 (Cont.) Building 728 Hunter Army Airfield

SAMPLE ID SAMPLE DATE SAMPLE DEPTH MATRIX UNITS	SOIL SCREENING CRITERIA (1) mg/kg	H728 - SB12 5.0' SOIL mg/kg	H728-5813 08/03/95 7.0' SOIL mg/kg	H728-SB14 08/04/95 7.0' SOIL mg/kg
BTEX		r n	r n	D
Xylenes PURGEABLE TPH	700 (b) -	390	D	D
EXTRACTABLE TPH	Ţ	89)	n
PAH			1	

NOTE: SOIL BORINGS CORRESPOND TO MONITORING WELL LOCATIONS

(1) – (b) STATE UST CRITERIA FOR ORGANICS IN SOILS . (-) – NO CRITERIA EXISTS

J - RESULT ESTIMATED U - ALL PARAMETERS ARE UNDETECTED

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SUMMARY OF CONSTITUENTS DETECTED IN GROUNDWATER Hunter Army Airfield **Building 728 TABLE 12**

SAMPLE DATE SAMPLE DEPTH MATRIX UNITS	GADNR WQS (1) WATER Ug/L	H728-MW1 09/06/95 3.2 - 13.2' WATER ug/L	H728-MW2 09/07/95 3.8 - 13.8' WATER ug/L	H728-MW2 H728-MW3* H728-MW31* H728-MW4 09/07/95 09/06/95 09/06/95 09/07/95 3.8 - 13.8' 2.6 - 12.6' 2.6 - 12.6' WATER WATER WATER WATER WATER Ug/L ug/L ug/L ug/L	H728 – MW31* 09/06/95 2.6 – 12.6' WATER Ug/L	H728-MW4 09/07/95 2.6 - 12.6' WATER ug/L	H728-MW5 09/06/95 3.3 - 13.3' WATER ug/L
втех		D				D	n
Benzene	71.28		2.4	1.6	1.4		
PAH		D	D	n	D	D	0
RCRA Metals						ŀ	
Arsenic	50					38	12
Barium	Į	290	860	120	250	240	32
Chromium	120	67	[190]	11	36	73	
Lead	1.3	[40]	[180]	[100]	[24]	[110]	
Mercury	0.012		[0.5]	[0.59]	[0.4]		

SAMPLEID	GADNR	H728-MW6	H728-MW8	H728-MW9	H728-MW6 H728-MW8 H728-MW9 H728-MW10 H728-MW11	H728-MW11	and the second second
SAMPLE DATE	WQS (1)	09/07/95	09/07/95	09/06/95	09/06/95	09/06/95	
SAMPLE DEPTH		2.9 - 12.9'	3.5 - 13.5'	3.1 - 13.1'	2.9 - 12.9'	2.3 - 12.3'	
MATRIX	WATER	WATER .	Free Product	WATER	WATER	WATER	14
UNITS	ng/L	ng/L	ng/L	ng/L	ug/L	ug/L	
BTEX			SN	n	D		
Benzene	71.28	[75]				1 290 1	
Ethylbenzene	28,718	36				34	
Toluene	200,000					10	
Xylenes	1	22				190	
PAH			NS	D	n	n	
Acenaphthene	đ	22					
Acenaphthalene	1	28					
Phenanthrene & Anthracene (2)	110,000	54					

(1) - GEORGIA DEPARTMENT OF NATURAL RESOURCES, IN-STREAM WATER

QUALITY STANDARDS (2) - COMPOUNDS ARE COELUTING, LEVELS ARE CORRESPONDING AS PRESENTED (-) - NO REGULATORY OR ACTION LEVEL LISTED [] - REGULATORY LEVEL EXCEEDED

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NS – PARAMETER NOT SAMPLED J – RESULT ESTIMATED U – ALL PARAMETERS ARE UNDETECTED

* - DENOTES SAMPLE/DUPLICATE PAIRS

	BUILDING 72		BLE 11 EOPROBE R	ESULTS (u)	g/kg)	
Groundwater Sample	Benzene	Toluene	Ethyl- Benzene	Xylene	TVHC (C1-C9)	TVHC (C10- CX)
H728-HP1-10'	<2	<3	<4	< 10	12	< 8
H728-HP2-10'	36	4	42	38	13000	< 8
H728-HP3-10'	110	<3	<43	620	35000	36
H728-HP4-10'	<2	<3	<4	< 10	1400	< 8
H728-HP5-10'	27	39	<43	670	3900	< 8
H728-HP6-10'	42000	53000	17000	150000	2100000	< 8000
H728-HP7-10'	570	22	22	360	11000	< 8
H728-HP8-10'	3	<4	<5	<11	1400	<9
H728-HP9-10'	4400	7500	520	8000	130000	< 880
H728-HP10-10'	<3	<4	<5	<11	1700	<9
H728-HP11-10'	<51	<72	<97	<210	50000	< 180
H728-HP19-10'	8	31	<48	240	38000	39
H728-HP20-10'	440	670	190	1100	54000	350
H728-HP21-10'	<2	<4	<5	<11	220	<9
H728-HP22-10'	< 0.5	< 0.7	<1	<2	190	<2

		WATER SUPPLY WELL	S WITHIN	2-MILE R	ADIUS
Well I.D.	Quad.	Owner	Total Depth	Casing Depth	Use
017	360	Howard Johnson Motel	448	294	Commercial
125	360	McCallan	341	146	Public
302	360	City of Savannah 25	540	287	Public
112	360	SCL RR, Shops	508	275	Commercial
285	360	U.S. Army, Hunter 1	504	259	Public
286	360	U.S. Army, Hunter 2	555	260	Public
290	360	U.S. Army, Hunter 4	300	90	Not Used
287	360	U.S. Army, Hunter 3	370	324	Public
036	36P	City of Savannah 36	414	252	Public
033	37Q	Derst Baking Co.	568	258	Industrial
097	37Q	Reynolds - Manley L1	346	128	Unused
096	37Q	Reynolds - Manley L2	514	258	Industrial
031	37Q	City of Savannah 09	710	267	Public
006	37P	City of Savannah 13	1000	270	Public

Quad: Georgia Grid System. The full well name as in Bulletin 113 is "360017" but only "017" is listed on the map for brevity.

Sources: Hunter AAF in AT&E, 1993. GA Geologic Survey, Bulletin 113, 1990. U.S.G.S. Well Listing, 1991 in AT&E, 1993.

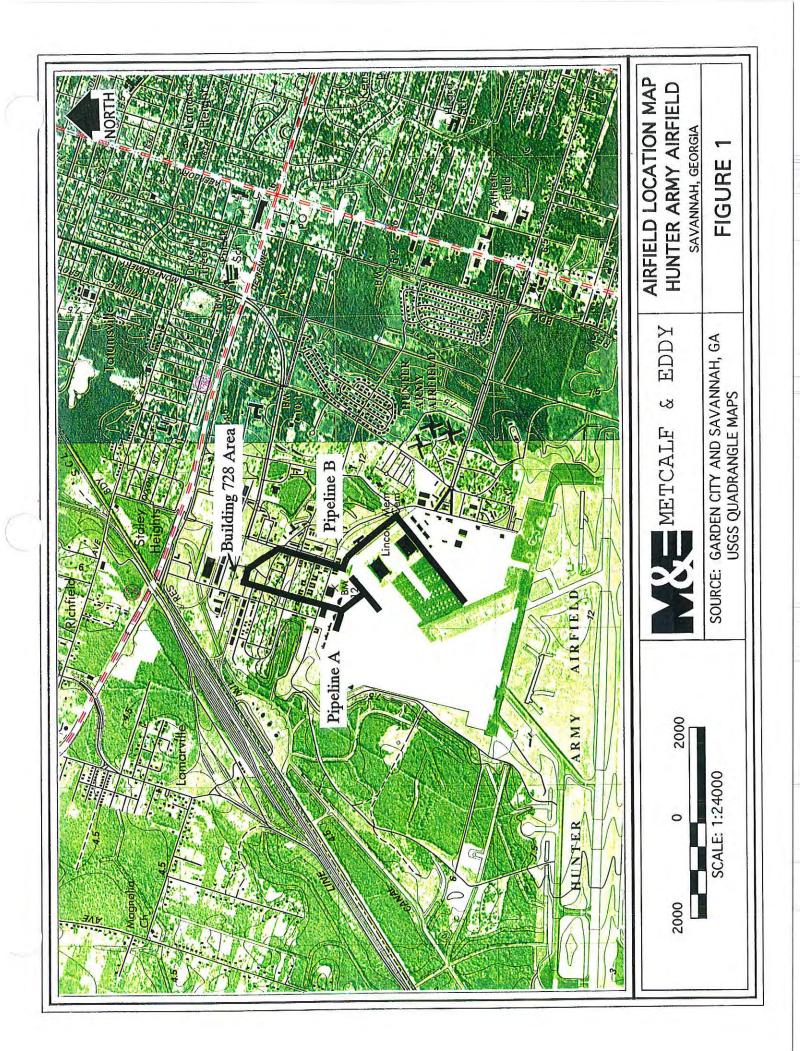
	BUILD		BLE 14 EA WELL SUM	IMARY	
Location	Screen Interval, ft	Water Depth, TOC	TOC Elevation, msl	Water Level Elevation, msl	Surface Elevation, msl
H728-MW1	3.2-13.2	2.40	19.20	16.80	19.5
H728-MW2	3.8-13.8	4.54	20.51	15.97	20.8
H728-MW3	2.6-12.6	4.97	20.80	15.83	21.1
H728-MW4	3.4-13.4	2.67	18.74	16.07	19.1
H728-MW5	3.3-13.3	4.83	20.37	15.54	20.7
H728-MW6	2.9-12.9	4.09	20.02	15.93	20.4
H728-MW7	3.5-13.5	3.17	19.17	16.00	19.6
H728-MW8	3.5-13.5	3.85*	19.17	15.32	19.6
H728-MW9	3.1-13.1	5.72	20.27	14.55	20.5
H728-MW10	2.9-12.9	5.44	19.11	13.67	19.4
H728-MW11	2.3-12.3	5.59	18.89	13.30	19.3
H728-MW12	2.9-12.9	3.14	18.51	15.37	18.8
H728-MW13	4.0-14.0	5.44	18.39	12.95	18.7
H728-MW14	4.0-14.0	6.17	18.76	12.59	19.0
H728-MW15	2.9-12.9	8.40	37.29	28.89	37.7
H728-MW16	3.0-13.0	6.22	35.43	29.21	35.9
H728-MW17	3.0-13.0	6.69	36.49	29.80	36.9
H728-MW18	3.0-13.0	7.92	36.91	28.99	37.4
H728-MW19	2.9-12.9	5.75	33.02	27.27	33.3
H728-MW20	3.0-13.0	6.74	37.36	30.62	37.9
H728-MW21	3.2-13.2	4.78	35.60	30.82	36.1
H728-MW22	2.5-12.5	2.12	32.22	30.10	32.7
H728-MW23	3.0-13.0	1.16	31.75	30.59	32.1
H728-MW24	3.0-13.0	5.18	37.26	32.08	37.7
H728-MW25	3.4-13.4	5.78	37.98	32.20	38.5
H728-MW26	4.1-14.1	5.75	37.98	32.23	38.4
H728-MW27	3.2-13.2	5.29	37.50	32.21	37.9
H728-MW28	3.8-13.8	4.91	37.23	32.32	37.6
H728-MW29	2.8-12.8	4.73	36.95	32.22	37.4
H728-MW30	3.0-13.0	4.78	37.25	32.47	37.6

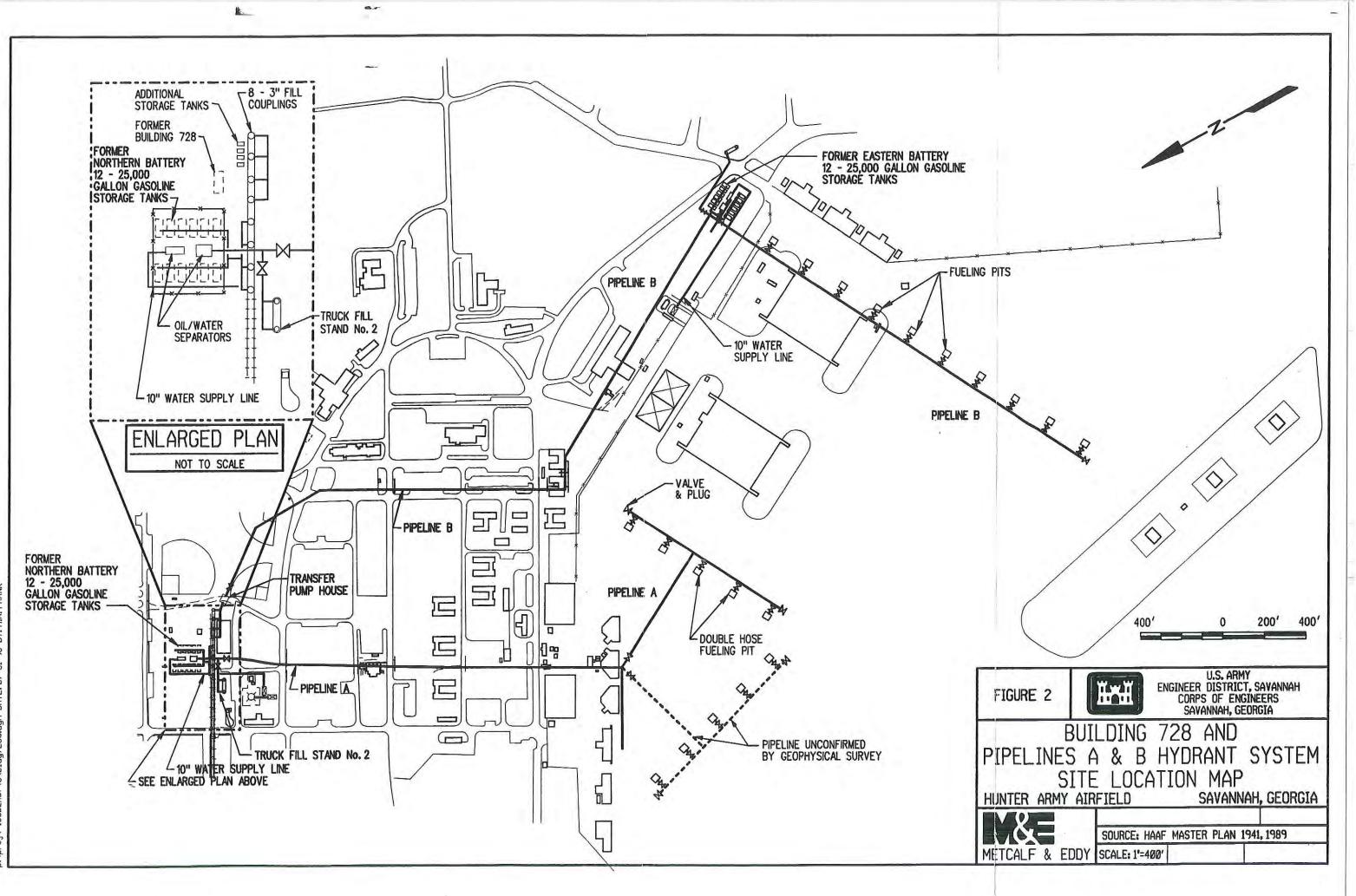
Wells measured 9/5/95

* - product

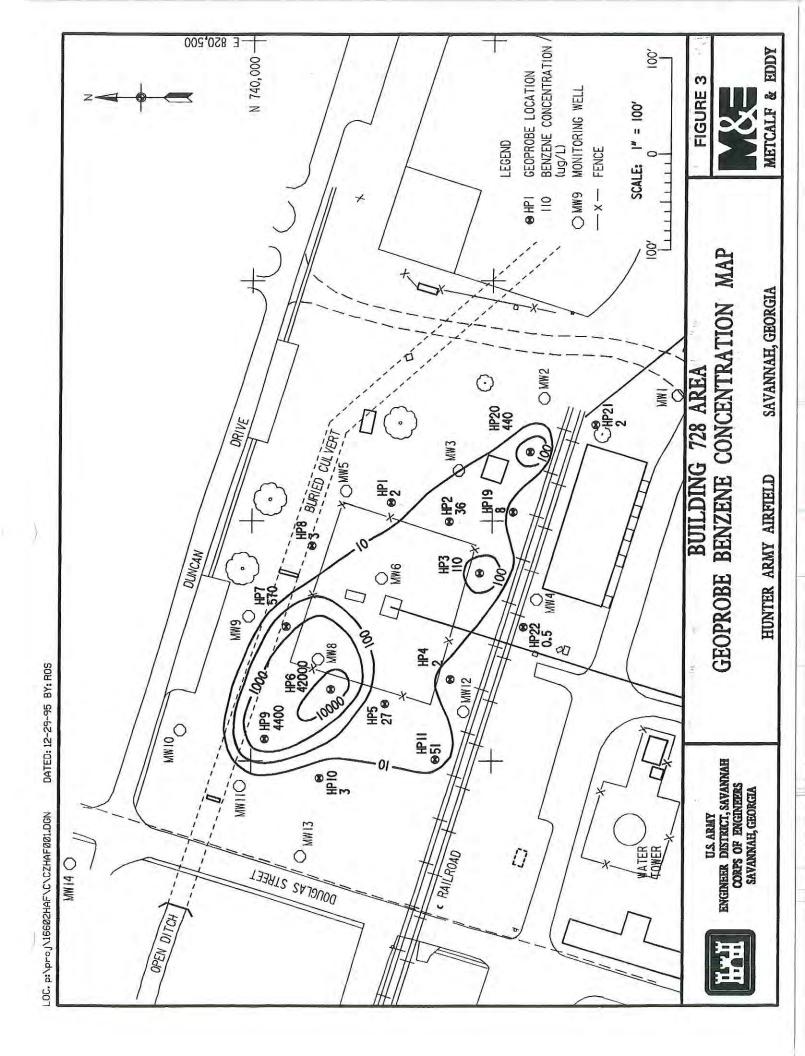
FIGURES

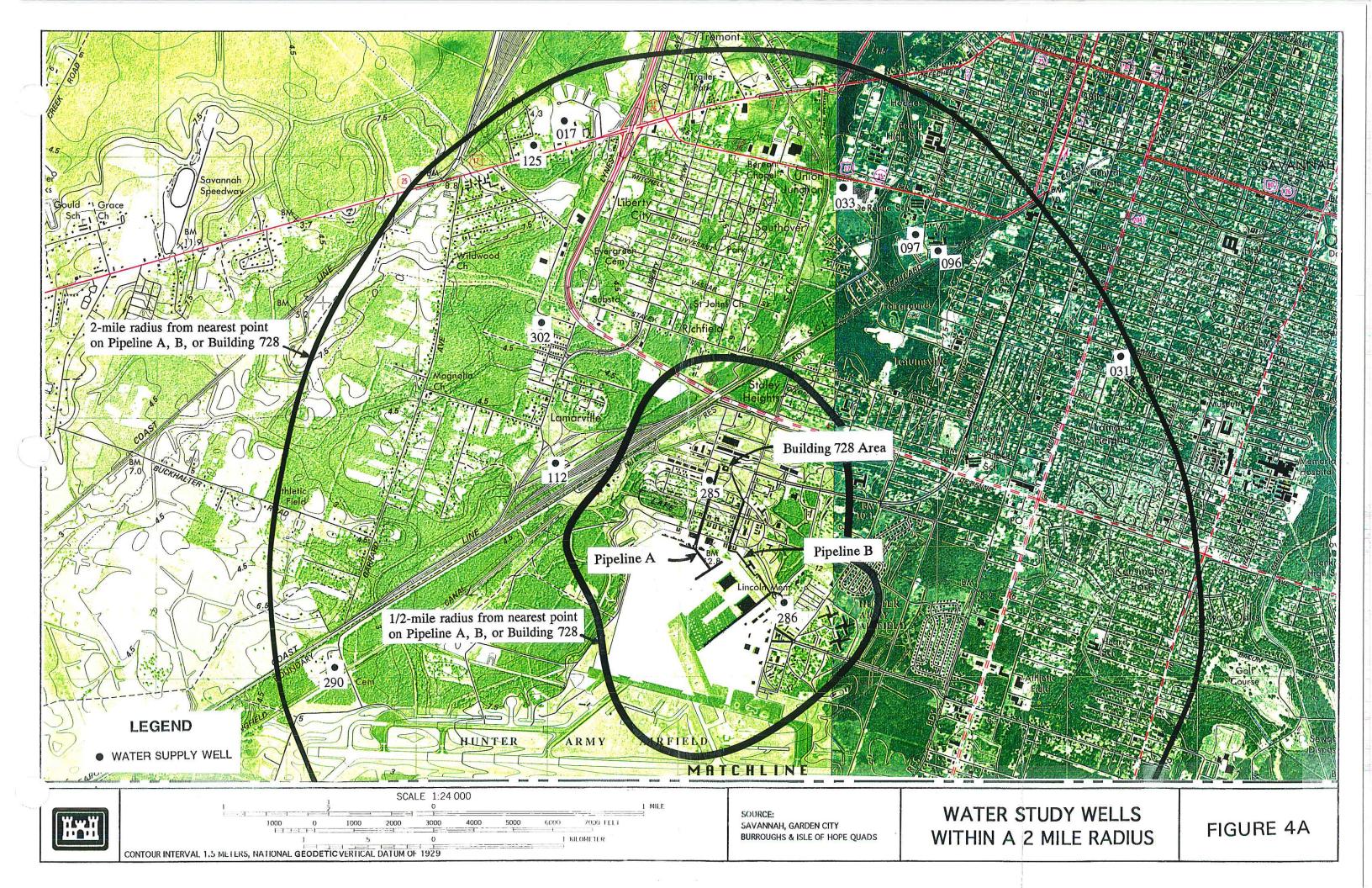
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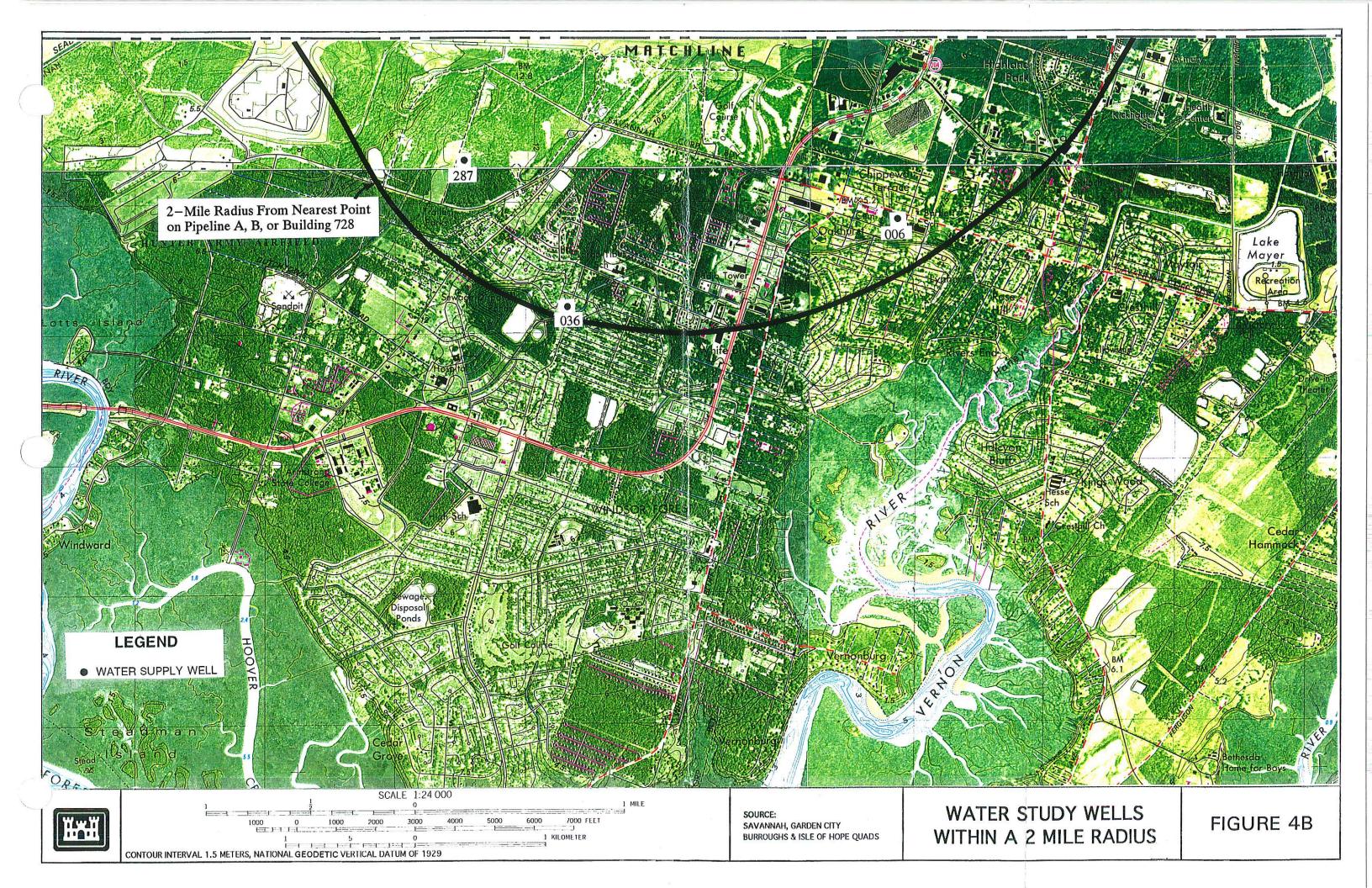


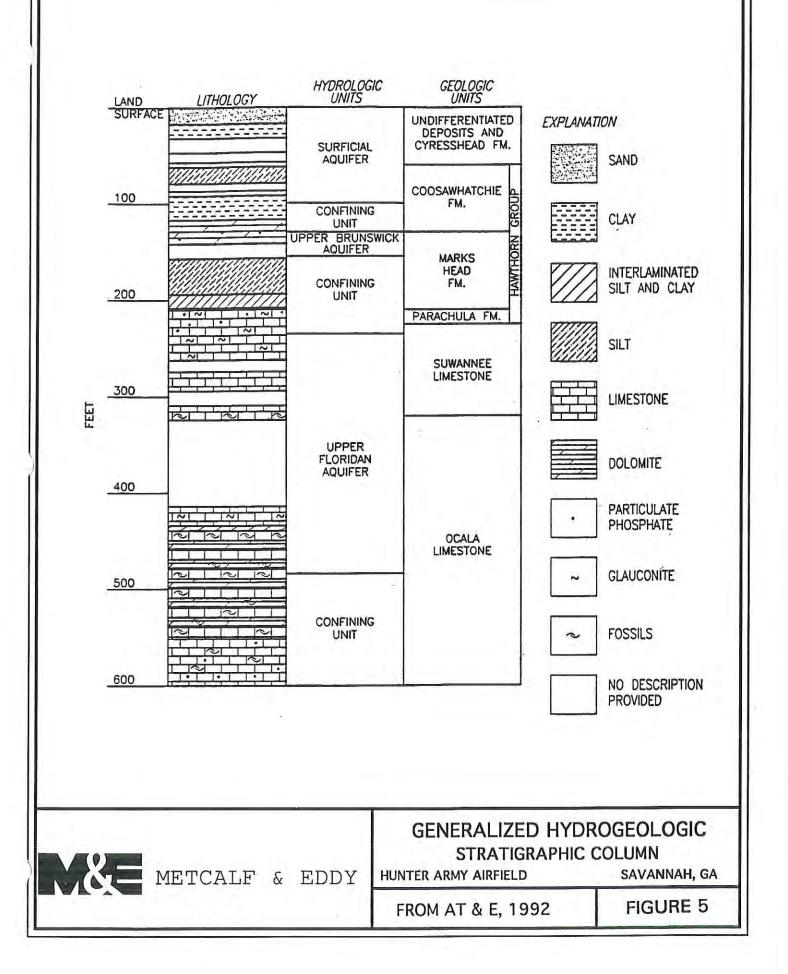


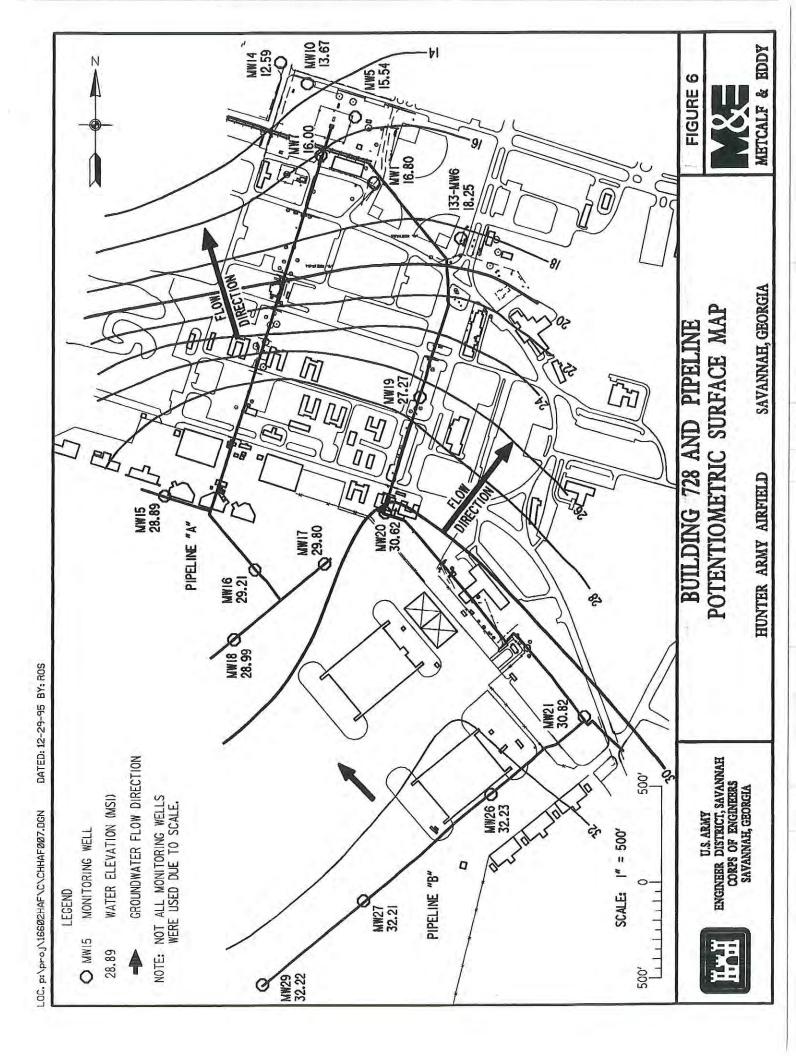
Nproj/ 16602haf/c/bldg728a.dgn DATE: 07-31-96 BY: M.A. FRANK

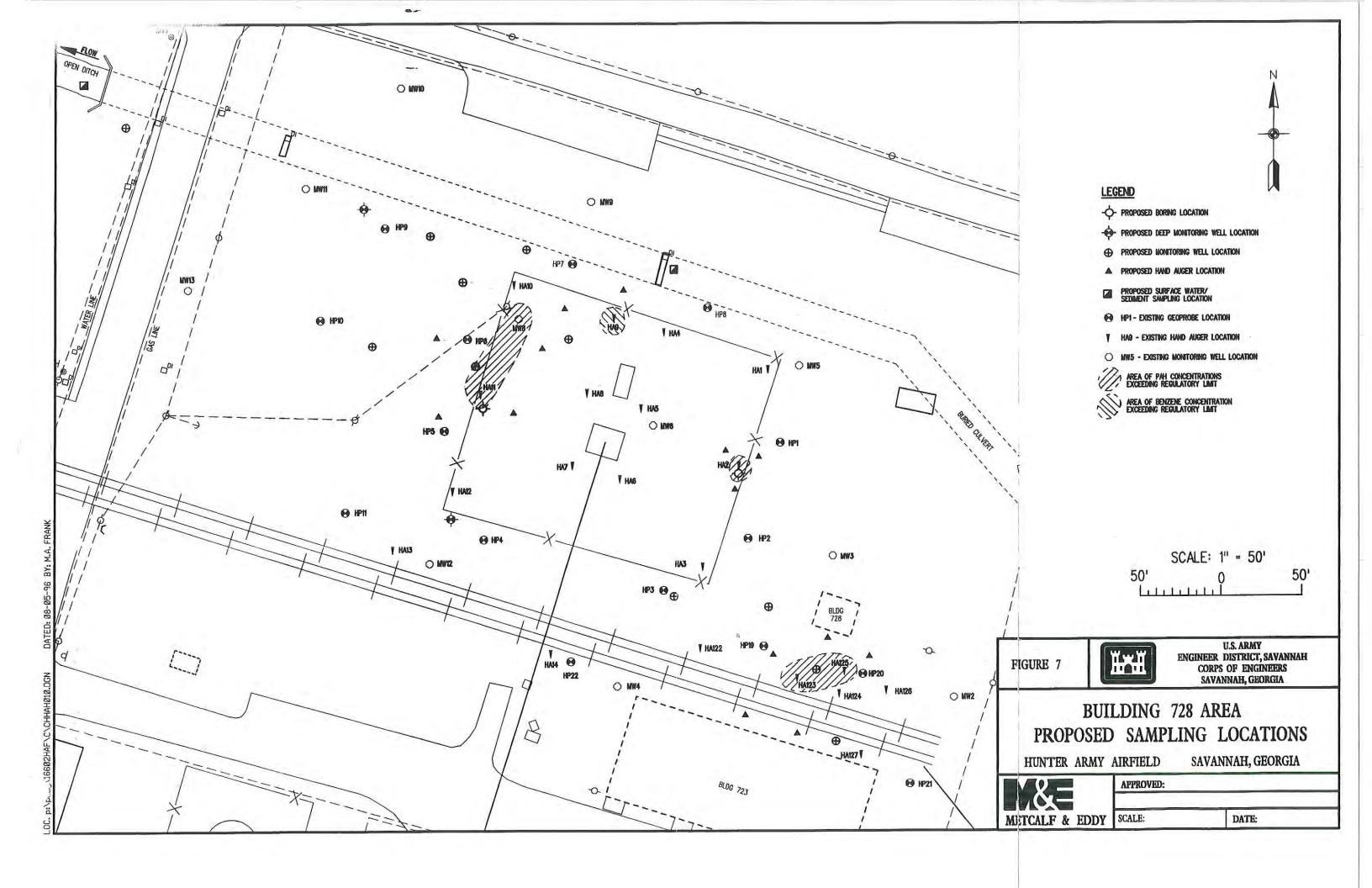












APPENDIX A

PRODUCT RECOVERY SYSTEM SPECIFICATIONS



HYDROSKIM

HYDROCARBON BELT SKIMMER

PROCESS HISTORY

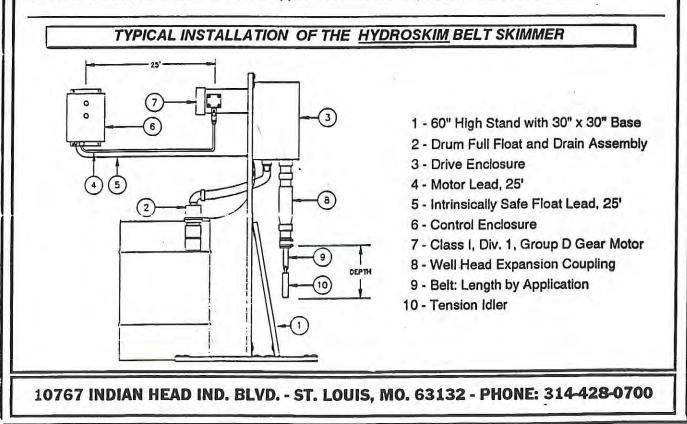
Belt skimmers have been used in industrial applications for years to remove accumulated oil and other hydrocarbons from process tanks. The technology is based on the properties of certain types of thermoplastics to attract hydrocarbons and repel water.

HOW IT WORKS

The process simply involves continuous circulation of an endless hydrocarbon resistant thermoplastic belt from the surface, down the well and through the hydrocarbon/water interface. A drive/recovery unit at the surface of the well is used to circulate the belt and remove the recovered hydrocarbon. The hydrocarbon then flows into a drum or tank for storage and disposal/recycling.

APPLICATION

The HYDROSKIM can be used in 2-inch or larger diameter wells. The process can be combined with groundwater depression or soil venting to enhance the recovery rates in low yield wells. Other models are available for applications such as open tanks, lagoons, etc.



APPENDIX B

GEOPHYSICAL DATA

GEOPHYSICAL SURVEYS HUNTER ARMY AIR FIELD, PIPELINES A & B

SAVANNAH, GEORGIA

Prepared for:

METCALF & EDDY

September 1995



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Prepared by:

Applied Engineering & Science, Inc. Atlanta, Georgia

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3

I. INTRODUCTION

Hunter Army Airfield (Hunter AAF), located on the southwest side of Savannah, Georgia, has been used by the military (either Army or Air Force) since 1940. Hunter AAF covers an area of approximately 8½ square miles.

The specific location of this geophysical investigation is an area of the base used in the past for fueling of aircraft. Fuel for the aircraft was stored in two underground storage tank (UST) farms located approximately 2,500 feet and 1,250 feet from fueling stations located on the concrete tarmac adjacent to the airfield runways (site location map, Plate 1). Underground pipelines carried fuel from the tanks to the fueling areas. Pipeline A extends from the former Northern Battery of USTs southwest approximately 2,100 feet to the tarmac. At this point, maps show the pipeline splitting in a "Y" and extending to former fueling stations on the tarmac. One branch (referred to in this report as the eastern branch of Pipeline A) extends approximately 900 feet in a northeast-southwest direction. The second branch of the "Y" (referred to as the western branch of Pipeline A) extends approximately 900 feet in a northwest-southeast direction. Records indicate that Pipeline A is 12 inches in diameter and constructed of steel.

Pipeline B also originates at the former Northern Battery of USTs and extends south and east approximately 3,600 feet to the Eastern Battery of USTs. From the Eastern Battery, Pipeline B

64

To accomplish the goal of locating the pipeline, AES used electromagnetic (EM) ground conductivity and ground-penetrating radar (GPR) equipment in the area of the pipelines. The scope of work involved locating approximately 10,750 total feet of pipeline. Shallow EM surveys measure ground conductivity and can be used to locate buried metallic objects, such as the steel pipelines at Hunter AAF, because of the contrast in electrical properties with surrounding geologic materials. Shallow EM surveys are relatively easy, fast and inexpensive to complete. However, this type of EM equipment tends to be sensitive to surface and near-surface sources of interference such as buried materials, power lines, fences, buildings and other objects or generators of electromagnetic fields. Furthermore, resolution of the location of buried metallic objects decreases rapidly as the depth of burial increases. For these reasons, it was planned to conduct the EM survey first to locate as much of the pipelines as possible with this instrumentation. In areas where interferences were too great to accurately locate the pipelines, the GPR survey would be used.

GPR surveys operate at a higher frequency of the electromagnetic spectrum than EM surveys. Because of the operational frequency and shielding of the antennas, GPR equipment is less susceptible to sources of interference than shallow EM equipment. Depth of signal penetration and resolution are also generally greater. GPR surveys were, therefore, used at Hunter AAF to locate sections of the pipeline which could not be accurately located with the EM survey. The influences of these sources of interference were considered in conducting the geophysical surveys to locate Pipelines A & B. In general, the EM survey was more affected than the GPR survey by these interferences. However, the interferences were not significant except in small sections of the pipelines. The influence of interferences are discussed in more detail in the results section of this report.

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II. FIELD GEOPHYSICAL SURVEY

A. Equipment Description

1. EM-31

A variety of electromagnetic geophysical instruments are available to measure ground conductivity. These generally operate in the frequency range of 10^2 to 10^4 hertz and vary in antenna configuration, depth and resolution capabilities, and other features. For the Hunter AAF pipeline location survey, an EM-31 manufactured by Geonics Limited of Mississauga, Ontario Canada was used. The EM-31 operates at 9.8 x 10^3 hertz with an antenna separation of 3.66 meters.

The contrast in conductivity between native soil or fill material and the steel pipelines is great enough to register a substantial difference in magnetic field strengths. The instrument was operated to measure the in-phase response, which is more sensitive to buried conductors, such as the pipelines, than the quadrature-phase response.

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range of depth and resolution capabilities needed to locate a variable geophysical target, i.e. the pipelines which were known to vary in diameter and depth of burial.

B. Theory of Operation

1. EM-31

Electromagnetic surveying methods utilize the response of subsurface materials to the propagation of electromagnetic fields. The primary electromagnetic field is generated by passing alternating current through a coil in the transmitter. Conductive subsurface materials respond by generating secondary electromagnetic fields that may be detected by the alternating currents they generate in receiver coils through electromagnetic induction.

The primary electromagnetic field travels from the transmitter coil to the receiver coil along two paths, the direct path above the ground surface and the indirect path through the subsurface materials. If the subsurface materials are homogeneous, the two fields will be similar, other than a reduction in field amplitude from the subsurface path. If the subsurface materials are conductive, then the primary field will induce alternating currents in the conductive material, which generate a secondary electromagnetic field that can be detected by the receiver. The primary and secondary fields differ both in amplitude and phase, which can be used to identify the location and geometry of the subsurface conductor. Because the magnetic component of the

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metallic objects and is also very good in distinguishing buried waste and disturbed soils from native, undisturbed materials.

GPR operates on a nearly continuous basis with the time span between the transmitted signal and detection of the return signal (the subsurface travel time of radar-frequency signals) in the nanosecond range. Propagation times for GPR signals in most common geologic materials range from approximately 4 to 11 nsec per foot. A GPR survey therefore results in a continuous profile along the survey line.

Soil conductivity and the frequency of the transmitted signal affect the depth the GPR signal can penetrate. The two most important variables are soil conductivity and the dielectric properties of the targets of interest with respect to the surrounding medium. As soil conductivity decreases, the depth that the GPR signal penetrates increases. Excluding metallic deposits, soil conductivity generally increases with increasing water content. Clays also generally have relatively high conductivities (in comparison to other geologic materials) both because of their moisture content and because of the electrical properties of clay-sized particles. Depth of penetration of a GPR system therefore decreases below the level of groundwater saturation and in clays.

The second important variable is the dielectric properties of the targets of interest relative to the surrounding medium. Generally, the greater the dielectric difference between the targets and the surrounding medium, the more effective GPR will be in distinguishing the targets. Metal is not

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2. Ground-Penetrating Radar

The GPR survey of the Pipelines A & B was completed June 7 through 10, 1995. The GPR equipment was set up with all cable connections made according to manufacturer's specifications. The pulseEKKO 1000 recording panel was set up initially to transmit, receive and record a GPR signal, again according to manufacturer's specifications and using documented signal propagation rates for the types of geologic materials expected and the depth of interest. Based on the depth of valves for the pipelines, it was determined that the pipelines could be as deep as 7 to 8 feet. The survey depth of interest to locate the pipelines was the upper 13 feet of materials.

Several test profiles were then completed and the signal gains and recording time span adjusted to provide a clear record of the target of interest. Other GPR settings were adjusted to provide a satisfactory recording.

Equipment settings and calibrations as used for the survey are included on the test profiles included in Appendix A. Most of the GPR survey lines were completed with the instrumentation set for a time window of 40 nsec (corresponding to approximately 13 feet in depth). Generally, the signal gains were set for automatic gain control (AGC) with a manually set maximum of 15,000. Signals were stacked, generally 32 or 64 times. This required a relatively slow survey speed but increased resolution of the target pipelines, making identification of the target easier.

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confirm the pipeline location, such as locations were the pipelines change direction or branch, or where other geophysical targets required closer spacing to distinguish the fuel pipelines. In addition to sections of the pipelines not located by EM-31, however, the entire length of Pipelines A & B was located at less frequent intervals as a quality control check on the EM-31 survey. The net result was that both pipelines were located with both the EM-31 and GPR surveys.

As with the EM-31 survey, because the purpose of the GPR survey was to locate the pipelines in the field the GPR data were generally not recorded. However, several GPR profiles were recorded in order to have a record of the instrument calibrations used and the response of the instrument to the two pipelines.

III. SURVEY RESULTS

A. Pipeline A

Pipeline A was located using both the EM-31 and GPR geophysical surveys. In general, there were no problems in tracing the pipeline with the EM-31. Exceptions were short sections of the pipeline near buildings, fences and parked vehicles, a 100-foot section of the pipeline immediately north of the hangers adjacent to the airfield, and the western "T" branch of the pipeline on the tarmac. The sections of pipeline with building, fence and vehicle interference were readily located with the GPR survey. The section of pipeline north of the hangers was covered with concrete containing steel bar reinforcement. This prevented the EM-31 from locating Pipeline A, but the pipeline in this area could also be located using the GPR survey.

The western "T" branch of Pipeline A could not be located with either the EM-31 or GPR. Multiple geophysical test lines were conducted covering not just the location of the western "T" branch as shown on base maps, but this entire section of the tarmac in case the map is incorrect in depicting the location of the pipeline in this area (Plate 1). By this point in the geophysical surveying effort, the GPR parameters for clearly locating Pipeline A had been well established. However, in the possibility that the pipeline on this branch is significantly different than the rest of Pipeline A as a geophysical target (i.e. different diameter, different depth of burial, and/or different material of construction) multiple tests were conducted with the GPR in an attempt to locate a target different than the rest of the pipeline. These included different antenna frequencies In general, the mapped location of Pipeline A was accurate. In addition to the discrepancies discussed above, the northeast-southwest section of the eastern "T" branch of Pipeline A was found to be slightly shorter (75 to 100 feet on each end) than shown on site maps.

Five GPR profiles of Pipeline A were recorded and these profiles are included in Appendix A of this report as Figures 1 through 5. The first profile (Figure 1, Huntab 1) was recorded on the northwest-southeast section of the eastern "T" branch of Pipeline A (Plate 1). This profile (facing southeast) shows the full pipe GPR signature with the typical metallic-object GPR signal response.

The second profile (Figure 2, Huntab 2) was recorded on the northeast-southwest section of the eastern "T" branch of Pipeline A. The pipeline signal is at the far right of this southwest-facing profile. The signal is truncated because the line was stopped just past the signal peak in order to accurately mark the location of the pipeline in the field.

The third profile (Figure 3, Huntab 4) was a semicircular survey taken at the "Y" intersection of Pipeline A in an effort to locate the western "T" branch of the pipeline. From left to right, the first pipe signal is the eastern "T" branch of Pipeline A. The second pipe signal (approximately two-thirds of the profile distance from left to right) is the unidentified signal which was traced northwest for a distance of 300 feet parallel to the hanger buildings. The end of this profile shows the initial signal limb of the main "Y" branch of Pipeline A as the GPR instrument circled to intersect this part of the pipeline. deviation is approximately at the mid-point of the northwest-southeast section of the pipe as it approaches the Eastern UST Battery (Plate 1, near the profile marked "Huntab 6"). Instead of being straight in this area as the site map shows, the pipeline actually makes a slight offset to miss a small building at the edge of the tarmac. The correct location is as marked on Plate 1. The third deviation from the mapped location is on the final northeast-southwest section of the pipeline on the tarmac. This section of the pipeline was found to be approximately 200 feet shorter than mapped.

Two GPR survey profiles of Pipeline B were recorded and are included in Appendix A of this report. The first profile, labeled Huntab 6 (Figure 6), was recorded in the area of the pipeline just discussed which deviates from the mapped location. Pipeline B is located approximately one-fifth of the distance from left to right on this profile, which faces northwest. A second target on this profile, located just left of center and shallower than Pipeline B, was investigated and found to be isolated. It is apparently a single, small, shallowly buried metallic object not related to the fuel pipeline.

The second recorded GPR profile (Figure 7, Huntab 7) recorded on Pipeline B was also located on the section of the pipeline near the Eastern UST Battery. On this profile, which faces northwest, Pipeline B is seen at the far right.

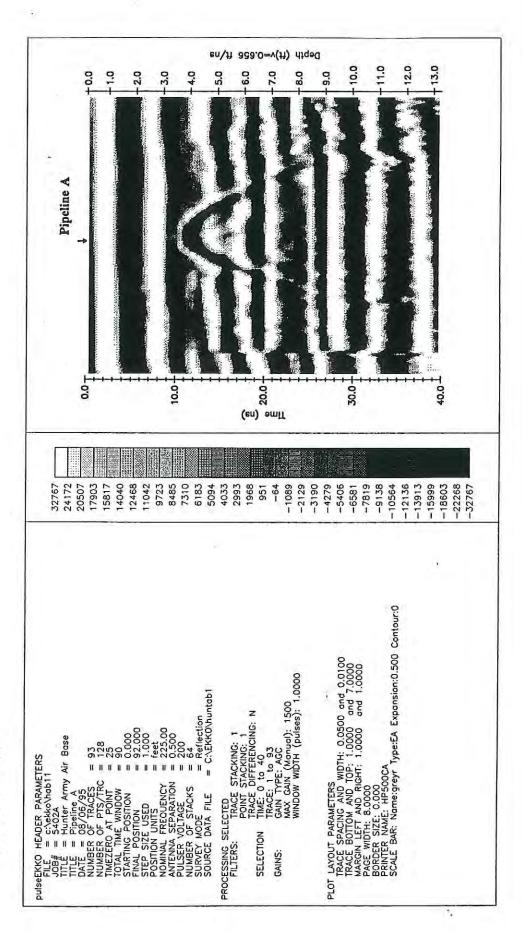
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APPENDIX A

GPR Survey Profiles

Pipelines A & B

Figure 1. Huntabl





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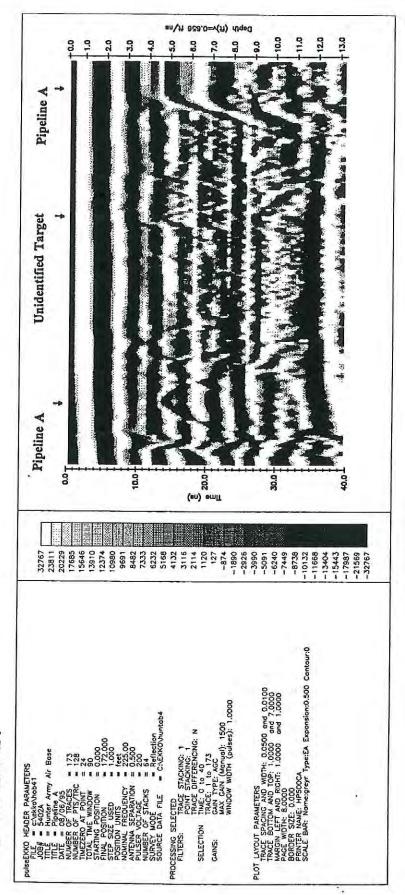
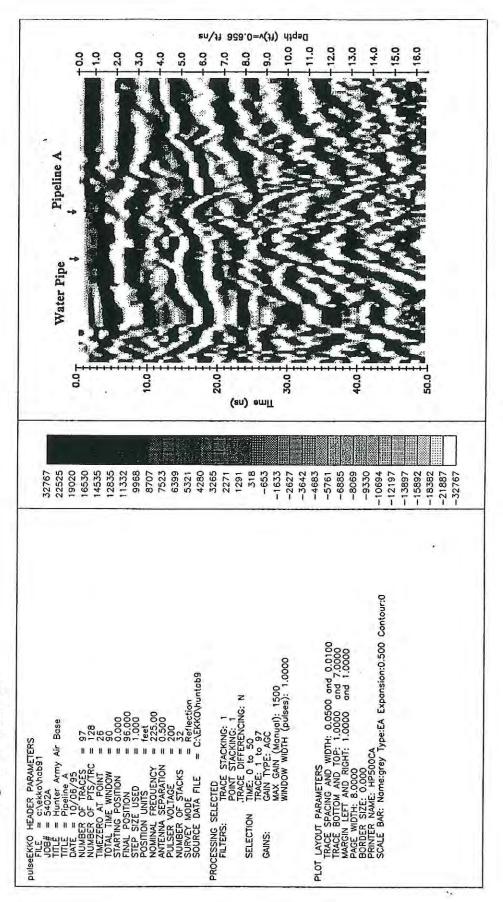


Figure 5. Huntab9

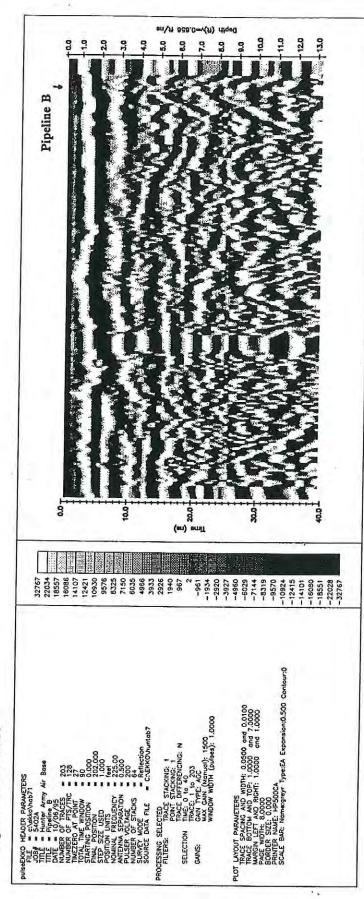


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APPENDIX C

GEOTECHNICAL DATA

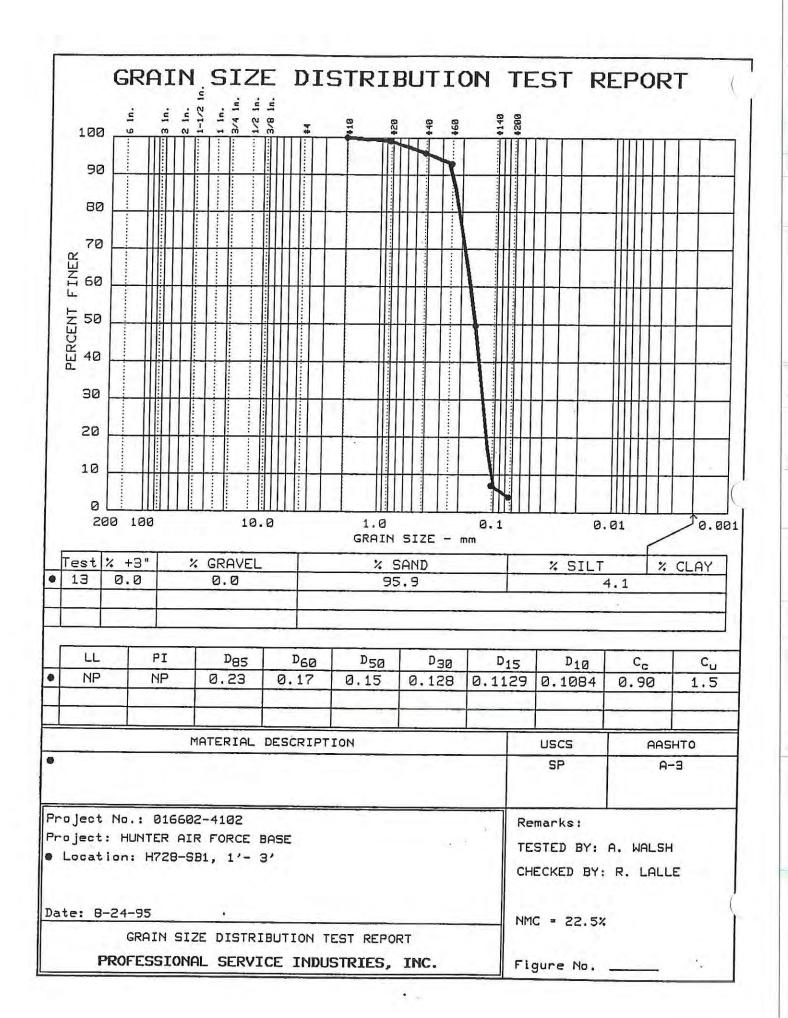
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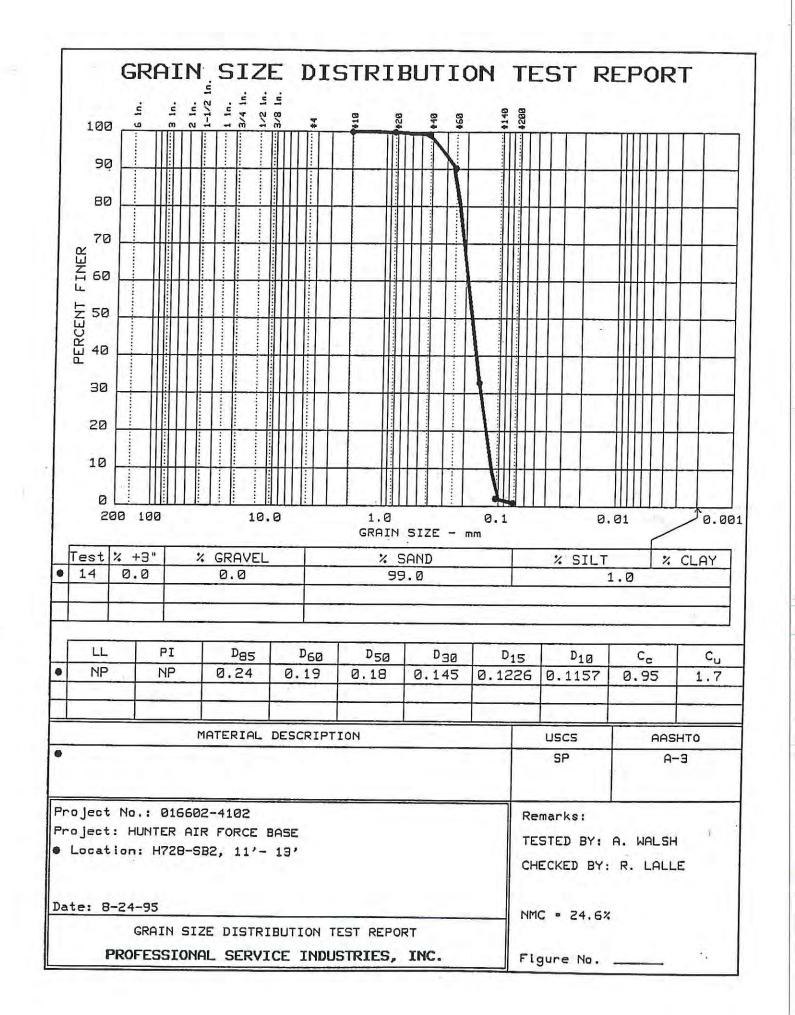
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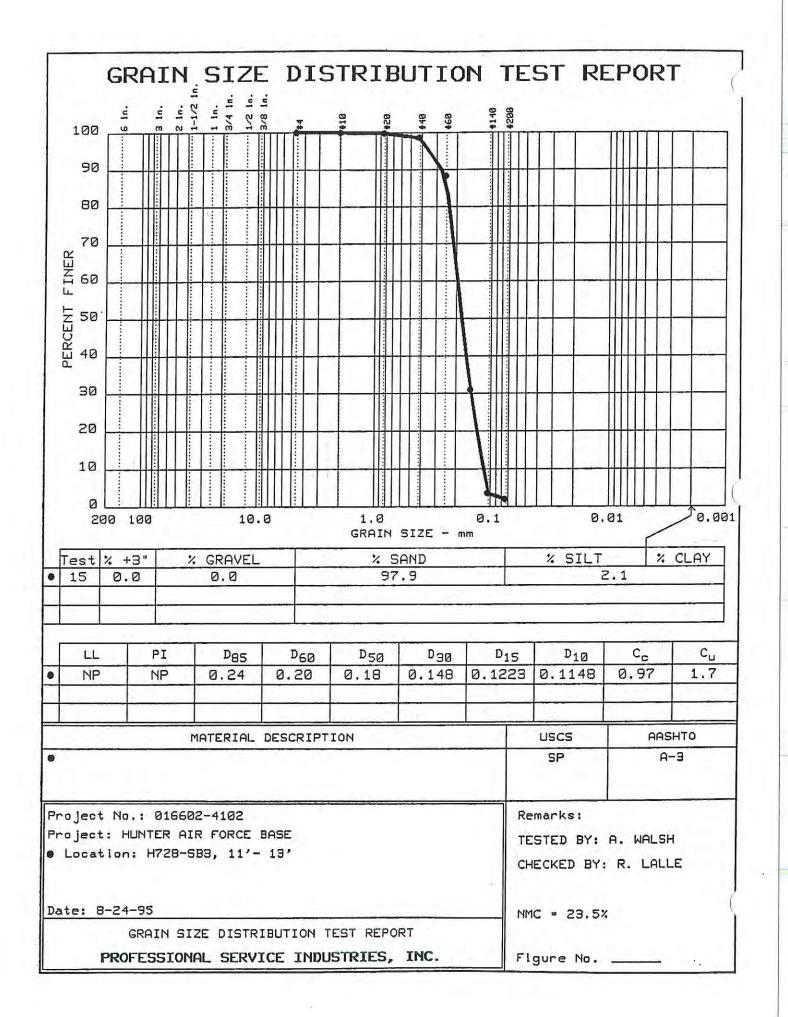
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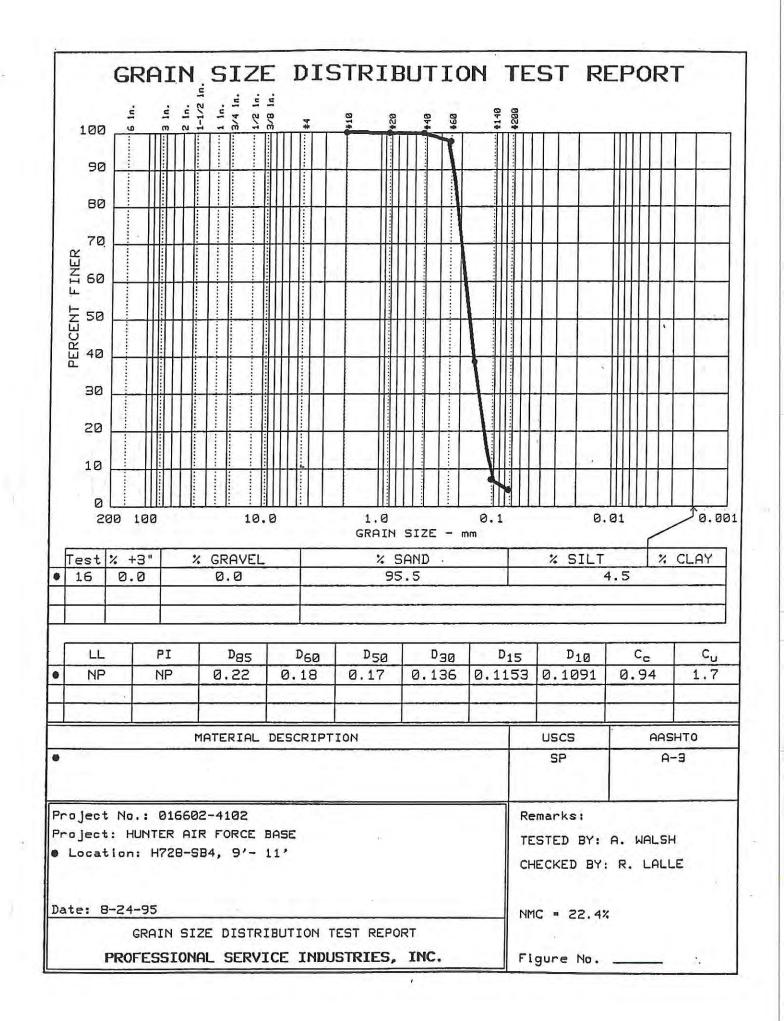
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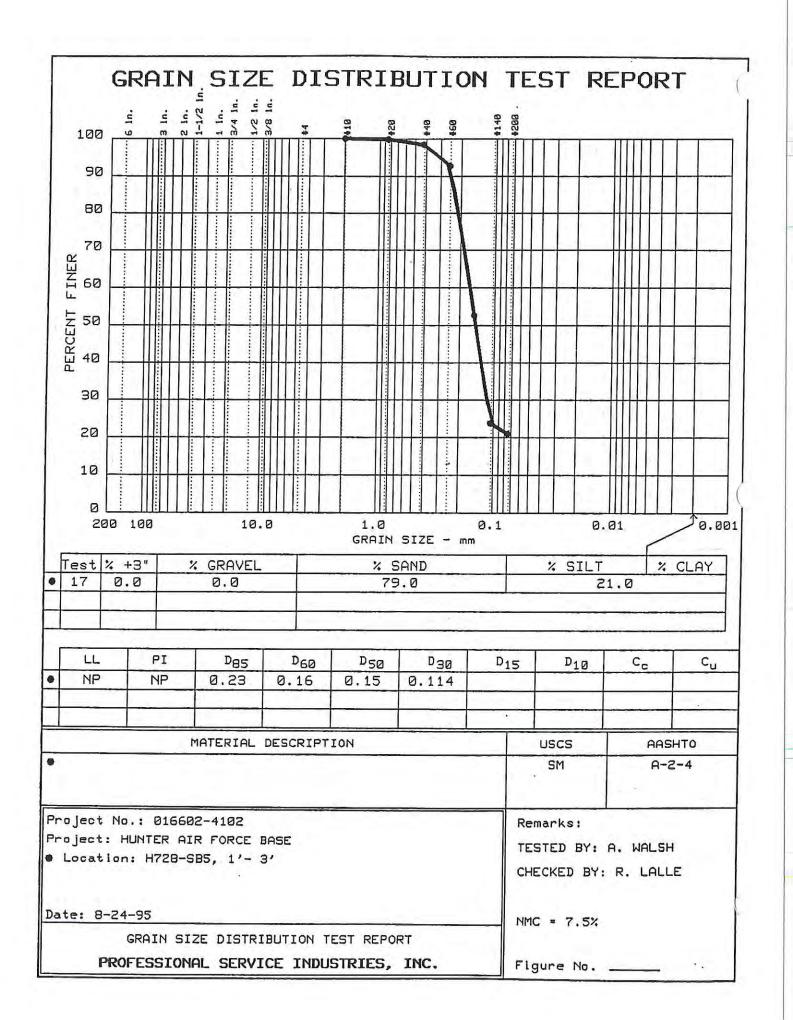
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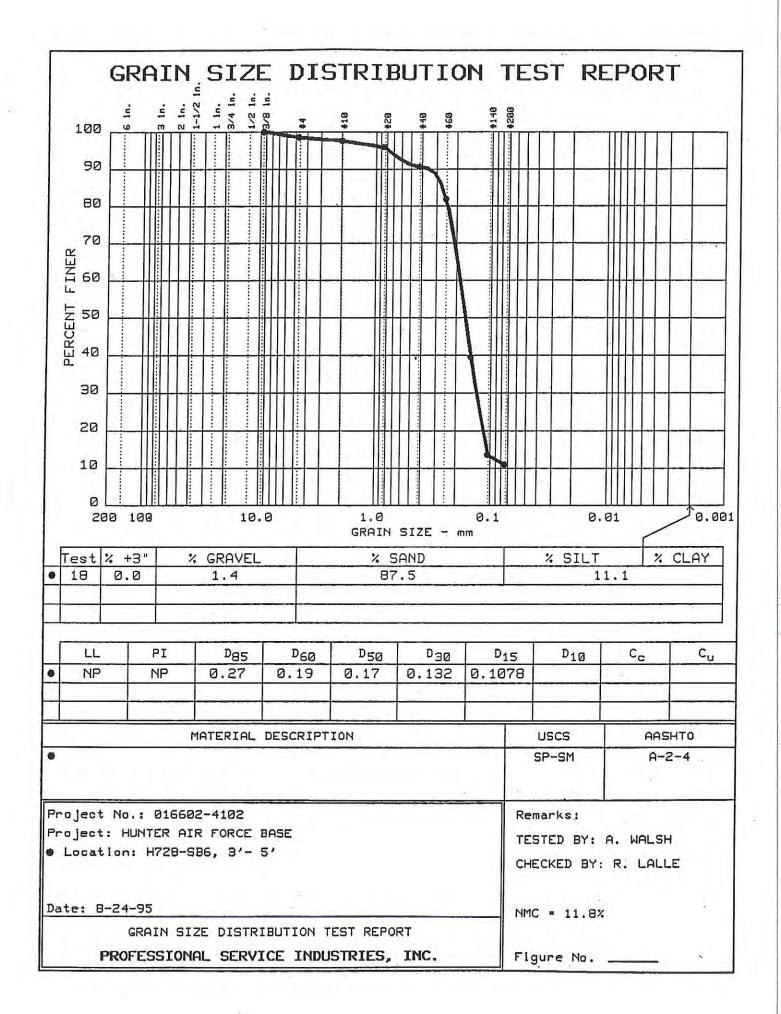


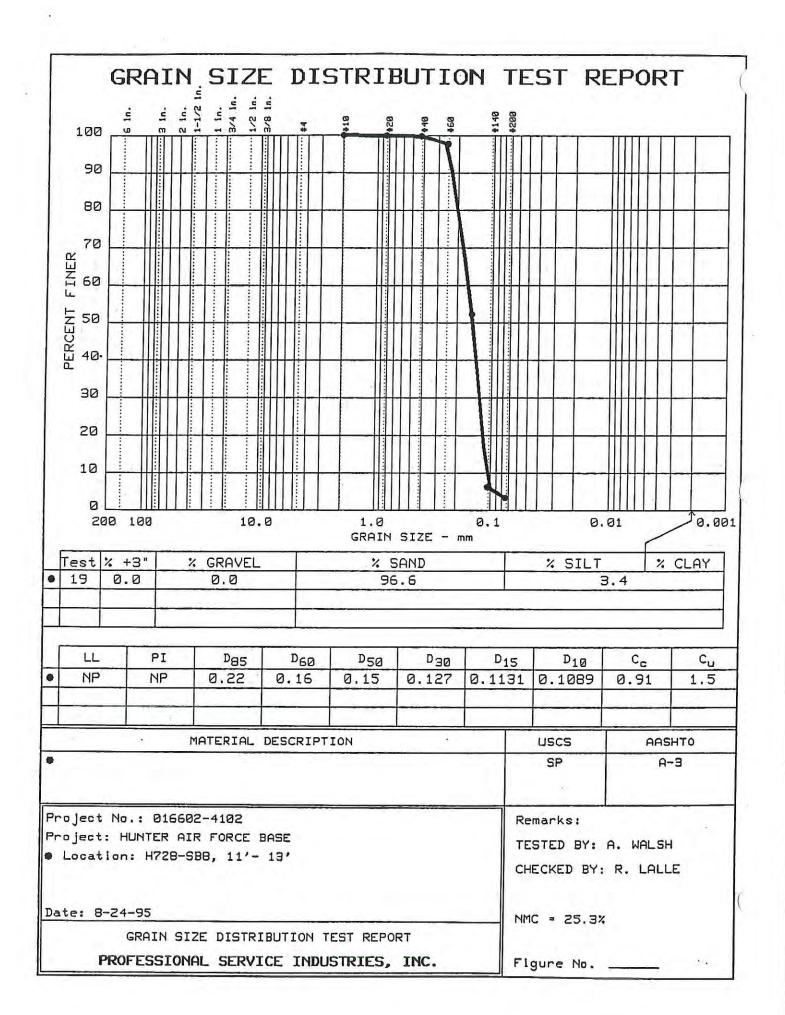


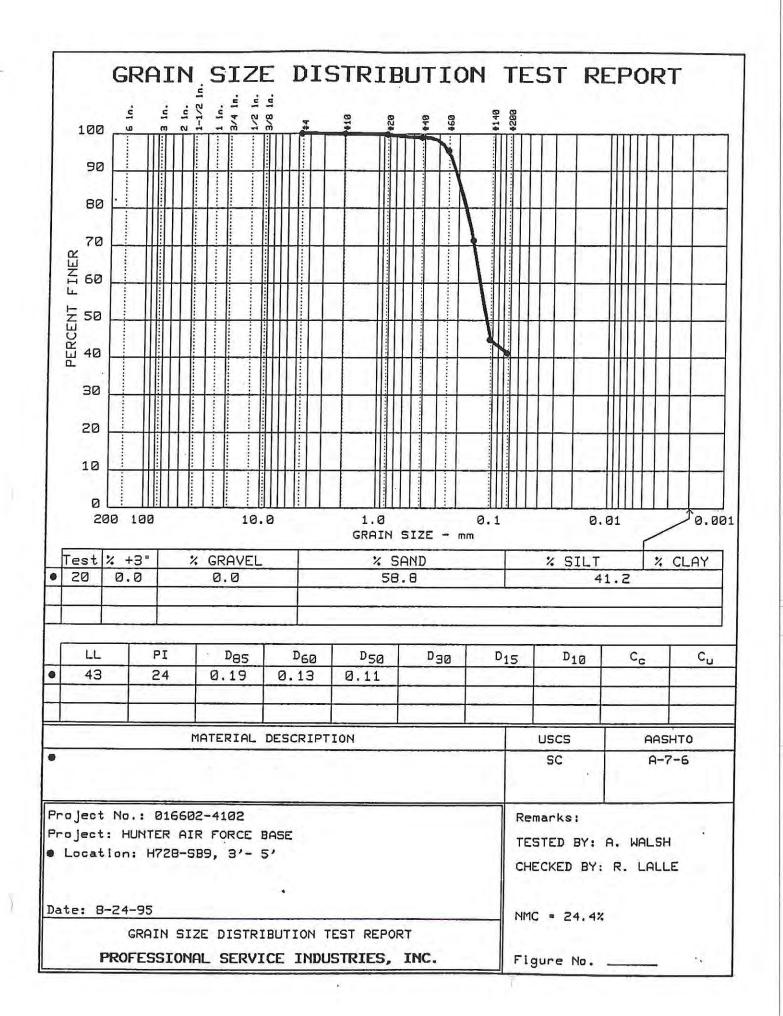


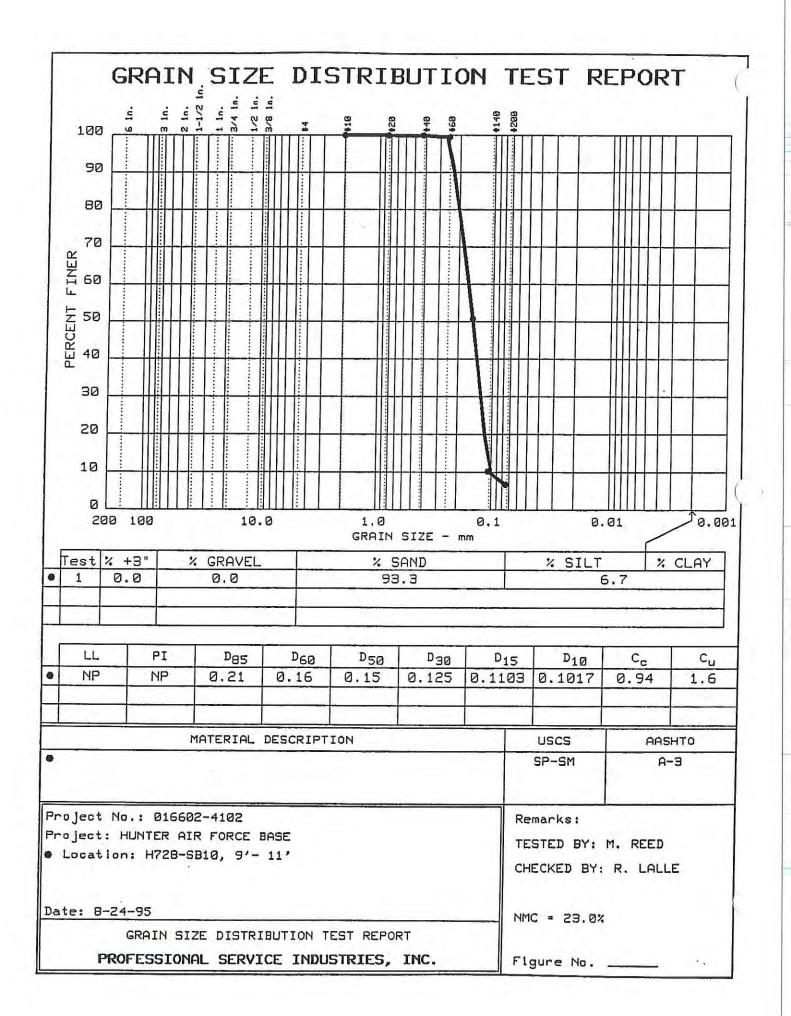


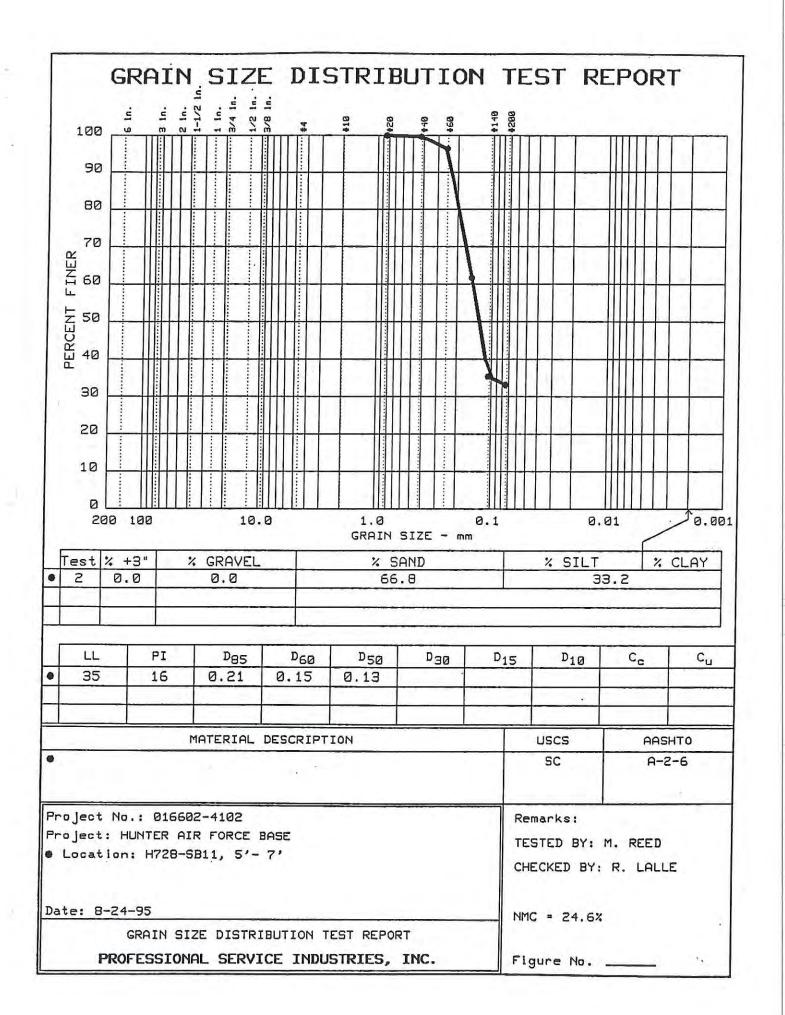


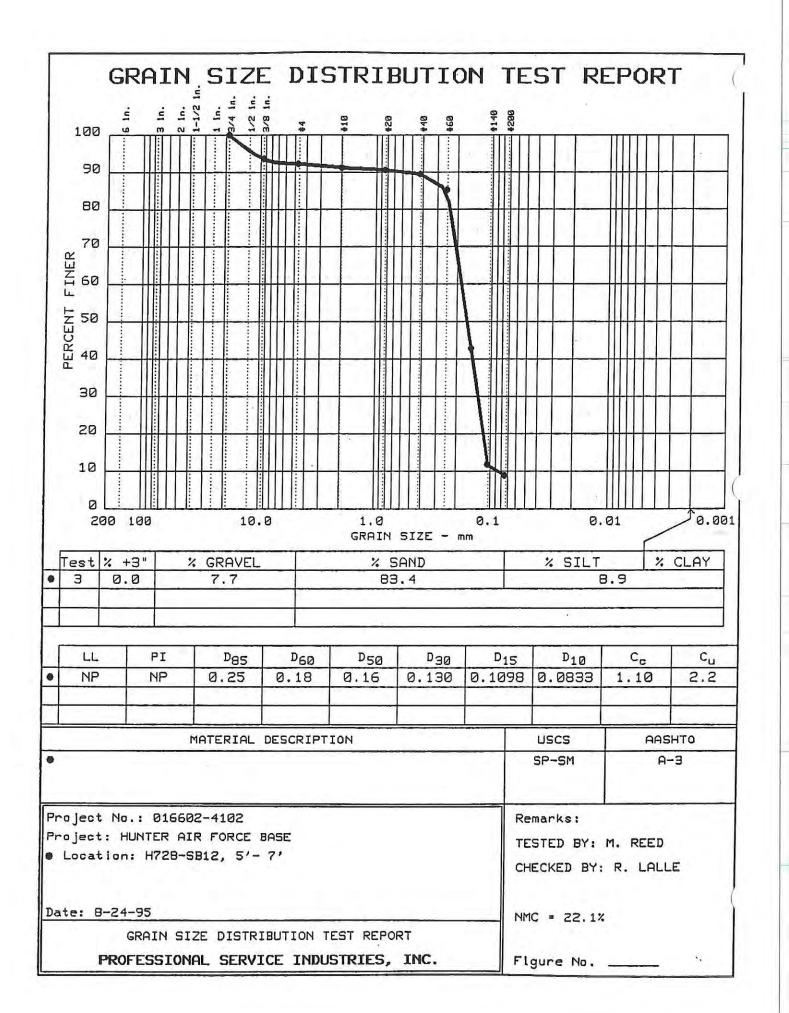


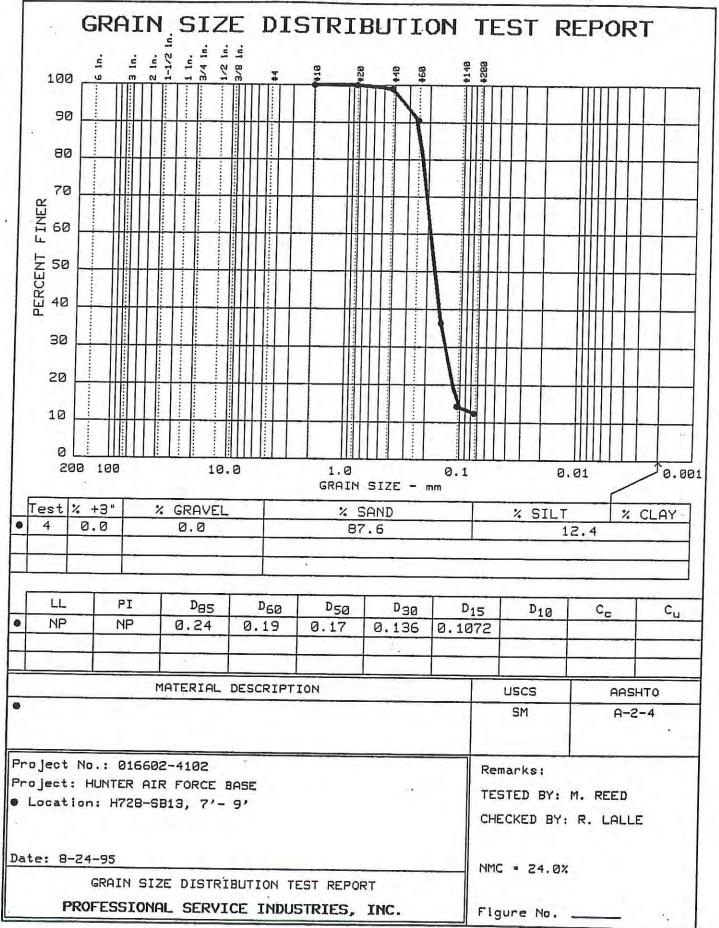




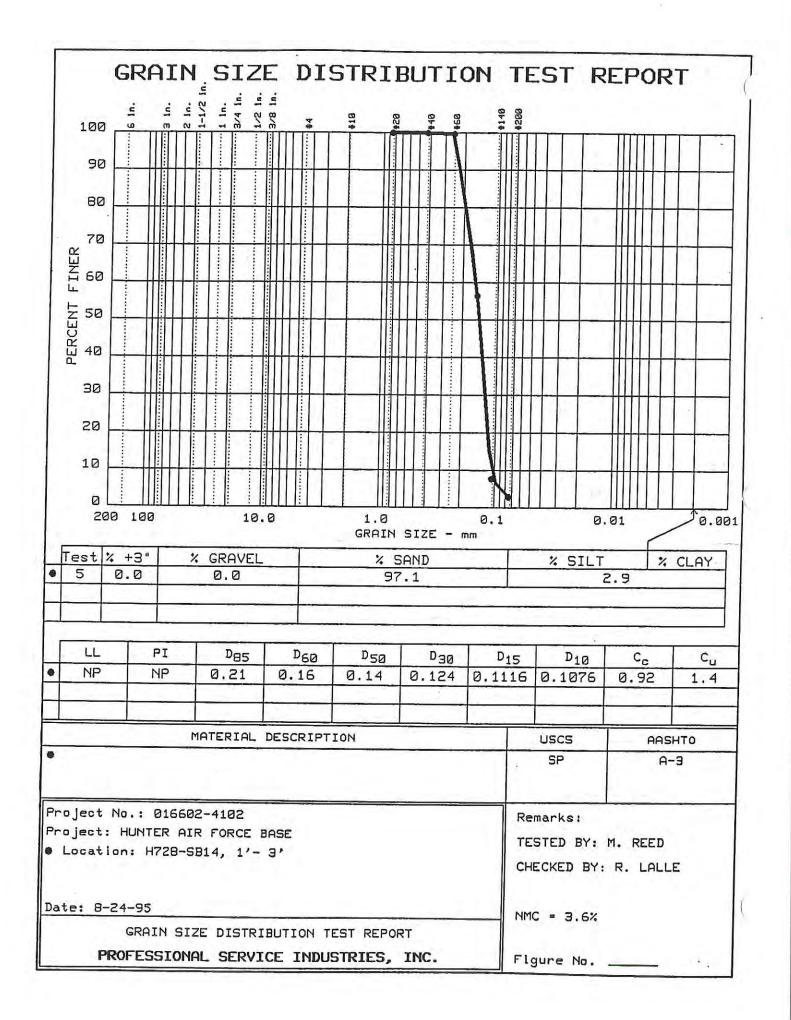


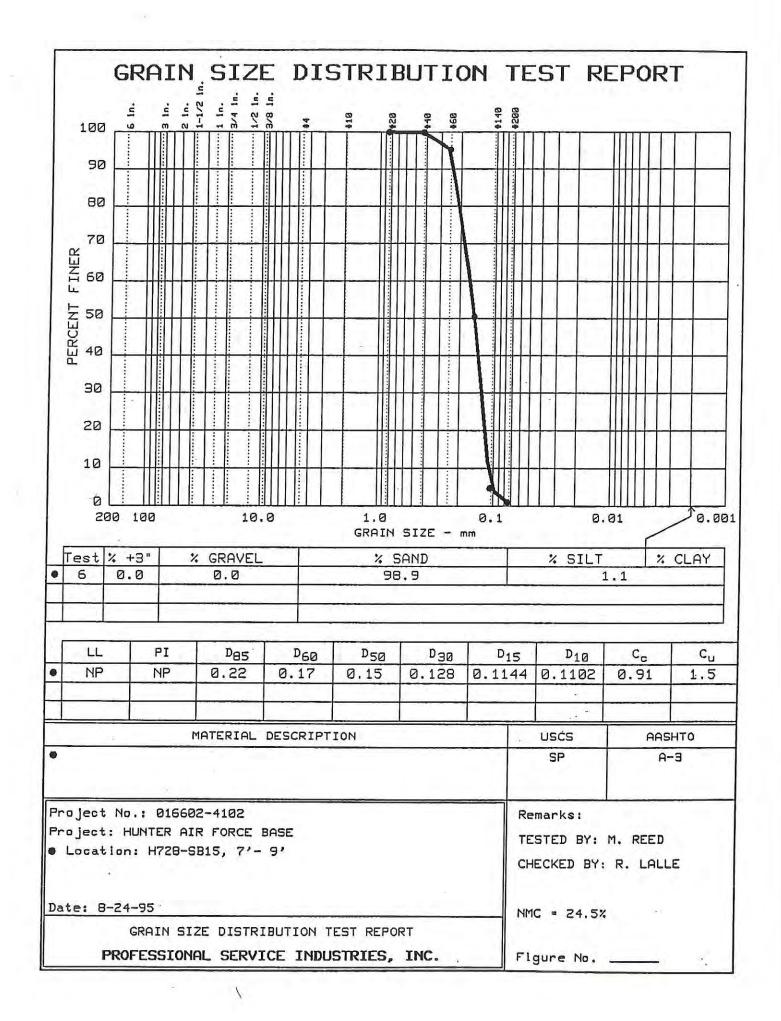


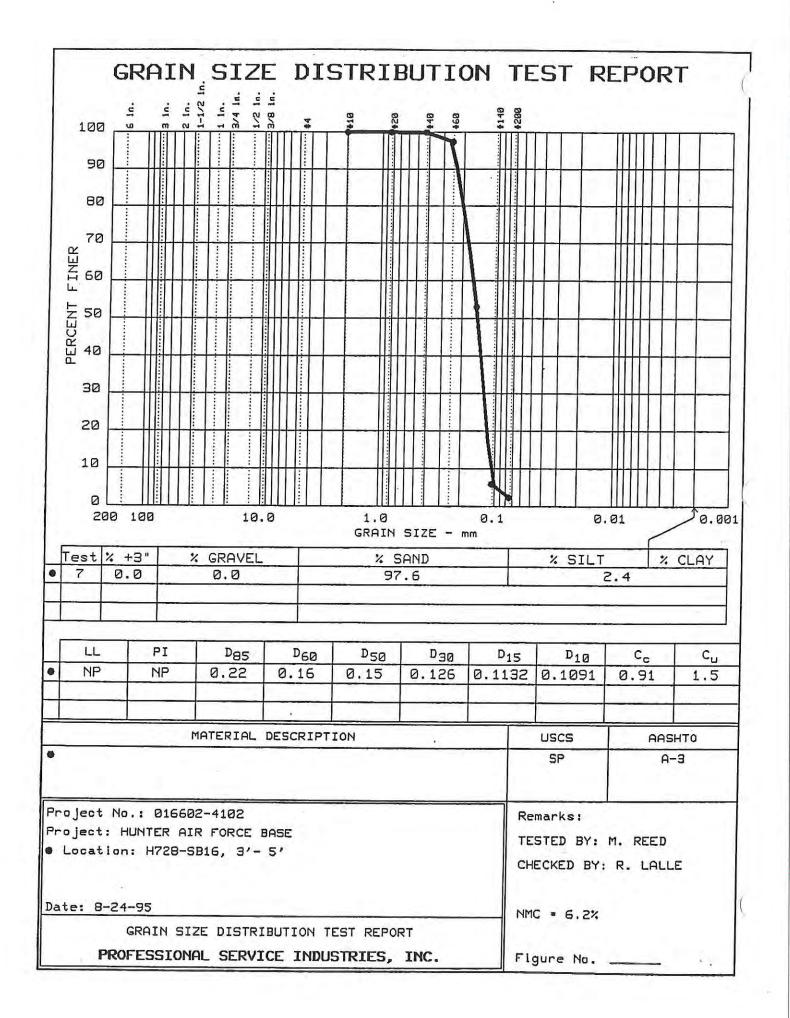


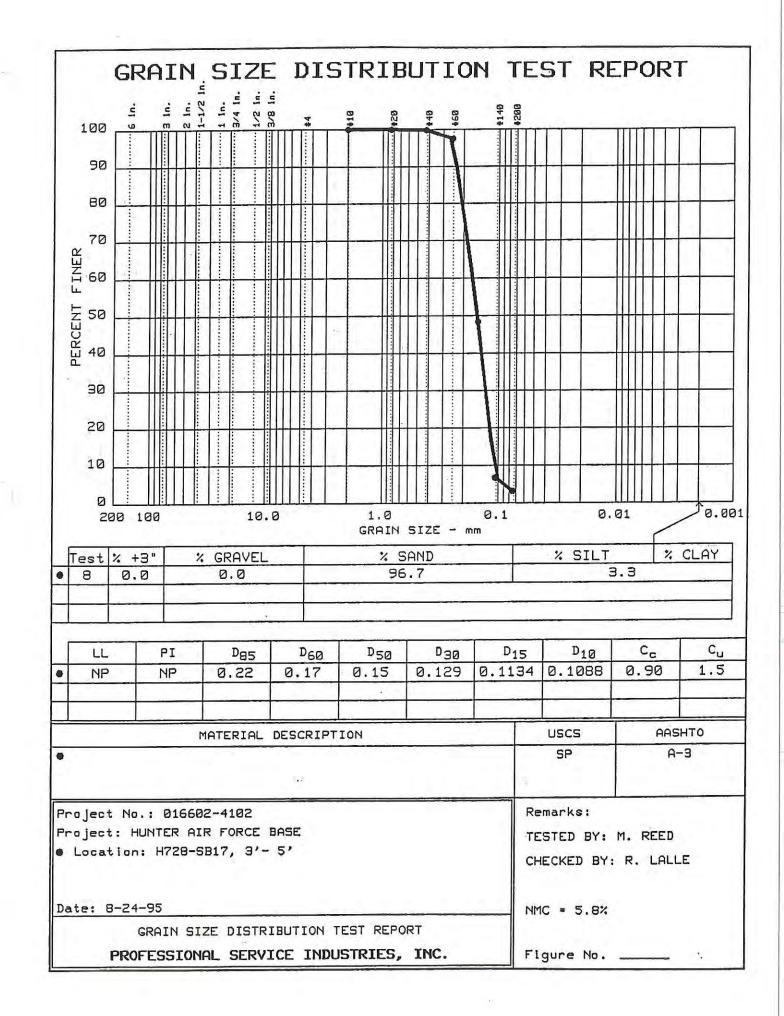


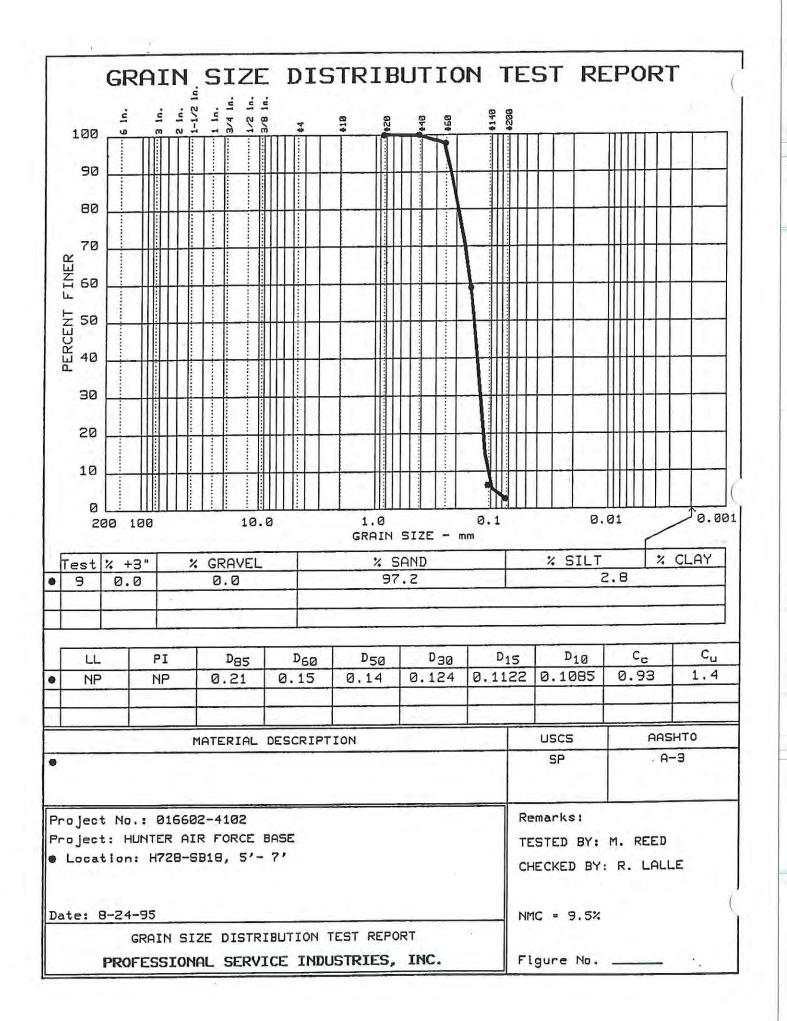
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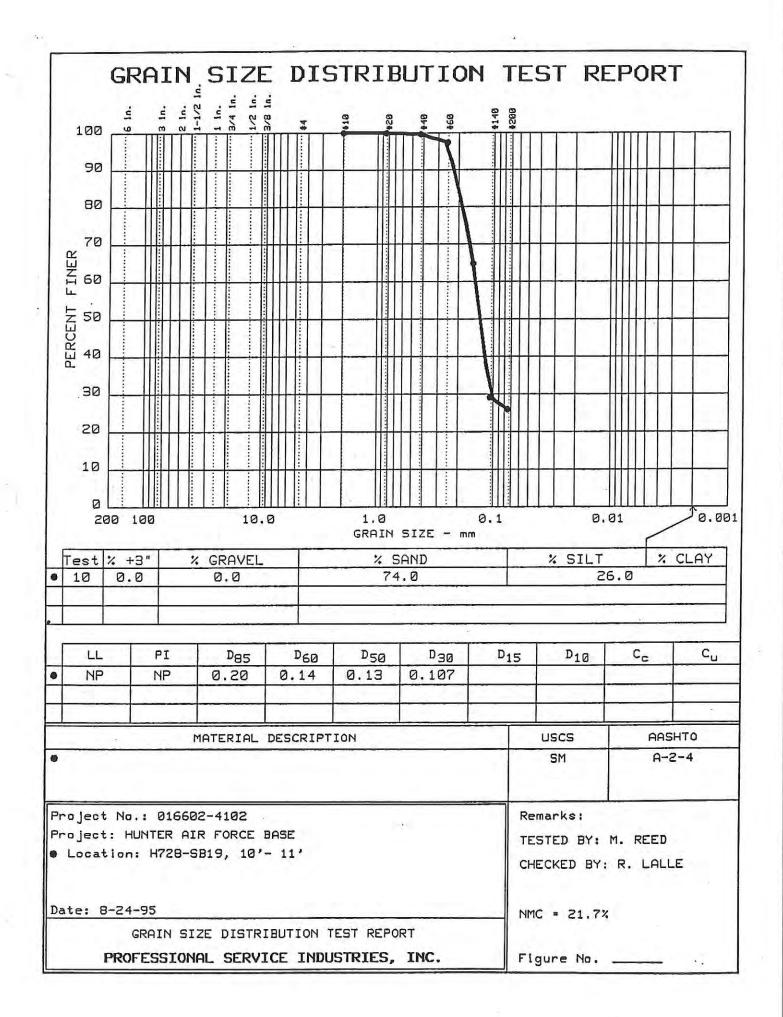


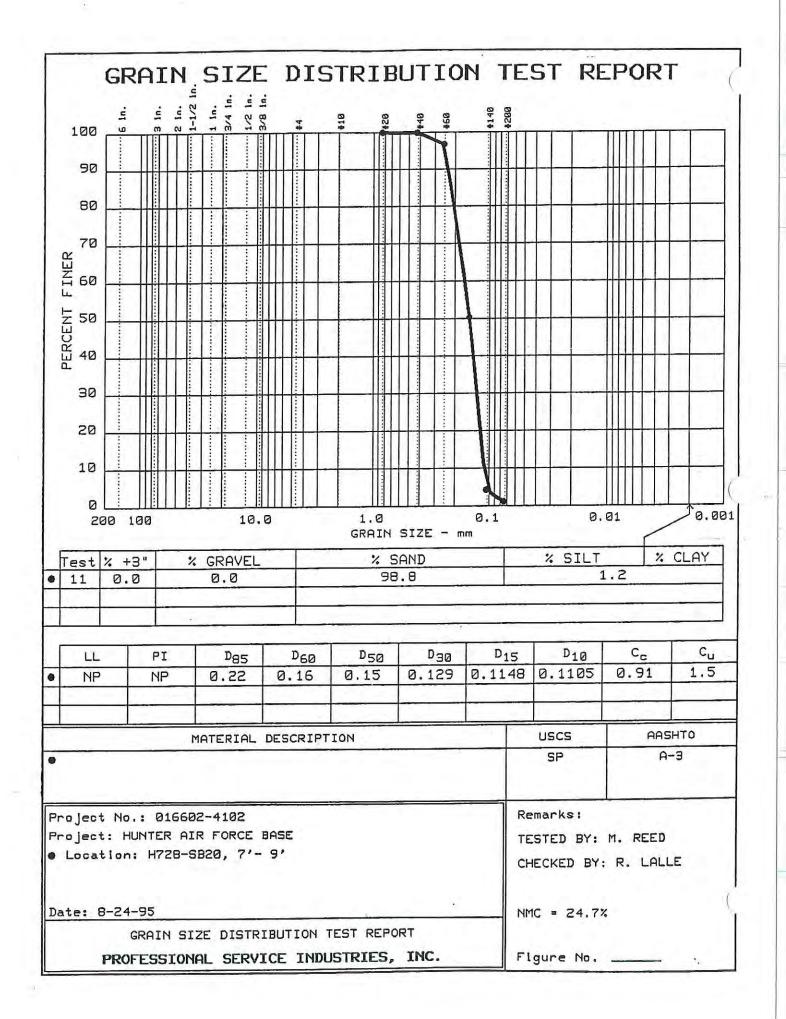


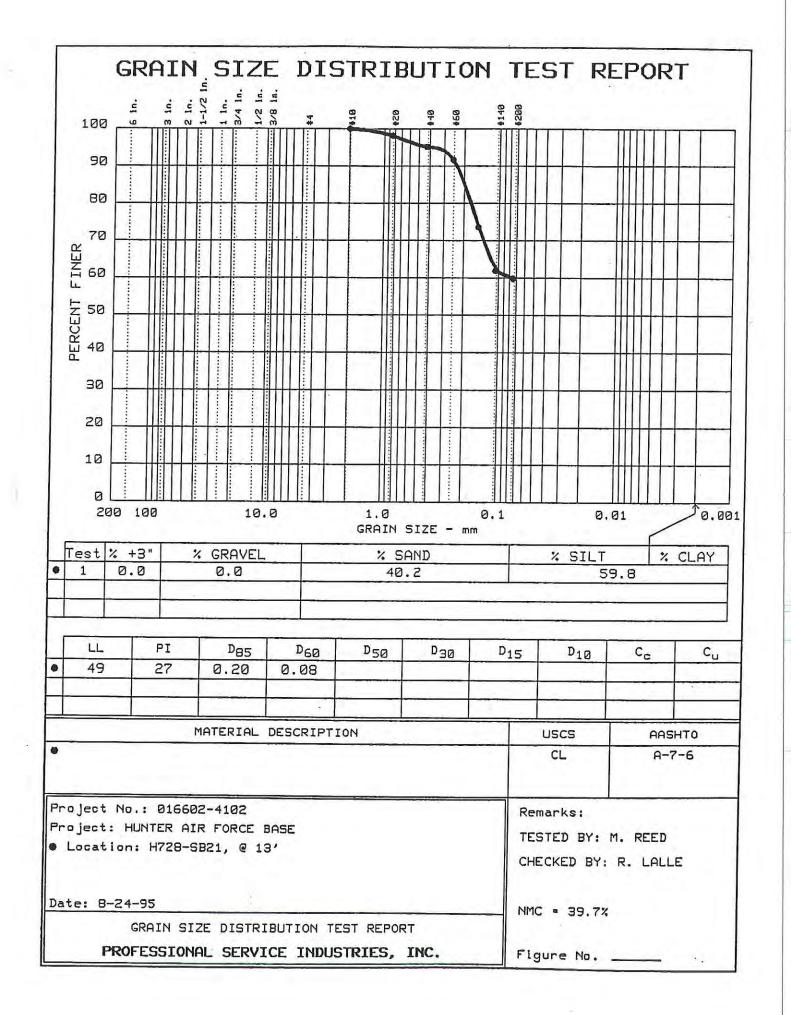


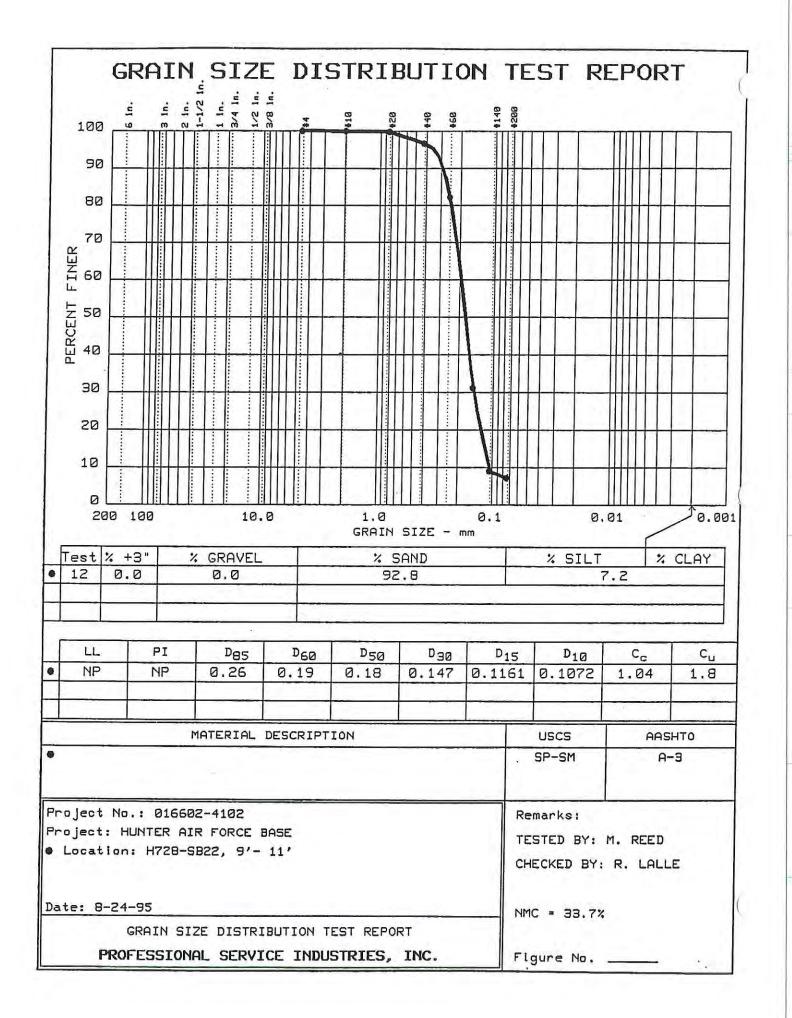


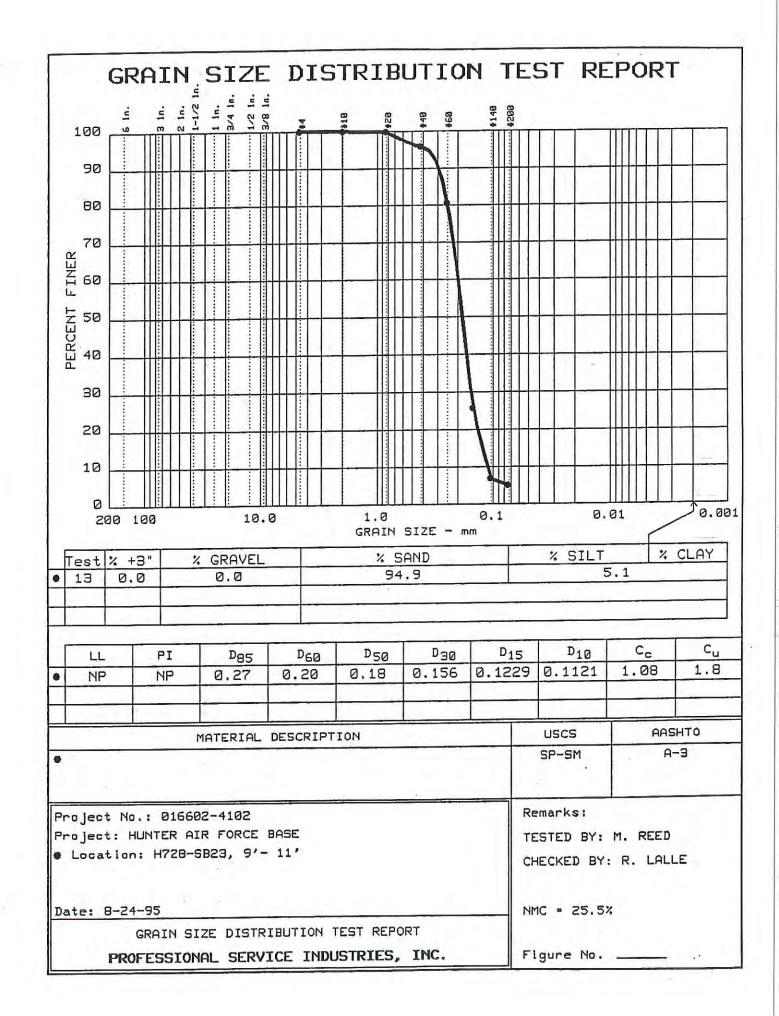


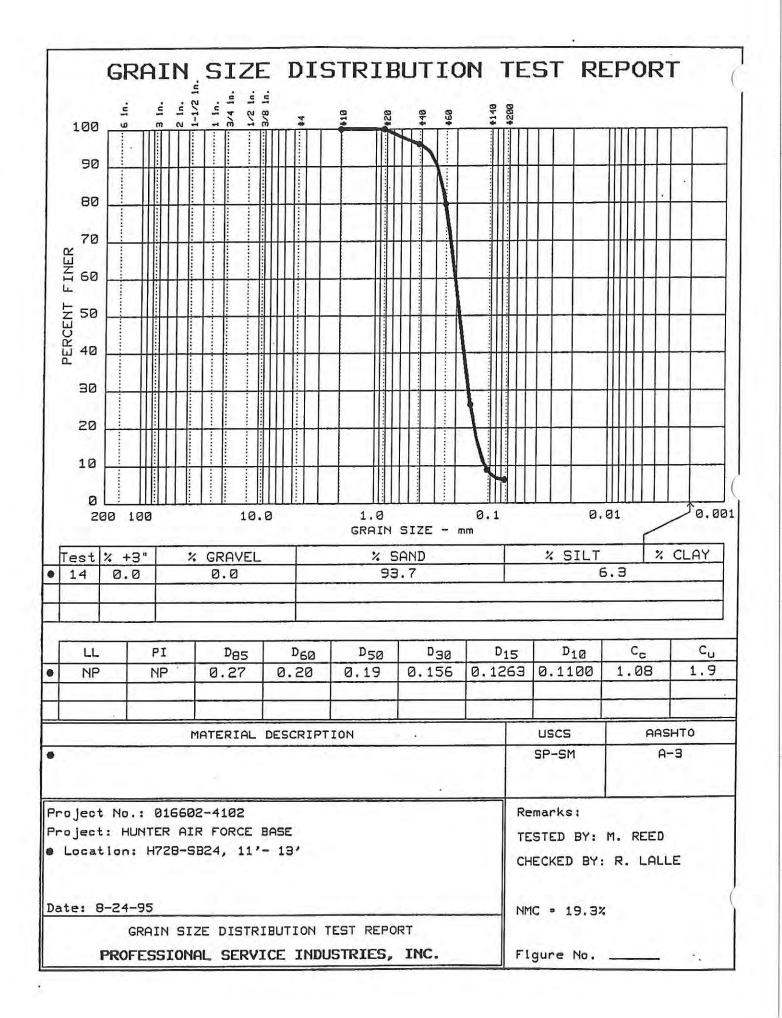


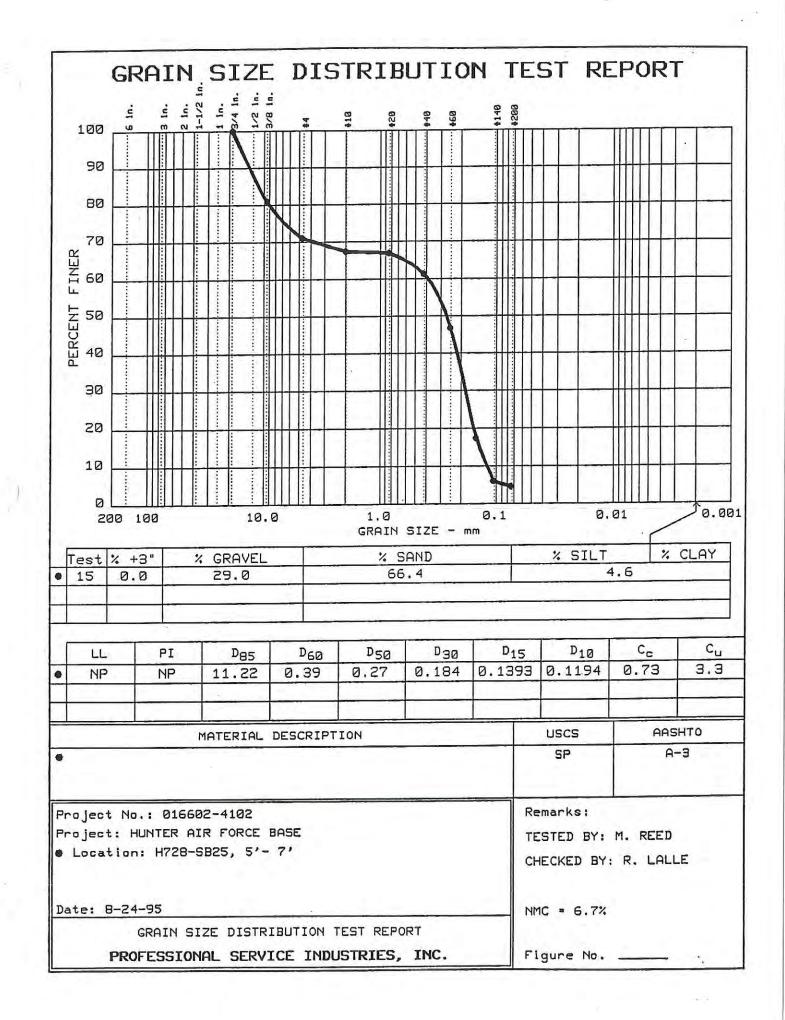


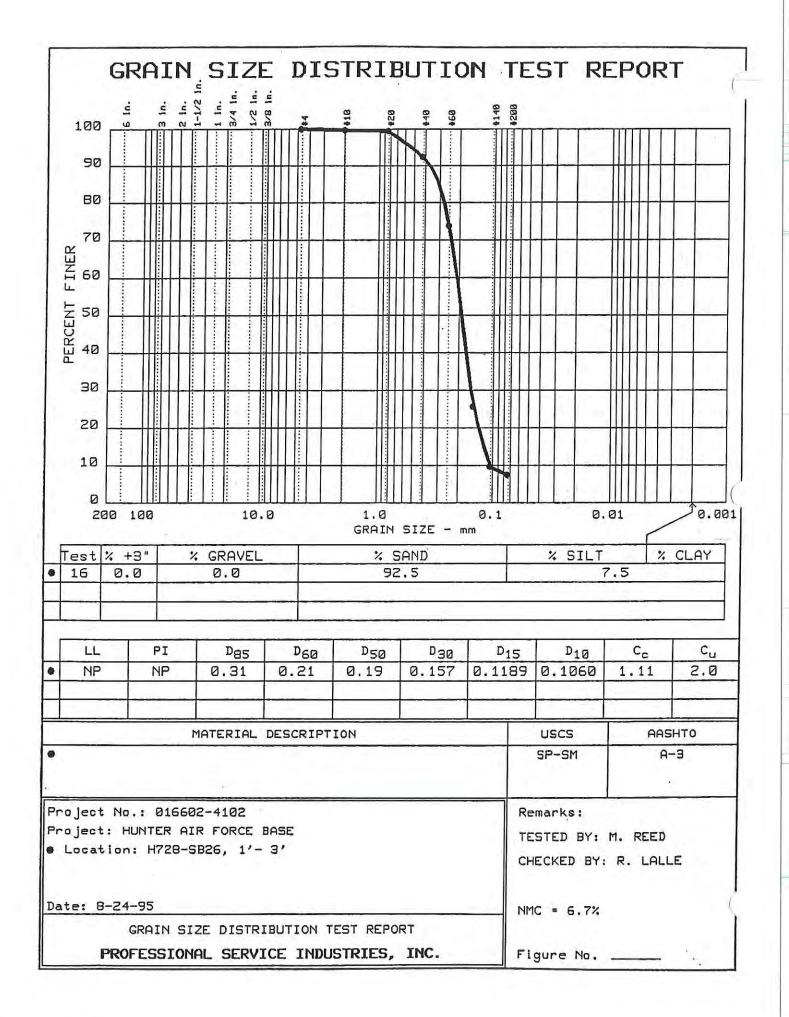


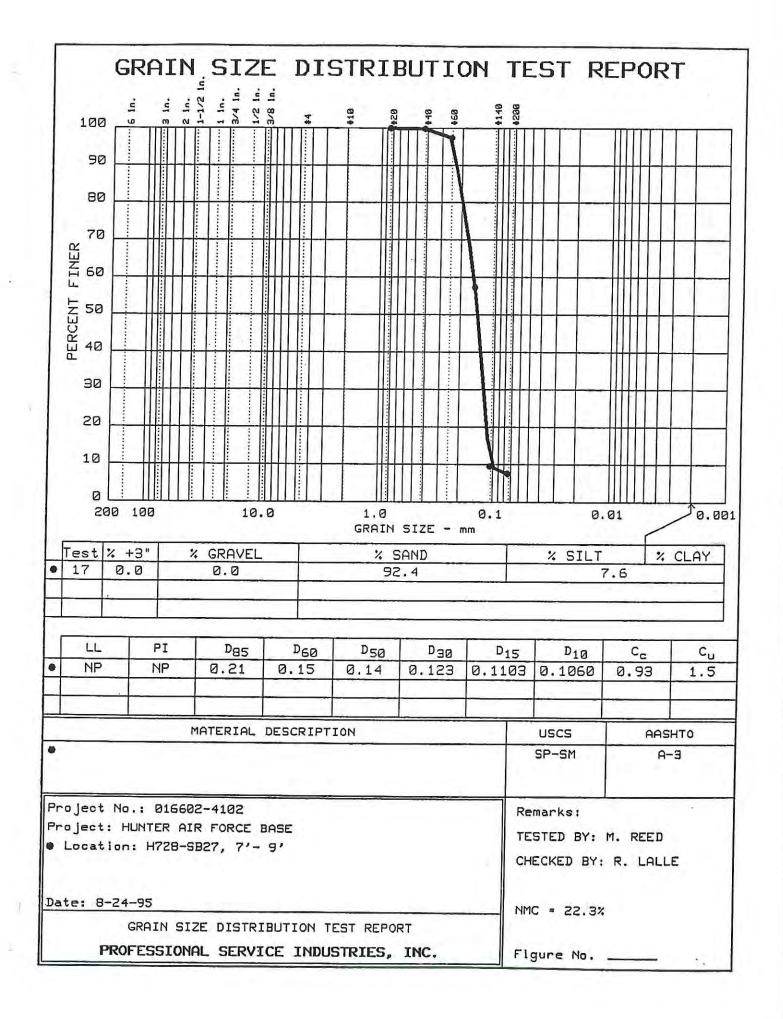


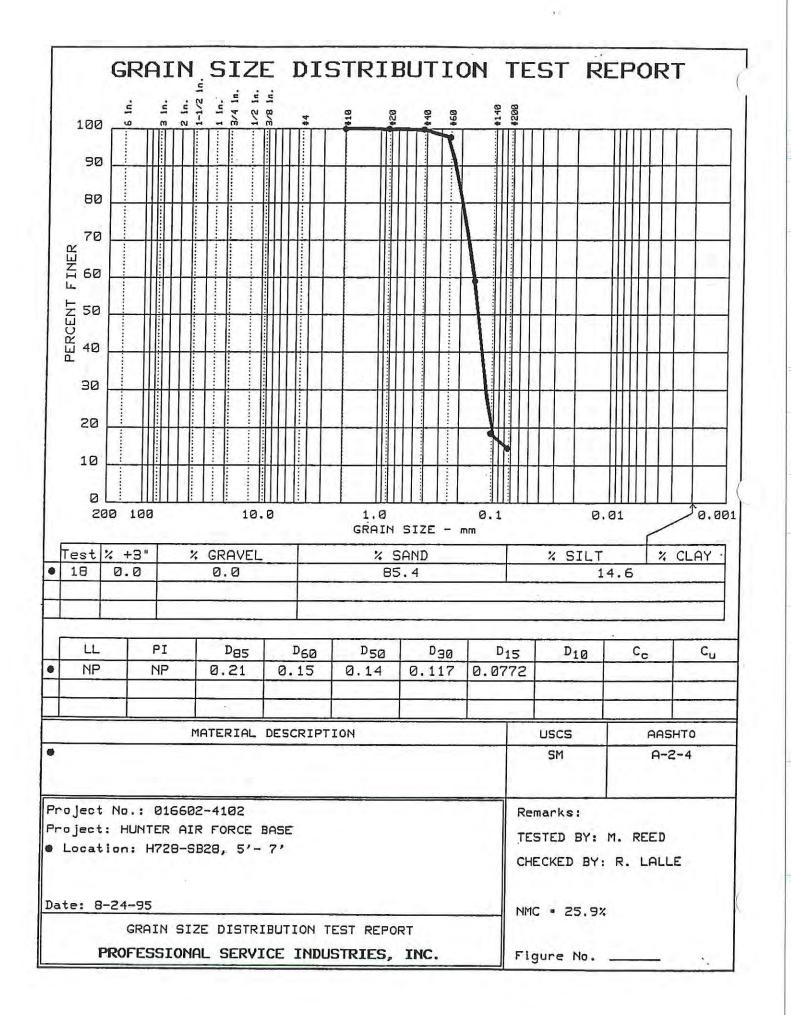


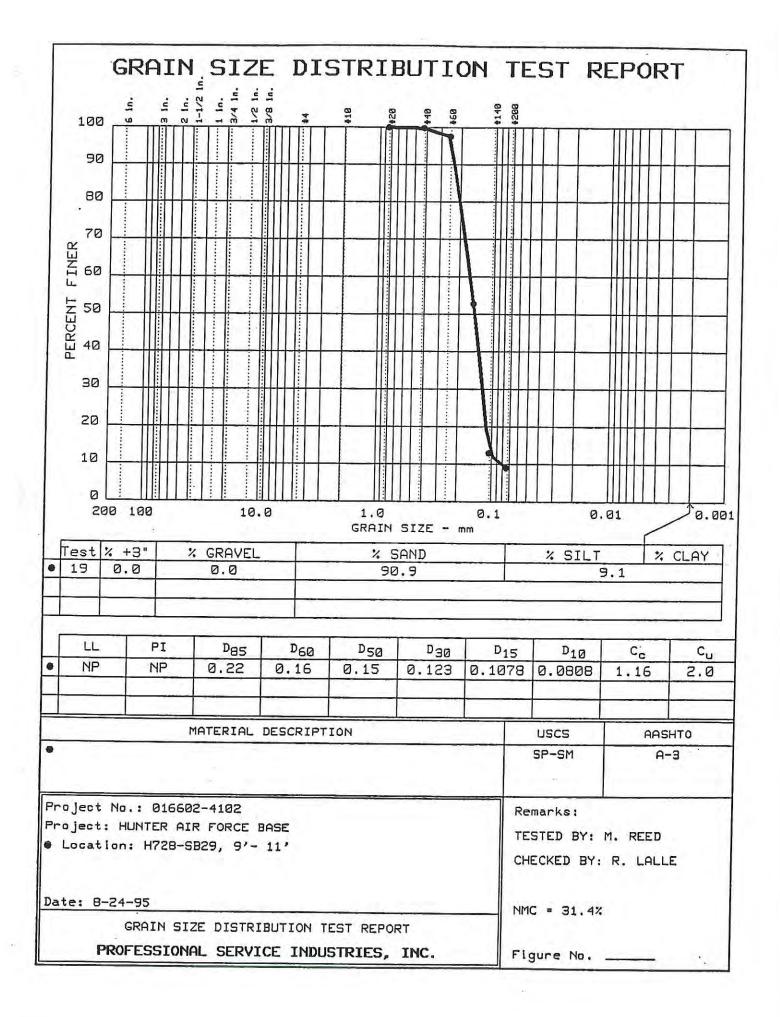


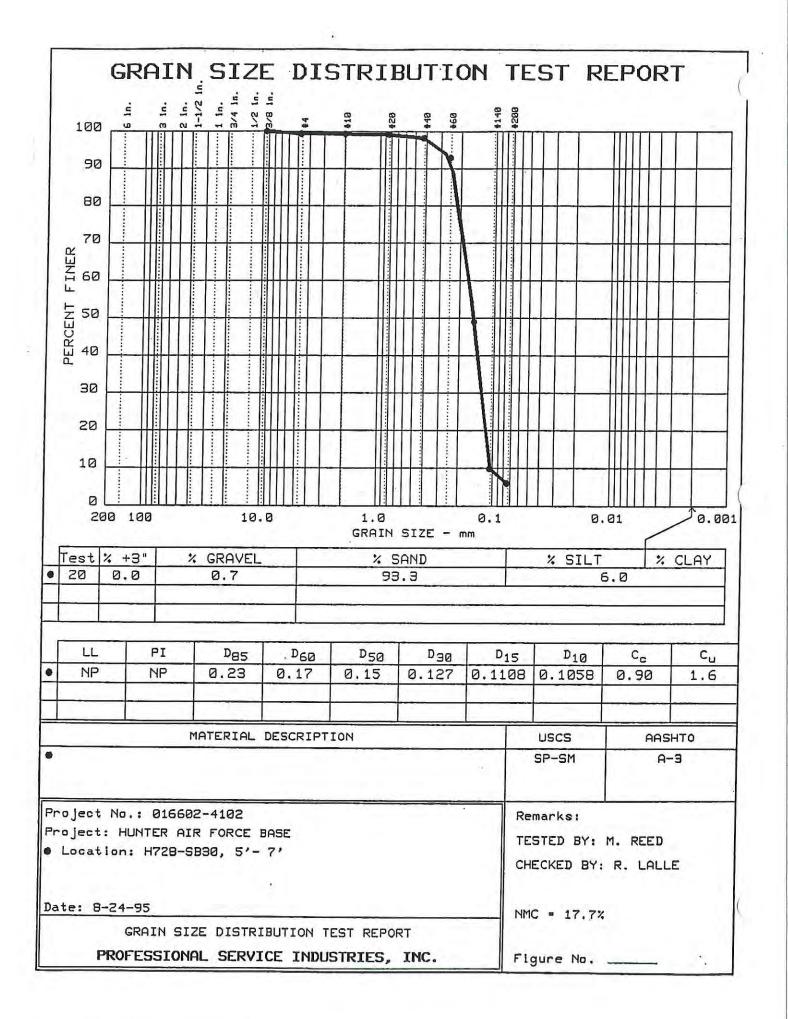












APPENDIX D

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	/ <u></u>		J: Hy Sand, 10% J: H, Ii gray, 10 yR 7/1, Loose, du fine grained, Jubround	sht			and	
			gray 10 yR7/1 losse di	c.			ODOR	
		Sne	line grained, subround	6.'				
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		1						
	2		-iture of 1570 sitt are	with				
	=		S. Hy saw, I Ste sin, give	1.0			OBOR	
		on	5: Hy sand, 1570 5: H, gro brown, 104R 5/2, wet, grained, subround	<i>,</i> c				
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-	3 —							
	_	1	No sample					
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		}	EOB @ 3.5'					
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Hole No. H728 - HAØY

		1 01	VISION	INSTALL	ATION	11 .		SHEET)	
DRILL	ING LO					HA		OF SHEET	TS
1. PROJECT				10. SIZE	AND TYPE	OF BIT	HAND AVE SHOWN (TEM or)	ger / 3"	
HA	AF "	Buib	12 728 Phase I				MSC		
2. LOCATION	(Coordin	ates or Sti	Swannah GA	12. MAN	FACTURE		NATION OF DRIL		
3. DRILLING	AGENCY			13. TOT/	AL NO. OF	NA.	DISTURBED	UNDISTURBED	
4. HOLE NO. and file ma	(As show	n on draw	IN 1110 11.7728 - 4.404	BUR	DEN SAMPL	LES TAKE		0	_
5. NAME OF		0.0			AL NUMBE			e	
			nuel	15. ELE		ISTA	RTED	COMPLETED	
6. DIRECTIO			DEG. FROM VERT.	16. DAT		6	-13-95	6-19-95	_
	<u></u>		N 3.0'		VATION TO	-		.47	_
7. THICKNES							FOR BORING		
8. DEPTH DR			3'	19. SIGN	ature of C Powf		OR		
9. TOTAL DE	EPTH OF	HOLE		<u> </u>	S CORF	BOX OR		MARKS	
ELEVATION	-	LEGEND	CLASSIFICATION OF MATERIA (Description)	125	* CORE RECOV- ERY	SAMPLE NO.	{Drilling time, weathering, •	water lose, depth of etc., it significant) 9	
	b								Ŧ
		}	clayer sand, 1070 chy,	5%					F
	-		5.17, very davk gravish k 10 YR 3/2, dry, fine grain Jubround.	non					F
1		SC	10 /R 3/2 dry, fine grain	ed,					E
	_	1	Jubround.						Ľ
		l		,,					F
	'		ctor silty sand, 25% sil	t, vary			ODOR		F
	_	}	dork grained, 10 YR 3/1, dan fine grained, subround	A,					F
		SAN	Pico areinal subround			:			F
	_	1 °m	f. no graines, Succes e						E
	~ =	1							
	Z. <u></u> _	<u> </u>	1 1 1 - 1 mon chil				1.14		E
			clayey sand 40% chay,	4			slight	ODOX-	F
	_	50	dark gray, loyk y/2, we	sitt		[]	/		F
		30	dark grav, 104/k 1/k, we medium Plastick, Very Sire grained, subround.	3001,					F
	_	1	dire graned, subround.						ļ ļ
	3	 			<u> </u>				
ļ	=	1	E.O.B. @ 3.0'						Ŀ
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DRILLI	ING LO		VISION		INSTALL	ATION	H	AAF	SHEET / OF / SHEE	тs
				20 PL +	10. SIZE		E OF BIT	HAN SHOWN (TEM	Auger 13"	
H	AAF	Buil	ding 1	128 Phase I				5 C		
5.	avain	nah	GA		12. MAN	JFACTURE		SNATION OF DE	RILL	
3. DRILLING	AGENCY	Mt	ي ا		11 707			A-	UNDISTURBE	
4. HOLE NO. (As show	n on drawi	ng titie	1728- HAØ5	aŭRi	AL NO. OF	LES TAKE	<u>∎ 3</u>	0	
5. NAME OF D		0		1720 MADJ		AL NUMBE				
	G.	Kowe	<u></u>		15. ELE	VATION G		ATER 3	COMPLETED	
S. DIRECTION				DEG. FROM VERT	16. DAT	EHOLE		<u>-13-95</u>	6-13-95	-
<u> </u>						VATION TO	OP OF HO	LE 20.0	88	
7. THICKNESS				.0'				Y FOR BORING		*
. DEPTH ORI			7	/	19, SIGN	ATURE OF	well	OR		
				SSIFICATION OF MATER	IAL5	S CORE	BOX OR		REMARKS	,
		LEGEND		(Description)		ERY	NO.	weathering	, water loss, depth of , etc., if significant) 9	
<u>a</u>	<u> </u>	<u>с</u>	5 thurson	nd, 1070 silt, bi			†			-
	-		S.III CL	5/7 Medius	rown					
		SIAN	dry, su	-5/3, Mediumyra Dangalar	ined					
		0000	1, -	Frict						
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			T:HUS	andy 10% sill,	gravish					ł
	1		brown	. 1011 5/2 Men	line per la constance de la co					
		5m	graine	, loyk 5/2, med dry, subround	1					
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	<u>ה –</u>				<u></u>					
			SAM	sonal clay ball				DOOR		
	-		Occa5	sonal clay ball	5					
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	ING LO		VISION	TINSTALL	ATION	H	AAF	SHEET	rs
A BROIFCT				10. SIZE	AND TYPE	OFBIT	High Ange SHOWN (TBM or MSL	er /3"	
F	LAAF	: Buile	ding 728 Phase I	11. DATU	JM FOR EL	EVATION M	SHOWN (TEM or MSL	, , , , , , , , , , , , , , , , , , ,	
			Sarannah GA	12. MAN	JFACTURE	• •	SNATION OF DRILL	<u></u>	
3. DRILLING		NN46		13. TOT	AL NO. OF	OVER-	DISTURGED		5
4. HOLE NO. and file ma	(As show mbac)		H728-HA06	TA TOT		R CORE B			-
S. NAME OF		Rowe	el		VATION GR	OUND WA	TER ~5'		
6. DIRECTIO	N OF HOI	LE	DEG. FROM VERT.	16. DATI	EHOLE		RTED C	0MPLETED 6-13-55	
				17. ELE	VATION TO	P OF HOL	E 20.72		
7. THICKNES							FOR BORING		*
8. DEPTH DR			5'	19. SIGN	ATURE OF	Powe	-		
9. TOTAL DE	EPTH OF	HOLE	CLASSIFICATION OF MATERI		% CORE	BOX OR	REMA		
ELEVATION		LEGEND	(Description)	~_J	RECOV- ERY	SAMPLE NO.	(Drilling time, wel weathering, etc., 9	er loss, depth of , if significant)	
°	b	<u> </u>						·····	F
		1	5: Hy Sand, 15% 5:14	brown					F
	-		10 YR 4/3, bose, dry, ver coarse grained, suba	ry "					F
		SW	Coarse grained, Juban	gular					4
	-	-							F
	1-								╌╞
		1	s: Hy Sand, 1020 s: H, 9	rayist			51: pt od	¢7 [⊷]	Þ
		1	brown, 1048 5/2, Loose, fine to medium grai	any					E
	·	Sn	fine to medium grai	ved,					þ
		-	subround.				:		E
	7	1							
		1	Jame as above, g	ray			3'-5' taker	- from	E
Į		1	104R 5/1, damp.	•			offset los	cated 1'	E
		JM			1		to north.		F
	_						ODOK		E
							W01~		F
		1	5: Hy sand, 10% 5: H,	light					F
		-	brownish gray, 10YR1	6/2, .					F
		Jon	damp, Loose, Sine grai	neal					F
]	brownish gray, 104R (damf, Loose, Sine grai subround.						F
4	, =						ODOR		
	4	-	J:14 Jand, 10-1570 3	s:14,	1				F
	-	-	very dark gray, 104R3 wet, Loose, Round, g	3/1,					þ
		sn	wet, Loose, Round of	ine					F
	=	7	grained	•					F
		1	, , , , , , , , , , , , , , , , , , ,				ODOR		¦
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Hole No. H728-HAVG

Hole No.	H728.	HAØF	
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		100	VISION	INSTALL	ATION		*	SHEET 1
DRILL	ING LO		a 144 a 14				TAAF	OF SHEETS
			ting 728. Rhose #	10. SIZE	AND TYP	EVATION	FLAND AL SHOWN (TOM or MS	15-ev/3"
2. LOCATION	(Coordin	tes or Sta	Ling 728. Rhase = Sovennah 64	12, MANU	FACTURE	ER'S DESIG	S C	-
3. DRILLING	AGENCY	Mt		13. 707/	L NO. OF	NA		UNDISTURBED
4. HOLE NO. and file nu	(As show mbse)	n on drawb	H728-HA07			OVER-LES TAKE	<u> </u>	,
S. NAME OF	DRILLER	G.R	owell			R CORE B	TER 5'	
6. DIRECTIO	N OF HOL	.E		16. DATI	E HOLE		-13-95	COMPLETED 6-13-95
7. THICKNES				L		OP OF HOL		<u> </u>
8. DEPTH DR				1		INSPECT	FOR BORING	
9, TOTAL DE			5.0	1	<u>6. R</u>			
ELEVATION			CLASSIFICATION OF MATERIA (Description)	ALS	% CORE RECOV- ERY	BOX OR SAMPLE NO.	(Drilling time, w	ARKS uter lose, depth of c., if significant
a	<u>b</u>	د	d		•			
			5: 14 Jamed, 10% 5:14, 4	ellow				
			lovie 8/6, loose, dry, n grained, subround	redium-		1		
		Sm	grained, subround					
		:	· · · · · · · · · · · · · · · · · · ·			 		
			5:14y Jand, 20% Jill,	dark			2'-5' tak	cate 1' to
			grayish proven inve V/2	L,			offset Loc	ate l' to
		3m	grayish brown, 104R 4/2 1005e, moist. five - mec grained, subrowned.	line			south.	
	·		availed To hormonal	A 100 -			. 1	
			o and the other of the other of the other				JI:ght al	OR
	2						V	
		6	Same as above.					•
		Sm						
		5 ,					/	
							Jlight OI	of.
	3			1. <i>1.L</i>		1		
			Jitty sand, 10% Jill,	light			4	
	티 귀		brownish group, 104R 6,	12, 1				
		Jm	loose, moist, fine grai	red,			/	
			Subround.	I			slight of	and and
	4 —						Onyor Od	
	' =		s: 144 sand, 20% jill,				-	
			clay, loose, wet, brown 10 YR 5/3, fine grained, subround	,				
		5m	104R 5/3, fine grained					
			subround					
					<u> </u>	<u> </u>	ODOR	
	5		E.O.B @ 5.0']		
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וופח	LING L	DG DI	VISION	INSTALL	ATION	HAN	+F	SHEET /
			01	10. SIZE	AND TYP	E OF BIT	HAND A	4.900 / 3"
Ë H,	AAF_	Build	ing 728 Phase I	11. DAT	JM FOR E	EVATION	SHOWN (TBM or M	ISL)
2. LOCATIO	(Coordi	nates or St.	Ling 728 Phase I Davonuch GA	12. MAN	UFACTURI		SC	.L
3. DRILLING	AGENS	LE .					VA	
4. HOLE NO. and file nu			ing title	13. TOT	AL NO. OF	OVER-	N DISTURBED	
			11700 1117	14. TOT	AL NUMBE	R CORE B	·	······································
5. NAME OF	DRILLEF	G. h	well	15. ELE	ATION G	ROUND WA		
6. DIRECTIO		LE		16. DAT	EHOLE	STA	0-14-95	COMPLETED 6-14-95
		<u> </u>		17. ELE	ATION TO	OP OF HOL		
7. THICKNES							FOR BORING	• • • • • • • • • • • • • • • • • • •
8. DEPTH DI 9. TOTAL OI			51	19, SIGN	G - Roi	INSPECT	ÓR	
		1	CLASSIFICATION OF WATERIA	· · · · · · · · · · · · · · · · · · ·				MARKS
ELEVATION		LEGEND	(Description)		ERY	BOX OR SAMPLE NO.	(Drilling time,) weathering, e	water lose, depth of to, if significant
0	<u>b</u>		E'HU 30 - 150 E'H					
	-	-	silty Jand, 45% silt 10YR 7/9, Loose; moist, grained, subangular subround.	, yellow				
		5m	availand the A	Meet:um	+			
	-	4	Subround.	40				
	, =	-						<u></u>
	/ - <u>-</u>		J: Hy sand, 5-10% J: H groupish brown, 10% coose, moist, fine gr Subangular tonron					
		-	grayish brown, 1040	25/2,				
		Sm	loose, moist, fine gr	a.ned				
	-	1	Subangular tonrow	d,			07-1	
	2	1			<u> </u>	<u> </u>	ODOK	
			Jame as above, 1: april fellow: jh brow 104R 6/4					
		Sm	1: ght felow ith brow	s,				
	-		(Sylc 6/4					
							ODOR	
	3-	4	same as above					
	-		grayish brown, loyR	5/2				
		Sm	increasing clay (45%	2)				
							<i>A</i>	
	4	 		1.00			DDOR	
	' -		clayley Jilty Sound, Clay, 1070 5:14, brown, 5/3, loose, wet, fine g	10%	-			
		5m	5/3 (200 Jilt, Drown,	1041C				
			Subround.	. conced				
		1	······································				ODOR	·
	<u>۲ –</u>		E.O.B. @ 5.0'	<u> </u>				
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			-				Hole No.	<u>H728-HADY</u>
DRILL	ING LO	G Di	VISION	INSTALL			AAF	SHEET ; of / Sheets
1. PROJECT	<u></u>			10. SIZE			HAND Aug SHOWN (TEN or MSL,	ev /3"
H	AAF	Buildi	ng 728 Phase 7			M	56	
			Swannah GA	12. MANU	IFACTURE	R'S DESIG	SNATION OF DRILL	
3. DRILLING	AGENCY	Mf	· E	13. TOT	AL NO. OF		DISTURBED	UNDISTURBED
4. HOLE NO. and file nu	(As show mbec)	m on drawi	H728-HAB9		L NUMBE			
5. NAME OF	DRILLER	GK	Rowell		ATION GF			3 '
6. DIRECTIO	N OF HO	LE		16. DATI		STA	RTED 100	6-14-95
VERTI	CAL 🗖	INCLINED	DEG. FROM VERT.		ATION TO			6-14 10
7. THICKNES	S OF OV	ERBURDE	N 3.0'				Y FOR BORING	
8. DEPTH DA	NLLED I	NTO ROCK			ATURE OF	INSPECT		
9, TOTAL DE	PTH OF	HOLE	3'	L	S CORE	BOX OR	REMA	RKS
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERI/ (Description)	ALS I	RECOV- ERY	SAMPLE NO.	(Drilling time, wet weathering, etc., 9	er loss, depth of if significant)
°			Clayer Sitty Sand, 10%	charl				E
		1	10% sitter dark gravish	brown	ļ			E
		5m	10% sitty dark gravish 104R 4/2, Loose, dry, f Srained, subround	ine				=
			Srained, subround.				DD-1	F
	,	<u> </u>		11			oDal	<u>E</u>
. .	⁻ -	4	5: Hy sand, 5-10% 5: dark gray, 10 VR 4/1, 1 moist, fine grained, : round to round.	14				E
		1	dark gray, 10VK 411, 1	oose,				E
		Ju	round to vound.	sus.			-	F
			0 00 100-00				ODOR	F
	2-		-ithich 1					
	-		same as above.					E
		Sm	same as above. same as above. saturated.		•		•	
		}					4	F
	۲						ODOK	
	 	-	E.O.B.@ 3.0'					E
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DRILLING LOG Division INSTALLATION HAMF OF I SHEETS 1. PROJECT HAMF OF I SHEETS OF I SHEETS 1. PROJECT HAMF OF I SHEETS 2. LOCATION (Coordinates or Station). Say much GAP 2. LOCATION (Coordinates or Station). Say much GAP 3. DRILLING AGENCY MAE II. DATUM FOR ELEVATION Shown (TDM or NSL) 4. HOLE NO. (As shown on drawing thile H728 - HA 18 II. DATUM FOR OVER- Disturber Staten 5. NAME OF DRILLER C. Rowcell II. ELEVATION GROUND WATER 3. S' 6. DIRECTION OF HOLE II. DATE HOLE States of OVERBURDEN 4.0' 8. DEPTH DRILLED INTO ROCK DEG. FROM VERT. II. ELEVATION TOP OF HOLE (0-14-95) 5. TOTAL DEPTH OF HOLE 4.0' II. TOTAL CORE RECOVERY FOR BORING % 8. DEPTH DRILLED INTO ROCK TOTAL CORE RECOVERY FOR BORING % % 9 CLASSIFICATION OF MATERIALS Score BANNE II. J. SIGNATURE OF JINSPECTOR 9 CLASSIFICATION OF MATERIALS Score BANNE III. BANNE FOR DRING % 9 CLASSIFICATION OF MATERIALS Score BANNE D.D.C.R
HAAF Building 728 Phase III. DATUM FOR ELEVATION SHOWN (TEW or NSL) 2. LOCATION (Coordinates or Station). 3. DRILLING AGENCY 4. HOLE NO. (As shown on drawind tills and till minumbed 3. NAME OF DRILLER 6. DIRECTION OF HOLE 6. DIRECTION OF HOLE 7. THICKNESS OF OVERBURDEN 8. TOTAL DEPTH OF HOLE 8. TOTAL DEPTH OF HOLE 8. TOTAL DEPTH OF HOLE 6. SI HY Samd, 10% SI, Very 6. SI HY Samd, 10% SI, Very 6. SI HY Samd, 10% SI, Very 7. THICKNESS OF OR SIGNATION OF MATERIALS 8. TOTAL DEPTH OF HOLE 6. SI HY Samd, 10% SI, Very 7. THICKNESS OF OF SIGNATION OF MATERIALS 8. TOTAL DEPTH OF HOLE 6. SI HY Samd, 10% SI, Very 7. THICKNESS OF OF SIGNATION OF MATERIALS 8. TOTAL DEPTH OF HOLE 6. SI HY Samd, 10% SI, Very 7. THICKNESS OF OF SIGNATURE OF SAMPLE 8. TOTAL DEPTH OF HOLE 7. THICKNESS OF OF SIGNATION OF MATERIALS 8. TOTAL DEPTH OF HOLE 7. THICKNESS OF OF SIGNATURE OF SAMPLE 8. TOTAL DEPTH OF HOLE 7. THICKNESS OF OVERBURDEN 8. TOTAL DEPTH OF HOLE 7. THICKNESS OF OVERBURDEN 8. TOTAL DEPTH OF HOLE 7. THICKNESS OF OVERBURDEN 8. TOTAL DEPTH OF HOLE 7. THICKNESS OF OVERBURDEN 7. THICKNESS OF OVERBURDEN 8. TOTAL DEPTH OF HOLE 7. THICKNESS OF OVERBURDEN 7. THICKNESS OF OVERBURDEN 7. THICKNESS OF OVERBURDEN 8. TOTAL DEPTH OF HOLE 7. THICKNESS OF OVERBURDEN 8. TOTAL DEPTH OF HOLE 7. THICKNESS OF OVERBURDEN 7. THICKNESS OF OVERBURDEN 8. TOTAL DEPTH OF HOLE 7. THICKNESS OF OVERBURDEN 7. THICKNESS OF OVERBURDEN 7. THICKNESS OF OVERB
Submuch Gto Submuch Gto 12. MANUFACTURER'S DESIGNATION OF DRILL MAT 13. DRILLING AGENCY MAT 4. HOLE NO. (As shown on drawing three and the number 4. HOLE NO. (As shown on drawing three and the number 5. NAME OF DRILLER 5. NAME OF DRILLER 6. DIRECTION OF HOLE 14. TOTAL NUMBER CORE BOXES 15. ELEVATION OF HOLE 16. DATE HOLE 16. DATE HOLE 17. THICKNESS OF OVERBURDEN 4.0' 18. TOTAL DEPTH OF HOLE 4.0' 19. SIGNATURE OF INSPECTOR 5. TOTAL DEPTH OF HOLE 4.0' 19. SIGNATURE OF INSPECTOR 5. TOTAL DEPTH OF HOLE 4.0' 19. SIGNATURE OF INSPECTOR 5. TOTAL DEPTH OF HOLE 4.0' 10. CLASSIFICATION OF MATERIALS 10. CLASSIFICATION OF MATERIALS 10. SIGNATURE OF INSPECTOR 5. TOTAL DEPTH OF HOLE 5. SIGNATURE OF INSPECTOR 5. TOTAL OF YOUND 10. SIGNATURE OF INSPECTOR 5. SIGNATURE OF INSPECTOR 5. SIGNATURE OF INSPECTOR 5. TOTAL OPTH OF HOLE 5. SIGNATURE OF INSPECTOR 5. SIGNATURE OF INSPEC
3. DRILLING AGENCY $\frac{M+E}{M+E} = \frac{M+E}{M+28 + H/4 8} = \frac{M+E}{M+28 + H/4 + H/4 8} = \frac{M+E}{M+28 + H/4 + H/4 8} = \frac{M+E}{M+28 + H/4 + H/4$
and file numberH728 · H.4 1814. TOTAL NUMBER CORE BOXES5. NAME OF DRILLER $G.$ Rowell18. ELEVATION GROUND WATER $3.5'$ 6. DIRECTION OF HOLE $G.$ Rowell18. ELEVATION GROUND WATER $3.5'$ 6. DIRECTION OF HOLE $G.$ HOLE $G14-95$ $G14-95$ 7. THICKNESS OF OVERBURDEN $4.0'$ 17. ELEVATION TOP OF HOLE $/9.95$ 7. THICKNESS OF OVERBURDEN $4.0'$ 18. TOTAL CORE RECOVERY FOR BORING 3 8. DEPTH DRILLED INTO ROCK -19.50 $GKOUPPERPECTOR39. TOTAL DEPTH OF HOLE4.0'6.60GKOUPPERPECTOR9. TOTAL DEPTH OF HOLE4.0'6.7 - KOUPPERPECTOR6.7 - KOUPPERPECTOR9. TOTAL DEPTH OF HOLEG. KOUPPERPECTORG. KOUPPERPECTOR6.7 - KOUPPERPECTOR9. TOTAL DEPTH OF HOLEG. KOUPPERPECTORG. KOUPPERPECTORG. KOUPPERPECTOR9. TOTAL DEPTH OF HOLEG. KOUPPERPECTORG. KOUPPERPECTORG. KOUPPERPECTOR9. SI HY Samd, 10% SI:H, Very dependencing, etc., if elignificantgg9. SUM WY, f: NE Grained, Sub -ODoRODoR$
S. NAME OF DRILLER C. ROWELL 6. DIRECTION OF HOLE DEG. FROM VERT. 7. THICKNESS OF OVERBURDEN 8. DEPTH DRILLED INTO ROCK 9. TOTAL DEPTH OF HOLE CLASSIFICATION OF MATERIALS 0 b c d d c d c d c d c d c d c d c d c d
B. DERECTION OF INDLE \Box VERTICAL [] INCLINEDDEG. FROM VERT.16. DATE HOLE $6 - 14 - 95$ \Box VERTICAL [] INCLINED $4.0'$ 17. ELEVATION TOP OF HOLE 19.95 18. TOTAL CORE RECOVERY FOR BORING 3.000 8. DEPTH DRILLED INTO ROCK18. TOTAL CORE RECOVERY FOR BORING8. DEPTH OF HOLE $4.0'$ 19. SIGNATURE OF INSPECTOR8. TOTAL DEPTH OF HOLE $4.0'$ 19. SIGNATURE OF INSPECTOR10. TOTAL DEPTH OF HOLE $4.0'$ 10. CLASSIFICATION OF MATERIALS10. CLASSIFICATION OF MATERIALS12. CORE BOX OR13. SIGNATURE OF MOLE14. CLASSIFICATION OF MATERIALS15. CLASSIFICATION OF MATERIALS16. CLASSIFICATION OF MATERIALS17. ELEVATION18. CORE BOX OR19. SIGNATURE OF MOLE19. SIGNATURE OF MOLE19. SIGNATURE OF MOLE10. CLASSIFICATION OF MATERIALS10. CLASSIFICATION OF MATERIALS11. CLASSIFICATION OF MATERIALS12. CLASSIFICATION OF MATERIALS13. SIGNATURE OF MOLE14. CLASSIFICATION OF MATERIALS14. CLASSIFICATION<
7. THICKNESS OF OVERBURDEN 4.0 8. DEPTH DRILLED INTO ROCK 9. TOTAL DEPTH OF HOLE 4.0 CLASSIFICATION OF MATERIALS 0 b c d c d c c c c c c c c c c c c c c c
B. DEPTH DRILLED INTO ROCK B. TOTAL DEPTH OF HOLE 4.0 ELEVATION DEPTH LEGEND CLASSIFICATION OF MATERIALS (Description) B C C CLASSIFICATION OF MATERIALS (Description) CLASSIFICATION OF MATERIAL
ELEVATION DEPTH LEGEND CLASSIFICATION OF MATERIALS (Description) a b c d d (Drilling time, weter lose, depth of weathering, etc., it elignificant) S: Ity sand, 10% S: It, Very of dayle gray, 10. YR 3/1, loose, dayle gray, 10. YR 3/1, loose, of Dork
ELEVATION DEPTH LEGEND a b c d (Description) a b c d (Description) a b c d (Description) f (Description)
= same as above
2 - Opor
Sc clarley sand, 20.25% clar, brown, 104R5/3, medium plasticity, soft, moist, fine grained, subvound.
- SC plasticity, soft, moist, p
Fine grained, subround. ODOR
= clarley sand, 20% clay,
SC 4/2, medium plasticity, Soft, fine grained, wet,
- SC 4/2, medium vlasticity,
4 E.O.B.C A.O'

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Hole No. H728-HA11

			VISION	INSTALL	ATION	<u> </u>	AAF	SHEET /	
	ING LO	<u>с</u>	·····	ļ					HEETS
I. PROJECT	AF î	suild:	ng 728. Phase I	10. SIZE	AND TYPE		SHOWN (TBM or MS	uger_	
Z. LOCATION	(Coordin	ates or St.	Sarpunah GA	12. MAN	UFACTURE	MS R'S DESIG	C		
3. DRILLING	AGENCY	Mte			AL NO. OF	NA		UNDISTU	RED
4. HOLE NO. and file run	(As show		the second second second second second second second second second second second second second second second s	BUR	DEN SAMPI	ES TAKE	N 3	D	
5. NAME OF		<u> </u>	owell		AL NUMBE				
6. DIRECTIO	, N. OF HOI		owell			ISTA	RTED	OMPLETED	
			DEG. FROM VERT.	16. DAT	VATION TO			6-14-1	22
7. THICKNES	S OF OVE	ERBURDE	N 30				FOR BORING		7
8. DEPTH DR	RILLED I	TO ROCH	< <u></u>		ATURE OF	_	the second second second second second second second second second second second second second second second s		
9, TOTAL DE	EPTH OF	HOLE	3.0'		3-1Cou				
ELEVATION		LEGEND	CLASSIFICATION OF MATERIA (Description)	ALS	% CORE RECOV- ERY	BOX OR SAMPLE NO.	(Driffing time, we weathering, etc	ARKS iter loss, depi 1, if eignifice 0	(hof ni)
a -	<u>b</u>	e	d		[•]			<u>v</u>	<u> </u>
	-	1	5: Hy Sand, 5-10% :	s. //	ľ				두
			1: ght brownish gray, 10 10030, dry, Sine grain subround to round.	YR6/2,	· ·				F
		3000	loose, dry, Sine grain	eð,					F
			Subround to round.			1			F
									F
]	silty sand, 1090 silt, brown, 104R 5/3, Loose, fine grained, subround	and a					F
	_		Drown, TOYR S 13, Coose,	mo.Jr					F
	·		dine grained Jubround	y 40					F
	_		round.						F
	2-	1							
		1	Sandy Clay, 30%	sand,					F
		CL	brown IOVR 5/3, med	ium				•	E
			Pasticity, Jost, wet	· 0					E
	=	4	Sandy Clay, 30% : brown, 104R 5/3, med Plasticity, soft, wet sand is fine grained subvounded.	and					F
	3_	·							E
			E.O.B. @ 3.0'						E
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									Ho	le No.	_	728-44
ו וופת	LING LO		VISION			INSTALL	ATION	HAN	4F		SHEET	ہ Sheets
BRAISCT		<u>i</u>				10. SIZE	AND TYPE		H AND SHOWN (TBA	Aug		/3"
LOCATION	AAF	Bu: U:			rase I		IN FOR EL	EVATION		or MSL)		
		, 	Javo	nnah	GA	12. MAN	JFACTURE	R'S DESIG	SNATION OF	DRILL		
3. DRILLING		Wet				13. TOT	AL NO. OF	OVER-	DISTURD	(D		URBED
4. HOLE NO. and file nu	(As show mbec)	n on drawi	ng title	H728	- HA12						<u> </u>	•
5. NAME OF	DRILLER	G. f.	لم حرور	P			AL NUMBE			5'-5'		
6. DIRECTIO		LE				16. DAT	EHOLE		RTED -14-95	1 50	MPLETI 6-14	
	CAL []	INCLINED			EG. FROM VER	17. ELE	ATION TO		10	7	<u> </u>	<u> </u>
7. THICKNES				5.0'					FOR BORIN	G		2
S. DEPTH DR				5.0'			ATURE OF	INSPECT	OR			
ELEVATION		LEGEND		LASSIFICA	TION OF MATE	RIALS	% CORE RECOV- ERY	BOX OR SAMPLE NO.	(Drilling ti weatheri	REMAR	KKS Ir Ioss, d If signifi	epth of Icent)
a	<u> </u>	с 		180.	1-5-1090	-+14	· · ·			9		
	=		Very	dark	7 J-10%	brown						
		51	104	R 3/E,	Loose, J	y, Sine						
			gra	ined, s	grantish Loose, dr ubangula	ar to						
	<u>-</u>									· · ·		<u></u>
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		JM				ι.						
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	2]		·	15 m - 1	14						<u></u> , , , , ,
	=	1	J:11 dar	Kavar.	5% J: sh brown , fine gro to rown	", IOVRYD						
		Sm	loose	, moisi	fire ard	ined.						
			Jubr	ound	to round	d.						
	3-	1										<u></u>
			Jan	-E as	above	lave a						
		sm	103	12/2	gravish	, , , , , , , , , , , , , , , , , , ,						
	4-]			h							<u></u>
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		SM	ີ່ພ	er.					a			
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	5-	· · · · · ·		E.O.B	@ 5.0'	. <u></u>			·····			
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								Hole N	о. H728-HA	~3
DRILL		OG	DIVISION		INSTALL	ATION	HAN	+F	SHEET ; OF ! SHEETS	5
1. PROJECT			<u> </u>		10. SIZE	AND TYPE	OF BIT	HAND A. SHOWN (TBM or M	rger 13"	
H.	AAFP	on:U:	ng 72	B Phase I	-11. DATI	IN FOR EL			ISL) (
2. LOCATION	(Coordi	nates o	Station)	rannah 64	12. MAN	IFACTURE	R'S DESI	SL.	L	
3. DRILLING	AGENC	Y			-		N	A		
		m			13. TOT	AL NO. OF	OVER-		UNDISTURBED	
4. HOLE NO. and file nu	(As show mbee)	m n on di	rawing litte	H728-HAB		AL NUMBE			· · ·	
5. NAME OF	DRILLE	R	Rowel	20		ATION GF		the second second second second second second second second second second second second second second second s		-
6. DIRECTIO	N OF HO		Route				ISTA	RTED	COMPLETED	-
VERTI			NED	DEG. FROM VERT	16. DATI	EHOLE	6	0-14-95	6-14-95	_
7				5.01	- 17. ELE	ATION TO	P OF HO	LE 18.57	·	_
7. THICKNES 8. DEPTH DR							_	Y FOR BORING	·····	1
				5.6		TURE OF		OK		
9. TOTAL DE		T				* CORE	BOX OR	RE	MARK5	
ELEVATION	DEPTH	LEGE	IND	CLASSIFICATION OF MATERI (Description)		RECOV-	SAMPLE NO.	(Drilling time, s weathering, e	mater lose, depth of tc., if eignificant	
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	-	-1	5:1	Hy sand, 10% Silt,	Clark		1			F
	-	7_	. 18.	Hy sand, 10% s:14, my, 10% 4/1, dry, 1 ne grainal, Jubrou	003e)	1				F
	-	124	n fin	re grained, Jubrou	~0					F
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		7								-=
		-	504	me as above						F
	-	3								F
	-	- ~~								F
	-	7								F
	2-]		- 1 con e: 14						
]	2.14	y sand, 5% s: 14, 12 5/1, mo: st, (003) a grained, round	SYM					
		-	0.	1 0/1, moist, (005	e,	-				F
		3 ~~	~ 9:N	e grames, round	l					
		3								F
	3 -			ty sand 5-10% J:	<u>µ</u>					F
		1	Ven	Hank avoil 104R	, 3/1					F
		Jon	- 1007	y dark gray, 104R. se, wet, fine grains model.						F
	-		roi	mded						
	. :									E
	4	╡	<u> </u>	is as al						E
			50-	me as above, sk gray, 104R4/1, 5	J. and al	Į.				E
		- - - - -	- 00	sk gray, 10924/1, 5	anurator					E
	-	1								E
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	5-	╡───		E.O.B @ 5.0'						E
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							Hole No.	H748-HA19	<u>×</u>
	LING LO		IVISION	INSTALL	ATION	#4	AF	SHEET / OF (SHEETS	
				10 5175					η.
1. PROJECT	AAF I	su:ld:	Savamah, Gut.	TI. DATE	IN FOR EL	EVATION	HAND AL SHOWN (TBM or MSI 15 -	<u></u>	1 `
2. LOCATION	N (Coordin	nates or Si	Savannah, Grt.			R'S DESIG	INATION OF DRILL		-
3. DRILLING	AGENCY	Mto	e -			,.	DISTURBED	UNDISTURBED	
4. HOLE NO.	(As show		H 728-HA14	BUR	AL NO. OF	OVER- LES TAKE	N 3	D	
5. NAME OF		00		1	ATION GF				-
6. DIRECTIO	N OF HO		owell	┨━━━━━━				OMPLETED	-
VERTI			D DEG. FROM VERT.	16. DATI	ATION TO		0-14-95 E 18.49	6-14-95	4
7. THICKNES	SS OF OV	ERBURD	en <u>3.0'</u>				FOR BORING		
8. DEPTH DF	RILLED	NTO ROC			ATURE OF	INSPECT			7
9. TOTAL DI	EPTH OF	HOLE	3'		G.R				_
ELEVATION	DEPTH	LEGEN	CLASSIFICATION OF MATERIA	ALS	% CORE RECOV- ERY	BOX OR SAMPLE NO.	REM/ (Drilling time, we weethering, etc.	NRKS ter loss, depth of , if eignificant)	
a	Ь	c	d		•	1)	- L
ł	=	1	J: Hy Sand, 10% Si, 10YR 3/1, Very dark 1005e, moigt, fine gra Jubround.	H,					E
	=	1	IOYR 3/1, yesy darks	gran/					E
		5m	loose moint, fine gra	ained					E
	=	1	Subvound.						F
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	=	1	Some as about	e		:			
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	1 =]							F
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		1	5: Hy saw, 5-10% 5: dark gray, 104/4/1, 10 saturated, finegraine subround.	17,					F
		1-m	Oark 104 104 4/1, ()	iose,					F
	=		saturance, finegraine	<i>ອ</i> ,					F
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	13-		E-0. B. @ 3.0'						E
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DRILI	ING LO	<u> </u>		ļ		HAAN		OF / SHEETS
1. PROJECT	ILAAT	<u>A</u>	1 728 Place F	10. SIZE	AND TYPE	OF BIT	HAND A SHOWN (TBM or MSL	uger / 3"
2. LOCATION	Coordin	IJU: [11:nc 728 Phase F	1		М	SC	
3. DRILLING			Savannah 614	12. MAN	FACTURE		NATION OF DRILL	
		VIII	9	13. TOT	L NO. OF	OVER-	DISTURBED	UNDISTURBED
4. HOLE NO. and file nu	(As shown mbac)	n on drawl	H728.1415					0
5. NAME OF	DRILLER					R CORE B		
6. DIRECTIO	05 HOL	how				L ST A	RTED IC	OMPLETED
			DEG. FROM VERT.	16. DATI			- 14-95	6-14-95
7. THICKNES	S OF OVE	RSURDE	N 3.0/			OP OF HOL	1.12.00	,
8. DEPTH DF						INSPECT	FOR BORING	
9. TOTAL DE	PTH OF	HOLE	3.0		<u>G.</u> H	Swell	//	
ELEVATION	ОЕРТН	LEGEND c	CLASSIFICATION OF MATERIA (Description)		% CORE RECOV- ERY	BOX OR SAMPLE NO. f	REM/ (Drilling time, wa weathering, etc.	ter loss, depth of , if significant
a			5. Hull 50 d 10 1507 5	- \].L				
			Very dark grad invR	3/1 3/1				
		SM	silty sand, 10-15% s very dark gray, 104R loose, dry, fire gra Round.	ind.				
			Round.					
	1-				<u>. </u>			
	·		5: 14 sand, 5-1070 5:	∶I+, _i				
	7 -	544	Very davk gravish b 10 yR 3/2, Loose, Moist fine grained, round	vour,				
			10 yr 3/2, 605e, Moisi	f Ú				
	、 		The grand, round	<i>y</i>				
			rillion 150 million					······································
	11		dark gray by P21, 1	ery				
		Sm	Ji Hy sand, 5% si H, ve dark gray, loyR3/1, 1 Saturated. fine grains	ر عرص				
н. 1917 - П.]]		round.	01				
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DRILLING LOG								Hole No.	H728- HJ16
1. MODELT HAAF Building 728 Phase I The CATON FOR ELEVATION Shown if the state is an intermediate or shallow is a provided in the state is a shallow is a provided in the state is a shallow is a provided in the state is a shallow is a provided in the state is a shallow is a provided in the state is a shallow is a provided in the state is a shallow is a provided in the state is a shallow is a provided in the state is a shallow is a provided in the state is a state is a provided in the state is a state	DRILI	LING LO		VISION	INSTALL	ATION	HAA	F	
2. LOCATION (Goodbasse or Stally) Salemack GA 12. MANUFACTUREN'S DESIGNATION OF DRILL 3. DRILLING AGENCY M+E 4. NOLE NO. (As above on destroy HII*) 4. NOTAL NO. OF OVER: 13. TOTAL NO. OF OVER: 14. TOTAL NO. OF OVER: 13. TOTAL NO. OF OVER: 14. TOTAL NO. OF OVER: 15. ELEVATION GROUND VATER 2. S' 4. DATE HOLE DEC. FROM VERT: 14. TOTAL NUMBER CORE BOXES 	1. PROJECT	·		11 220 01 -	10. SIZE	AND TYPE	OF BIT		rev / 3"
Salphine & GH = Salphine & G	2 1 00 47101	HAAP	- 1ja.	ntion) //	TIS DATI	IM FOR EL	EVATION	SHOWN (IBM or MSL)	
WHYE Is TOTAL BO, OF OVER THE DISTURSED 4. HOLE NO. (As whom and dearing title H 728 - H/A (G Is TOTAL BO, OF OVER THE BOXES Image: Colspan="2">Image: Colspan="2">Image: Colspan="2">Image: Colspan="2">Image: Colspan="2" C				Savannah GA	12, MAN	JFACTURE	R'S DESI	GNATION OF DRILL	
And Idle number IH 728 - H/4 16 14. TOTAL NUMBER CORE BOXES S. NAME OF DRILLER G. ROWELL 15. ELEVATION GROUND WATER 2.5' G. DIRECTION OF HOLE Is. ELEVATION GROUND WATER 2.5' MULTICAL INCLINED DEC. FROM VERT. IS. ELEVATION GROUND WATER 2.5' T. THICKNESS OF OVERBURDEN 3.0 15. ELEVATION TOP OF HOLE $6-14-95$ $6-14-95$ B. DEPTH ORILLED INTO ROCK	3. DRILLING	AGENCY	\mathcal{M}_{∇}	+E	13. TOT	AL NO. OF	OVER-	DISTURBED	UNDISTURBED
S. NAME OF DRILLER G. Rowell S. NAME OF DRILLER G. Rowell S. NAME OF DRILLER G. Rowell S. DIRECTION OF HOLE DEC. FROM VERT. S. DIRECTION OF HOLE DEC. FROM VERT. T. HICKNESS OF OVERBURDEN S. O DEPTH DRILLED INTO ROCK DEPTH DRILLED INTO ROCK S. TOTAL DEPTH OF HOLE S. TOTAL DEPTH OF HOLE S. TOTAL DEPTH OF HOLE S. TOTAL DEPTH OF HOLE S. SI Hy Samd, 5-10% 5:H, Wrown, 10% R 4/5 (0032, WO:St, fine grained, Sub- round for round. S. SI Hy Samd, 5-10% 5:H, Same as above S. e as above S. Si Hy Samd, 5-10% 5:H, Same as above Same as above	4. HOLE NO. and file nu	(As show mbsc)	n on drawt	H728-HA16	 		-		0
6. DIRECTION OF HOLE M VERTICAL [INCLINED] DEG. FROM VERT. 16. DATE HOLE M VERTICAL [INCLINED] T. THICKNESS OF OVERBURDEN 3. 0 17. ELEVATION TO PO F HOLE 20. 75 18. TOTAL CORE RECOVERY FOR BORING 3. 0 19. SIGNATURE OF INSPECTOR CLASSIFICATION OF MATERIALS K CORE ELEVATION DEPTH DF HOLE 3' CLASSIFICATION OF MATERIALS $K CORE ELEVATION DEPTH LEGEND CLASSIFICATION OF MATERIALS K CORE ELEVATION DEPTH LEGEND CLASSIFICATION OF MATERIALS K CORE ELEVATION DEPTH J. LEGEND K CORE SAMPLE NO. TOWNS IN 10YR 4/5 (0032, WO: 3t, fline grained, Sub- TOWNS fp TOWNS. J SAMPLE SILLY SAND, 5:1070 S:14, J SAMPLE SILLY SAND, 5:1070 S:14, J SAMPLE SILLY SAND, 5:1070 S:14, J SAMPLE SILLY SAND, 5:1070 S:14, VORY dark gray, (0YR 3/1, 10052, WC, fline grained, TOWNS. K CORE SILLY SAND, 5:1070 S:14, VORY dark gray, (0YR 3/1, 10052, WC, fline grained, TOWNS. K CORE SILLY SAND, 5:1070 S:14, VORY dark gray, (0YR 3/1, 10052, WC, fline grained, TOWNS. K CORE SILLY SAND, fline grained, TOWNS. K CORE SILLY SAND, fline grained, TOWNS. K CORE SILLY SAND, fline grained, TOWNS. K CORE SILLY SAND, fline grained, TOWNS. K CORE SILLY SAND, fline grained, TOWNS. K CORE SILLY SAND, fline grained, TOWNS. K CORE SILLY SAND, fline grained, TOWNS. K CORE SILLY SAND, fline grained, TOWNS. K CORE SILLY SAND, fline grained, TOWNS. K CORE SILLY SAND, fline grained, TOWNS. K CORE SILLY SAND, fline grained, TOWNS. K CORE SILLY SAND, fline grained, TOWNS. K CORE SILLY SAND, fline grained, TOWNS. K CORE SILLY SAND, fline grained, TOWNS. K CORE SILLY SAND, fline grained, TOWNS. K CORE SILLY SAND, fline grained, SILLY SAND, fline grained, SILLY SAND, fline grained, SILLY SAND, fline fli$	5. NAME OF	DRILLER	6	A					
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	6. DIRECTIO	N OF HOL		1000004	16. DAT	E HOLE	STA	RTED CO	MPLETED
7. THICKNESS OF OVERBURDEN 3.0 8. DEPTH DRILLED INTO ROCK — II. SIGNATURE DE INSPECTOR 8. TOTAL DEPTH OF HOLE 3' ELEVATION DEPTH LEGEND CLASSIFICATION OF MATERIALS (SAMPLE NO. (Drilling time, which lose, depth of MO. (Drilling time, which lose, depth of Torund . (Drilling time, which lose, depth of Torund . (Drilling time, drilling titeme, drilling time, drilling time			INCLINED	DEG. FROM VERT.					
B. TOTAL DEPTH OF HOLE 3' ELEVATION DEPTH LEGEND CLASSIFICATION OF MATERIALS B C CLASSIFICATION O	7. THICKNES	S OF OV	ERBURDE	N 3.0					
ELEVATION DEPTH LEGEND CLASSIFICATION OF MATERIALS $\begin{array}{c} \times \text{ CORE}\\ \text{Description} \end{array}$ $\begin{array}{c} \times \text{ CORE}\\ \text{SAMELE}\\ \text{P}\\ \text{O}\\ O$						ATURE OF	INSPECT		
• • • • • • • • • • • • • • • • • • •	9. TOTAL DI	EPTH OF	HOLE					REMAR	KS .
Silty Sand, 5-10% silt, Unover, 104/2/3 loose, moist, finegrained, sub- round to round. J Sun Silty Sand, 5-10% silt, Very davk gray, (048 3/1, loose, wel, fine grained, round. 3 E.O.B.C. 3.0'	ELEVATION		LEGEND	(Description)	~_3	RECOV-		(Drilling time, wate weathering, etc.,	if eignificent)
2 	a	<u>ь</u> —		511/5 1 5402 5	:#			······································	
2 				brown, 104R4/19 (0050	e,				E
$2 = \frac{1}{5m}$ $2 = \frac{1}{5m}$ $3 = $			Sm	moist, finegrained,	Sub-				E
2 3 E.O.B.C. 3.07 E.O.B.C. 3.07 E.O.B.C. 3.07 E.O.B.C. 3.07 E.O.B.C. 3.07 E.O.B.C. 3.07		_		round to round.					4
2 3 E.O.B.C. 3.07 E.O.B.C. 3.07 E.O.B.C. 3.07 E.O.B.C. 3.07 E.O.B.C. 3.07 E.O.B.C. 3.07					 .	· <u> </u>			E
2 Silty Sand, 5-1090 5:1t, Very durk gray, 104R 3/1, 1005e, wel, line grained, round. 3 E.D.B C 3.0'		_		same as above			1		
2 Silty Sand, 5-1090 5:1t, Very durk gray, 104R 3/1, 1005e, wel, line grained, round. 3 E.D.B C 3.0'		_							F
= Very durk grav, 10 VR 3/1, 5 m loose, wet, line grained, round. 3 - E.O.B.C. 3.0'			5~~						E
= Very durk grav, 10 VR 3/1, 5 m loose, wet, line grained, round. 3 - E.O.B.C. 3.0'		, =							
= Very durk grav, 10 VR 3/1, 5 m loose, wet, line grained, round. 3 - E.O.B.C. 3.0'		2-		Silty sand, 5.1070 5:	I I ,				
$3 - \varepsilon \cdot 0. \beta \in 3.0'$		_		Very dark gray, 10YR 3	/í,				F
$3 - \varepsilon \cdot 0. \beta \in 3.0'$			SM	loose, wet, line grain	ied,				E
		=		round.					t i i i i i i i i i i i i i i i i i i i
		3-		E.D.B.R. 30'	/				
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Dell	ING LO		VISION	INSTALL	ATION	HAAF		SHEET (OF SHEETS
1.0001507				10. SIZE	AND TYPE		HAND ANY	
H	AAF	Baile	ng 728 Phase I	11. DATI	IN FOR EL	EVATION	SHOWN (TEM or MSL)	<u> </u>
2. LOCATION	l (Coordin	intes or Sta	ntion)	1			54	
Javan 3. DRILLING		GV		12. MANU	UFACTURE	R'S DESIG	GNATION OF DRILL	
J. DRILLING	AGENCI	Mt	E	13. TOT	AL NO. OF	OVER-	DISTURBED	UNDISTURBED
4. HOLE NO. and file nu	(As show	n on draw	H728 - HA17	BUR	DEN SAMPI	LES TAKE	N 5	0
5. NAME OF					AL NUMBE		the second second second second second second second second second second second second second second second se	•
		<u>6. K</u>	owell	15. ELE	VATION GF			PLETED
6. DIRECTIO		LE		16. DATI	E HOLE	7	14-95 CON	6-14-95
			DEG. FROM VERT.	17. ELE				
7. THICKNES	S OF OV	ERBURDE	N 5.0'				Y FOR BORING	2
6. DEPTH DR	RILLED I	NTO ROCK	<u> </u>		ATURE OF	INSPECT	OR	
9. TOTAL DE	EPTH OF	HOLE	50		the second second second second second second second second second second second second second second second se	Sowell		
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIA (Description)	ALS	% CORE RECOV- ERY	BOX OR SAMPLE NO.	REMARI (Drilling time, weter weathering, etc., i	lose, depth of
•	b	c	b		•	*	<u> </u>	
		1	S:Hy sand 5% silt, davk gray, 10/R 3/1, dry, fine grained,	Very				Ŀ
	_	1	davk gray, 10YR 3/1,	loose				Ŀ
1		5m	dry, fine grained,	round				<u> </u>
	_						l	-
)	1						
	·	1	Jilly Sand, 1090 Sill, grayish brown, Loyk Loose, dry, fine grain	dork				
	-	lem	grayist brown, Loyk	3/2,				-
		- JV	Loose, dry, fine grain	ed.				-
	=	1	Round.	,				E
	2	1						
		1	same as above	•			3'-5' taken	from
	_	1,						+e> 1+00
		Jm				,	east.	E
	=	1						
	3 —						· · · · · · · · · · · · · · · · · · ·	-6
		1	same as about	R.				-
			moist.					
1		SM						
	=	1						E
	4-]	· · · · · · · · · · · · · · · · · · ·					E
i	' =	-	same as above					E
	=	SM	saturated.					Ę
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	5]	E.O. B @ 5.01		<u> </u>			
			C. U. D (P 3.U.					<u>F</u>
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								Hole No	. H728 . HA 18	8
			VISION		INSTALL	ATION	HAAF	:	SHEET 1	
	LING LO)G	· · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		AND TYPE			OF I SHEET	
1. PROJECT	LAAF	Buil	ding 728	Phase I	10. SIZE	JM FOR EL	EVATION	SHOWN (TBM or MS	L) ev / 3"_	
			Sovonnah	6A	12, MAN	JFACTURE	R'S DESIG	SC. SNATION OF DRILL	•	
3. DRILLING	AGENCY	M+	-G		13. TOT	AL NO. OF		DISTURBED	UNDISTURBED	5
4. HOLE NO. and file nu	(As show mbse)	n on drewi	H728	3-HA18	<u> </u>	AL NUMBE			0	
5. NAME OF	DRILLER	G	Rovell			VATION GR	ROUND WA	TER 343.		
6. DIRECTIO			·	DEG. FROM VERT.	16. DAT		4	0-15-95	6-15-95	
7. THICKNES	S OF OV		N 3.5'			VATION TO		LE <u>23.75</u> Y FOR BORING		7
8. DEPTH DE						ATURE OF		the second second second second second second second second second second second second second second second se		-
S. TOTAL DE			3.5'				Rowl			
ELEVATION	DEPTH	LEGEND		ATION OF MATERIA	L\$	ERY	BOX OR SAMPLE NO.	(Drilling time, we weathering, etc	ARKS ster loss, depth of >, if significant)	
a	<u> </u>	¢		d		•			<u> </u>	╪
	-] .	S: Hy Sand	, 5-10% 5;H,	very		1 1			F
	-	-	dark gray	fine grained,	wse,					F
		Ism	Contory,	fine grained,	Sub-					F
	. –] [100022 40	round.						F
	1	:		1 5 1 5 5						┮
	=		sing sand	2, 5-1090 5.	'') 7/Πα		1			F
		IC.M	INR 3/2 "	fraying a se	0.0					F
		0	grained, v	grayist bro no: st, loose, .	t,ne					F
	. =	1								F
	2	<u>↓</u>	- Juga d	son silt hh	ok			C-1/20t frag	- affret	Ē
	-		S. My server,	570 5:14, blo 1005e, wet, S				Collect fro located	1 hoast	E
		Sm	grained, v	m. A	ne				VB 2-01.	E
	=		0 - 0.07]			E
	3		No	E. al.						Ŀ
	=	ł	10	Sample						Ŀ
		 		BC 3.51	+				<u> </u>	<u>-</u>
			2.0.	د.د م ۵						E
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	ING LO		VISION	INSTALL		HAAM	6	SHEET /
		<u> </u>	Α	10. SIZE				
H.A	AFT	Build	ins B728 Phase I	11. DATU	IM FOR EL	-	SHOWN (TBM or MSL)	
2. LOCATION	(Coordin	etes or St	and B728 Phase I	12 MAN	FACTURE	<u>Ms</u>	ATION OF DRILL	<u></u>
3. DRILLING	AGENCY		Savannan Bir	12. MARC		MA		
		VIA		13. TOT/	L NO. OF	OVER-	DISTURBED	UNDISTURBED
4. HOLE NO. and file num	(As show mbsc)	n on drawi	H728-HA19				_ <u>17</u>	0
5. NAME OF	DRILLER	<u> </u>	A A			R CORE B	the second second second second second second second second second second second second second second second s	
			lowell	+		ISTA	RTED CO	MPLETED
6. DIRECTIO			DEG. FROM VERT.	16. DATI	E HOLE		6-15-85	6-15-85
			<u> </u>			P OF HOL		
7. THICKNES							FOR BORING	- *
8. DEPTH DR 9. Total De			4.0	19. SIGN	ATURE OF	Sould	OF	
S. TOTAL DE		<u> </u>	CLASSIFICATION OF MATERI	ALS	% CORE	BOX OR	REMA	KS
ELEVATION	DEPTH	LEGEND	(Description)		ERY	BOX OR SAMPLE NO.	(Deilling time, wate weathering, etc.,	f loss, depin of if significant
a	<u> </u>	<u>د</u>	5:114 Sand, 50% 5:11, C	1			¥	
	-	-	3.114 James, 30% J.11/C	dial				
			brown, 104R 3/3, Loose, Very Sine grained Vou	July,				
	_	Sm	very dine grained, vou	ner				
		1						
i)							
		1	Same as above, do gravish brown, 104R4, fine grained. round	x71C 12				
			Brayion brown, Joyk 4,					
	_		fine graines. Forme	ĸ				
		1						
	2-	{		t.				
	_	ł	Jing Jark gravish	brown				
		sm	silty sand, 5% sil very dark gravish 10 VR 3/2, loose, mo fine grained, round.	;s7,				
	=	\$	fine graince, round.					
	~ -	1						
	2		silty sand, 5% same	, dark		ļ	Sample col	lected
	-		gravish brown, IOYA	4/2,			from offse	& located
		Sm	grayish brown, loyA loose, saturated din	e graine	d		1' to eas	+
	_		round.					
	<i>u</i>						·	
	7	1	E.O.B @ 4.0'					
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									Hol	• No.	H728	- HAZ	Ø
DRILL	ING LO		VISION			INSTALL	ATION	HA	AF			/ Sheets	
I. PROJECT	<u></u>			120 DI		10. SIZE		OF BIT	HAND SHOWN (TEM	Au	er /	3"	(
	AAF	Build	ding	728 Pha mak BA	se I	11. DATU	IM FOR EL	EVATION M	5C-		,		
			and an	unah bA		12. MANI	FACTURE		INATION OF C	RILL			
3. DRILLING	AGENCY	Mt	E			13. TOT	L NO. OF	OVER-	DISTURBE	p	UNDIST	RBED	
4. HOLE NO. and file run	(As shown	n on drawb	ng title	H728-H	AZØ	ļ		OVER- LES TAKE	<u> </u>		0	<u> </u>	
5. NAME OF	DRILLER	G.R.	m JP					R CORE B		5'			
6. DIRECTIO	N OF HOL	.E	5000			16. DATI	HOLE	5TA	-15-95		MPLETER 6-15-		
VERTI	CAL []	NCLINED		DEG. F	ROM VERT.		ATION TO	DP OF HOL		.67	<u> </u>	<u> </u>	1
7. THICKNES	S OF OVE	RBURDEN	4	5.0'		- 18. TOT	L CORE F	ECOVER	FOR BORING	•	_	٦	
8. DEPTH DR	ILLED IN	TO ROCK					ATURE OF	INSPECT					
9. TOTAL DE	PTH OF	HOLE		5'		(vell		REMAR		<u> </u>	
ELEVATION		LEGEND		CLASSIFICATION (Descrip	tion)	-	RECOV-	BOX OR SAMPLE NO.	(Drilling tie weatherin	ne, wate	r loss, de; il signific	pth of ant)	
<u> </u>	<u>ь</u>	<u>د</u>	1.11	y Sand, 5 R4/3, 2005e ined, subvo Il fragmen	n ailt	10 0 0							F
			5:11	y sand, 5	76 7 · 11, June D.	Wrown							F
			1°Y	R4/3, (003e	javy, j:	round	•						F
		Joh	gra	need Junio	Ar	· ···· · ·							-
			She	Il traquen	10.								E
	l	·	<u> < ` </u>	ty sand, in 12 5/2, loose e grained, 18 Programmen	502 3:17	grafisi				•			E
~			1.6	19 5-0,	, moist i	inder.							E
		Sm	104	K 5/4, (003 c	con met	auster							E
	-	-	+:10	l frogmen	ts.	071							E
			300										E
	2			ysamd, 65 4, 104R7/2 egrained, r		ligh F							E
	=),//	ysand, LS	2 lonse	dry,							
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	=		Fra	egrander	÷ .								E
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Hole No. H728-HAZI

			IVISION	INSTALL	ATION	HAM	<	SHEET		
	ING LO)G			AND TYPE			OF 1 SI Auger /	B"	
1. PROJECT	AAF	Build	live 728 Phase I	10. SIZE	IN FOR EL	EVATION MS	SHOWN (TBM or	MSL)	<u> </u>	
2. LOCATION	i (Coordin	setes or Se Sav	annah GA	12. MANU	JFACTURE	R'S DESIG	SNATION OF DRI	LL		
3. DRILLING	AGENCY	M4		13. TOT	L NO. OF	NA OVER-	DISTURSED	UNDISTUI	RBED	
4. HOLE NO. and file nu	(As show	n on draw	H728-HAZI	13. TOTAL NO. OF OVER- BURDEN SAMPLES TAKEN 4 0 14. TOTAL NUMBER CORE BOXES -						
5. NAME OF	DRILLER		lowell		AL NUMBE			4.51		
6. DIRECTIO	N OF HO	LE	•	16. DAT	E HOLE	STA.	RTED -15-85	COMPLETED	0	
VERTI	CAL 💭	INCLINE	D DEG. FROM VERT.		ATION TO				24	
7. THICKNES	S OF OV	ERBURDE	en 4.5'	18. TOT	AL CORE P	RECOVERY	FOR BORING		*	
8. DEPTH DF			and the second second second second second second second second second second second second second second second	19. SIGN	S. Z	INSPECT	OR			
9, TOTAL DE	EPTH OF	HOLE	4.5			· · · · · · · · · · · · · · · · · · ·	R	EMARKS		
ELEVATION	БЕРТН	LEGENC	CLASSIFICATION OF MATERIA (Description)	ALS	RECOV-	BOX OR SAMPLE NO.	(Drilling time, weathering,	water lose, dep etc., if eignifice 9	th of nd	
•	-	¢	Silly sand, 5% 5:14, 4	1 dowish					F	
]							F	
		5m	brown, 104/15/4, loose, C five grained, vound.	,					Ē	
	=	1							F	
	,	_	5:114 sand, 5% 5.11, 5	Ling				i=		
	' =		3:114 St 0, 576 5:11, 5 10:00 17.54R 5/6, Los	ie,					E	
		SM	brown, T. SYR 5/6, Los moist, fine grained, 150m	S.					þ	
]							F	
	2_	-							E	
	- =	1	s: Ity sand, 50% s: It, you is yR 7/6, loose, woist, grained, round.	ellow,					F	
	=		10YR7/6, (0050, 000.51)	dine					ļ	
	-		grained, council						Ē	
	_	1								
	3-	4 {	Sand, 1500 5:14, pale	brown					F	
	=]	loyR 6/3, loose, wet, f grained, round.	in e				·	F	
		ISM	grained, round.						E	
	=	4							ł	
	14 -		the state							
	=	1	No Sample						E	
]	E.O.B. 4.5'							
		4	2.0, 0, 7,0						E	
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DRILLING LOG I. PROJECT HAAF Building 728 Phase I 2. LOCATION (Coordinates or Station) Growmach GH 12. MANUFACTURER'S DESIGNATION OF DRILL	SHEET / OF SHEETS
1. PROJECT HAAF Building 728 Phase I 2. LOCATION (Coordinates or Station) Governmenh GH 12. MANUFACTURER'S DESIGNATION OF DRILL	sex / 3"
HAAF Building 728 Phase I 11. DATUM FOR ELEVATION SHOWN (TEN & MSL) 2. LOCATION (Coordinates or Station) Savonnah GA 12. MANUFACTURER'S DESIGNATION OF DRILL	/
13. TOTAL NO. OF OVER- DISTURBED	
and the number with the HAZZ - HAZZ	·
S. NAME OF DRILLER G. Rowell IS. ELEVATION GROUND WATER 2	
ISTARTED (CO	MPLETED
VERTICAL DINCLINED DEG. FROM VERT.	6-15-85
T 17. ELEVATION TOP OF HOLE 33.35	
18. TOTAL CORE RECOVERT FOR BORING	- *
C D ell	
SCORE BOX OR REMAR	KS
ELEVATION DEPTH LEGEND CLASSIFICATION OF MATERIALS CORE BOX OR REMAR (Description) CLASSIFICATION OF MATERIALS (Description) CORE SAMPLE (Description) CORE NO.	it eignificent)
c b c d s 2 s · //	
= 50/Hy Sand, 5% 5:14, Yellowish brown, 104R 5/4, 5m loose, dry, finegrained,	
= 5m loose, dry, finegrained,	
= subround.	
= same as above.	
= 10xR6/4 light yellow.oh	
= 5:HY sand 5% sitt, pale, brown, 104R6/3, loose, dry, give grained, round.	
- m Brown, 104/K 6/3, 10000, dry,	
= " " " inc grama, roand.	
3 - same as above, moist	
- Joan	
4 _ same as above. Auger refus	al at s'
	East.
-Jon Orise to	
5 7	
- No Sample Auger refus	sal at 5.5%
E.O.B. 5.5'	<u> </u>
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Hole No. H728 - HA23

			IVISION	INSTALL	ATION	4 a	AF	SHEET /	
1 BROISCT	LING L			10. SIZE		////	HAND A	OF I SHEETS	4
{	HAAF	- Buil	ding 728. Phase I Savannah GA	11. OAT	UM FOR EL	EVATION	SHOWN (TBH or M	SL)	
2. LOCATION	N (Coordi	nates or St	Cartannah GA	12. MAN	UFACTURI	ER'S DESI	15 C	L	-
3. DRILLING]		N	A	UNDISTURBED	
4. HOLE NO.	(As shot		dad title	13. TOT	AL NO. OF Den samp	OVER-		D	
and file nu			H728-HA23		AL NUMBE			•	
_		6. Ko	well	15. ELE	VATION GI		/	COMPLETED	-
5. DIRECTIO			D DEG. FROM VERT.	16. DAT	EHOLE		0-15-95		
7. THICKNES					VATION TO			7	
8. DEPTH DI					AL CORE		Y FOR BORING	<u> </u>	4
9. TOTAL DI			7'		<u> </u>	Zowel	<u></u>		
	DEPTH	LEGEND	CLASSIFICATION OF MATERIA	ALS	% CORE	BOX OR	REN (Deilling time, w	ARKS mter loss, depth of c., if significant)	
a	ь	c			ERY •	NO. f	weathering, et	c., if significant	<u> </u>
	-		5:14 sand, 50% s: H, gr brown, 10485/2, losse, fine grained, subrown	ayish					F
	=	1	brown, 104R5/2, loose,	dry					F
1		50	fine grained, subround	ζ.	ļ				E
	-								E
	1 -								╞
	-		same as about	e	1				F
		Sm							F
	=								E
	=	1							E
	2-		Some as above	,					E
	-	3	James a arout						
		sm							F
	-	4							Ε
	3-	 		······					
	$=$		Same as above						F
		5m							F
	-	Í							Ε
	, =	4							E
	4		Same as above						F
		1	moist.						F
		5m	mois1.						E
	-	1							E
	5-	4		<u> </u>		<u> </u>		10	╞
]	5and, (5% silt, pel	.e			6-7 collec	+ from cated 18"	F
		Sm	brown, 104R.6/3, Loose,	110:57			to east.		F
			brown, 104R.6/3, loose, Veryfine to fine grained round ed.	1					E
	, =	1							E
	- - ۹		same as above wet.						E
			Sound as a co		ļ				Þ
		1sm	wer						F
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	7 -	1	BOR OT OI		<u> </u>				E
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									Ho	le No.	H728-	HAZ			
DRILL	ING LO	G	DIVISION			INSTALL	ATION	H	AAF		SHEET / OF / SH				
1. PROJECT	HAAE	ព .	· Id:	728 Pha	Se I	10. SIZE	AND TYP	E OF BIT	HARA SHOWN (TBL	Aug or MSL)	er / 3	и (
2. LOCATION	Coordin	ates or	Station	much	GA		FACTURE	P'S DESI	MSC.	Dettil					
3. DRILLING		,	NTE		<u> </u>				NA						
4. HOLE NO. and file nu	(As show			H728.	HA24	13. TOTAL NO. OF OVER- BURDEN SAMPLES TAKEN									
5. NAME OF	DRILLER	CK	owell			14. TOTAL NUMBER CORE BOXES									
6. DIRECTIO	N OF HOL	LE				15. DATE HOLE STARTED COMPLETED									
VERTI			<u> </u>		. FROM VERT.	17. ELEVATION TOP OF HOLE 35.20									
7. THICKNES						18. TOT	AL CORE I	RECOVERY	FOR BORIN	G	_	2			
8. DEPTH DR				».5'		19. SIGN	ATURE OF	Rowl							
9. TOTAL DE		<u>r - </u>	CI	ASSIFICATIO	N OF MATERIA		1 CORE	BOX OR		REMARI					
ELEVATION a	DЕРТН Ь				ription) d		ERY	NO.	weather	ng, etc., i g	iose, depth I significant	,°'			
	-		s:14	sand, 5	70 5:14, d. , 10 YR 4/2 medium	ork						E			
		l c n	~ gray	Line to	medium	grained	1					E			
		3.	Sup	round.		•						F			
												F			
	(Sand	2570 S:	It, gravisl ; dry, f: -d.	h brown						E			
		1	IOYR1	5/2, 10050	= , diry, fr	ทย									
		5m	- grain	icd, von	\mathcal{A} .										
	=]													
	2_			,											
			Tan	ne as	above							E			
	=	50													
	_	1													
	-					-						F			
	3-				above		<u> </u>		11. 1	ller	ted fro	200 -			
	<i>´</i> =			re as	avoie				4 +06	locate	d 1';	LΕ			
		Sm	~ [east.	co cas c		ΈE			
												E			
	ų <u> </u>											 			
			Same	1, 15% 5	s: 17, 1:qui e, slightly grained,	tgray,		· ·				F			
			IOYR	7/2, Loos	e, slightly							F			
		JM	moit	st, fine	grained,	round						E			
	11											E			
	5-1														
	11			reas a	slove,							F			
		Sr	~	wet.								F-			
	-											F			
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				No S.	mple		f ·					Ę			
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				E.O.B. 6	0 6.51							Ē			
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Hole No. 11728- HAZ5

			DIVISION	INSTALL	ATION		11 -	SHEET /	7			
DRILL	ING LO					1	TAAF	OF / SHEETS				
			<i><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></i>	10. SIZE	AND TYPE	OF BIT	HAND A	tuger 13"				
ŀ	IAAF	Buil	ding 728 Phase I	11. DATU	IN FOR EL	EVATIO	SHOWN (TBM or M	SL) (]	1			
2. LOCATION	(Coordin	ates or S	Savannah GA	- MSL								
l			Davannah 600	12. MANUFACTURER'S DESIGNATION OF DRILL								
3. DRILLING	AGENCŸ	M	+=									
A HOLE NO.	(As show		ing titla	13. TOTAL NO. OF OVER- DISTURBED UNDISTURBED BURDEN SAMPLES TAKEN								
4. HOLE NO. and file mu	nb er)		H728. HAES		L NUMBE	BCORE			1			
5. NAME OF	DRILLER		Rowell					5	1			
			NOWEN	15. ELEVATION GROUND WATER 6.5								
6. DIRECTIO			DEG. FROM VERT.	16. DATE HOLE 6-16-95 6-16-95								
		INCLINE		17. ELEN	ATION TO		- 4-3					
7. THICKNES	S OF OVE	ERBURD	EN 6.5									
8. DEPTH DR												
9, TOTAL DE			6.5'	1	ß.	Rou	ell					
S, TOTAL DE		1000	CLASSIFICATION OF MATERIA		S CORE	BOX OR	RE)	ARKS	1			
ELEVATION	DEPTH	LEGEN	D (Description)		RECOV-	SAMPLE NO	(Driffing time, w	nter loss, depth of c., if significant	1			
•	Ь	e	d		•	+		9	+			
		1	Sand, (5%5:17, brown 104R 5/3, Cose, dry, fin grained, round.				I		E			
		1	104R5/3, Losse, dry, fin	e					F			
[1	_	1 .	grained, round.				1		F			
		SM										
	-	1							F			
1	_ =]				L			E			
		1	- lario						F			
		-	Same as above									
1	=	1.				ļ			F			
	<u> </u>] 5m	-]			F			
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	=	1				1	ł		F			
i I	2	 				<u> </u>	+	······································	t			
		1	Same as above moist.				1		F			
]		1				1			F			
]		sm	VIL O. DY									
1	_	1				1			F			
	- 1	4				1						
	3 -	1							-E			
	<u> </u>	1	same as above				1		F			
		1										
		Sm	·]		'	1			\mathbf{F}			
		1				1			F			
	=	7				1			E			
	4	1				 	·		-			
1	7	1	same as above						F			
	=	7	Junio de come			1			F			
		Sm				1	1		F			
1		1			1	1	1		F			
1	🗆	1					1		\mathbf{F}			
	5-	1			L				F			
1	>		Sand, 4570 5:14, dark	brown	1							
1	=	1	Sand, 45% 5:14, dark 7.5 YR 3/4, loose, wet, grained, round	fine	1				F			
1	-	Jm	grained round		•				Þ			
1		1.000			}				F			
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	=]	E.O. B@ 6.51			1			F			
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							Hole No.	HTC8-HA	126			
DRIL	LING LO		IVISION	INSTALL		7	HAAF	SHEET / OF / SHEETS				
1. PROJECT		 		10. SIZE	AND TYPE	OF BIT	HAND AL	aer/3"	177			
<u>+</u>	+ <u>A A F</u>	= Bu	Wing 728 Phase I	II. DATI	JM FOR EL	EVATION. M	SHOWN (TBM or MSL)		L,			
Z. LOCATION	N (Coordin		Savannah GA	10. SIZE AND TYPE OF BIT HAnd Anger/3" 10. SIZE AND TYPE OF BIT HAnd Anger/3" 11. DATUM FOR ELEVATION SHOWN (2BM or MSL) MSC 12. MANUFACTURER'S DESIGNATION OF DRILL NA								
3. DRILLING	AGENCY	NN+	E									
4. HOLE NO.	(As show			13. TOTAL NO. OF OVER- BURDEN SAMPLES TAKEN / D								
5. NAME OF		0			AL NUMBE			•	Į			
6. DIRECTIO			owell	15. ELEVATION GROUND WATER ?								
			DEG. FROM VERT.	16. DATI		(0-18-95	6-16.95	[
7. THICKNES	S OF OV	ERBURDE	N /.5 '	17. ELEVATION TOP OF HOLE 36.81								
a. DEPTN DF				19. SIGN	ATURE OF	INSPECT	y for Boring 🦟	— <u>x</u>				
9. TOTAL D	EPTH OF	HOLE	18'		<u>G. 1</u>	Sowel	<u></u>					
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIA (Description) d	LS	% CORE RECOV- ERY	BOX OR SAMPLE NO. f	REMAF (Drilling time, wate weethering, etc., 9	r lose, depth of				
			5: Hy sand, 5% 5:H.	dark					E			
			5: Hy sand, 5% J: H, grayish brown, 104RS, loose, dry, fine grained	/z,					F			
		Sm	loose, dury, time grained	round					E			
	_								E			
	1-	:	Same as above						F			
			Dant as where				Auger refuse	0 + 18"	E			
			E.D.B.@1.5'				Auger retuso		E			
			E.U.D.CT.						(
	2-	<u>,</u>										
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								Hole	No. HA 28 - HA				
DRILL	ING LO		VISION		INSTALL	ATION	HA	AF	SHEET / OF / Sheets				
				770 JI. T	10. SIZE			HAND AU	iger 13"				
LOCATION	(AAF	Bu: (ding	728 Phase I Ionnah GA	11. DATUM FOR ELEVATION SHOWN (TBM or MEL)								
	, voorubi			Ionnah 6A	12. MANUFACTURER'S DESIGNATION OF DRILL								
DRILLING	AGENCY	Mta	Ē.		13. TOT	AL NO. OF			UNDISTURBED				
HOLE NO.	(As show	n on drawi	ng title	H728- HAZ7									
NAME OF	DRILLER	6. Re			14. TOTAL NUMBER CORE BOXES 15. ELEVATION GROUND WATER 5.5'								
DIRECTIO			wel	<u> </u>	STARTED COMPLETED								
				DEG. FROM VERT.	6-10-75 010-74								
THICKNES	S OF OVE			5.5	17. ELEVATION TOP OF HOLE 34.38 18. TOTAL CORE RECOVERY FOR BORING ~ *								
DEPTH DR					19. SIGNATURE OF INSPECTOR								
TOTAL DE	PTH OF	HOLE		5.5'			well						
	ДЕРТН	LEGEND		LASSIFICATION OF MATERI (Description) d		% CORE RECOV- ERY	BOX OR SAMPLE NO. f	(Deilling time.	EMARKS water loss, depth of etc., if eignificant) 9				
a			- ×à	mal < 5%5:14, darl	<u> </u>								
	-	1	dra	nd, <5%5:14, darl Wish brown, 104R4/2 fine grained, roum	, loose,								
		SAL	diry,	fine grained, roum	0.	ļ							
		1											
	1					 							
	. <u> </u>		Sou	me as above									
	-		50										
		sm											
								1					
	ν_{-}	<u> </u>	<	ne as above.	-								
	-	1	9,10	we as above, wish brown, 104R 51	2								
		sm	U	• -									
	-												
	3	 			. <u>.</u>	 							
		1	50	-d, (5% sill, bron YR 5/4, loose, moist egrained, subround	m,	1							
		SM	7.5 [:w	earained subround	ź.								
		1211											
	<u>м</u> =	1											
	۳		Jan	-d, <5% 5:14, brown	ist.								
			Yel	023, 10 YK 6/6, 10035	wet,								
		Sm	fine	grained, round.			1						
	_	1		•		1							
	S- <u>-</u>]		11 5 1									
				No Sample									
		 						··					
	-	1		E.O.B. @ 5.5'									
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							Hole No.						
DRILL	LING LO		VISION	INSTALL	ATION	HAI	4F	SHEET (OF 2 SHEETS					
1. PROJECT	AF P	wilding	g 728 Phase I anuah GA	10. SIZE	AND TYP	E OF BIT	Hand Aug. SHOWN (TBM or MSL	er /3"					
2. LOCATION	Coordin	ates or Sta	tion)	<u> </u>			NSL						
3. DRILLING	AGENCY		anual lift	1			NATION OF DRILL						
4. HÖLE NO. and file nu		MEE n on drawt	H728-HA28	13. TOTAL NO. OF OVER- BURDEN SAMPLES TAKEN									
5. NAME OF				14. TOTAL NUMBER CORE BOXES									
6. DIRECTIO			owell	STARTED COMPLETED									
VERTI			DEG. FROM VERT.										
7. THICKNES	S OF OVE	RBURDE	N 8.0'	117. ELEVATION TOP OF HOLE 58.05									
8. DEPTH DF	RILLED IN	TO ROCK		19. SIGNATURE OF INSPECTOR									
9. TOTAL DI	ертн ог	HOLE	8′		G. Rowell								
ELEVATION		LEGEND			RECOV-	BOX OR SAMPLE NO.	REMA (Drilling time, wai weathering, etc.	ar loss, depth of					
•	Ь.	¢	e 111150	eal	•		V						
			5: Hy Sand, 5% 5: H, Vi dovic gray, loose, dvry, f: negrained, round	1048.3/2									
	-	Sim	fine svained, round					Ę					
		-••د						F					
	. =							F					
		·	Sand, <5% silt, doric brown, 104R 4/2, 605c, fine grained, round	gravist									
			wown, 104/2 4/2, 605C,	Jry,				F					
		SIM	fine grained, round					F					
		.,	,										
	2-		e have										
	-		Some as above					F					
		500						F					
								F					
								F					
	3		some as about										
			Some as about					F					
		SM						F					
							4	F					
								F					
	4 - <u>-</u>		Sand, <3905:17, light brownish grow, 104/10 losse, moist, very find grained, fround.										
			provision gray, 104/26	0/2,				E					
		Sm	have moist, very fin	e				6					
		Ť	grained, hound.					E					
							·						
	5		Same as above.										
			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~										
		Sm						E					
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	ιφ <u>–</u>		some as above										
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								Hole No.	H728-			
DRILL	ING LO		VISIÓN		INSTALL	ATION	HA	AF	SHEET 2. OF 2. SHEETS			
PROJECT				<i>Di</i> —	10. SIZE	AND TYPE	OF BIT	HAnd Auge	v 13"			
HAAF	But	ding	728	avannah GA	11. DAT	IN FOR EL	EVATION	SHOWN (TEM or MSL	)			
2. LOCATION	(Coord in	ates of Sta	ation >	avanual GA	12. MAN	FACTURE		SC.				
3. DRILLING	AGENCY	1001						VA				
	(	VVITC	-	1	13. TOT	AL NO. OF	OVER-	N S				
4. HOLE NO. ( and file num	nbee)		ng title	H728-HA28				0				
5. NAME OF D	DRILLER	G.K	) Milei	00	14. TOTAL NUMBER CORE BOXES							
6. DIRECTION	OF HOI		unes.	<u> </u>	16. DAT		ATE	RTED IC	MPLETED			
VERTIC				DEG. FROM VERT.				-16-95	6-16-55			
. THICKNES	S OF OVI		<u></u>	R.O		VATION TO						
. DEPTH DR						AL CORE P		FOR BORING	*			
. TOTAL DE	PTH OF	HOLE		8.0			owell	7				
ELEVATION		LEGEND		CLASSIFICATION OF MATERI (Description)	ALS		BOX OR SAMPLE NO.	REMA (Drilling time, wat weathering, etc.,	RKS er loss, depth of if significant			
	<u>b</u>	<u>с</u>		d L.C. alt is A.k	<u>F</u>	•	<u> </u>	9				
		]	San hra	e, wet, very fine gra	6/2.		1					
		Sim	603	e wet word hup are	ained.							
			Rou	ind.	~/							
	=											
	8	<u> </u>		E.O. B. @ 82	57		<u>  </u>					
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								Hole No		2			
DRILL	ING LO		VISION		INSTALL	ATION	HA	AF	SHEET / OF ( SHEETS				
1. PROJECT	4 F 12	with sa	e, 7	28 Plase I	10. SIZE	AND TYPE	OF BIT	HAND AUS SHOWN (TBM or M	ev / 3"				
2. LOCATION	Coordin	ates or Sta	Hon	28 Phase I onnah GA	MSC 12. MANUFACTURER'S DESIGNATION OF DRILL								
3. DRILLING	AGENCY	·	Sav	onnah GAT	12. MANU	JFACTURE		SNATION OF DRIL	L-				
	V.	NHE			13. TOTAL NO. OF OVER- BURDEN SAMPLES TAKEN								
4, HOLE NO. and file nu	(Aş show mbəc)	n on drawt		H728-HAZ9	14. TOTAL NUMBER CORE BOXES								
5. NAME OF	DRILLER	G.Ko	vel	l l	15. ELEVATION GROUND WATER 2								
6. DIRECTIO		LE			16. DATE HOLE STARTED COMPLETED								
7. THICKNES				5.51		ATION TO			2	4			
8. DEPTH DR						AL CORE P		FOR BORING	<u> </u>	-			
9, TOTAL DE				5.5'	_ 19. 510H	GR	o well	7					
ELEVATION		LEGEND		CLASSIFICATION OF MATERIA	ALS	% CORE RECOV- ERY	BOX OR SAMPLE NO.	REk (Deilling time, w weathering, et	IARKS mier loss, depth of c., it significant)				
0	ь	e		d	- <i>k</i>	•	- f		9	E			
		1	5: N	y sand, 5% 5:14 d fish brown, 104R 4/2 1, fine grained, vou	art 2. loose,					F			
	-		dri	1. fine grained, rou	nd.					F			
		sm	-		-					F			
	-									F			
	(		- Fa-	-d. 50 silt here. M						F			
	=		104	-0, < 5% 5:17, brown 25/3, loose, dry, e grained, round.	Ner					E			
		Jm	₽:и	e avained, nousl.	10.1					E			
	=	Ĭ		0 0 00000				•		E			
										F			
	<u>د</u>		5.	re as above						E			
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		50-								F			
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		1	Sa	me as above		l		Auger CR	-	F			
		Sm								F			
	=									F			
		1								E			
	2	1		No Sample				Auger (che	isal at	F			
				•				5.5'		F			
				E.O.B C 5.5'					<u>, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	E			
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								Hole		728- HA 3ø	5			
DRILI	LING L	<b>0</b> G	VISION		INSTALL	ATION	HA	AF		EET / F / SHEETS				
1. PROJECT	AF	Build:	ns 7	28-Phase I	10. SIZE	AND TYPE	E OF BIT	HAND SHOWN (TEM )	Auger	/3"	$\left  \right $			
2. LOCATIO	N (Coordi	nates or Si	(allon)	ah GA	12, MAN	JFACTURE		IZ CON	RILL		4			
3. DRILLING	AGENC	Mte	;				NA	<u>}</u>		IDISTURBED	4			
4. HOLE NO.	(As shot			11770 11 10 1	BURI	AL NO. OF	OVER-LES TAKE	IN 4		<u></u>				
5. NAME OF						AL NUMBE				· · · · · · · · · · · · · · · · · · ·	-			
6. DIRECTIO		<u>G. ho</u>	wel	l	15. ELEVATION GROUND WATER 2 ISTARTED COMPLETED									
VERTI			o	DEG. FROM VER	T.	16. OATE HOLE 6-19-95 6-19-95								
7. THICKNES	SS OF OV	ERBURD	EN	4.51	17. ELEVATION TOP OF HOLE 38.57									
8. DEPTH D	RILLED	NTO ROC			19. SIGNATURE OF INSPECTOR									
. TOTAL O		HOLE	1	4.5'		IALS & CORE BOX OR REMARKS RECOV- SAMPLE (Drilling time, water lose, depth of								
ELEVATION	рертн ь	LEGEN	ļ	CLASSIFICATION OF MATER (Deacciption) d		RECOV- ERY	SAMPLE NO. f	(Drilling tim weathering	e, water lo	es, depth of ignificant				
	-		Sam	rd, gravish brown, 9 woist, fine graine and.	10YR5/2,						F			
	-	3	605	g woist, fine graine	d						E			
		5m	no	ind.							E			
		]									F			
	1-		5 11	me as above						<u> </u>	E			
	=	4									F			
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	=	4									E			
	2-	·]						<u></u>			╞			
	-	1	Sau	me as above							E			
		Sm									F			
	-	-									E			
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	=		5a	me as above			i				E			
		Jm									E			
											F			
	4-	-					 			0_1	E			
				No Sample				Auger 1 4.5'	lefu sa	y ex	E			
	-			E.O.B.C 4.5				713			╞			
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									Hole		28· HA3	4
DRILL	ING LO		VISION			INSTALL	ATION	+AA)	F		EET (   Sheets	
1 DBAIECT						10. SIZE	AND TYPE	OF BIT	HAND	Aug	er / 3"	
HA	AFE	Bu:  d:	"5	728-Phas	se I	TI: DATE	IN FOR EL		SHOWN (TON .	MSL) 0		
2. LOCATION	l (Coordin	Savi	ation) an Ni	ah GA		12. MAN	FACTURE	R'S DESI	GNATION OF D	ILL		┦
3. DRILLING	AGENCY	M+E						N,				_
4. HOLE NO. and file nu	(As show			H728 - H	1 1 7 1	13. TOTA	AL NO. OF	OVER-			0	
5. NAME OF				· · · · · · · · · · · · · · · · · · ·			AL NUMBE			<u> </u>		_
		<u>G. K</u>	we	<u>ev</u>		15. ELE	ATION G		RTED	COMPL	ETED	-
6. DIRECTIO			·	DEG.	FROM VERT.	16. DATI			0-19-95	6-	19-95	
7. THICKNES	S OF OVI	ERBURDE	N	2.5			ATION TO			14		7
8. DEPTH DR							ATURE OF		Y FOR BORING			-
9. TOTAL DE	PTH OF	HOLE		2-5				well			····	
ELEVATION		LEGEND	•	CLASSIFICATION	OF MATERI	ALS	S CORE RECOV- ERY	BOX OR SAMPLE NO.	(Deilling time weathering	REMARKS , water los , etc., if sig	a, depth of gnificant	
<u>a</u>	- b	e		4	11 1'3	-h				<u> </u>		
		{	Jan	~ < 5 % 5.	It gray of	un st						
			0000	d, <5% 5: m, 104R5, grained, V	2, (3), 2	,, -, -, -, -, -, -, -, -, -, -, -,						
		5m	<del>1</del> ° ne	grained v	ound.							
	_	1										
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		Jun										
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	<i>C</i>			NoS	, de				Auger 10 Z.5	Sugal	al	
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								Hole No.	H720- HA	34. N
DRILL	ING LO		VISION		INSTALL		HAA		SHEET ) OF / SHEETS	
1. PROJECT				<u> </u>	10. SIZE	AND TYPE	OF BIT	HAND Aug	ser / 3"	
H.A.	AF B	su:U:u	6 7	128-Phase I	11. DAT	IM FOR EL	EVATION	SHOWN (TEM or MSL 15 4	5	
2. LOCATION	Coordin	ston or Sta	illon) CMNA	128-Phase I ih 6A	12. MAN	UFACTURE	R'S DESI	SNATION OF DRILL		1
3. DRILLING	AGENCY	M4E					NA		UNDISTURBED	-
4. HOLE NO.	(As show			H728-HA32		AL NO. OF DEN SAMPI		N 1	D	4
S. NAME OF						AL NUMBE			·	-
		<u>G.</u>	Kowe		15. ELE	VATION GR		•	OMPLETED	-
6. DIRECTIO		LE		DEG. FROM VER				0-19-95	6-18-85	4
7. THICKNES		<u> </u>		1.3		VATION TO				-
8. DEPTH DR				1.9		AL CORE F		Y FOR BORING		-
S. TOTAL DE				1,3		5. R.	self			
				CLASSIFICATION OF MATER	HALS	* CORE	BOX OR SAMPLE NO.	(Delling the	RKS	
ELEVATION	DЕРТИ Ь	LEGEND c		(Description) d		ERY	NO.	(Drilling time, we weathering, etc.	, if eignificent	╞
			Sam	d. dark gravish	brown,					F
	=		אנ	IR 4/2, LOOSE; MOSTA	fine					F
		] 5m	ava	d, dark gravish 1R 4/2, loose, moist, :ued, vound.			-			F
			0.4							F
	. =	} :					<u> </u>	<u> </u>	0	F
	· ·							Auger re ~ 1.3	tusal at	F
				E.O. B @ 1.3'				~ 1.3		F
										F
										F
	2	-					<u> </u>			F
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Hole No. H728-HA33

			VISION	INSTALL	ATION	HA	AF	SHEET /	
	.ING LO			10 6175		1 1 1 1		OF I SHEET	
I. PROJECT	AAF	Bail	ding 728 - Phase I	11. DATI	IN FOR EL	EVATION	SHOWN (TBM or MS	u jel / jel	
2. LOCATION	Coordin	ates or St.	stion Sovannah GA	L			<u>M5C</u>		
3. DRILLING	AGENCY			12, MANI	JFACTURI	ER'S DESIG	NATION OF DRILL		
4. HOLE NO.	(As show		the title	13. TOT	AL NO. OF	OVER-		UNDISTURBED	<u>`</u>
and file nu			H728-H133	14. TOT	AL NUMBE	R CORE B		•	
5. NAME OF		G , [	Rowell	15. ELE	ATION G	ROUND WA	<u> </u>	OMPLETED	
6. DIRECTIO			DEG. FROM VERT.	18. DATI		6	-16-95	6-16-95	- -
7. THICKNES	S OF OVE		n 6.0			OP OF HOL		5	-
8. DEPTH DR						INSPECT	FOR BORING		-
9. TOTAL DE	PTH OF	HOLE	'ما		<u>G-</u> , _	Bowe	Q		
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF NATERIA	LS	% CORE RECOV- ERY	BOX OR SAMPLE NO.	REM Drilling time, we weathering, etc	ARKS iter loss; depth of . ., if significant)	
¢	ь	<u> </u>	d		•	f		<u> </u>	-
		1	sound, > 570 5: 14, brow 104/25/3, Loose, dry, f: grained, subround	n,					E
	-	~	104/25/3, Loose, dry, f:	rl			x		F
	·	5000	grained, subround						E
	=								E
		<b> </b>	Sand, > 5% s: H, 1:ght Yellow: sh brown, 104K Loose, dwg, finegra: u rowng						-E
	·	1	5and, >5% 5:14, 1:ght	(1)					E
	=	1	fellowish brown, 1094	ed 4					E
		sm	loose, ave, +inegra. u	41					E
	=		Vound						E
	2	\		<u></u>				· · · · · · · · · · · · · · · · · · ·	-E
			Same as above	<b>,</b>					E
	-								F
		Sm							F
									F
		<b></b>							
	_ =	1	Sand, vary fale brow 104/27/4, loose, mo fine grained, vom	m,					-
	_	1	104/27/4, loose, mo	ist,					F
		Sm	fine avained, vou	d					F
		1	0						F
	ч	<b> </b>				<b></b>			_F
	' =	1	some as above						F
	_	1							F
		spon							F
	=	1							F
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		1	Same as above saturated						F
		1	Saturated						F
		sm							F
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	6		E.O.B @ 6.0'			1			F
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									Ho		728-HA
	ING LO		VISION			INSTALL	HAA	F		1	ET / / Sheets .
						10, SIZE	AND TYPE	OFBIT	HANd	Augo	
HAAI	F Bui	1dine	728	- Phase	<u> </u>	TI. DATI	IN FOR EL	EVATION	SHOWN (TBA	ce MSL)	·
2. LOCATION	(Coordin	eter or Sta Savan	tion)	CA		12 MAN	FACTURE	MSL	NATION OF	DRILL	
3. DRILLING	AGENCY			<u>, GVI</u>		12. 000	JF ACTORE	NA			
		NN46				13. TOT	AL NO. OF	OVER-	DISTURBO	D UND	STURBED
4. HOLE NO. and file rus	(As show mbec)	n on drewi	ng title	H728-H	A34				·		Ø.
S. NAME OF	DRILLER	00	owel					R CORE B		7	
			ower	<u> </u>				ISTA	RTED	COMPLE	
6. DIRECTIO			<u></u>	DEG. F	ROM VERT.	16. DAT		6	-16-95		16-95_
				1.5'				OP OF HOL		7.72	
7. THICKNES				<u></u>					FOR BORIN	<u> </u>	*
, DEPTH DR			·	1.5'		19. SIGN	ATURE OF	INSPECT	swel		
	<u> </u>	LEGEND	CL	ASSIFICATION	OF MATERIA		* CORE	BOX OR	(Drilling t	REMARKS	, depth of
ELEVATION	6			(Descrip			RECOV- ERY	HO.	weatheri	ng, etc., it sig 9	nificant)
0		с	Same	d, > 5% 5 Wish brow e, dry, f: wd.	HI-h	₮					
			Jella	d'sh horord	DL INVEL	./.					
		Jm	Lane.	a dra Pr	are are'	l'I Led					
		,	5000	und.	~~ J.~	(					
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NPIL I	ING LO		DIVISIO	N			INSTALL	ATION	HAAF	;	OF SHEET	,
							10. SIZE	AND TYPE			izer/3"	-
1-10	AAF	Build	ling	728	Phase 311	2 <u> </u>			EVATION	SHOWN (TEM or MS		1
LOCATION	(Coordin	ates or	Station)	/	2.4			101071107	1/1	MSL GNATION OF DRILL		
DRILLING	AGENCY	Save	mm	they l	511		12. MAN	JFACTURE	- R 3 DE31	NA	-	
		$-\mathcal{M}$	+E				13. TOT	AL NO. OF	OVER-		UNDISTURBED	7
and file nu	(As show mbec)	n on dra	wing titl	14-5	2 <u>28 - 14</u> .	A35					Ø	
. NAME OF			71	1 11 1	-0 -11			AL NUMBE			•	-
		<u>G.</u>	Kow	<u>ell</u>			15. ELE	ATION GR			COMPLETED	-
DIRECTIO		- 2			DEG. FR	OM VERT.	16. DATI	EHOLE		-16-95	6-16-95	
								ATION TO				_
. THICKNES				4"						Y FOR BORING	· · · · · · · · · · · · · · · · · · ·	×
DEPTH DA							19, SIGN	ATURE OF		Ŵ		
. TOTAL DE	PTH OF	HULE	<del></del>	/	FICATION OF		<u> </u>			REM	ARKS	1
ELEVATION	DEPTH	LEGEN	D	- UL A331	(Descripti	on)		RECOV- ERY	BOX OR SAMPLE NO.	(Drilling time, w weathering, etc.	ater loss, depth of	
0	ь	د			d			•	<u> </u>		1 Dat 11"	┈╁
	-	1		Nax	ample					Auger red	usal at 4". e taken	ŀ
	-	1			sample @ 4"		,			no Samp	121-2	Ł
		1		eon	@ 4"							Ŀ
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									Hole I		728- HA
DRILL	ING LO	G	VISION	·		INSTALL			AF		SHEETS
1. PROJECT	LAAF	Buil	dine	728 Ph	ase I	10. SIZE	AND TYPE	OF BIT	HAN TEM or	HISL)	/3"
2. LOCATION	Coordin	ates or Sta	tion) (	rah GA		12. MANI	JFACTURE		HSL INATION OF DRI		
3. DRILLING	AGENCY	Mt				13. TOT/	AL NO. OF	OVER-	NA IDISTURGED	UNDI	TURBED
4. HOLE NO. and file nu	(As shown	n on drawi	ng title	H728-	HA36		NL NO. OF				0
5. NAME OF	DRILLER	G.	Rov	ell			AL NUMBE				
6. DIRECTIO		.Ε		DKG.	FROM VERT.	16. DATI			6-16-95		16-55
7. THICKNES	S OF OVE	ROURDE	N	6"			ATION TO		FOR BORING		*
8. DEPTH DR	ILLED IN	TO ROCK				19. SIGN	ATURE OF	INSPECT			
9. TOTAL DE	EPTH OF	HOLE		6″		<u> </u>		well		EMARKS	
ELEVATION	рертн Ь	LEGEND	C		N OF MATERI ription) d	NLS	% CORE RECOV- ERY	SAMPLE NO.	(Drilling time, weathering,	weter loss, etc., if sign g	
a .			•						Auger ro 6". Ro taken,	fuse	at E
				No Sam	1010				6". N.	5ant	E
	-		Ec	BQ 6"					Jacour		E
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Hole No. 4728 - HA37

				INSTALL	ATION		11	SHEET /	٦
DRILL	ING LO		VISION				HAAF	OF   SHEETS	4
1. PROJECT		<u> </u>	, JJO PLANT	10. SIZE	AND TYPE	OF BIT	HAND AUC SHOWN (TBM or M	zer / 3"	-
H A.	AF Coordin	Ju. D. l	ug 728-Phase I Savonnah GA	1		M	s (		
				12. MANU	JFACTURE	P'S DESIG	ATION OF DRIL	.L	
3. DRILLING		VNY		13. TOT/	L NO. OF		DISTURBED	UNDISTURBED	-
4. HOLE NO. and file nu	(As show mbsc)	n on drawl	No 11110 H728-HA37		AL NUMBE				-
5. NAME OF					ATION GF				1
6. DIRECTIO	_	-		16. DATI	EHOLE	STA	RTED -16-95	4-16-95	
VERTI			DEG. FROM VERT.		ATION TO				-
7. THICKNES	S OF OVE	ERBURDE	N 6.0'				FOR BORING		
8. DEPTH OF	RILLED IN	NTO ROCK		19. SIGN	ATURE OF	INSPECT	ORAN		
9. TOTAL DI	PTH OF	HOLE	6'	<u> </u>		Kowe BOX OR		MARKS	-
ELEVATION	DEPTH	LEGEND	• • • • • • • • • •		RECOV-	SAMPLE NO.	(Deilling time, ) weathering, •	water loss, depth of itc., if significant	
	Ь	<u> </u>	50. 0 (507 5' 14 1.1	.+	<b>-</b>				F
ł		]	Sand (50% 5:14, 1:91 Yellowish brown, 10xR loose, dry, fine grained round.	6/4					E
Į		Sm	loose, dry, fine grained	9, "					Ē
			round.	•					F
	=	-							╞
	/		Same as Above	,					F
	] =	-					1		E
	-	Sm							E
	=								E
1	7	<b> </b>		<u> </u>	<b> </b>	<u>                                      </u>			
		1	Sand, Pale yellow, 2.51 8/2, Loose, moist fine grained, round	10.1					F
	=		2.51 8/2, (00 Je, moist	, vevy					Þ
1		3~	fine grained, round	1					F
1	-	]							F
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	6-		E.O. B. @ 6.0.	<u></u>			······································	<u> </u>	F
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								Hole N	. H728-HA
	ING LO		VISION		INSTALL	ATION	HA	AF	SHEET / OF / SHEETS
					10 SIZE				
<del>. раојест</del> Н А.	AF '	Build	ing	728-Phase I	11. DATU	M FOR EL	EVATION	HAND AU SHOWN (TBM or H	SL)
LOCATION	(Coordin	ates of Sta	tion! mu	nh GA	12. MANU	FACTURE		INATION OF DRIL	L
. DRILLING	AGENCY	m+	Ē		12. 707	L NO. OF	DVER.	1 DISTURBED	UNDISTURBED
HOLE NO.	(As show			1020 11 130	BURI	DEN SAMPI	LES TAKE		Ø
S. NAME OF		0 0		H728-HA38			R CORE B		
. DIRECTIO		<u> </u>	owe				ISTA	RTED	COMPLETED
VERTIC	CAL	INCLINED		DEG. FROM VERT.				-18-95 E 19.8	6-18-95
THICKNES				3.5			OP OF HOI	FOR BORING	<u>,                                     </u>
DEPTH DR						ATURE OF	INSPECT	08/	
, TOTAL DE	PTH OF	HOLE		3.51			Sowe		
ELEVATION		LEGEND		CLASSIFICATION OF MATERI (Description)		* CORE RECOV- ERY	BOX OR SAMPLE NO.	RE (Driffing time, s weathering, s	MARKS mater loss, depth of to., if significant) 9
a		¢	500.0	al 1500 silt dark	grai				
	-		105	(R 4/1 10030, moin	(J 7,	:			
]		Sou	fine	-d, < 5% 5:11, dark 12 4/1, loose, moist grained, vound.	-				
				J , · · -				-	
	_ =							×	
	(		Sar	nd, light brown :- my, 104/2 6/2, loose, e grained, well rown	sh,				
	-		Fra	24, 104R 6/2, Loose	, moist,				
		Sm	din	e grained, well row	ded.				
	=								
	<u>م –</u>	<b> </b>					<u> </u>		
			54	nne as abo wet	ve				
		5		wet.					
		Sm						•	
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	3			1 Sanda			1		· _ · _ · · _ · · _ ·
	-			No Sample					
1		<b> </b>			<u></u>	<u> </u>	<u> </u>		
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Hole No. H728-HA39

	LING LC		IVISION	INSTALL	ATION	HA	LAF	SHEET 1 OF ( SHEETS	]
I PROJECT			Δ.	10. SIZE	AND TYPE	OFBIT	HAND AL	12, p. 1 2"	
HZ	AAFR	build:	ng 728- Phase I	11. DATI	IN FOR EL	EVATION. M	SHOWN (TEM or MS	5L) (	
		Dor	immah 6A	12. MANU	JFACTURE	R'S DESI	SNATION OF DRILL		1
3. DRILLING	AGENCY	Mt	E	13. TOT	AL NO. OF		DISTURBED	UNDISTURBED	-
4. HOLE NO. and file nu	(As show	n on draw	H728-HA39	BUR	AL NO. OF	LES TAKE	N <u>3</u>	D	4
5. NAME OF			HITCO HUIST		AL NUMBE			- ·	-
6. DIRECTIO	N OF HOL		Rowell			I ST A	RTED	COMPLETED	┥
VERTI			DEG. FROM VERT.	16. DATI			0-18-55	6-18-85	-
7. THICKNES	S OF OV	ERBURDE	N 3.51	J	ATION TO		FOR BORING	<i>&gt;</i>	
8. DEPTH DF	RILLED I	NTO ROC		L	ATURE OF	INSPECT	OR		1
9. TOTAL DE	EPTH OF	HOLE	3,5	<u> </u>		Zowe		IARKS	4
ELEVATION	DEPTH	LEGENC	CLASSIFICATION OF MATERIA (Description)	LS	RECOV-	BOX OR SAMPLE NO.	(Drilling time, w	wter loss, depth of c., il significant	
0	<u>ь</u>		a lucidad ava	1:36				<u> </u>	╞
	=		sand, very dart gray brown, 104x 3/2, Loose fine grained, round	dery					E
	<u> </u>	5m	fine grained, roun	0					E
									F
									E
	_	1	Sand, g'varist brown 164/25/2, bose, moist, fire grained, vound.	$\sim$					E
		SIL	fire orgined cound						F
	-		grander, vouroe.						E
	7 =	1					· · · · · · · · · · · · · · · · · · ·		E
			Some as above						F
	=		Some as above wet.			-			E
		JM							F
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	<u></u>		No Sample						E
			100 Samp -						E
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		ł	E.O.B. @ 3.51						E
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									Hole	No.	H726-	H./1
	ING LO		VISION			INSTALL	ATION	HA	AF	į	INEET L DF L SHEE	TS
PROJECT				· · · · · · · · · · · · · · · · · · ·		10. SIZE	AND TYPE			Auge	w/3"	
14	AUF	Bu:	ding	728-PL	use I	11. DATU	IM FOR EL	EVATION	HAND SHOWN (TEM)	or MSL)	<u> </u>	
LOCATION	(Coordin			ah 6A		12. MANU	FACTURE	R'S DESIC	NATION OF D	RILL	<del>_</del>	
DRILLING	AGENCY	Mt						M		<u> </u>	INDISTURBE	
. HOLE NO.	(Ae show	•			y allow	13. TOTA BURC	L NO. OF	ES TAKE	N <u>3</u>		0	
end file nu				H728-	HATY		L NUMBE				•	
		G.K	owel	<u>v                                    </u>		15. ELE	ATION GR		TER	31	PLETED	
S. DIRECTIO				DEG	FROM VERT.	16. DATI			0-18-95		-18-55	
1							ATION TO					
. THICKNES				3.5			AL CORE P		FOR BORING			
, TOTAL DE	_			3.5'		19. 516 16	G	- Pou	nel .			
ELEVATION			c	LASSIFICATIO	N OF MATERIA	ALS	% CORE RECOV- ERY	BOX OR SANPLE NO.	(Drilling tin weatherin	REMARK	S Iosa, depth o eignificant)	r
a	<u>b</u>	c			d		•	F		g		
	-	ł	silt	y sand,	5% 5:11,	very						E
	-	SM	dari	y sand, k gray, ist, Dine	104K3/1, (	003e						È
		1.21	000	JY, Pive	grained,	Yound						F
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	'			we as	above							
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	-	1		E.O.B.	@ 3.5	1						ļ
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<u>_</u>				LINEYAL	ATION			H728-HA
DRILL	ING LO		VISION	INSTALL	$\mathcal{H}$	AAF		OF SHEETS
			- 01 -	10. SIZE	AND TYPE	OF BIT	HAND Aug SHOWN (TEM or M	ev / 3"
HAA	F Bui	bing	728- Phase I	11. DAT	JM FOR EL	evation. MS		iL) /
LOCATION	(Coordin	aton or Sta	728- Phase I annah GA	12. MAN	FACTURE		INATION OF DRILL	•
. DRILLING	AGENCY	Mte	E	1		NI	1	
		VVIA		13. TOT	AL NO. OF	OVER-	N 7	
And file num	(As show nbec)	n on drawt	H728-HA41					· · · ·
. NAME OF		0	Rowell		AL NUMBE			
			rowell					COMPLETED
			DEG. FROM VERT	16. DAT	EHOLE	6	-18-95	
7-					VATION TO	OP OF HOL	E 21.57	, 
. THICKNES							FOR BORING	
DEPTH DR				19. SIGN	ATURE OF			
TOTAL DE	PTH OF	HOLE	3'		<u>G</u>			ARKS
ELEVATION	рертн	LEGEND	CLASSIFICATION OF MATERI (Description)	ALS		BOX OR SAMPLE NO.	(Drilling time, w	eter loss, depth of G, if significand
<u> </u>	<u>b</u>	c	d		•	- <del>(</del>		0
	=		sand, (5% 5% H, very de quayish brown, 10x/3/ moist, fine quained,	ark				
			grayion brown, 10x/3/2	2, (0050				
		Sm	moist, time grained,	vound.	l			
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	ING LO		VISION		INSTALL	ATION	H	4AF	SHE	SHEETS
DOOLECT					10. SIZE			HAND SHOWN (THE C		13"
HAN	IF B	uilding	2 72	8. Phase I rah 6A	11. DAT	JN FOR EL	EVATION M S	SHOWN (TEN a	MSC)	
LUCATION	(Goordin		avan	rah 6A	12. MAN	UFACTURE	ER'S DESIG	NATION OF D	RILL	
3. DRILLING		Mte			- 13. <u>TOT</u>	AL NO. OF			UND	STURBED
4. HOLE NO. and file run	(As shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the shown the sh	n o <del>n</del> drawl	ng title	H728- HA42		AL NUMBE				<u>0</u> ,
5. NAME OF	DRILLER	G.K	lowel	D		VATION GE			3'	•
		.E			т. 16. DAT	EHOLE	STA 6	-18-95	COMPLE	8-55
7. THICKNES				3.5		VATION TO			2.51	
B. DEPTH DR						AL CORE P		FOR BORING		
. TOTAL DE	PTH OF	HOLE		3.51			Row			
ELEVATION		LEGEND	Ċ	LASSIFICATION OF MATE (Description)	RIALS	T CORE RECOV- ERY	BOX OR SAMPLE No. f	(Deilling the	REMARKS e, weter lose, i, etc., it sign c	depth of ilicant)
	<u>ь</u>	¢	<'H	sand, 15% 5:14, V						
			dorl	gravish brown.	104R 3/2					
		SM	1005	e, moist, fine gras,	nel,					
	_		Sulli	ound to round.	·					
	1	<u> </u>						<u> </u>		
	` =		5:1ky	Sand 5-1070 5: dark gray: Th b 23/2, loose moist, ned, vound.	r,					
	_		1041	2 3/2, loose moist.	Rine					
		JUM	gra;	ned, vound.						
	Ξ									
	ι		chile	w/ 5:14, <5% sand, black, 104R 2/1, wity, wel,	2590					· · · · · · · · · · · · · · · · · · ·
		high	clark	black, 104R 2/1,	soft,					
		ml	* plast	icity, wel,	•					
1	_									
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	1			No Sample						
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				E-0.B.@ 3,	5'					
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		<u> </u>		1			Fiele No.	SHEET I
DRILL	ING LO	C DI	VISION	INSTALL	ATION	_H	AAF	OF ; SHEETS
			720 li +	10. SIZE		OF BIT	HANN AUS SHOWN (TOM or MSL	er/3"
H.	AAF	Build:	ng 728. Phase I Sonnah GA			SVATION	MSC	~ ·
		<u> </u>	Vonnah GA	12. MANU	FACTURE	R'S DESIG	NATION OF DRILL	
3. DRILLING	AGENCY	MZE	<u> </u>	13. TOT	AL NO. OF			UNDISTURBED
4. HOLE NO. and file nu	(Ås show mbæ)	n on drawl	H728-HA43	ļ				0
S. NAME OF	DRILLER	CR	owell		AL NUMBE			
6. DIRECTIO	N OF HO		ower	16. DATI		ISTA	TED C	OMPLETED
WVERT			DEG. FROM VERT.	<b></b>	ATION TO		-18-95 E 22.63	6-18-55
7. THICKNES	S OF OV	ERBURDE	N <u>3</u> .0				FOR BORING	- *
8. DEPTH DF			<		ATURE OF	INSPECT		
9. TOTAL DE	EPTH OF	HOLE	CLASSIFICATION OF MATERIA		G. R x core		REMA	ARKS
ELEVATION		LEGEND	(Description)	~~~	% CORE RECOV- ERY	SAMPLE NO.	(Drilling time, we weathering, etc.	ter loss, depth of , if significant)
C	b		5:144 sand, 10% 5.14				·····	
	=	4	dork gray, 104/2 4/1. 100	se .	~			
		Sm	dork gray, 104R 4/1, loc moist, Sine grained, ro	und.				
1		<b> </b>				···· , ····		
	` =	1	same as above					
	=	SM						
	L =							
	<i>V</i>	<u> </u>	Sandy Silt, 10-1500 Rin Sand, Very dark Drown,		<b>.</b>			
		]	Sand, very dark drown,	104/2				
		m	z/z, moist,					
•	=	1						
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							Hole N	lo. H728.HA		
	ING LO	_	VISION	INSTALL		HAA	F	SHEET / OF / Sheets		
PROJECT		<u> </u>	Wing 728 - Phase I and GA	10. SIZE	AND TYPE	OFBIT	HAND A	uger / 3"		
<u> </u>	AAF	<u> </u>	Wing 728 - Phase I	11. DATU	IM FOR EL	EVATION.	SHOWN (TBM or )	ansly /		
LOCATION	(Coordin)	etes or Sta WMM	ah GA	12. MANU	FACTURE	R'S DESIG	NATION OF DRI	ĻL.		
DRILLING	AGENCY	1Mt	-E					UNDISTURBED		
HOLE NO.	(As show		ne title	BUR	EN SAMPI	OVER-	N 5	Ø		
and file num			H728-HA44			R CORE B		<u> </u>		
•		<u>G.R</u>	owell	15. ELE	ATION GE	IOUND WA	TER 5	COMPLETED		
DIRECTION			DEG. FROM VERT.	16. DAT	E HOLE	- î	-18-55	6-18-95		
<i>—</i>				17. ELE	ATION TO	P OF HOL	.e 23.2	21		
. THICKNES							FOR BORING	%		
DEPTH DR			5'			INSPECT	OR			
, TOTAL DE			CLASSIFICATION OF MATERI		* CORE	BOX OR	(D-III) a store	MARKS weter lose, depth of		
ELEVATION		LEGEND	(Description) d		ERY	SAMPLE NO. f	weathering,	stc., if significant		
	<u>_</u>	<u> </u>	France home love	//2						
	11		Sand brown, IOVR ( loose, dry, fine gra vound.	12,						
		Sm	Vound , Fine gra	inco						
		.د								
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	1		same as above							
			Jame as above mo:st.							
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	3		sandy 5:14, 1090 Jan	-define)						
			black, INYR 2/1, moist	, Joff						
		mC	The second second second second second second second second second second second second second second second se	,						
		]								
	<u>ل</u>	<u> </u>			<b> </b>	<b>_</b>				
1			silty Sand, 10% silt,	very						
		1	dark brown, 104R2/2,	fine						
		Sm	grained, round,							
÷	_	1								
	5-	1			<u> </u>					
	<u> </u>	1	E.O. B @ 5.	0'						
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							Hole No.	H728-HA
DPILI	ING LO		VISION	INSTALL	ATION	HAN	9F	SHEET / OF / Sheets
			<u> </u>	10, SIZE	AND TYPE	OF BIT	HAND AUG SHOWN (TEM & MSL	
HA	HF B	uib:	6728-Phase I	TI. DATU	IM FOR EL		shown (tem or mee 15 C	
LOCATION	(Coordin	etes of Sta Savi	annah 6A	12. MANL	FACTURE	R'S DESIG	NATION OF DRILL	
DRILLING	AGENCY	M4					A	UNDISTURBED
HOLE NO.	(As show	-		13. TOT/	ND NO. OF	ES TAKE	N 5	0
				14. ТОТ/	L NUMBE	R CORE 8		•
NAME OF	DRILLER	G.R	owell	15. ELEN	ATION GR		<u> </u>	
DIRECTIO		.E		16. DATE			0-18-95	0MPLETED 6-18-95
THICKNES					ATION TO			- 3
DEPTH DR					AL CORE P		FOR BORING	
, TOTAL DE			55		G. R.			
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERI (Description)	ALS	% CORE RECOV- ERY	BOX OR SAMPLE NO. f	REMA (Drilling time, wai) weathering, etc.	er loss, depth of
a	<u>b</u>	¢	J: 114 Sand, 20% J. 14,	hl.k	•	······		
			JULY 2/1 LAND MOST	L Pipe				ļ.
		SM	loyR 2/1, Loose, moisi grained, round	, -, •, •				F
		Sm						Ē
	=							
	1		Sand (59, silt, da gravish brown 104R loose, moist, Line gre subround	,K				E
			svovish brown 104R	4/2	•			
		Sm	loose, moist line are	ined,				ł
	_		Subvound					ļ.
	,	1						
	L		Jame davk gray, 10 moist, Loose, line gr vound.	IR 4/1,				
		]	moist, Loose, fine gr	aired,				ļ
		Sm	vound.					F
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			some as about	e				E
		Sm						
	=	1						l l
	4 —	<b> </b>	1	. <u></u>				
	' =	1	Sandy silt, 10070 same	5-0				4
		me	block, 104R2/1, moi	17, 3047	1			
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	-	1	No Sample					ŀ
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	=	1	E.O. B @ 5.5'		1	1	·	E
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		1.01	VISION	INSTALL	ATION		Hole No.	H728-
DRILL	ING LO		4 IA(A4			HA	JAF	OF SHEETS
PROJECT		<u>_</u>	The Pl T	10, SIZE	AND TYPE	OF BIT	HAND AN SHOWN (TEM or MS	yev / 3"
HAA	F Bu	1 10 - 19	7728 - Phase I	-	M FOR EL		shown ( <i>18m of m</i> s) 15 L	<b></b> ,
LOCATION	(Coordin	500 gr 310	728-Phase I Normanh GA	12. MANU	FACTURE		NATION OF DRILL	
DRILLING	AGENCY	Miti					HA IDISTURBED	UNDISTURBED
And file num	(Ae show		ind title		L NO. OF	OVER-	N 5	Ø
						R CORE B	OXES	,
NAME OF L	RILLER	G.Roi	sell	15. ELE	ATION GF	ROUND WA		
DIRECTION				16. DATI	HOLE		RTED 10	6-18-95
VERTIC	:AL 🔲	INCLINED	DEG. FROM VER			OP OF HOL		
THICKNES	S OF OV	ERBURDE	N 5.0				FOR BORING	- 1
. DEPTH DR	ILLED H	NTO ROCK	· -		ATURE OF	INSPECT		
, TOTAL DE	PTH OF	HOLE	5'			well		
	DEPTH	LEGEND	CLASSIFICATION OF MATER (Description)	ALS	1 CORE RECOV-	BOX OR SAMPLE NO.	(Drifling time, we	ARKS iter loss, depth of ., if significand
a	Ь	c	d		•	ľ.		9
	_		Silty sand, 15% 5.	H. Wark				
1	_		10 YR 2/1 Lorrie dur.	fine				
		5m	10 YR 2/1, loose, dry, grained round.					
	-	1						
	, _	<u>  :</u>						
	' =		Jand, (5% J. H, do grayish brown, 104h Loose, moist, fiar g round.	VK				
	_		grayish brown, 1042	4/2,				
		Sm	loose, moist, diar g	raines				
		1	V. Janes i				•	
	2-	1					· · · · · · · · · · · · · · · · · · ·	
	-	1	Same as abou 10YR3/1, very da	<i>م</i>				
	=	Sim	JOYR3/1, very da	rk gray				·
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:	3-	<u>+</u>	A					
	-		same as about	,				
		SM						
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	τ		Soundy 5:14, 10704	Ine				
		ML	Sand black, WYR	2/1,				
		3	sand black, 10YR Wet soft		ĺ			
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Hole No. <u>H728-H447</u>

			DIVISION	INSTALL	ATION	HA	NE	SHEET /	1
DRILL	ING LO	ж				77		OF / SHEETS	-
1. PROJECT		<b>h</b> o		10. SIZE	AND TYPE	OF BIT	HAND ALL SHOWN (TEM or MS	azer / 3"	4
41	4AF	Bu:	ding 728. Phase I mak GA	111. DATI	UM FOR EL	EVATION	SHOWN (TEM or MS		
2. LOCATION	(Coordin	ates or S	mah (A)	12 MAN	UFACTURE	R'S DESI	SNATION OF DRILL		-
3. DRILLING	AGENCY	Jave					NA		
3. 01.1201.10	1	Mte		13. TOT	AL NO. OF	OVER-	IDISTURSED	UNDISTURBED	1
4. HOLE NO.	(As show	m on dra	H72B-HA47	BUR	DEN SAMPI	LES TARE	N 3	D	-
S. NAME OF			1740-11747	14. TOT	AL NUMBE	R CORE B		•	4
S. NAME OF	URIECEN	S. ho	weel	15. ELE	VATION GE	ROUND WA			1
6. DIRECTIO				16. DAT	EHOLE			COMPLETED	
			D				-18-95		4
7. THICKNES			EN 3.0'		VATION TO			4	-1
8. DEPTH DR				18. TOT	AL CORE P	RECOVER	Y FOR BORING		
			3'	19. SIGN	G. Ro	inspect	0R		
9. TOTAL DE		HOLE		1			REM	ARKS	1
ELEVATION	DEPTH	LEGEN	D CLASSIFICATION OF MATERIA (Description)	ALS	RECOV-	BOX OR SAMPLE NO	(Delling time, m	eter loss, depth of , if significant)	
	ь	c	d		1 •	1		9	
			silling I word silf		·				E
ł	=	1	5:14 sand 10% 5:14, dork gray ish brown, 3/2, loose, dry, fine gi round.	INA					F
	-	-	down giving ish wown,	in the second					<b>F</b> -
		300	SIC, Loose, any, fine g	vaived,					
		1	vound.						E
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	` <u> </u>	-	Same as above, 1	noist					F
		1	Jave C	• /					E
		Sm							
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							Hole No	<u>H728-HA9</u>	۳ ۲
DRILL	ING LC		VISION	INSTALL	ATION H	AAF		SHEET ; OF / SHEETS	;
				10. SIZE	AND TYPE	OF BIT	HAND A	user / 3"	
1+A	AFR	mible	14 728 - Phase I	11. DAT	IM FOR EL	EVATION	SHOWN (TBH or MS	L)	
2. LOCATION	(Coordin	ates or St	ng 728-Phase I privah GA						
3. DRILLING	AGENCY			-112. MANU	JFACTURE	ER'S DESIC	HATION OF DRILL		
4. HOLE NO.	(As show	Mf	and a second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s	13. TOT	AL NO. OF	OVER-	N 5		
and file nu 5. NAME OF	enb ec)		17 728-HA 98	14. TOT	AL NUMBE	R CORE B	the second second second second second second second second second second second second second second second se	'	
		<u>G. K</u>	well	15. ELE	VATION GF		0-0	COMPLETED	-
6. DIRECTIO			DEG. FROM VERT	16. DAT	E HOLE	6	-19-95	6-19-95	
7. THICKNES					VATION TO			·	-
8. DEPTH DR					AL CORE F		FOR BORING		-
9. TOTAL DE			5.5'		-	owel			
ELEVATION		LEGEND	CLASSIFICATION OF MATER	ALS	% CORE RECOV-	BOX OR SAMPLE NO.	REM (Drilling time, w	ARKS eter loss, depth of C., if significand	
d	Ь	G	(Peecription) d		ERY •	NO. f	weathering, etc	s, if eignificent)	
			Sand Jollow INVR;	7/6.					F
	=	1	Sand, yellow, 10% ? Moist, Loope, fine gra round.	ained					E
		Jam	Moist Coope, a me fre	incer;					E
			I tourne.						F
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		<u> </u>	d i Palati						~Þ
			sand, very pale brown 104R 7/4, moist, losse, Pine grained, round	n,					E
	-	1	10 YR 7/4, moist, (0039	very					E
		Sm	tine grained, vound						E
		-							F
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	2-		same as above.						
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		Sm	· · ·						$\vdash$
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		1	same as above		i				E
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	1110 1 01		VISION	INSTAL		HAAF	-	SHEET / OF SHEE
DRILL	ING LOC	<u> </u>					HAnd	fuger 13"
1. PROJECT	15 [	3.11	elsing 728. Phase I	11. DAT	UN FOR EL	EVATION	SHOWN (TBM or M	SL)
2. LOCATION	(Coordine	tes or Sta	tion) 21	1		MS	<u>_</u>	
				- 12. MAN	UFACTURE	R'S DESIG	NATION OF DRIL	L
3. DRILLING	AGENCT	INTE	-	13. TOT	AL NO. OF		DISTURBED	UNDISTURBE
4. HOLE NO. and file num	(As shown							0
S. NAME OF			14728-HA49		AL NUMBE			
g. NAME OF	priceon	G. F	nowell	15. ELE	VATION G			COMPLETED
6. DIRECTION		Ē			E HOLE	1	17ED 2-19-95	6-19-95
VERTI		NCLINED	DEG. FROM VERT		VATION TO	·····		>
7. THICKNES	S OF OVE	RBURDE	N 5.0				FOR BORING	
8. DEPTH OR	ILLED IN	TO ROCK			ATURE OF	INSPECT	9月/	
9, TOTAL OF	PTH OF H	OLE	5-0			owle		
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERI (Description)	AL\$	RECOV-	BOX OR SAMPLE NO.	(Driffing time, )	WARKS nater loss, depth of Ic., if significant)
a		c	d		ERT •	но. 1	weathening, a	9
			sand uplowish how	Ω		1		
	1		Jand, yellowish broz 104R 5/4, Loose moist five grained vound					
		sm	five arcined sound	{				
	-	-	June Voure	•	1			
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			1 , note his	. Ar-				
			Sand, very pale bro 10 1/27/3, 10050, moisi Sine grained, round		1			
		~ M	10 1/27/3, (0050, moisi	, very				
		-3 / C	Pine grained, round	,				
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ŧ	<i>۲</i> –		Jame as above					
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Hole No. 1928 - HASØ

·			NIVISION		INSTAL	ATION	11	4AF	SHEET	
DRILL	LING LO	G					111	1 .	OF ) SHEET	늬 .
1. PROJECT		~		770 AL - T	10. SIZE	AND TYP	E OF BIT	HAND	Auger / 3"	
1-1	AAF_	<u>1)u;</u>	ld:ng	728-Phase I		UM FUR EI	MS	4		
Z. LUCATION	4 (Coordin	50	Jonn	ner GA	12. MAN	UFACTURI	ER'S DESI	GNATION OF DRIL	L	1
3. DRILLING	AGENCY	MN					N	DISTURBED	UNDISTURBED	4
4. HOLE NO.	(Ae ahow	-			13. TOT	AL NO. OF Den samp	LES TAKE	IN 4	0	_
			4	1 11 100 1101 -1	14. TOT	AL NUMBE	R CORE E	IOXES		_
S. NAME OF	URICEER	G.K	avel	19	15. ELE	VATION G		7.0		_
6. DIRECTIO	N OF HOL	LE			16. DAT	E HOLE	ST A	6-19-95	COMPLETED 6-19-55	
<b>WVERTI</b>		INCLINE		DEG, FROM VERT.	- 17. ELE	VATION TO	OP OF HO		····	٦
7. THICKNES	S OF OVE	ERBURD	EN	4.51	18. TOT	AL CORE I	RECOVER	Y FOR BORING		2
8. DEPTH DE					19. 5IGN	ATURE OF				
9. TOTAL DE	EPTH OF	HOLE		.5	1	(	COWEL		ARKS	-
ELEVATION	DEPTH	LEGEN	• •	CLASSIFICATION OF MATERI (Description)	ALS	RECOV-	SAMPLE NO.	(Drifting time, w	neter lose, depth of c., if eignificand	
a	<u>b</u>	c		<b>d</b>		•	<u>  '</u>	,	9	$\pm$
	-	1	Sam	I yellow sh brows	$\hat{J}$					F
	=	1 _	10	YR 5/4, Loose, mois e grained, round.	ト					E
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	·	1	Sau	nd, very pale brown l 7/3 loose, moist e grained, round,	n,					E
	_		104	7/3 Loose, Moist	very					E
		Sin	Find	e grained, round,						
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		1		reas above, we		ł				F
	-	JIN		Light gray, 2.517,	12			•		E.
		5/10								F
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		1		No Sample						F
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			<b>.</b>	E.O. B.C.4.5'						F
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									<u>H</u>	ole No.	17700	
DRILL	LING LO		VISION			INSTALL		11.1	AF		SHEET (	HEETS
1. PROJECT		<u> </u>		772 AI		10. SIZE	AND TYPE	OF BIT	HA NO	1 Aug	jer/	39
H	AUF	Buil	d'in	728 Mas	e	11. DATU	IM FOR EL	EVATION $M\zeta$	SHOWN (18	n of MSL)	v	1
2. LOCATION	N (Coordin		tation) MM	728. Phas.		12. MANU	FACTURE	R'S DESIG	NATION OF	DRILL		
3. DRILLING	AGENCY	M+1				13. TOT/	L NO. OF			ED	UNDISTU	
4. HOLE NO. and file nu	(As show	m on drai	ving title	H7728-	HASI	ļ	L NUMBE				<u> </u>	· ·
5. NANE OF	DRILLER	G.R	(DI) PH			1	ATION GR			4.5'	<u></u>	
6. DIRECTIO	N OF HO	LE		<u> </u>		15. DATI			RTED 0-19-9		MPLETED	
	CAL	INCLINE			ROM VERT.	17. ELE	ATION TO			6.17	<u> </u>	
7. THICKNES	SS OF OV	ERBURD	EN	4.5'	<u> </u>				FOR BORI			×.
8. DEPTH DE			:к				ATURE OF		ØR			
9. TOTAL DE	EPTH OF	HOLE	1	4.5'		1	<u>G. Ro</u>			REMA		
ELEVATION		LEGEN		CLASSIFICATION (Descrip	OF MATERIA Mion)	AL\$	RECOV- ERY	BOX OR SAMPLE NO. f	(Drilling weathe	time, wete ring, etc., g	if eignifice	th of nt
			+	1 1: 1.4	· · ·	/						E
	=	1	1 bir	on, 104R 6; e grained,	11 Loose	moist						E
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DRILL	ING LO	<b>x</b>	VISION		INSTALL	ATION	HAD	AF	SHEET	,
				700 11 -	10. SIZE	AND TYPE	OF BIT	HAnd,	Auger/ 3"	
Н	AAF	Bui	dia	728- Mase I	TIL DATI	IN FOR EL	evation. MS	SHOWN (TBM or	MSL) (	
2. LOCATION	(Coordin	ates or St.	n alr	5728-Phase I GA	12. MAN	FACTURE		SNATION OF DRI	<u>LL</u>	4
3. DRILLING	AGENCY	1 1 1 1	<u>, , , , , , , , , , , , , , , , , , , </u>		1		N.	4	· .	_
	74	MA			13. TOT	L NO. OF	OVER- LES TAKE	N DISTURBED	UNDISTURBED	
4. HOLE NO. and file nu	(All anow			H728-HA52			R CORE B		i	7
S. NAME OF	DRILLER	0	howe	210		ATION GR			• /	
6. DIRECTIO	N OF HOI		cowe		16. DATI			RTED	COMPLETED	٦
	CAL []	INCLINED		DEG. FROM VERT.	L			6-19-95	6-17-95	
7. THICKNES	S OF OV	ERBURDE	N.	5.01	i	ATION TO				-
. DEPTH DP				~		ATURE OF		Y FOR BORING		-
, TOTAL D				5'	]	<u>G. 1</u>	Sowll	//		
ELEVATION	DEPTH	LEGEND		CLASSIFICATION OF MATERIA	ALS	% CORE BOX OR RECOV- ERY NO. weathering,		Ri (Drilling time, weathering.	REMARKS s, water loss, depth of , etc., if eignificent)	
a	ь	c		d		•	f		9	4
	-		Jan	d brown, 104R 51 moist, fine grain	3, .		-			Ī
		1	100	& Moist, fine grain	ied,					ŀ
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	' =		Sa	me as above						
:	=		vertt	me as above Date brown, 104/27/3	,					
		Sm		·						
	=	1								
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	=	1	Sar	very pale br v/k 8/2, loose, mc: 2 vy fine grained, v	own					
	=		(0	YR 8/2, Loose, mc. 3	it, n					
		] 5 M	Υe	wy fine grained v	ound					
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Hole No. H728-HAS3

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		DI	VISION	INSTALL	ATION	HA	NE	SHEET I	]
DRILL	ING LO	G				11.1		OF I SHEETS	4
1. PROJECT		0 1		10. SIZE	AND TYPE	OF BIT	HAND Aug SHOWN (TEM or MS	ev / 3"	1
HU	AAF	<u>Duib</u>	ing 728- Phase 7			M	56	•	
		N	Nonnah GA	12. MANU	FACTURE	R'S DESIG	A OF DRILL		1
3. DRILLING	AGENCY	M+E	,			· · · ·		UNDISTURBED	
4. HOLE NO. and file nu	(As show		the title	BURI	NO. OF	LES TAKE	N 5	0	J
			H728-HA53	14. TOT		R CORE B	OXES	-	
5. NAME OF	DRILLER	G.R	owell	15. ELE	ATION GR	IOUND WA	J		
6. DIRECTIO		.E		16. DAT	EHOLE		NTED 19-95	00000000000000000000000000000000000000	
	CAL []	INCLINE	D DEG. FROM VERT.					61175	
7. THICKNES	S OF OVE		in 5.0'				FOR BORING	- 8	1
8. DEPTH DR					ATURE OF	INSPECT	OR		1
9. TOTAL DE	EPTH OF	HOLE	5'	]	G.	Rowe	<u> </u>		
ELEVATION		LEGEND	CLASSIFICATION OF MATERIA	LS	& CORE	ISAMPLE	REM: (Drilling time, we	ARKS iter lose, depth of ., if eignificent)	
	Ь	c			ERY	NO. f	weathering, sto	s, if eignificent	
0	<u> </u>	⁻	Sand Yellow, 1048 loose, down, Line gre round,	z lia					E
		1	Sector yes plus, 10 fire 1						E
		3m	loose, doing, tine gro	Culy			•		E
	=	5.00	Cart,						E
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	(- <u>-</u>		- 1 150 sill it is he	10					Е
	=		Sand, 58 5:14, very fe brown, 104/ 8/2, Loose, very P:ne grained, rown	mit					F
		< 4.	brown, 1042 0/2, (005e,	1					F
		Jin	very time grained, rown	0					F
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DPII I	ING LO		VISION		INSTALL	ATION	HAR		SHEET ! OF ! SHEETS		
		·		6 .DI =	10. SIZE	AND TYPE	1 1 1	HANN AC SHOWN (TOM or M			
HA	JF	Build	$\frac{1}{100}$ $\frac{72}{100}$	8- Phase +	11, <b>DAT</b> I	IN FOR EL	SC MS	240 M (13 M of N	NLJ '		
2. LUCATION		<u> </u>	1 much	.8 - Phase I GA	12. MANU	FACTURE	R'S DESI	INATION OF DRIL	L	1	
J. DRILLING	AGENCT	M4E	- 		13. 707/	L NO. OF				1	
4. HOLE NO. and file ma	(As show mbst)	n on drawb	na 11110 H9	28- HA54	ļ	L NUMBE			Ð	-	
5. NAME OF	DRILLER	GK	lowell			ATION GF				1	
6. DIRECTIO	N OF HOL		wee_		16. DATI	- HOLE	STA		6-19-95	7	
		INCLINED		DEG. FROM VERT.	17. ELEN	ATION TO				1	
7. THICKNES					18. TOT	L CORE F	RECOVER	Y FOR BORING	- 1		
8. DEPTH DA				-/	19. SIGN	Rowl		OR			
9. TOTAL DE				FICATION OF MATERIA			BOX OR	Delition date	REMARKS (Drilling time, water lose, depth of		
ELEVATION	DЕРТН Ь	LEGEND		(Description) d		ERY	NO.	weathering, e	to., if significant) 9		
		·	Jand V	ery pale brown	~,					F	
			10 YR 7/3	, very fine g , Loose, moist	vained					F	
		5M	Vound	, Loose, moist	,					E	
	-									F	
	1-			as above,						Ē	
	=		Same	as moore,						þ	
		SM	-							E	
	=									F	
	$\mathcal{V}_{-}$									Ē	
			Same	as above						F	
		SM								F	
					· -					E	
	3_	<b>_</b>					<u> </u>			╞	
			Sume	as above, wet.						E	
		sm		wer.						þ	
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				No Somple						E	
		<b> </b>		E.O.B@ 4.5'	<u>,</u>						
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Dell I	ING LOO		VISION	TINSTALL	ATION	AAF		SHEET ( OF ) SHEET
				10. SIZE		OFBIT	HAND A	user 13"
H,	AAF	Buib	ting 728-Phase I Month GA	11. DATU	IN FOR EL	EVATION	SHOWN (TBM or M	SLJŰ
2. LOCATION	(Coordina	tee or Sta	allon)	12. MANU	FACTURE	• •	ATION OF DRIL	<u>.                                    </u>
3. DRILLING	AGENCY	M+1				NF	7	
4. HOLE NO.	(Å +		na title	13. TOT	AL NO. OF	OVER-	DISTURBED	UNDISTURBED
and file nu	mber)		H728-H1 55	-14. TOT		R CORE BO	XES -	
5. NAME OF	DRILLER	r R	owell			OUND WAT		
6. DIRECTIO	N OF HOL	E		16. DATI	E HOLE		- 19-95	6-19-95
(X) VERTI	CAL 🛄"	ICLINED	DEG. FROM VERT.			P OF HOL		
7. THICKNES	S OF OVE	RBURDE	n 4.0				FOR BORING	
8. DEPTH DR	ULLED IN	TO ROCK		19. SIGN	ATURE OF	INSPECTO		· · ·
9, TOTAL DE	PTH OF H	OLE	<u> </u>		G. Ro			
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERI (Description)	ALS	% CORE RECOV- ERY		REI Deilling time, w weathering, ei	ARKS mater loss, depth of ic., if significant)
a	b	<u>د</u>	d		•	f	- <u></u>	9
			Sand Very pale 6	voun				
		5m	sand very pale b 104R7/3, 100 se, mo very fine grained,	,37,				
			very rine grained,	vound				
	, ゴ		-					
			,					
	・ ゴ	<i>.</i>	, Same as above					
	크	Sm						
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	2 <del>]</del>							
	4 -		Jame Q5 above	<i>•</i>				
	크							
		Sm						
	3-7							
	Ξ		Same as also Saturates	ve				
		sm	Saturated	·				
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	4-		E.O.B. @ 4.0	/				
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								Hole N	10. 1728-HA	130
DRILL	ING LO		VISION		INSTALL		HAF		SHEET / OF / SHEET	rs
1. PROJECT					10. SIZE	AND TYPE	OF BIT	HAND / SHOWN (TBM or	tuger / 3"	
HA1	<u>4F R</u>	Build	ing .	728- Phase I GA	111. DATU	M FOR EL	evation. NS			
		Sove	nuah	614	12. MANU	FACTURE	R'S DESIG	INATION OF DRI	LL.	1
3. DRILLING	AGENCY	NIFE	<i>-</i>		11. 7074	L NO. OF	NA		UNDISTURBED	<del>,  </del>
4. HOLE NO. and file ma				H728. HH 56	BURG	DEN SAMPL	ES TARE	N 6	0	
5. NAME OF				1.100 111 00		ATION GR				-
6. DIRECTIO			vel	, 			1 ST A	RTED	COMPLETED	-1
VERTI			<u></u>	DEG. FROM VERT.	16. DATE	ATION TO		0-19-95 E 37,74	6-19-95	
7. THICKNES	S OF OVE		۲. N	6.0'				FOR BORING	,	
8. DEPTH DR					19. SIGN	ATURE OF	INSPECT			
9. TOTAL DE	EPTH OF	HOLE		6.0		<u>G . R</u>	· · · · · · · · · · · · · · · · · · ·			_
ELEVATION	DEPTH	LEGEND		CLASSIFICATION OF MATERIA	LS	% CORE RECOV- ERY	BOX OR SAMPLE NO.	(Drilling time,	EMARKS water lose, depth of etc., if eignificand	
a	b	<u>د</u>	<b></b>	d			<b>f</b>		9	- <u>L</u>
	=	1	5:11	4 sand, 5% sill, b.	ownish					E
	-	5	Yel	low, 10 4R 6/8, 6005e, e grained, round.	Moist					E
		Jm	fin	e grained, round.						E
]		1	[	U -07 10- 0-						E
	1	<b> </b>	<u> </u>	A _ 1						-E
		1	Jan	d. very pale brow 2813, Loose, moist, 2 grained, round	n,					E
	-	1_	10 y/2	- 8/3, Loose, moist,	very					E
		Sm	Lin	e grained, round						上
	=	1								F
	2-	<b> </b>				<u> </u>				
	-	]	5	me as above	i					F
		SM								F
	_	]								F
		}	1							F
	3-									-F
	-	1	1 5	ump as elsove						F
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		SM		wet						F
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	φ <u></u>			E.O.B. @ 6.01						Þ
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		}								F

									0. <u>H728-HA5</u> SHEET /
DRILL	ING LO		ISION		INSTALL	H	AAP		OF   SHEETS
			ius 7	28- Phase I	10. SIZE	AND TYPE	OF BIT	HAND A SHOWN (TEM or M	nger / 3"
2. LOCATION	(Coordin	ntee or Sta	nah	GA	12. MANU	FACTURE	R'S DESIG	NATION OF DRIL	
3. DRILLING	AGENCY	MAE			13 TOT	L NO. OF	NA OVER.	DISTURBED	UNDISTURBED
4. HOLE NO. and file nu	(As show		a title	1728-HA57	BUR	DEN SAMPL	ES TAKE		0
S. NAME OF		01	well			ATION GE			
6. DIRECTIO	N OF HOL		wea		16. DAT			RTED	6-19-95
			<u> </u>	DEG. FROM VERT.		ATION TO		-19-95 E 37.	
7. THICKNES				5.5	18. TOT	L CORE P	ECOVER	FOR BORING	- 1
8. DEPTH DR				5.5'		TURE OF		OR	
9. TOTAL DE			and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second se	SSIFICATION OF MATERI			BOX OR SAMPLE NO.	RE (Deliting time	MARKS
ELEVATION	DЕРТН Ь	LEGEND		(Description) d		ERY	NO. f	weathering,	water loss, depth of itc., il significant) g
O			Sand	1, 15% silt, yellow	ish				
	=		brown	1, 15% silt, yellan , 104 5/4, Loose, zrained, round	moist,				
1		Son	fine g	grained, round	-				
	-								
	'		5	1 Dale brown 1041	27/3				
			Loose	A pale brown 10%, moist, very & ned, round.	ine				
		Sm	gra:	ned, vound.					
	2				····		<b>-</b>		
	-		2.	me as abor	le l				
		Sm							
	=	1							
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		5m							
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	2	<u> </u>		No Sample			1		
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				E.O.B @ 5.51	<u></u>	<u> </u> .	-		
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Hole No. H728-HA58

			IVISION	INSTALL	ATION	AAF	5	SHEET /	
	ING LO				AND TYPE			OF SHEETS	Η,
I. PROJECT	1= R.	Id .	= 728- Phose F	10. SIZE	IN FOR EL	EVATION	SHOWN (TBM or		-1 (
2. LOCATION	(Coordin	ates or St	+ 728-Phase F			<u>M5</u>			4
3. DRILLING		10000		12. MANI	JFACTURE	R'S DESIG	A		
4. HOLE NO.	(As show	VN4		13. TOT	AL NO. OF	OVER-	N 5		
and file nu	anb ec		H708- HA 38	14. TOT/	AL NUMBE	R CORE B	OXES	•	
5. NAME OF	DRILLER	$G_{\cdot}$	howell	15. ELE	ATION GR		010		_
6. DIRECTIO		.е		16. DATI	<u> </u>	6	-19-95	6-19-95	_
7. THICKNES	S OF OVE	ROURD	EN 5.5		ATION TO		LE <u>37.3</u> Y FOR BORING		× .
8. DEPTH DR	ULLED IN	TO ROC		19. SIGN	ATURE OF	INSPECT			-
9. TOTAL DE		HOLE	5.51		<u>G. R</u>		/		-
ELEVATION		LEGEN	CLASSIFICATION OF MATERIA (Description)	LS	% CORE RECOV- ERY	BOX OR SAMPLE NO.	(Drilling time,	MARKS water loss, depth of stc., if eignificant) s	
a	b	. <u>c</u>			•			<u> </u>	
			hand 1048514 loose	moist					F
		Jon	Sand, (590 silt, yellow brown, 104R 5/4, Loose, five grained, round.	1					F
	1		the grand, I burg.						F
						-			E
	/		s. J p. Do la				<u> </u>		E
	11		sand, very pale brow 104R 8/2, LOOSE, MOIST Very fine grained, v	in,					Ε
		5m	10412 012, COUSC, POIS	mad					E
		0.	very time gound, t	ong.					E(
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,	2								E
			same as above.						E
		Sm							F
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	1		Same as above						F
		sm							F
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	7		same as above						F
		ł	wet.	1					F
		5m							F
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			NO SAMPLE						F
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	11		E.O. B @ 5.51						E
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		וס	VISION	INSTAL	ATION	HAR		No. 4728- 14.
	ING LOG				AND TYP			OF 1 SHE
1. PROJECT	1 Fuild	line	728-Phase I Jonnah GA	10. 312E	UM FOR EI	EVATION	SHOWN (TBM or	MSL)
2. LOCATION	(Coordinates		tion with 6A	12. MAN	UFACTUR		SL .	
3. DRILLING	AGENCY 1/	) NIC		]		N	<u>A</u>	UNDISTUR
4, HOLE NO. and file nu	(As shown on	drewt	ng title	13. TOT	AL NO. OF DEN SAMP	OVER-	N 6	UNDISTOR
and file nu						R CORE B		-
	6.	ho	well	15. ELE	VATION G	ROUND WA	TER (	COMPLETED
6. DIRECTION	AL	.INED	DEG. FROM VERT		E HOLE	6	- 20-95	6-20-99
/*	·····					OP OF HOL		.32
7. THICKNES 8. DEPTH DR						RECOVER	FOR BORING	
9. TOTAL DE			6'	1	S. Rou	nd l		
ELEVATION		GEND	CLASSIFICATION OF MATERI (Description) d	ALS	S CORE RECOV- ERY	BOX OR SAMPLE NO.	R (Drilling time weathering,	EMARKS , water loss, depth etc., if significant 9
0			Sand Jellowish home					
	Ħ		104A 5/6, 60039, MO:3	7,				
	- <u></u> S	m	Sand, yellowish broad 1042 5/6, loose 100:5 Sine grained, vound.	-				
	4		ų -					
	(-]		- 4-10		+			
	=		Same as above.		1			
	- <u>-</u> ]51	m						
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	2		1 1 1 1 1 1	/				
	H		Sand davk yevours	r which	4			
	\$	m	Sand Javk Yellowis brown, 104R 4/4, 1003 fine grained round					
			, vound	•				
	3		·					
	Í T		Same as above	,				
		m						
	4I			<u></u>	<u> </u>			<u></u>
	1 =		same es above					
		in	-					
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j -	5 =		Some as above Baturated.			1		
			Saturated.					
		m						
	6		E.O. B@ 60'					
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DRILL	ING LO		VISION	INSTALL			AF	SHEET / OF ( SHEETS	5
			770 11 -	10, SIZE	AND TYPE	OF BIT	HAN AU. SHOWN (TBM or M	yer /3"	-
HA	<u>AP V.</u>	Ju. 1din	ng 148- Mase I	IN. DATU	IN FUR EL	MS.		,	ł
J. DRILLING	1 (Coordin	Sa	ng 728-Phase I Vanuah 6A	12. MANU	FACTURE	R'S DESIG	INATION OF DRIL		1
		VNtE		13. TOT/	AL NO. OF	OVER-	DISTURBED		1
t. HOLE NO. and file nu	(As show mbst)	n on draw	H 728- HA60	ļ			¥		
5. NAME OF	DRILLER	6. hou	vell		ATION GP	ROUND WA	TER 6'	COMPLETED	
S. DIRECTIO	N OF HOL	"E		16. DATI		6	- 20-95	6-20-95	4
THICKNES	S OF OVE	RBURDE	n 6.0'		ATION TO		E <u>37.34</u> r for boring		
, DEPTH DF				19. SIGN	ATURE OF	INSPECT			-
, TOTAL DE	EPTH OF	HOLE	6'	G					-
ELEVATION	-	LEGEND	CLASSIFICATION OF MATERIA (Description)	NLS	CORE RECOV- ERY	BOX OR SAMPLE NO. f	(Drilling time, s	ARKS meter lose, depth of tc., if significant) g	
0	<u> </u>	<u> </u>	e dist allow h	henne					þ
	=	1	Sand, 1: ght yellow; th	Product,					þ
		Sm	104R 6/4 Loose, moist. Brained, round.	r • 11C					F
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	' <u>-</u>	1	Same as above						ł
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		SM							ł
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	2	<u>}</u>	i la ha						
	=		Sand, very pare orde	, ,					ł
		SM	Sand, very pale brow 104R 7/3, loose, moist very fine grained, vous	,					
	=		Very Line grained, vou	0					ł
	13-		some as above						ł
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		SM							E
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									Hole	No.	H728-4	146
DRILL	ING	LO		/ISION		INSTALL	ŀ	+AA.			SHEET / OF / SHEET	5
1. PROJECT	4 F	Ŀ	Build	inc	,728 - Phase I	10, SIZE	AND TYPE	OF BIT	SHOWN (TBM	Aug MSU	er/3"	-
2. LOCATION	(Coor	dine	Sav	tion)	,728-Phase I	12. MANU	FACTURE	MSC R'S DESI	GNATION OF D	RILL		-
3. DRILLING	AGEN	CY	Mto	ج		13. TOT	L NO. OF			<u>,                                     </u>		-
4. HOLE NO. and file nu			on drawb	ng title	H728- HAGI	ļ						
5. NAME OF		6	5. Ro.	wel	Q	15. ELE	ATION GF		ATER	4.5	MPLETED	
6. DIRECTIO					DEG. FROM VERT.	16. DATI			6-20-95		6-20-85	_
/ 7. THICKNES	S OF C	VE	RBURDE	1	4.5	<u> </u>	ATION TO		Y FOR BORING	1,21		*
8. DEPTH DR		-				19. SIGN	ATURE OF	INSPEC	the second second second second second second second second second second second second second second second s			
9, TOTAL DE	PTHO	) F F			4.5'		<u>Row</u>	BOX OR		REMA	RKS	-
ELEVATION	DEP1 b		LEGEND	•	CLASSIFICATION OF MATERIA (Description) d		RECOV- ERY	SAMPLE NO.	(Drilling tim weathering	e, wat 1, etc., 9	er lose, depth of if eignificent)	
		-		s:Iti	1 5and, 5%-10% 5:14,	gray						F
		Ξ		10 Y	R 5/1, loose, dry, S: ined, round.	ие						E
	-		SM	gra	ined, round.							F
		Ξ										F
	1 -					, · · .						E
		Ξ	•	300	me as above mo:ot.							F
		Ξ	sm		•							F
		ᆂ										E
	2-	_										╶╞╴
		Ξ		5:14	y sand, 5% 5:14, 1	rown,						_
	_	_	5m	1041L	5/3, loose, moist, f:, ned, round.	1e						E
		Ξ		0''	to , round.							F
	3-	Ξ										-E
j				Sa	me as above							E
	_	Ξ	<b>C</b>		wet.			1				F
			Sm									E
	4 -	=										Ē
ļ					No Sample							E
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	-	Ξ			EO.B 4.51							F
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								Hole	No. H728-H/	162
	ING LO	G DI	VISION		INSTALL	ATION	AAF		SHEET / OF   SHEET	rs
				Ω.	10. SIZE	AND TYPE	OFBIT	HAND A	uger / 3"	=  (
НА	AF_/	Bu: 1d:	ng	728. Phase I GA	11. DATI	IN FOR EL	EVATION	тэнойн (тэм ог 154	MSL) /	
2. LOCATION	(Coordin	Savan	nation	GA	12. MAN	FACTURE	R'S DESIG	INATION OF DR		
3. DRILLING	AGENCY	M+	í,	, <u> </u>				10ISTURBED	UNDISTURBE	<u></u>
4. HOLE NO. and file nu	(As show	-		1000 111/2		AL NO. OF	ES TAKE	N 5	0	_
and file nu						AL NUMBE			· · ·	
1	DRIEEEN	G. Ko	well		15. ELE	ATION GR		TER 5.5	COMPLETED	
6. DIRECTIO		LE Inclined		DEG. FROM VEF	16. DAT	E HOLE	(	0-20-95	6-20.95	-
7				5.5		VATION TO			6	_
7. THICKNES 8. DEPTH DF			_			AL CORE P		Y FOR BORING		귀
S. TOTAL DE				5.51		Rowel				
ELEVATION	[	LEGEND		CLASSIFICATION OF MATE (Description)	RIALS	% CORE RECOV- ERY	BOX OR SAMPLE NO	R (Drilling time, weathering,	EMARKS , water loss, depth of etc., if significant	
0	· b		ļ	d		•	f	<u>.</u>	9	
		1	sa	nd, (57. 5:14, ye wn, 104R 5/4, 100: e grained, vound	lowigh					Þ
	=	1	bro	un, 104R5/4, (00)	se, proist,					F
		Sm	£:n	e grained, round	<i>2</i> .					F
1	=	-								E
	( —	]		d land pale	brown					E
	_		101	nd, very pale 1R-7/3, loose, mois ained, vound.	+ fine					E
	<u> </u>	Son		in 175, couse, i -	/	1				E
ļ	] _	1	5"	ined, vound.						Ľ
	_ =	4								Ę
	2	4	500	nd, very pale R 8/2, Loose, mo: 7 ined, vound.	brown,					F
	=		104	R8/2, Loose, mois	t, fine					F
		- son	gra	ned, vound.						E
	-									E
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		1		No Sample						E
1	=	1								
1	-	1	1	E.O.B. 5.51	-					F
	=	7								F
	6	-				1				F
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INSTALLATION DIVISION HAAF OF I SHEETS DRILLING LOG 10. SIZE AND TYPE OF BIT HUAND Auger / 3" 11. DATUM FOR ELEVATION SHOWN (TBH & MSL) 1. PROJECT Building 728 - Phase I T. PROJECT HAAF Building 2. LOCATION (Coordinates or Station) Savannah MS C GA 12. MANUFACTURER'S DESIGNATION OF DRILL NA 3. DRILLING AGENCY ME UNDISTURBED DISTURBED 13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN 4. HOLE NO. (As shown on drawing title and file number) 10  $\mathcal{O}$ H728-H463 14. TOTAL NUMBER CORE BOXES S. NAME OF DRILLER 15. ELEVATION GROUND WATER 6.5' G. Rowell STARTED COMPLETED 6. DIRECTION OF HOLE 16. DATE HOLE 6-20-95 6-20-95 DEG. FROM VERT. WVERTICAL DINCLINED 34.34 17. ELEVATION TOP OF HOLE 6.5 7. THICKNESS OF OVERBURDEH 18. TOTAL CORE RECOVERY FOR BORING 5. DEPTH DRILLED INTO ROCK 19. SIGNATURE OF INSPECTOR G. Rowel 6.5' 9. TOTAL DEPTH OF HOLE T CORE BOX OR RECOV-ERY NO. REMARKS CLASSIFICATION OF MATERIALS (Description) (Drilling time, water loss, depth of weathering, stc., if significant) ELEVATION DEPTH LEGEND " . a α 5: 144 Sand, 5% 5: 14, dark grayish brown, 104R 4/2, Loose, moist, fine grained, round. sm same as above 5m sand, yellowish brown, 104/ 5/4, 100se, moist, fine grained, round. SM Sand, very Pale brown, 104R 7/3, Loose, moist, Sine quained, vound Sm same as above Son Jand, brown, 104R 5/3, loose wet fine grained Sm No Sample E.O. B.C. 6.5

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Hole No. SHEET Y

H72	8-	HА	63

									Hole	No. H728 - H.	A	
ו זופת	ING LO		VISION			INSTALL	ATION	HAAI	c	SHEET   OF ¹ SHEET	r\$	
PROJECT				~		10. SIZE		E OF BIT	HAND	Anever 13"	_	
Hut	IF B	ild'in	: 72	8- Phas.	e I	11. DATE	M FOR EL	EVATION	SHOWN (TBM or	MSL)		
LOCATION	(Coordin	ates or Ste	noh	GA		12. MANI	FACTURE	MS	NATION OF DR	ILL		
. DRILLING	AGENCY					NA						
		<u> </u>	+ E		<u> </u>	13. TOTAL NO. OF OVER- BURDEN SAMPLES TAKEN 3						
. HOLE NO. and file mu	(As show mbec)	n on drawi	ng title	H728-	HA64	- 14. TOTAL NUMBER CORE BOXES						
NAME OF	DRILLER	<u> </u>	01					ROUND WA		2		
DIRECTIO		S. Kor	ell		<u> </u>	+		I ST A	RTED	COMPLETED		
VERTI				DEG.	FROM VERT.	16. DATI	E HOLE	6	-20-95			
								OP OF HOL		95		
THICKNES				3.0	<u></u>				FOR BORING		*	
DEPTH DR				3'		19. SIGN		Rivel				
. TOTAL DE					OF MATERIA		* CORE	BOX OR	R	EMARKS	_	
ELEVATION	DEPTH	LEGEND		(Descri	iption)		RECOV-	SAMPLE NO.	(Priiling time, weathering,	, water loss, depth of etc., if eignificent		
đ	Ь	с		d	.K. = =	1-1				<u>v</u>		
	=	1	Sam	d, very de m, 104R 3/ grained, v	wr gra	7.56						
	_		brou	m, 104/K 3/	C, Loose,	moist						
			1:10	grained,	round.							
		]										
		]				111-		┟┄━──┤				
		]	San	d, pale b e, moist, f nd,	rown, loy	1613,						
	-	-11-	6005	e, moist, &	ive grain	a,		ļ				
		1200-	rou	nd,								
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	2	┣				<u> </u>				· · · · · · · · · · · · · · · · · · ·	_	
		]	5~	me as	above							
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	3-	<u> </u>		<b>TO 2</b>	@ 3.0'				CHO-ex V	refusal at		
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	ING L	0G	DIVISION		INSTALL	ATION	HAAP	-		F Z SHEETS	
-			L	Λ	10. SIZE		OF BIT	HAnd	Auge	1 - 11	1
HA.	AF	Build	ding	728 - Phase I		JM FOR EL	EVATION. MS (	SHOWN (TBM	or MSL)()		
LOCATION	(Coords	nates of	statidh)	GA	12. MAN	JFACTURE	R'S DESIG	SNATION OF	DRILL		┨
DRILLING	AGENCI	Y .	-				NA		- 1.0		4
HOLE NO.	(As abo	M+	-	•	13. TOT. BUR	AL NO. OF Den Sampi	OVER- LES TAKE				
. HOLE NO. and His nu	mb ec)			H728. HA65	14. TOT.	AL NUMBE	R CORE B			,	-
. NAME OF	DRILLER	GK	Rowe	U	15. ELE	VATION GF	ROUND WA	TER	8.5'		
DIRECTIO	N OF HO	LE			16. DAT	EHOLE	ATA	-20-95	COMP	-20-95	
	CAL 🗖	)INCLIN	1ED	DEG. FROM VE		VATION TO			52		1
THICKNES	S OF OV	ERBUR	OEN	8.5				Y FOR BORIN	· · · · ·		,
, DEPTH DF	ULLED I	NTO R	оск		19. SIGN	ATURE OF	INSPECT				٦
. TOTAL DE	ЕРТН ОГ	HOLE		ଟାର୍ଚ	G.	Rowe					4
ELEVATION	DEPTH	LEGE	ND	CLASSIFICATION OF MATE (Description)	ERIALS	% CORE RECOV- ERY	BOX OR SAMPLE NO.	(Drilling ti	REMARKS me, weter is	ose, depth of significant)	
a	b	c				•	1		9		4
	-	-	5a	nd, brown, loyk:	5/3,						
		_	loc	nd, brown, loye se, dry, Sine qu und.	rained,						
		51	~ ro	und.		]	ļ				
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		3	50	nd, very pale b VR 8/3, loose, mo	: own						
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							<u> </u>	Hole No.	H728-H.		
	ING LO		/1510N		INSTALL		HAAF	3	SHEET / OF Z.SHEETS		
					10. SIZE		OF BIT	Hisna tu	nex /3"		
HA	AF	<u>Buibl;</u>	NS 7	128-Phase I	11. DATI	IM FOR EL	EVATION	т <del>shown (төм or msl</del> MSC	0		
DRILLING		Javan	non	Gø	12, MAN	FACTURE	R'S DESIG	NATION OF DRILL			
HOLE NO.		VIITE			13. TOTA	L NO. OF	OVER- LES TAKE				
and His nu	mb ec/			H728-HA65	14. TOTAL NUMBER CORE BOXES						
	G.	howe	el.			ATION GR		0.0	OMPLETED		
DIRECTIO	CAL	L NCLINED		DEG. FROM VERT.	16. DAT	ATION TO		5-20-95	6-20-55		
THICKNES	S OF OVE	RBURDE	1	8.5	· · · · · · · · · · · · · · · · · · ·			Y FOR BORING	~ *		
. DEPTH DF					19. SIGN	ATURE OF	INSPECT	OR			
. TOTAL DE	EPTH OF	HOLE		8.5	A1 S	% CORE	BOX OR	REMA	RKS		
	DEPTH	LEGEND c		(Description)		RECOV- ERY	BOX OR SAMPLE NO.	(Drilling time, wei weathering, etc.	, il eignificent)		
	1 -		5an	d, very pale bri R 8/3, loose, mois e grained, round	nin						
			104	R 8/3, Loose, mois	+,						
		Sm	fin	e grained, round	l,						
	a =										
	8 -			No Sample							
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DRILL	ING LO		VISION		-	INSTALL		HAA			DF / SHEETS
			~ <del>~</del>	- 10, oc	Ŧ	10. SIZE	AND TYPE	OF BIT	HANN SHOWN (TOM	Ang	er/3"
بر H LOCATION .	AF P (Coordin	ates or Sta	i 2 7	28. Phase	<u></u>			$\mathcal{M}$	SC		····
DRILLING		Jav	onneu	h GA		12, MANU	FACTURE	R'S DESI	GNATION OF D	RILL	
		VNte				13. TOT/	L NO. OF	OVER-			
and file nu	(As show mber)	n on drawi	ng title	H728- H	A66						<del>.</del>
NAME OF	DRILLER	G. Ro	100	0		1	ATION GR			2	
DIRECTIO	N OF HOL	.Е				16. DATI		STA	RTED 6-20-95		-20-95
				DEG. F	ROM VEAT.	17. ELE	ATION TO			.72	
. THICKNES				2'	- <del> </del>				Y FOR BORING		- *
. DEPTH DE				2'		19, SIGN	ATURE OF	owel			
ELEVATION		LEGEND		LASSIFICATION (Descrip	tion)		% CORE RECOV- ERY	BOX OR	(Driffind tin	REMARK 10, weter 1, etc., if	S lose, depth of eignificent)
a	<u> </u>	c		d have m	104141	2			·	<u> </u>	
			lon	d, brown, se, dwy, J und.	) 140 000	· ue l			1		
		sm	roz	end.	gra						
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DRILI	LING LO		VISION		INSTALL	ATION	HAA	F	SHEET	SHEETS
		<u></u>	1 4	DI DI	10. SIZE	AND TYPE	OF BIT	HAND SHOWN (TEM or	Auger	13"
1-1	AAF	<u>Bui</u>	din	g 728. Thase I	11. DATU	IN FOR EL	EVATION MS	SHOWN (IBM OF		
2. LUCATION		50	Non	5 728. Phase I nah GA	12. MANU	JFACTURE		GNATION OF DRI	L.L.	
3. DRILLING	AGENCY	int	Ē		13. TOT	AL NO. OF	<u> </u>	DISTURBED	UNDIS	TURBED
4. HOLE NO. and file nu	(As show	n on drawt	ng title	H728.HA67	BUR	DEN SAMPI	.ES TAKE	N 6'		0
5. NAME OF		<u> </u>				AL NUMBE				· · · · · · · · · · · · · · · · · · ·
6. DIRECTIO			wel	<u></u>			1.57.4	RTED	COMPLET	ED
S. DIRECTIO				DEG. FROM VERT.	16. DATI			0-20-95	6-20	0.95
7. THICKNES				6,5		ATION TO			+ 2	
8. DEPTH D				~	19. SIGN	ATURE OF	INSPECT	Y FOR BORING		
9. TOTAL DI	EPTH OF	HOLE		6.5	€	S. Rou				
ELEVATION	DEPTH	LEGEND	c	LASSIFICATION OF MATERIA	LS	% CORE RECOV- ERY	BOX OR SAMPLE NO.	R (Drilling time, weathering,	EMARKS weter lose, c etc., li signil	tepth of (cant)
0	ь	<u>ج</u>		d		•	1		9	<u>-</u>
	=		Sau	nd, brownigh ite A 6/6, loose, mo e grained, roum	low					E
		In	104	R 6/6, Loose, mo	: st					F
		- J	1:1	e grained, row	d.					F
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	3-	┨		d . Dalaha						
	=		Sau	d, very pale br	t t					E
		Sm	Ver	R7/3, loose, mois I fine grained, v	in al					E
	=	1		The grained,	ouncr.					L L
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			50	me as above	>					F
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				E.O.B@ 6.5'					<u> </u>	
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							Nole No.	11728-11146	²٥
	ING LO		VISION	INSTALL	ATION	HAAI	<i>–</i>	SHEET / OF / SHEETS	
				10. SIZE	AND TYPE	OF BIT	HAND Ang	er / 3"	<b>]</b> (
H.A	AF	Build	ing 728. Phase I	11. DAT	IN FOR EL	EVATION	SHOWN (TOM or MSL)		1
2. LOCATION	Coodin	ates or Sta	etion)	<u> </u>		<u> M5</u>			1
		Nonin	ah 64	12. MANU	JFACTURE	r's desig	INATION OF DRILL		1
3. DRILLING	AGENCY	MAE	Ē.	UN TOT	AL NO. OF			UNDISTURBED	1
4. HOLE NO.	(As show	n on drawt	ing title	BUR	AL NO. OF	LES TAKE	N 6	0	_
			H728-HA68	- 14. TOT	AL NUMBE	R CORE B		·	
S. NAME OF	DRILLER	G. Ro	well	15. ELE	VATION GE				
6. DIRECTIO	N OF HOI		·····	16. DAT	EHOLE	ST A	-20-95	6-20-55	
		INCLINED	DEG. FROM VERT.		VATION TO				1
7. THICKNES	S OF OVI	ERBURDE	N 6.51				FOR BORING	1	-
8. DEPTH DF					ATURE OF				1
9. TOTAL DE			6.51	1	6.	Bowe			
			CLASSIFICATION OF MATERI	ALS	% CORE	BOX OR	REMA (Drilling time, well	RKS er loss, denth of	
ELEVATION			(Description)		RECOV-	SAMPLE NO.	weathering, etc.,	it eignificent)	1
a	ь	с	e d ha	1	<b>-</b>	<u> </u>			F
		]	Sand, brown, 104/2	4/3,					F
	=		Loose, mo: st fine	graine	P				F
	-	SA	round.	v	F				F
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	2		Sand, very pale b	vous					F
	=		LAND RIZ LOOSE MA	-1					F
		SM	loyk 8/3, loose, mo. very Dine grained			r			F
l	_		round the france	×,					E
		1							E
1	3			ali					E
ļ	=	1	Sand, Vellow, 10YK	7/6,					-
		SM	loose moist, dine q	vaivas					F
			Sand, yellow, 10YR Loose, moist, d'ine q round.	·					F
1	=	1				ŀ			F
	4	<u> </u>			<u> </u>				卞
1	-		sand, very pale bra	un,					F
i	-	sm	LIAV1/ 8/2 Land - 14-0.	st, A					F
		7~~~	very time grained, va	nud.					F
	=	1							E
	5	1					· · · · · · · · · · · · · · · · · · ·		七
1	=	1	Same as above						F
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DPI1 1	ING LO		VISION	INST	ALL	ATION	HAM		SHEET / OF ( SHEET	5
			1 01	10. 5	IZE	AND TYPE	OF BIT	HANA SHOWN (TEM of	Auger 13"	
IAA	AF	BU.B	ing 728-Phase	<u> </u>			<u>M:</u>	56		
		Sovo	much GA		IAN	FACTURE	R'S DESI	GNATION OF DRI		
	NGENC .	WHE			TOT/	L NO. OF		DISTURBED		·
HOLE NO. and file rea	(As show mber)	m on drawt	H728-HA	19 -		L NUMBE		Ψ		ļ
S. NAME OF	DRILLER	CT	Rowell			ATION GP			,5'	
. DIRECTIO		LE				E HOLE		RTED 21- 95	6-21-95	
WVERT	CAL 🗆	INCLINED	DEG. FRO	M VERT.	ELE	ATION TO				
. THICKNES								Y FOR BORING		*
DEPTH DR			6.5	19. 1		G.K	INSPECT	OR		
. TOTAL DE			CLASSIFICATION OF	MATERIALS			BOX OR SAMPLE NO.	RE (Delities the	MARKS water lose, depth of	
ELEVATION	DЕРТН Ь	LEGEND	(Description d	n)		ERY	NO.	weathering,	stc., if eignificent	
			and vellouis	1. hrown						
		]	sand yellow: st 104/2 5/6, Loose, M grained, vound	no, of fin	,					
		son	grained vour	1.						
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		son	104/28/4, Loose,	provide a						
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DRILI	LING LO		VISION		INSTALL	ATION	4AAF		SHE	ET / / Sheets
1. PROJECT			,		10. SIZE	AND TYPE	E OF BIT	HAW SHOWN (TEM	Auger 1	3"
Н,	AAF	<u>Build</u>	dive	728- Phase I	11. OAT	JN FOR EL	EVATION. MS	SHOWN (TBM	or MSL) '	
2. LOCATIO	(Coordin	inten or St	ation	h GA	12 MAN	FACTURE		GNATION OF D		
3. DRILLING	AGENCY	/					NA			
		Mte			13. TOT	AL NO. OF	OVER-	DISTURBE	UND	ISTURBED
4, HOLE NO. and file nu	(As show mbec)	m on draw	ing title	H728-HA70	<b> </b>					0
5. NAME OF	DRILLER	n b	owel			AL NUMBE			6.51	
6. DIRECTIO	N OF HO		ouce	۲ <u>ــــــــــــــــــــــــــــــــــــ</u>	16. DATI			RTED	COMPLE	
	CAL 🛄	INCLINE		DEG. FROM VERT.		VATION TO		<u>- 21-95</u>	.71	z1-95
7. THICKNES	S OF OV	ERBURDE	N	6.5				Y FOR BORING		*
8. DEPTH DF	HLLED II	NTO ROCI	ĸ	~	1	ATURE OF	INSPECT	OR		
9, TOTAL DI	EPTH OF	HOLE		6.5		<u> </u>	Bowl	Ŵ.		
ELEVATION	DEPTH	LEGEND		CLASSIFICATION OF MATERIA	ALS	% CORE RECOV- ERY	BOX OR SAMPLE NO.	(Drilling tin weatherin	REMARKS (e, water loss (, etc., if eig	, depth of nificant)
٩	Ь	<u> </u>	ļ	b		•	ſ		9	
		1	Sa	nd, yellowish b	m					7
-		1	10	yR 5/6 Imar Mo.	54.					F
	·	sm	P.	nd, yellowith b YR 5/6, Loose, Mo: ine grained, vou	Á					
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		sm								E-
		1							1	E
	3_	<u> </u>								F
		1	500	nd, very pale bra YR8/4, loose, mois re grained, round	mn			R		F
	_	1	10	YR8/4, Loose, mois	<i>.t</i>					F
		Sm	Sin	e grained round						
		]		U -07. U	•					
	, =	1								<b>t</b> =
	4	1	1	1		<b></b>				É
		1	59	me as above						E
		Son								F
	=	1								F
	_	1			1					F
	5-	<u> </u>				<u>_</u>				<b> </b> _
			50	me as above wet						Þ
	. =	1_		wet						F
	-	Jon	1							E
	=	1	1							E
	6-	<b> </b>	<b> </b>						<u> </u>	<u>F</u> 7
	۲ <u>–</u>	1		No Sample						P
	=	1								4
		<u> </u>		E.O.B. @ 6.5'		· · · · · · · · ·				F
	-			E.D.D. C. D						
	7 -	1					1			
t l		1	I			I	I I	l		

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								Hole	No. H728-HA7
DRILL	ING LO		VISION		INSTALL	ATION H	AAF		SHEET ; of / sheets
I PROJECT					10. SIZE			HAND A	ucer 13"
HA	4F F	Buildin	5 728-	Phase I	11. DATE	IN FOR EL	EVATION	SHOWN (TBM or	MSL)
Z. LOCATION	(Coord in	ates or Sta	ition)	Phase I A	12 1441	FACTOR	MSC B'S DESIG	-	ILL
3. DRILLING	AGENCY		nan O	· •	12. MANU	IF ACTURE	NA		
		Mte			13. TOT	L NO. OF	OVER-	DISTURBED	UNDISTURBED
4. HOLE NO. and file nu	(As show mbed)	m on drawl	ng title 4-	728-11171					0
S. NAME OF		Λ	1	100 100 10			R CORE B		
			well_		15. ELE	ATION GP	LOUND WA	TER 6	.5'
6. DIRECTIO				DEG. FROM VERT.	16. DATI		6	-21-95	6-21-85
	<u> </u>				17. ELEN	ATION TO	P OF HOL	.e <u>3</u> 7.2	. 2.
7. THICKNES				5				FOR BORING	- *
8. DEPTH DF							INSPECT	OR	
9. TOTAL DE	PTH OF	HOLE	6.			r. <u>Bou</u>			EMARKS
ELEVATION	DEPTH	LEGEND	CLAS	SIFICATION OF MATERIA (Description)	15	RECOV-	BOX OR SAMPLE NO.	(Dritting time, weathering,	water loss, depth of etc., if significant
¢	Ь	c		b			f		9
			Sand	, yellowish bri 5/6, Losse, moist, of round.	on,				
			loyR .	5/6 Lose moist,	fine				
		Sm	graine	ed round.					
	-								
		-							
	1-	1							
			Sam	e as above	2				
1		Sm							
[									
							1	ļ	
	2-	<u>]</u>		· · · · ·	1,		<u> </u>	· · · · ·	
1		-	sand,	yellow, 104R7/ moist, fine gr	6,				
		Sar	loose,	moist, time gr	aine,				
			round	<b>9</b> . <b>°</b>	•				
	_	1							
1	3-	<b> </b>							
	=	1	Sand,	very pale brown	n,				
	=	1	10YR 81	14, loose, Moist, 1	ne	ŀ			
		Sm	graine	d, vound.					
		1	-						
	ď	<u> </u>						<u></u>	
	<u> </u>	-		1.10					
	_		Sam	e as above			1		
		Sm				l			
		1							
		1							
	5			- limite					
		1	Same	e as above					
	-			wet.			i		
	-	sm							
	-	7							
	6-	1						<del>_</del>	
	· ·	1		No Sample			1		
	-	1		1					
		<u></u>	F	.O.B@ 6.5'			· · · ·		
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Hole No. 1720 - HAZZ

			IVISION	INSTALL	ATION	1 4	1	SHEET	/	]
DRILL	ING LO	G				HA			SHEET\$	
1. PROJECT			Cab RI	10. SIZE	AND TYPE	OF BIT	HAND AU SHOWN (TBM or MS	ger 13	34	(
HAM	t <u>F</u> B	uildi.	al 728. Phase I	II. DAT		nsc		4.7 ·		
ECCATION	50	wonn	ah GA	12. MAN	JFACTURE	R'S DESI	GNATION OF DRILL			1
3. DRILLING	AGENCY	NHE		11 TOT	AL NO. OF			UNDIST	URBED	{
4. HOLE NO. and file run	(As show		the title	BUR	DEN SAMPI	LES TAKE	N 6			
S. NAME OF		0	H728. HA72		AL NUMBE			· · · ·	•	ł
			well	15. ELE	ATION GF	ISTA	(0. 3			1
6. DIRECTIO			D DEG. FROM VERT.	16. DATI		6	-21-95	6-21	-95	
7. THICKNES	S OF OVE		EN 6.5-		ATION TO		LE <u>37,22</u> Y FOR BORING			1
8. DEPTH DR	ILLED IN	TO ROC			ATURE OF	INSPECT	9F			1
9. TOTAL DE	PTH OF	HOLE	6.5'			20 well	···			4
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIA	LS	% CORE RECOV- ERY	BOX OR	(Drilling time, w	ARKS Iter loss, d	pth of	
a	Ь	c	d		•	NO. Í	weathering, etc	9		<u> </u>
	11		Sand, yellowigh brow 104R 5/6, Loose, mois Pine grained, round	n,						F
			104R 5/6, Loose, mois	· , · ·						F
		SM	fine grained, round	1						F
	-									E
	ι —	<b></b>	·····						<del></del>	Ē
			same as above							E
	_	Sm								E
		Sin								Þ
										F
	2 <u>–</u>		- I was lake bron	<i>.</i>						F
	11		Sand, very fale brow LOYR 7/4, loose, moist, Sine grained, vound							Ε
		Sm	D. 194, 10050, 100, 51							E
	11		dine grained, vound							E
	ر ۱									L.
	יו		same as above	-						F
	11									F
		SM								E
	11									E
	4									E
	- 1		Some as above							E
										上
		sm								F
										F
	5		1 in 1 Dala home	,				***		F
	11		Sound, very part of the	7						F
		sm	104/ 8/4, 1000e, we to	ne						E
	11	QV.	Sound, very pale brown 104/2 8/4, loose, wed, f: grained, round							E
	. =						· · · · · · · · · · · · · · · · · · ·		<u> </u>	Ē
	6	·	No Somple							E
					· .					F
			E-O.B. @ 6.51	<u> </u>					<u> </u>	F
									`.	F
										E

Hole No. 1728 - HA73

			VISION			INSTALL	ATION	HAAF		1	.ет ₁	ך
DRILL	ING LO	G									/ SHEETS	-
1. PROJECT		Ω.,		20 Places	£	10. SIZE	AND TYPE	E OF BIT	HAND , SHOWN (TEM	MSE)	/3"	+
LOCATION	AP	DUC 0	<u>, 14 C 7</u>	128. Phase		1		M_	56			
		Savor	mah	GA		12. MAN	IFACTURE	R'S DESIG	INATION OF D	RILL		1
3. DRILLING	AGENCY	M+6	-			12. 707				UNI		-
4, HOLE NO.	(As show			1020 11 42		URI	AL NO. OF	LES TAKE	N (q		0	4
5. NAME OF				H728 HA	73	14. TOT	AL NUMBE	R CORE B			·	4
S. NARE OF	DRICCER	G. Ko	well			15. ELE	ATION GF			.51		4
6. DIRECTIO	N OF HO	LE				16. DAT	E HOLE		121-95	COMPL	21-95	
IV VERTI		INCLINE	°	DEG. FRO	M VENT.	17. ELE	ATION TO					1
7. THICKNES	S OF OVI	ERBURDE	IN	65'		18. TOT	AL CORE P	ECOVER	FOR BORING		- 1	
8. DEPTH DF	ULLED I	NTO ROC		<u> </u>		19. SIGN	ATURE OF	INSPECT	ØR	·		
9. TOTAL OF	EPTH OF	HOLE	1	6.5'		<u> </u>	<u>G.</u> R	BOX OR		REMARKS	···· ·	4
ELEVATION 0	<b>ДЕРТН</b>	LEGEND		ASSIFICATION OF (Description) d	ิง		RECOV-	SAMPLE NO.	(Drilling tim		e, depth of Inificent)	
		1	Sam	d, yellow:	sh bi	voin						F
	_	1	IOYK	- 5/6, Lonse	mo.o	<i>ŧ, ´</i>						F
		Sm	Line	- 5/6, loose, grained, ro	numl	,		1				F
		-		(11100,10		•						F
	_	-										╞
		-	5	ame as	- h.	-10						F
		-			ano	26						F
		Sm	1									F
												F
	a		ļ									F
		1	5	une as	ahral	ø						E
ł	=	1				-						Ε
		sm										E
	=	4										
	3_	·	<b>_</b>		<u> </u>				<u> </u>			┢
	] _ =	1	Jan	d, very fai R 7/4, loose,	e bron	m,						F
	=	sm	10 4	R 7/4, Loose,	moist	<i>,</i>						
		1 3100	Pine	grained, Vo	md.							F
	=	-		-								F
	4	]	+		1					<del></del> .		╞
· ·	-	3	Som	d, very fa	xe br	own,						F
1		Sm	104	12 8/4, Loose	, mois	51,						F
			9.00	e grained, i	round	<i>k</i> .						F
		1					1					F
	5	<u>+</u>			have		i					F
	_	1	Za	me as a wel.	wove							E
		sm		wer.								E
	=	1										E
I	, =	1						l				E
ſ	<u>-</u> ما	4		11.5. 1-			<u> </u>					E
	=	1	1	No Somple								E
1		<b> </b>		0 -1			<b> </b>			•••••		۰E
	=	1		E.o. 8,@6.5							۰.	F
	=	1					·					F
		-1	1				1	1				

										-77
DRUII	LING LO	G DI	VISION		INSTALL	ATION	HAA	F	SHEET   OF ¹ Shee	тя
		<u>_</u>		0,	10. SIZE	AND TYPE		HAND A	1 Ser 13"	
HA	AF_ 1	Build:	NG T	728. Phase I	11. DATU	IN FOR EL	EVATION. M	shown (tem or 54	MŞL)	
2. LOCATION	i (Coordin	Salar	nn al	728. Phase I h 6A	12. MANI	IFACTURE		SNATION OF DRI		
3. DRILLING	AGENCY				l		N	4-		_
4. HOLE NO.	(As show	M4e			13. TOT	AL NO. OF	OVER-	N G		"
and file nu	anb ec)			H728-HA74	14. TOT		R CORE B	IOXES ·	·	
5. NAME OF	DRILLER	G.R.	nn01	1	15. ELE	ATION GF	ROUND WA	TER 6.5		
6. DIRECTIO		LE			16. DAT	HOLE	A TE	RTED 21 - 95	6-21-55	-
		INCLINE	` <u> </u>	DEG. FROM VERT.	17. ELE	ATION TO			26	
7. THICKNES	S OF OV	ERBURDE	N	6.5'	18. TOT	L CORE P	RECOVER	Y FOR BORING		*
8. DEPTH DF			<		19. SIGN	ATURE OF	INSPECT	OR		
S. TOTAL O	EPTH OF	HOLE		(0.5'					EMARKS	
ELEVATION	DEPTH	LEGEND		CLASSIFICATION OF MATERIA (Description)	LS	RECOV-	BOX OR SAMPLE NO.	(Drilling time,	water loss, depth of etc., it significant	
O	<u> </u>	<u> </u>						· · · · · · · · · · · · · · · · · · ·		
	-	1	Sou	-0, < 5% 5: 14, brow	$m_{l}$					F
			0.	VR 5/3, loose, mois re grained, round						E
		1 3000	6.1	re grained, round						Е
	_ =	1.								E
	/		500	nd, brownish yello	207					E
	=	1	10	IR 6/10 Loose moist S						E
		Ion	gri	IR 6/14 loose moist, f.	P-C					
	=		0	0,100-01						
	、 =	1								
	-	-		nue as above				;		누
	=	]	5	none as and						F
		Son								-
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	] =	1	50	me as about	>					E
	=	4	1			:				E
		Jon	·							E
	=	7								F
1	4			11-2 -110-2	1.					-  -
		1	500	nd, yellow, 104R7						F
		Sm	60	ose, moist, fine g	rained					F
	=	1 3000	່ເພ	md,						E
1	- =	4								E
	5	4	ra	nd, very pale bro	zn,					E
	=	1	IDVA	18/2, loose, moist,						E
	_	Sm	S	e grained, romo	1					E
1	=	1	1 11 11	ta nell' voure	•					E
l	, =	1								
	<b>*</b>		1							<u> </u>
ł		]		No sample					.*	F
1		]								
	=	-		EOB @ 6.5' (WET)					•	· F
		1		every		l	1			F

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		<u> </u>		I mart to the	4 11 0 11		Hole N	lo. <u>H728-HA7</u>
DRILI	ING LO		DIVISION	INSTALL	ATION	FAAF	<b>с</b>	OF / SHEETS
				10. SIZE	AND TYPE	OF BIT	HAND A	uger 13"
Hv	tuf i	Build	ine 728-Phase I interior Connah GA	11. DATI	IN FOR EL	EVATION. MS	SHOWN (TBM or I	15() (
LOCATION	(Coordin	inten or St San	innah GA	12. MANI	FACTURE	R'S DESI	SNATION OF DRI	IL .
DRILLING	AGENCY	Mte	<u>,                                     </u>	]			14	
HOLE NO.	(As show		ing title	13. TOTA	AL NO. OF	OVER- LES TAKE	N 7	
And file nu	mber		H728. HA75	14. TOT	L NUMBE	R CORE B		
S. NAME OF	DRILLER	GR	ovell		ATION GF			5'
DIRECTIO	N OF HO			16. DATI			NTED 0-21-95	COMPLETED 6-21-85
	CAL 🗀	INCLINE	D DEG. FROM VERT.					
. THICKNES	S OF OV	EROURDE	EN 7.5'		ATION TO		Y FOR BORING	<u>ر م</u>
. DEPTH DR	NLLED 1	NTO ROC	к —		ATUREOF	INSPECT		
. TOTAL DE	EPTH OF	HOLE	7.5	6	· Bou	self		
	DEPTH	LEGENO	D CLASSIFICATION OF MATERIA	ALS	% CORE RECOV-	SAMPLE	(Drilling time.	MARKS water loss, depth of
a	ь ь	c	d		ERY +	NO. f	weathering, 4	g
			Found day of the new	· 1				
		1	Sand, very dark gray brown, 104R 3/2, Loose fine grained, round	. The				
		1 <m< td=""><td>1042 512, Coose</td><td>1</td><td></td><td></td><td></td><td></td></m<>	1042 512, Coose	1				
	_		fund graines, vond	-				
	,	1						
			I d logit hom	n m				
	_	]	Sound, yellowigh bron 10YR 5/4, loose, moist, grained, round.	0.10				
		San	- grained round	// C		1		
	_	]	Jo mar, Pouro,					
	~ -	]					-	
	2-	1	same as above					
		1						
		Sm						
		1						
	3_	1						
	=	1	5mme as above					
		1						
		SM	-					
	=							
	4	1			ļ		· · · · · · · · · · · · · · · · · · ·	
	' =	-	sand, yellow 10/R7/	6,				
	=	sm	loose, moist, fine g	rained				
	-		- round.					
	=	]						
	5-	]		IOYPOL.				
		-	Sand, Very Pale brown,		1			
		]	Loose, moist, fine gra	ined,				
	_	Sm	round.					
		1				ŀ		
	6	<u></u>				<b> </b> -		
		}	Sand, very pale bro					
		Sm	104/ 8/2, loose, moist,	Kine _{l.}	<b></b>			
			grained, round.					•
		1	]		ł			
	7	<b> </b>			{	<del> </del>		

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							Hole	No. H728-	HA
<b>ND11 1</b>	ING LO		VISION	INSTALL	ATION	HAA	) <i>p=</i>	SHEET /	ETS
			Λ.	10. SIZE	AND TYPE	OFBIT	HANA A	ucer 1 34	
[19A	F Bu	: lel:ns	728. Phase I	11. DATI	IN FOR EL	EVATION	SHOWN (TBM of	MSL)	
LOCATION	(Coordin	ates or Sta	nah GA	12. MAM	FACTURE	MS	INATION OF DR		
. DRILLING		Juva	had On			HA			
		VNYE		13. TOT/	AL NO. OF	OVER-		UNDISTURS	ED
and file nu	(As show mber)	n on draw:	H728-HA76			R CORE B			
S. NAME OF	DRILLER	c A	well			ROUND WA		-6'	
S. DIRECTIO	N OF HOL		WELL				RTED	COMPLETED	
DIRECTION		INCLINED	DEG. FROM VERT.	16. DATI			-21-95	6-21-55	
THICKNES						OP OF HOL		9	
DEPTH DR				1		INSPECT	FOR BORING		*
, TOTAL DE			J.5'		. Rou				
			CLASSIFICATION OF MATERIA		% CORE	BOX OR	(Dalling along	EMARKS, weter loss, depth	of
ELEVATION	-	LEGEND	(Description) d		ERY	NO.	weathering,	etc., if eignificant	
o	- b -	c	Sampi (5% silt, very a gravish brown, 1042 fine grained, round. 1000e, moist	tark			······································		
			gravish worn with	3/2					
		Sm	Pine Que in and an it	-1-1	. I				
	-	Ĭ	LOODE, Misist		ŀ				
	=	1	·····						
			/						
	-	4 1	source as above	-	1				
		5m							
		1							
	2	<b> </b> -	End ullainsh hom	л.		1			
	=		Sand, yellowish bron 104R 5/4 10050, moist, Dine grained, round						
		sm	fine grained mou	1.					
	=	1							
	_ =	1						·····	. <u>.</u>
	3-	1	l ac h	10					
	=	1	Jame as about	•	1				
		JM							
		1							
	, =	]							
	4	1	Sand, Very Pale brow	n					
		]	Samo, your I to orde	6.	ļ				
		Sm	10 YR 7/3, loose, moist, grained, round.	\$.KC	]				
	=	]	Junea, 10000.						
		l	······································		ļ	<u> </u>			
		}	· · ·						
		}	Same as also	ne					
		3m							
	_	]							
	, =				ļ	ļ			
	φ <u></u>	1	Sand, light brownish	arail			· ·		
	=					· ·			
		5m	10 VK6/2, Loose, moist,	oline				•	
			Brained, Roand,						`.
	=		· · · · · · · · · · · · · · · · · · ·					······	

									Hole No.	H728-	H /4
DRILL	ING LO		VISION		INS	TALL	ATION HA	AF	· · · · · · · · · · · · · · · · · · ·	SHEET 2 OF 2 SHEET	•
			11.	0 770. Min	o Z 11.	SIZE	AND TYPE	OF BIT	HAND ANG	er /3"	-
LOCATION	11 /1 /	DU. ates or St	tion)	7 LO . Mase	<u> </u>			MS	4		
DRILLING	AGENCY	Wanna	he	5 728. Phase	12.	MANU	FACTURE	R'S DESIG	NATION OF DRILL		1
		Mfë				TOT	L NO. OF	OVER-		UNDISTURBED	
And file num				H728- HA74	14.	TOT		R CORE B	DXES -	i	
S. NAME OF C		G.Ko	vell	, 	15.	ELEV	ATION GR			MPLETED	
DIRECTION			»	DEG. FROM		DATE	HOLE	4	-21-55	6-21-85	
. THICKNES				8.5			ATION TO				_
. DEPTH DR							L CORE R		FOR BORING		3
TOTAL DE				8.5'			. Row				
ELEVATION	DEPTH	LEGEND		LASSIFICATION OF M. (Description)	ATERIALS		% CORE RECOV- ERY	BOX OR SAMPLE NO.	REMAI (Drilling time, wath weathering, etc.,	RKS w loss, depth of if eignificent)	
a	<u></u>	<u>د</u>		d			•			·····	┢
	1 =		Sa	nd, 1: pht bro. W, 1042 6/2, 1. grained, ro.	m'sh	1					F
		Jon	gr	4, 10YR 6/2, L	ose, W	er,					F
	_		d'ine	grained, ro	und.						E
	。 <del>-</del>	1							_		E
ļ	8			E.O.B @ 8. No Sample	5'						F
	_	]	/	No Sample			-				F
			┼{	\$ E.O. B. R. 8.	5'						⁻╞
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								Hole	No. 1728 - H	AT
DBII I	ING LO		VISION		INSTALL	ATION	F		SHEET / OF / She	ETS
0001567				<u></u>	10. SIZE	AND TYPE	OF BIT	Hornd to	1ser 13"	
H.	AJF	Build	1 728-	Phase I	11. DAT	M FOR EL	EVATION. MSC	SHOWN (TBM or	MSL)	
LOCATION	(Coordin		nah 6A		12. MANI	FACTURE	R'S DESIG		ILL	
. DRILLING	AGENCY				]		NA		UNDISTURE	
. HOLE NO. and file nu	(As show		ng title		13. TOT	AL NO. OF	OVER- LES TAKE	N 4	D	E <i>U</i>
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		VATE		······	13. TOT	AL NO. OF	OVER-		ED		°
4. HOLE NO. and file nu	(As show mbs:)	n on draw	ing title	H728-HA80	ļ	AL NUMBE		<u> </u>			
5. NAME OF	DRILLER	G. Low	,000	2		ATION GE			6'		
6. DIRECTIO			ne		16. DATI		A TA	RTED	100	DMPLETED	
1 VERTI		INCLINE	» <u></u>	DEG. FROM VERT.				0-21-5		6-21-5	3
7. THICKNES	S OF OV	ERBURDE	.N	6.0'		VATION TO			6.37		
8. DEPTH DE						ATURE OF		Y FOR BOR	<u></u>		
9. TOTAL DI				6'		<u>G.</u> 11	owelf	/			_
ELEVATION	r	LEGEND		CLASSIFICATION OF MATERI (Description)	ALS	% CORE RECOV- ERY	BOX OR SAMPLE NO.	(Drilling weathe	REMA time, wet ring, etc.,	RKS er loss, depth of , if significant)	
a	Ь	¢	ļ	d		•	<u> </u>		9		-E
		4	Ja	nd, dark, yellow un, 104R/H, loos 0:11, fine quaine	ish						E
	=	1	bro	un, 104R/H, loos	er						E
		sm	m	oith five graing	J						F
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		]	Ja	md, yellowish bri	non,						F
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DRILL	ING LO		VISION		INSTALL	ATION	HAA	P	SHEET ( OF   SHE	ET\$
				2	10. SIZE	AND TYPE	OF BIT	Hand /	Juger/3	<u> </u>
HA	AF	Bu:lo	1:12 728.	Thase I	11. DATU	IN FOR EL		SHOWN (TBM or	MSL)V	
LOCATION	(Coordin	annah	GA		12. MANU	FACTURE		SNATION OF DR	ILL	
. DRILLING	AGENCY		~				R)	4		
		M4			13. TOT	L NO. OF	OVER-	DISTURBED		ED
4. HOLE NO. and file nu	nper)		H72	-8- <u>HA81</u> _						. 1
S. NAME OF	DRILLER	CR	-00		<u> </u>	ATION GR			51	
. DIRECTIO		<u> </u>			+		ISTA	TEO	COMPLETED	
X VERTI			,	DEG. FROM VERT.	16. DATI	- HOLE	4	-21-95		55
/					17. ELE	ATION TO	P OF HO	Е <u>3</u> 4.7	<u>/</u>	
THICKNES				<u></u>				FOR BORING		
, DEPTH DR			451	····	19. SIGN	ROW	INSPECT	OR		
. TOTAL DE		HOLE	the second second second second second second second second second second second second second second second s	ATION OF HATER	1	% CORE	BOX OR	R	EMARKS	
ELEVATION	DEPTH	LEGEND	CEASIFIC	ATION OF MATERIA		% CORE RECOV- ERY	NO.	(Driffing time, weathering,	water loss, depth etc., if significant)	of I
0	ь	с		d		•		<u></u> .		
	-	1	sand b	rown, loyk:	š/3,					
	-		loose, we	tound.	ne				•	-
		Sm	grained.	round.						
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			Elayer so	nd, brown,	10YR					
			5/3, Loos	= moist, 10%	o class					
		SM	fineara	e moist, 10%						
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Hole No. 11728-11182

DRILLING LOG       DIVISION       INSTALLATION       HAAF       OF 1 SHEETS         1. PROJECT       HAAF       Building 728-Phase I       10. SIZE AND TYPE OF BIT HAND Auger /3"         1. DATUM FOR ELEVATION SHOWN (TBM or MSL)       MSL         2. LOCATION (Goordbrates or Statlow)       MSL         S. DATION (Goordbrates or Statlow)       MSL         S. DATILLING AGENCY       MFE         1. HOLE NO. (As shown on drawing title       H728-HA82         1. HOLE NO. (As shown on drawing title       H728-HA82         1. NAME OF DRILLER       G. ROWEL         1. DIRECTION OF HOLE       13. TOTAL NO. OF OVER-         1. TOTAL NUMBER CORE BOXES       0         1. TOTAL CORE RECOVERS       14. TOTAL NUMBER CORE BOXES         1. DIRECTION OF HOLE       2.0         1. DEG. FROM VERT.       15. ELEVATION GROUND WATER         2.0       16. DATE HOLE       STARTED         18. DEPTH DRILLED INTO ROCK       19. SIGNATURE OF INSPECTOR         3. TOTAL DEPTH OF HOLE       2.0         3. TOTAL DEPTH OF HOLE       2.0
Interf       Du. 1010101010101010
Savannah, 0 H         3. DRILLING AGENCY       M+F         4. HOLE NO. (As shown on drawing title       H728-HA82         5. NAME OF DRILLER       G. Rowell         6. DIRECTION OF HOLE       DEG. FROM VERT.         18. ELEVATION GROUND WATER       2'         6. DIRECTION OF HOLE       DEG. FROM VERT.         19. VERTICAL       DINCLINED         10. TOTAL CORE RECOVERY FOR BORING       4. O         10. DEPTH DRILLED INTO ROCK       19. SIGNATURE OF INSPECTOR         6. TOTAL DEPTH OF HOLE       2.0         19. SIGNATURE OF INSPECTOR       32.39         19. SIGNATURE OF INSPECTOR       32.39         19. SIGNATURE OF INSPECTOR       3. ORE IBOX OR
3. DRILLING AGENCY       Mff       II. TOTAL NO. OF OVER- BURDEN SAMPLES TAKEN       DISTURBED       UNDISTURBED         4. HOLE NO. (As shown on drawing title and file numbed)       H728-HA82       II. TOTAL NO. OF OVER- BURDEN SAMPLES TAKEN       DISTURBED       O         5. NAME OF DRILLER       G. Rowell       II. TOTAL NUMBER CORE BOXES       II. TOTAL NUMBER CORE BOXES       O         6. DIRECTION OF HOLE       G. Rowell       III. ELEVATION GROUND WATER       27         6. DIRECTION OF HOLE       DEG. FROM VERT.       III. ELEVATION TOP OF HOLE       20.21-55         7. THICKNESS OF OVERBURDEN       2.0       III. TOTAL CORE RECOVERY FOR BORING       32.39         7. THICKNESS OF OVERBURDEN       2.0       III. TOTAL CORE RECOVERY FOR BORING       32.39         8. DEPTH DRILLED INTO ROCK       III. TOTAL CORE RECOVERY FOR BORING       32.39         9. TOTAL DEPTH OF HOLE       2.0       III. TOTAL CORE RECOVERY FOR BORING       32.39         9. TOTAL DEPTH OF HOLE       2.0       III. TOTAL CORE RECOVERY FOR BORING       32.39         9. TOTAL DEPTH OF HOLE       2.0       III. TOTAL CORE RECOVERY FOR BORING       32.39         9. TOTAL DEPTH OF HOLE       2.0       III. TOTAL CORE RECOVERY FOR BORING       32.39         9. TOTAL DEPTH OF HOLE       2.0       III. TOTAL CORE IBOX OR       REMARKS
4. HOLE NO. (As shown on drawing title and file numbed)       H728-HA82         5. NAME OF DRILLER G. ROWEL       H728-HA82         14. TOTAL NUMBER CORE BOXES
3. NAME OF DRILLER       G. Rowell       14. TOTAL NUMBER CORE BOXES         3. NAME OF DRILLER       G. Rowell       18. ELEVATION GROUND WATER       27         6. DIRECTION OF HOLE       DEG. FROM VERT.       18. DATE HOLE       STARTED       COMPLEYED         6. DIRECTION OF HOLE       DEG. FROM VERT.       16. DATE HOLE       6-21-85       6-21-85         7. THICKNESS OF OVERBURDEN       2.0       17. ELEVATION TOP OF HOLE       32.39         8. DEPTH DRILLED INTO ROCK
G. KOWEU       18. ELEVATION GROUND WATER       2.         G. DIRECTION OF HOLE       DEG. FROM VERT.       18. DATE HOLE       STARTED       COMPLETED         G. VERTICAL DINCLINED       DEG. FROM VERT.       18. DATE HOLE       G-21-85       G-21-85         7. THICKNESS OF OVERBURDEN       2.0       18. TOTAL CORE RECOVERY FOR BORING
6. DIRECTION OF HOLE VERTICAL INCLINED DEG. FROM VERT. 7. THICKNESS OF OVERBURDEN 2.0 8. DEPTH DRILLED INTO ROCK
7. THICKNESS OF OVERBURDEN       2.0       17. ELEVATION TOP OF HOLE       32.39         7. THICKNESS OF OVERBURDEN       2.0       18. TOTAL CORE RECOVERY FOR BORING       32.39         8. DEPTH DRILLED INTO ROCK
8. DEPTH DRILLED INTO ROCK
9. TOTAL DEPTH OF HOLE 2.0 G. BOWER REMARKS
S. TOTAL DEFINITION NOLD
ELEVATION DEPTH LEGEND (Description) RECOV- ISAMPLE (Drilling time, weier lose, depth of
- 5: /ty sand 5% 3. /t,
- The JOYD 3/2 loss a maint
Jilty sand, 5% silt, very dark grayigh brown JoyR 3/2, loose, moist, Pine grained, vormed.
= same as above
= same as above = wet.
-Jam Well
Z _ E.O.B. @ 2.0'
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									Hole No	. <u>Н728-НА</u>	183	
DRILL	ING LO		VISION			INSTALL	ATION H	AAF		SHEET   Of ( Shee	TS	
				720 PL -	0 T.	10. SIZE	AND TYPE	OF BIT	HAND AU SHOWN (TBM or M	qev/3"	-	
LOCATION	AAF Coordin	DU. 10 etes or Sta	Ning Hond	728-Phase				MSL				
. DRILLING	2000					12, MANL	FACTURE	NA	SNATION OF DRIL	L		
		141		r		13. TOT/ BURG	L NO. OF	OVER-			•	
ANDLE NO.	(As show nbec)	n on drawt		H728-HA	83						_	
NAME OF	DRILLER	G. Ro	wel	1			ATION GP	OUND WA	TER 3,	51		
		.E			OM VERT.	16. DATI		6	-22-95	COMPLETED 6-22-85	-	
THICKNES	S OF OVE	RBURDE	N .				ATION TO		E <u>33.98</u> Y FOR BORING		*	
DEPTH DR						19. SIGN	ATURE OF	INSPECT				
, TOTAL DE	PTH OF	HOLE		3.5'		G. Rowell						
	DEPTH Ъ	LEGEND	j	CLASSIFICATION OI (Descripti d	F MATERIA ion)	LS	RECOV-	BOX OR SAMPLE NO. f	(Driffing time, v	nates loss, depth of ic., if significant 9	'	
			50	11502 5:41	de la c						ł	
			bra	d, <5% 5:H, un, 104R 4/2 e quained, ro	(ma	mint					ļ	
		Sm	Sin	e grained ro	und	,						
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								Hole N		489
DRILL	ING LO		VISION		INSTALL	ATION	HAAF		SHEET ( OF ( SHEETS	
1. PROJECT	AAr	B/.		728- Phase I	10. SIZE	AND TYPE	OF BIT	HAND A SHOWN (TEM or )	nger/3"	-
ת ۲	I (Coordin	ates or Sta	tion	100-1-nje	1		MSC	-		
3. DRILLING		avani	un la	A	12. MANI	FACTURE	R'S DESI	GNATION OF DRIL	- L	1
		$V^{\nu}$	14E	· · · · · · · · · · · · · · · · · · ·	13. TOT	AL NO. OF			UNDISTURBED	-1
4. HOLE NO. and file nu	(As show mbec)	n on drewi	ng title	H728-HA84	<b></b>	AL NUMBE		<u>i (a</u>		-
5. NAME OF	DRILLER	G.Ro	nuel		<b></b>	ATION GP			·····	1
6. DIRECTIO		LE		DEG. FROM VERT.	16. DATI	E HOLE	6		6-22-55	
7. THICKNES				6.0'		ATION TO			-	_
6. DEPTH DR				-		AL CORE P		Y FOR BORING		4
S. TOTAL DE				6'	<u>G.</u>	Rowel	~//			
ELEVATION		LEGEND	· · · ·	CLASSIFICATION OF MATERIA	ALS	% CORE RECOV- ERY	BOX OR SAMPLE NO.	RE (Drilling time, weathering, 4	MARKS water lose, depth of itc., if significant) 0	
a		c					· ·		<u> </u>	F
	=		5a	nd, 15% 5:14, dar	(C. 1					E
		Sm		Vish brown, 104/4/1 e grained, voun ose, moist,	r,					E
	_		1.6 J	e grained, voun	ð.					Þ
				use, mo.st,						╞
1	, <u> </u>		Jan	d, (ight fellowist un, 104R 6/4, Loose e grained, vound	K .					F
			bro	un, 104R 6/4, LOOSE	moist					F
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DRILL	ING LO	G	VISION			INSTALL	ATION HAI	4/=				SHEET ) OF / S	HEETS
				<u></u>		10. SIZE	AND TYPE	OF BI	тH	rud	Aus	rev 13	"
H	AAF	Bu:	dim	z 728-Pha	se I	11. DATL	M FOR EL	EVATIO MS	ON SH	own (TBI	i or MSL)		
LOCATION	Coordin	ates or St	ation) (	)		12 MANI	FACTURE			TION OF	ORILL		<del></del>
. DRILLING	JONA	nnah	- <b>F</b>			14. MARL		NA					
-		VNtE				13. TOT/	L NO. OF	OVER-	KEN	DISTURSI	ED	UNDISTU	RBED
A. HOLE NO. and file nu	(As show mbec)	n on draw	ing title	H728-H1	185		L NUMBE		!			<u>.                                    </u>	
S. NAME OF	DRILLER	G. Ri		<u> </u>			ATION GP		_		6.5	/	
. DIRECTIO	N OF HOL	<u></u>	wee	<u>y</u>		16. DATI			TART			MPLETED	
VERTI				DEG. FF	IOM VERT.				-	2-95		6-22-	5.2
. THICKNES	S OF OVI	RAURDE	N	6.5	<u></u>		ATION TO			<u>37.</u>			
. DEPTH OF							ATURE OF			DA BORIN	<u> </u>		*
. TOTAL DE				6.5	-	G.	· · · ·						
				CLASSIFICATION O	FNATERIA	LS	% CORE RECOV- ERY	BOX O	R	(Drilling t	REMA	er ines, der	th of
ELEVATION		LEGENE	1	(Deecript	ioni		ERY	NO.		weatheri	ind, etc., g	it elenifica	nn)
a	<u>ь</u> —	<u>с</u>		d have as it	NA 11-								
		1	Sau	int D.	0YK 413,	loose							
		sm	m	d, brown, 1 oist, fine g. sund. 1500	rained,								
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	ING LO		VISION	INSTALL	ATION HAAI	c		OF   SHEETS
			Λ.	10. SIZE		OFBIT	Hound A	user 13"
H.	AAF	Bu:10	ling 728-Phase I	11. DAT	UM FOR EL	EVATION MSC	SHOWN (TBM or )	ISL)(/
LOCATION		nuch		12. MAN	UFACTURE		NATION OF DRIL	.L
. DRILLING				1		NA		
		Mte		13. TOT.	AL NO. OF	OVER-	DISTURBED	
4. HOLE NO. and file ma	(As show mber)	n on dræwi	H728-HA86		AL NUMBE			· · ·
S. NAME OF	DRILLER	1	well		VATION GE			₽/A
S. DIRECTIO						TAT A	RTED	COMPLETED
			DEG. FROM VERT.		E HOLE		22-95	6-22-95
7- 7. THICKNES			······································		VATION TO			
. DEPTH OF					AL CORE P		FOR BORING	
. TOTAL DE			4.5	13, 3,00		Zowell	···	
	· · · · · ·		CLASSIFICATION OF MATERIA	ALS	& CORE	BOX OR	RE (Dritting sime	MARKS
ELEVATION		LEGEND	(Description)		ERY	NO.	weathering, a	water loss, depth of tc., it significant) 9
a	b	с	0		<u> </u>	<u>† − </u> †		
			Sand, 65% sitt, brow 104R 4/3, loose, me. Sine grained round	m,				
		om	104K 4/3, Loose, me.	54				
		0	d'ine grained rown	l'				
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					<u>†                                    </u>			
			same as above					
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			ISION	INSTALL		6		H928- HA
	ING LOG		<u> </u>		HAA		HAND Auge	OF / SHEE
1. PROJECT	ALD	·Ide	778 - Phase I	10. SIZE	JM FOR EL	EVATION	SHOWN (TBM or HSL	5-1
LOCATION	Coordinat	es or Sta	e 728 - Phase I	1		MSL	····	
	2000	ennah	64	12. MANI		R'S DESIG	NATION OF DRILL	
I. DRILLING A	AGENCY	MŧĒ		13. TOT		OVER- LES TAKER	DISTURBED	UNDISTURSE
4. HOLE NO. ( and file num	As shown		1110 U370- 1100-2	BŪRI	DEN SAMPI	LES TAKEP	15	0
S. NAME OF D	RILLER		H728-HA87	_		R CORE BO		•
	G	. Kow	ell	15. ELE	VATION GE	LOUND WAT		
6. DIRECTION				15. DAT	E HOLE		-22-95	6-22-9
VERTIC		CLINED	DEG. FROM VERT		VATION TO	DP OF HOL		
7. THICKNESS	OF OVER	BURDEN	5.5				FOR BORING	-
8. DEPTH DRI	LLED INT	O ROCK			ATURE OF	INSPECT		
9, TOTAL DE	PTH OF H	OLE	5.5'			owly		
ELEVATION	DEPTH	EGEND	CLASSIFICATION OF MATER (Description)	IALS	RECOV-	BOX OR SAMPLE NO.	REMA (Drilling time, we weathering, etc.	ter loss, depth o
a	ь	c	d		ERY •	NO. f		
<u> </u>			Sand, yellowigh br	own,				
	7		104R 5/6, Loose, mo:	54.				
		sm	Pine grained, vound	- , 				
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	'-+		Sand, Very dark gr brown, 104x 3/2, lo moist, dine grained,	apish				
	ヨ	ł	brown, 104×3/2, la	sey				
		5m	moist fine grained	vound				
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	-		G.O.B. 5.5'					
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								Hole N	0. H728-HA	88
DBILL	ING LO		VISION		INSTALL	ATION HA	AF		SHEET ; OF / SHEETS	
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нA	LAF 2	Buildia	77	3- Phase I	11. DATU	M FOR EL	EVATION	SHOWN (TEM or 1	ISL)	<b>`</b>
2. LOCATION	(Coordin	ates or Sta	tion)		12. MANU	FACTURE		ISC		-
2. LOCATION	AGENCY	nan c			1		NA			_
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4. HOLE NO. and file nu	nbec)			H728- HA88	14. TOT		R CORE B	OXES	· ·	1
5. NAME OF	DRILLER	G.hov	oll				ROUND WA			
6. DIRECTIO	N OF HOL	.E	<u> </u>		16. DATE	HOLE	STA	RTED 1-27-65	6-22-95	
VENTI		INCLINED		DEG. FROM VERT.			P OF HO		32	-
7. THICKNES	S OF OVE	RBURDE	4	2'				FOR BORING	~ ,	
8. DEPTH DR		TO ROCK				ATURE OF	INSPECT			7
9. TOTAL DE	PTH OF	HOLE		2'	<u> </u>		10 Well		MARKS	-
ELEVATION	- · .	LEGEND	(	CLASSIFICATION OF MATERI (Description)	ALS	RECOV- ERY	BOX OR SAMPLE NO.	(Drilling time, weathering, c	water lose, depth of htc., if significant)	
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			bro M	int line annined						E
		JM	<i>v</i> -1	no, and grands,	round.					E
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			VISION	INSTALL	ATION	11		H728- Hr
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i. project Ha	AF Ī	Buildin	6A	10. SIZE	AND TYPE	OF BIT	HAND AND SHOWN (TEM or MSL MSL	
		ton or Sta Runah	GA	12. MANU	JFACTURE		NATION OF DRILL	<u> </u>
. DRILLING	AGENCY	Mte		13. TOT	AL NO. OF	OVER- LES TAKEI		
4. HOLE NO. and file num	(As shown mbec)	ion dzawb	H728- HA89			R CORE B		· · ·
S. NAME OF	DRILLER	;. Ror				IOUND WA	TER Z	
6. DIRECTIO	N OF HOL	E	DEG. FROM VERT.	16. DATI	EHOLE	ST AI	-28-95	6-22-95
7. THICKNES						P OF HOL		>
8. DEPTH DR					ATURE OF	INSPECT	FOR BORING -	
S. TOTAL DE			21		G. Ro	well		
ELEVATION			CLASSIFICATION OF MATERIA	LS	* CORE RECOV- ERY	BOX OR SAMPLE NO.	REMA (Drilling time, we weathering, etc. c	ter loss, depth of , if significant)
<u> </u>		<u> </u>		A 6-22-75				<u>.</u>
			Jand, very dark gr	y.th				·
			brown, loyr #1/3, loog Moist, fine grained, 1	e I				
		sm		and.			<b>DD-</b>	
,							DDOR Augær re at 2'	
			Jand, very dark gra	4.5L			Augoer re	Jusal
		Sm	brown, loyk 3/2, loose,	moist			at 2'	
	_	0.	brown, 10YR 3/2, Loose, Dine grained, round	1				
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	LING LO		VISION	INSTALL	ATION	HAAF		SHEET OF / SHEETS	
			Δ	10. SIZE					].
HAU	AF B	uildin.	& 728-Phase I	11. DATI	IM FOR EL	EVATION	SHOWN (TBM or )	ISL.)	<u>ן</u>
		Savo	anval Git	12, MAN	FACTURE		NATION OF DRIL	.L.	1
3. DRILLING		MTE	·	13. TOT	AL NO. OF				1
4. HOLE NO. and file nu	(As show mbec)	n on drawb	H728- HA90	<b></b>	AL NUMBE				-
5. NAME OF	DRILLER	. Rowe			ATION GR			.5'	1
6. DIRECTIO	N OF HO	LE INCLINED				6	RTED -27-95	COMPLETED	_
7. THICKNE					VATION TO			5	
8. DEPTH D					AL CORE F		FOR BORING		-
S. TOTAL DI			5.5'		<u>6.</u>	Rowe	Ø		4
ELEVATION	<u> </u>	LEGEND	CLASSIFICATION OF MATERI (Description)	ALS		BOX OR SAMPLE NO.	(Destine sheet	MARKS water loss, depth of itc., it significant) 9	
<u> </u>	<u>b</u>	c	d		•		<del></del>	<u> </u>	Ŧ
	-	]	Sound very dark gravish brown, loo dry, sine grained, V						F
		5m	gravish brown, ice	, se,					E
1	=		ony, sine graines,	ure.					F
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DRILL	ING LOG	DIV	7151ON	INSTALL	ATION 11	AAF		SHEET / OF / SHE
			Δ	10. SIZE			Unid Ange SHOWN (TBM & MSL	w / 3"
	LAAF T	Build	ing 728. Phase I	11. DATU			SHOWN (TBM or MSL	<b>5</b>
LOCATION	(Coordinate	a or Sta	mah, 614	12. MANU	FACTURE	MSG R'S DESIG	NATION OF DRILL	
. DRILLING	AGENCY	avan	-maxing	1		NA		
	P 1	148	4 444	13. TOTA	L NO. OF	OVER-	DISTURBED	
And file num	(As shown o ibse)	at drawu	H728-HA91	<b></b>		R CORE B		/-
5. NAME OF D	RILLER	D	00			OUND WA		
6. DIRECTION		howe				STAP		MPLETED
O. DIRECTION	AL []INC	LINED	DEG. FROM VERT.	16. DATE				6-27-9
77 7. THICKNES	<u> </u>					OP OF HOL		
8. DEPTH DR							FOR BORING	
9. TOTAL DE			2'	- 19, SIGN	G.	Road	P	
ELEVATION	DEPTH L	1	CLASSIFICATION OF MATERI (Description)	ALS	S CORE RECOV-	BOX OR SAMPLE NO.	REMA (Drilling time, wei weathering, etc.)	RKS er lozz, depth if significant)
a	Ь	c	d	·	•	1		
			Sand, very dark qua brown, 10yR 3/2, Loose fine grained, voun	yish				
	Ξ		homen, 104/2 3/2, Loose	dry.				
	-	5m	fine svained voun	d. '				
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Hole No. H728-HA92

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f			VISION	INSTALL	ATION			SHEET /	
DRILL	ING LO					AAF		OF / SHEETS	ļ
1. PROJECT		A 11		10. SIZE	AND TYPE	OF BIT	HAW ANGE SHOWN (TEM or MSL	ex 3"	4
Н,	AAF_	Build	ing 728. Phase I	11. DATI			SHOWN (1DM OF MSL	A)	ł
2. LOCATION	(Coordin	ates or St. /	-, GA	12 MAN	(V)	SL R'S DESIG	ATION OF DRILL	· · · · · · · · · · · · · · · · · · ·	┨
3. DRILLING	Java	muan	_, 0 01		/	VA			
4. HOLE NO.		NN+E	ind title	13. TOTA	AL NO. OF	OVER-	N DISTURBED		1
and file nu	nbec)		H728. HA92		AL NUMBE				1
5. NAME OF	DRILLER	o A			VATION GF				1
		<u>6. Ko</u>	well					OMPLETED	1
6. DIRECTIO			DEG. FROM VERT.	16. DATI	E HOLE		-27-85	6.27-95	
		NCLINE		17. ELE	VATION TO	POFHOL	E 38.90		1
7. THICKNES	S OF OVE	ROURDE	N 1′				FOR BORING	~ *	1
S. DEPTH DR	ULLED IN	TO ROCH	· · · ·		ATURE OF	INSPECT			1
S. TOTAL DE					S. Roi	Sell			1
3. TOTAL DE			CLASSIFICATION OF MATERIA		% CORE RECOV- ERY	BOX OR	REMA	RKS	ł
ELEVATION	DEPTH	LEGEND	(Description)		ERY		(Drilling time, we weathering, etc.	, if algniticanu	I
a	Ь	c	d		•	f		·	t
	_	1	Jand light vellowish	home					F
<b>i</b>	=	}	Jame, light yellowish 104/26/4, loose, moist, fine grained, vound.	s. owe,					ļ
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			time france, vound.						ł
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DRILLI			1510N	INSTALL		AAF	-	OF SHEET			
			Λ.	10. SIZE	AND TYPE	OF BIT	Hand Au	and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second se			
HA	AF	Build	ing 728-Phase I	10. SIZE AND TYPE OF BIT Hand Auger 13" 11. DATUM FOR ELEVATION SHOWN (TBM & MSL) M 54							
LOCATION	(Coordina 50	tes or Stat	rah, 6A	12, MANI	FACTURE		NATION OF DRIL	L	4		
	GENCY	MAL		A TOTAL NO OF OVER DISTURBED UNDISTURBED							
HOLE NO. (	As shown	on drawin	a title	13. TOTAL NO. OF OVER- BURDEN SAMPLES TAKEN							
and file num	bec)		#728-1477		14. TOTAL NUMBER CORE BOXES						
NAME OF D	RILLER	G.K	owell	15. ELEVATION GROUND WATER 4'							
DIRECTION	OF HOL	E		16. DAT	E HOLE	6	-27-95	6-27-95			
VERTIC	AL []"	NCLINED			VATION TO	OP OF HOL		0			
THICKNESS							FOR BORING		*		
DEPTH DRI			 	19. SIGNATURE OF INSPECTOR G. Rover							
TOTAL DE	PTH OF H	IOLE	CLASSIFICATION OF NATE			BOX OR	RE	MARKS			
LEVATION	DEPTH	LEGEND	(Description)		RECOV-	SAMPLE NO.	(Drilling tene, weathering, e	water lose, depth of tc., it significant)			
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	-		Sand, very dark gr. brown, 104R3/2, Loos fine grained, round	ayith	1						
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		DIV	VISION	INSTALL	ATION	JAF		SHEET / OF ( SHEETS	
	ING LO		0.	10. SIZE	AND TYPE	OF BIT	Hand Au	ser 13"	1
HA	AF	Buildin	uc 728. Phase I	11. DATI	IM FOR EL	EVATION M	SHOWN (TBM or )	MSL)	1
2. LOCATION	(Coordin	etes or Sta	elin Cit	12. MAN	IFACTURE	R'S DESIG	NATION OF DRI		1
3. DRILLING	AGENCY	MTE MTE		<b> </b>			A	UNDISTURBED	-
4. HOLE NO. and file net	V	VITC		13. TOTA BURI	NL NO. OF	OVER-	н 3	Ø	
					AL NUMBER				4
5. NAME OF	DRILLER	G. Ka	well	15. ELE	ATION GR		TER 3	COMPLETED	-
6. DIRECTION			DEG. FROM VERT.	16. DAT	EHOLE	6-	2795	6-27-95	
					VATION TO	and the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second division of the second divisio		>	4
7. THICKNES							FOR BORING	·····	4
8. DEPTH DR 9. TOTAL OB		· · · · · · · · · · · · · · · · · · ·	3.5	_ 19. SIGN	ATURE OF	Bowell	7		
			CLASSIFICATION OF NATERI		% CORE RECOV- ERY		BI	WARKS water lose, depth of	
ELEVATION	DЕРТН Ь	LEGEND	(Description) d		ERY	NO. f	weathering,	water loss, depth of stc., if significant) g	
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	-		homon INVA 3/2, Loose	Moint					F
		Son	Sand, very dark gre brown, 104/23/2, Loose fine grained, vound.	• /	1				F
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וופח	ING LO		VISION	INSTALL	A110N	HAAF		OF / SHEETS		
		<u> </u>	0	In SIZE AND TYPE OF BIT HANN AUGUN 1.3"						
НАА	F Bail	Hing -	728- Phase I	11. DAT	IN FOR EL	EVATION	SHOWN (TBM or M	ar)		
LOCATION	(Coordin	ton 6t St	etion)		FACTURE	MS	L-			
	<u>Sawa</u>	manas	h ch	12. MANU	JFACIURE	NA		-		
		1.140		13. TOT	AL NO. OF	OVER-	DISTURBED	UNDISTURBED		
HOLE NO.	(As shown	on drew	H728-HA95					Ø		
NAME OF			11100 11113	14. TOTAL NUMBER CORE BOXES						
			well	18. ELE			RTED	COMPLETED		
DIRECTIO			DEG. FROM VERT.	16. DATI	EHOLE		0-27-95	6-27-95		
VERTIC				17. ELE	VATION TO	OP OF HOL	E 37.8	0		
THICKNES				18. TOTAL CORE RECOVERY FOR BORING						
DEPTH DR	ILLED IN	TO ROCI		19. SIGNATURE OF INSPECTOR						
TOTAL DE	PTH OF	HOLE	4'	G, BOWER REMARKS						
	DEPTH	LEGEND	CLASSIFICATION OF MATERIA (Description)	LS	RECOV-	BOX OR SAMPLE NO.	(Drilling time, )	nter loss, depth of ic., if significant		
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			J: 14 Jand, 15% silt, d gray ish brown, 10% Loose, dry, fine gra round.	bark						
			gray: 5h brown, 1041	1412	1					
		SM	loose, dry, fine gra	iaed,	1					
	ļ		vound.							
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	11		Sand, very dark gray brown, 104A.3/2, loose, fine grained, round.	r.gh						
		SIL	6rom, 1042.3/2, Coose,	moist						
	Π	1	time grained round.							
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							Hole	No. H728- HA	76
			VISION	INSTALL		AAF		SHEET /	s
L	ING LO			10. SIZE	AND TYPE	OFBIT	HAND A	user 13"	
Г и	AAF	Build	ing 728-Phase I	11. DAT	IN FOR EL	EVATION	SHOWN (TBM or	MSL)	
2. LOCATION	(Coordin	ates or Sta	rale, GA		V	NSL	NATION OF DR		-
3. DRILLING					JFAGTURE	NA			
		W46		13. TOT	AL NO. OF	OVER-		UNDISTURBED	
4. HOLE NO. and file nu	(As show mber)	n on drawi	H 728. H A96						-
5. NAME OF	DRILLER	0			AL NUMBE		and the second second second second second second second second second second second second second second second	3.5'	4
	6	. Kowe			<u></u>	STA	RTED	COMPLETED	
6. DIRECTIO						متقام بالي بساده	-27-95	6-27-95	_
7					VATION TO			6	_
7. THICKNES							Y FOR BORING		긕
S. DEPTH DP			3.5'	19, SIGN	ATURE OF	owell	ýr.	,	
9. TOTAL DE					Z CORE	BOX OR SAMPLE	(D-III) - Alm	EMARKS , weter loss, depth of	
ELEVATION	DEPTH	LEGEND	(Description)		ERY	NO.	weathering,	etc., if eignificant	
• •		<u> </u>		with a ck					F
	=	1	5:14 sand, 15%	S.IT, DOIR					F
1	=	1	grafish brown, 11	04 <i>14-4/2</i> ,					F
		sm	loose, dry fine a	zvained,					F
		7	Vouno.	•		1			F
		<u> </u>	Very .	12 1 4			·	······································	F
	=	]	Sand dark gra 1042 3/2, loose un Rine grained, Va	yith bran					E
		1 ism	104 3/2, Loose, U	wist,					E
		]5"~	tive grained, vo	und,					E
	=	-							E
	2-	<u>]</u>			<u> </u>				E
	-		Same as abor wet.	le					E
		Sm	wet.		1		· ·		E
	_	1,2,							E
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	3-	 			1				E
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	=	1	EOB @ 3.	5'		1			þ
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							Hole No.	H728- HA97
DRILL	ING LO	G	VISION	INSTALL		AUF		SHEET ) OF / SHEETS
				10. SIZE			HAND AUS SHOWN (TBM or MSL	er /3"
HU	<u>4AF</u>	<u> Buile</u>	HIME 728-Phase I	1		MSI	1	J.
I	<u>)a</u>	vann	ah, GA	12. MANU	FACTURE		NATION OF DRILL	
3. DRILLING	V	MtE	·	13. TOT	L NO. OF	OVER-	DISTURBED	UNDISTURBED
4. HOLE NO. and tile run	(As show mbee)	n on drawi	H728-HA97	<b> </b>		R CORE B	<u> </u>	·
S. NAME OF	DRILLER	6. ho	Joth			ROUND WA		/
6. DIRECTIO	N OF HOL	-E	DEG. FROM VERT.			6	-27-95	OMPLETED
7. THICKNES	<u></u>					OP OF HOL	E <u>37.87</u> FOR BORING	- 1
8. DEPTH DR					ATURE OF	INSPECT		
9, TOTAL DE	PTH OF	HOLE	4.5'			Cowell		
ELEVATION		LEGEND	CLASSIFICATION OF MATERI (Description)	ALS	* CORE RECOV- ERY	BOX OR SAMPLE NO.	REM/ (Drilling time, wa weathering, etc.	NRKS ter loss, depth of , if significant) )
	b	c	- 111 - 1 15th with	al it				
	=	1	5: 14 Jand, 15% 5:14	000 F				ļ
		Ism	grayion brown toys	110				<b>. ‡</b>
			grayish brown wyk Loose, dwy, Line grain round.	$\mathfrak{G}_{i}$				
	, <u> </u>	1						
Į i			Sound dark gravish 104/2, Lopse mist, grisned, <b>round</b> .	brown,				l l
			104/4/2, Loose maist,	fine				
		Jun	griened yound.				;	ļ.
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	z	]					· · · · · · · · · · · · · · · · · · ·	
		1	Some as above					
		SM						
	7 -							
	) <u> </u>	]	sand dark gravish	brown,				
		]	104R4/2 / wet, loose,					
		3m-	grained, round,					
	=	4	Sumer, Jouria,					
	4-	<b>_</b>		<u> </u>				
	=	1	No Sample					
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		1	FOB @ 4.5'					
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DOUL	LING LO	<u>7</u>	DIVISION	INSTAL		AAF		SHEET J OF J SHEETS
			<u> </u>	10. SIZE	AND TYPE	OF BIT	HAND A	1150N 13"
HA	AFE	3uilo	ling 728- Phase I Staffer h, GA	11. DAT	UN FOR EL	EVATION	SHOWN (TBM or MS	L) 0
2. LOCATION	I (Coordin	tates or	statfor	12. MAN	UFACTURE	MSL-	NATION OF DRILL	
3. DRILLING	AGENCY	nna	h, Dh	_		N.A		
	//	148		13. TOT	AL NO. OF	OVER-	DISTURBED	
4. HOLE NO. and file nu	(As show mber)	m on ar	H728-HA98		AL NUMBE	R CORE B	OXES -	·
5. NAME OF	DRILLER	61	Rowell		VATION GP		the second second second second second second second second second second second second second second second s	5-1
6. DIRECTIO	N OF HO		the	16. DAT	E HOLE	BT A	-27-95	COMPLETED
	CAL 🗆	INCLIN	ED DEG. FROM VER	r	VATION TO			
7. THICKNES	SOF OV	ERBURI	DEN 4.5'				FOR BORING	- 1
8. DEPTH DF	RILLED	NTO RO			ATURE OF			
9. TOTAL DI	EPTH OF	HOLE	4.5'					1.045
ELEVATION	<b>ДЕРТН</b>	LEGE	ND CLASSIFICATION OF MATER (Description)	IALS	K CORE RECOV- ERY	BOX OR SAMPLE NO. f	(Drilling time, w weakering, et	ARKS ater lose, depth of c., if eignificent g
		<u> </u>	Sand, very dark gr	avith				
	=	1	100000 10VR3/2 100	50				
		Sm	- brown, 104K3/2, loo. moist, fine grained vound.	1				
	-		vound.					
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	- 1		Some as all	ve				
		Jru	~					
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	1 5-		Sand dark grayith	brown				
ł			Sand dark grayish 104R 4/2, loose, minth grained, vound.	fine				
		Jon	- grained vound.					
	=	1					н. На 1976 г. – С. 1976 г. – С. 1976 г. – С. 1976 г. – С. 1976 г. – С. 1976 г. – С. 1976 г. – С. 1976 г. – С. 197	
	4	<b>-</b>		. <u> </u>	<u> </u>			······································
1	` =	-	No Sample					
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DRILL	ING LO	G	VISION	INSTALL	атіон Н <u></u> .а.а	F		SHEET / OF ) SHEET	
			220 ALCOT	10. SIZE			HAN SHOWN (TEM or ME	waren/3"	
HAAI	- nuile	dius 1	128-Phase I	1	i	MSL			
	Javo	ma	h Grt	12. MANU	FACTURE	R'S DESIG	NATION OF DRILL		
DRILLING	AGENCY	ME	- '	13. TOT/	L NO. OF	VA	DISTURBED	UNDISTURBED	
4. HOLE NO. ( and file num	(As show	n on drawi	H728- (+A99	13. TOTAL NO. OF OVER- BURDEN SAMPLES TAKEN					
S. NAME OF				14. TOTAL NUMBER CORE BOXES					
		6'. M	owell	15. ELEV		ISTAP	TED	COMPLETED	
6. DIRECTION			DEG. FROM VERT.	16. DAT		<u></u>	-27-95	6-27-95	
7. THICKNES						OP OF HOL		3	
8. DEPTH DR							FOR BORING	<u></u>	
9. TOTAL DE			4.5'	19. SIGNATURE OF INSPECTOR					
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIA	LS	ERY	BOX OR SAMPLE NO.	(Delifing time, w	IARKS wter loss, depth of a, if significant) a	
	<u> </u>	^c	d		•		<u></u>		
1			Sand, dark quarish l 10414/2, Loose, encist, quained, vound.	ovoun,					
1		JM	104/64/2, Loose, maist,	+:ne					
	-	0	O' " in the round.		l.				
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	_		same as above,						
		Sm							
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			same as above,						
		SM							
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	2 <u>-</u>	<u> </u>	· · · · · · · · · · · · · · · · · · ·	<u> </u>					
	) <u> </u>		sand brown, 104R 5/3	-					
	-		Loose, wet fine grain	ed,					
		son	vound.						
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DRILL	LING LO	ж С	DIV	ISION	INSTALL	ATION HAN	4F		SHEET (	<u>[</u> [				
1. PROJĘCT			<u> </u>	n Ar	10. SIZE	AND TYPE	OF BIT	HAND Au	zer 13"	(				
1+A.	<u>AF Î</u>	3u:1	die	15 728. Phase I GA	TI. DAT		NSL	SHOWN (TBM or MSL						
2. LOCATION	i (Coordin	ates of	r Stad	GA	12. MAN			NATION OF DRILL		1				
3. DRILLING	AGENCY	Mad	<u> </u>				NA			4				
4, HOLE NO.	(As show	n on d	C	H728-HA160	13. TOT BUR	AL NO. OF	OVER- LES TAKE	N USTURBED						
5. NAME OF	DRILLER	0	A.	4	14. TOTAL NUMBER CORE BOXES 15. ELEVATION GROUND WATER 4.5									
	(	6.1	an	vel	16. ELE			-	OMPLETED	-				
6. DIRECTIO			NED,	DEG. FROM VERT.	16. DATE HOLE 1.77-95 (0-77-95									
7. THICKNES	S OF OVI	ERBUR	DEN	4.5					*	1				
8. DEPTH DR	RILLED I	NTO R	оск											
9. TOTAL DE	EPTH OF	HOLE		4.5'	G. Bowel									
ELEVATION		ł		CLASSIFICATION OF MATERIA	ALS	CORE RECOV- ERY	BOX OR SAMPLE NO. f	REMA (Drilling time, wet) weathering, etc.,	RKS er lose, depth of , if significant)					
a	ь	¢		d				<u>y</u>		F				
	-	1		5:14 sand 15% 5:14, c	Jar K					F				
		500	~	gravish brown, 104R. Loose, dry, fine gra	41 <i>C</i> ,					F				
				loose, dry, time qua	ver,					F				
		-		, ound						F				
	<u>ا</u> ا	]	+											
		]		Sand, very dark g brown, 104R3/2, loose, dine grained, vound.	raifish					F				
	=			brown, 104R3/2, 6003e,	mo:st,									
	_	] Su	<	dine grained, vound.						Þ(				
		-		,						F				
	2-	]	-						<u> </u>	F				
	_	]		Same as above	0					F				
		]	.		•					F				
	_	50	$\sim$							F				
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	3		-							F				
	_	- I		same as above wet.						F				
		50	~	wet.						F				
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	_	1		No Sample						F				
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		1		EOB @ 4.5'						E				
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	ING LO		VISION			INSTALL		HAAF			SHEET / OF / SHE	ETS		
				<u></u>		10. SIZE		OF BIT	Hand	Auge				
HJ	AAF_	Build	ing 7	28-Phas	eI	11. DATU			SHOWN (TBM	or MSL)				
LOCATION	Coordin	aton or Sta ah, G	tion A			12. MANU		R'S DESIG	NATION OF D	RILL				
DRILLING	AGENCY	M4E					$\mathcal{N}_{\mathcal{O}}$			·····	UNDISTUR			
. HOLE NO.	(As show		nø title		. 10(1	- 13. TOTAL NO. OF OVER- BURDEN SAMPLES TAKEN 3								
and file nu				H728-HA	101_	14. TOTAL NUMBER CORE BOXES								
	_	<u>G</u> R	well			15. ELE\	ATION GF	ROUND WA	TER	?	PLETED			
S. DIRECTIO				DEG. FR	OM VERT.	16. DATE HOLE 6-27-95 6-27-95								
						17. ELEVATION TOP OF HOLE 37.85								
. THICKNES				. 0'		18. TOTAL CORE RECOVERY FOR BORING 7								
, TOTAL DE				51		19. 51070	G	. Rou	cell					
ELEVATION	· · · · · · · · · · · · · · · · · · ·	LEGEND	CL/	SSIFICATION OI	NATERIA	LS	% CORE RECOV- ERY	BOX OR SAMPLE NO.	(Deitting tim	REMAR 10, weta 1, otc., i 0	KS · Joss, depth / significant	of		
a		<u>د</u>		d lau - au tr	N/ 1/2	1								
			Mar'	t, brown, 11 t, fine gn	·1/- 7/2	, coose		·						
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			VISION		INSTALL	ATION	AUAF		. 1-1728-11/			
	ING LO	G	<u>,</u>					Haud Aug	of / sheet ev / 3"			
. PROJECT HA	AF_I	<u>Bu: U:</u>	ng 728. Pha:	ie I	10. SIZE 11. DATI	IN FOR EL	EVATION MS	HAW! Ang SHOWN (TOM or MS	L)			
LOCATION	(vooruat	eter or Ste Wan		1	12. MANI	FACTURE	• -	NATION OF DRILL	<u></u>			
DRILLING	1.0.1101		nave 1		NA							
		MAE			13. TOTAL NO. OF OVER- BURDEN SAMPLES TAKEN							
and file nuz	(As show nbec)		H728-H.	A 102			R CORE B					
5. NAME OF E	RILLER	6. hor			15. ELEVATION GROUND WATER ?							
. DIRECTION									COMPLETED			
			DEG.	FROM VERT.	15. DATI		· * .	-27-95	<u>6.27.95</u>			
THICKNES			· 1.5'		17. ELEVATION TOP OF HOLE 37.84							
DEPTH DR							INSPECT					
TOTAL DE		<u> </u>	1.5'		(	<u>G. Ro</u>	well					
	DEPTH	LEGEND	CLASSIFICATIO	N OF MATERIA	L\$	% CORE RECOV- ERY	BOX OR SAMPLE NO.	REM (Drilling time, w weathering, etc	ARKS ater loss, depth of 2, if significant)			
a	b	c		d		•	f		9			
1	_		sand, brown loose, mo: + f, round.	., 10YR. 4/3								
	_		loose, moint	Lucan	1							
		Sm	round.	VINE JVA								
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DBil I	ING LO		VISION	INSTALL	ATION	НАЛ	e	SHEET ) OF / SHEET			
			۸.	10. SIZE	AND TYPE		HAnd Au SHOWN (TBM or )				
H,	AAF	Build's	ng 728-Phase I	11. DATI			SHOWN (TBM or )	ISL)			
LOCATION	Coordin	nahi	didn) GA	12. MANUFACTURER'S DESIGNATION OF DRILL							
. DRILLING	AGENCY	nang			l	NA					
			MYE	13. TOTAL NO. OF OVER- BURDEN SAMPLES TAKEN 3							
HOLE NO.	(As show mbet)	n on arawa	H728- HA 103			R CORE BO		<u> </u>			
NAME OF	DRILLER	G. Ro				ROUND WAT		.5'			
DIRECTIO	N OF HOL	.E.	well	16. DATI		STAR	TED	COMPLETED			
VERT			DEG. FROM VERT.					6-28-95			
THICKNES	S OF OVE	RBURDE	3.51			POF HOL		<u> </u>			
DEPTH DR					ATURE OF		FOR BORING	·			
. TOTAL DE	PTH OF	HOLE	3.5'	]	G-	Rowell	<u> </u>				
	DEPTH	LEGEND	CLASSIFICATION OF MATERIA (Description)	LS	% CORE RECOV- ERY	BOX OR SAMPLE NO.	RE (Drilling time, weathering, e	MARKS meter lose, depth of tc., it significant			
e	b	<u>د</u>	d		•		<u> </u>	9			
	=		sand, brown, 104R 4/3,	loose							
1			moist, sine grained,	round.							
		JM	v ·								
	/ <u></u>										
	=		some as above								
		Sm		i							
	=		- -								
	2-		5' Hu/ Sand, 20,25% 5'	14		1					
	=		In plantite wet for	10							
		5m	s: Hy sand, 20.25% sil low plasticity, wet, f: grained, round. 104R	2/1							
			block	.,							
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			EOB @ 3.5'								
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					<u> </u>		Hole No.		<u>28</u> -6			
DRILL	ING LO		VISION	INSTALL	ATION	HAAI	=	SHEET ( OF   SHEETS				
			no Plant	10. SIZE	AND TYPE	OFBIT	Hand Aug SHOWN (TBM or MS	er 13"	] (			
HAA6	Bu:	W:ng	728-Phase I	1	L	MJL		~	1			
5	avan	nah,	GrA	12. MANI	UFACTURE	R'S DESIG	NATION OF DRILL					
DRILLING	AGENCY	MtE		13. TOT	AL NO. OF		DISTURBED	UNDISTURBED	-			
And file nu	(As show	n on drawb	14728-HA104	13. TOTAL NO. OF OVER- BURDEN SAMPLES TAKEN 3								
NAME OF	DRILLER	G.Roi		14. TOTAL NUMBER CORE BOXES								
. DIRECTIO							TED C	OMPLETED				
VERTI		INCLINED	DEG. FROM VERT.	T. 18. DATE HOLE 6-28-95 6-28-95								
. THICKNES	S OF OVE	RBURDE	N 3.5'				FOR BORING	1				
. DEPTH DA	ULLED I	TO ROCK			ATURE OF		287					
. TOTAL DE	PTH OF	HOLE	3.5'	<u> </u>		,,,,,,,	REMA	RKS	-			
ELEVATION	DЕРТН Ь	LEGEND	CLASSIFICATION OF MATERI/ (Description)		% CORE RECOV- ERY	SAMPLE NO. f	(Delling time, we weathering, etc.	, if significant				
			Sand brown 104/24	/3					Þ			
			Sand, brown, 10yR 4/ loose, moist, fine q round,	"/ was	/				F			
		SM	round,	·····e	F				E			
	-		- *						F			
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			Some as about	e,				-	F			
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	7.—		· · · · · · · · · · · · · · · · · · ·						÷			
			s: Hy sand, 20-2590 104× 3/1, low plasticit fine grained, round	5:14					E			
			104× 2/1. Low plasticit	1, wet					E			
		50-	fine grained vouro	ľ, í					F			
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## HAND AUGERS

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## 105 - 121 NOT COLLECTED

		DIVISION	INSTAL	ATION	100	Hole No. <u>H728-H</u>
DRILLI	NG LOG	DIVISION			HAA	
i. project	AAF Bu:	Wing 728 - Phase -	10. SIZE	AND TYP	E OF BIT EVATION	SHOWN (TBM or MSL)
2. LOCATION	(Coordinates	Salmuch, GA		UFACTUR	R'S DESIG	NATION OF DRILL
3. DRILLING A	GENCY N	1 <i>†E</i>	13. TOT	AL NO. OF	NA OVER- LES TAKEI	
A. HOLE NO. ( and file num	As shown on bec	trawing sille H728- HA	122.		R CORE B	
5. NAME OF D	RILLER	owell			ROUND WA	
6. DIRECTION	OF HOLE			E HOLE		-20-95 6-20-95
	AL []INCL			VATION T	OP OF HOL	
7. THICKNESS						FOR BORING
8. DEPTH DRI			19. SIGN		Rowell	
	DEPTH LEG	CLASSIFICATION OF	MATERIALS	RECOV-	BOX OR SAMPLE NO.	REMARKS (Drilling time, water loss, depth o weathering, etc., il significant)
a	<u> </u>		· II dock		<u> '-</u>	¥
	1	s: Hy sand 5% 3 gravish brown Loose, moist, fr.	INVR 4/Z.			
		n fray. In avoing	ne avained	1		
		vound.	0			
	1	:				······································
		s: Hy sand, 10% dark brown, 10% moist, fine grain	sith, very			
	- 5	m march Diroun, 104/2	2/2, Loose,		1 1	
		providity wine gran	no round.			
	2					0.Dor
		sand, gray, 10%, moist, fine grain round.	N.5/1, Loose,			
		m Moist, fine grain	es, sub			
	Ξ	round.				0.Del
	3 —	No SAMPLE				ODOR
	=					
		E.O.B 3.5'			┼┅╍┥	······································
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							Hole N	о. <u>H728-HA</u>			
DRILL	ING LO		VISION	INSTALL			AAF	SHEET   OF   SHEET			
ROJECT	AE B	uildin	4 728 - Phase I	10. SIZE	AND TYPE	OF BIT	HAW AUC SHOWN (TEM & M	rev / 3"			
LOCATION	(Coordin	ates or Sta	g 728. Phase I annah 64	12. MANI	IFACTURE		NATION OF DRIL	L			
. DRILLING	AGENCY	Mte				NA		UNDISTURBED			
. HOLE NO.		n on drawi	IN 1110 4728- HA122			OVER- LES TAKE	H <u>3</u>	0			
NAME OF	DRILLER	Cho	mall	14. TOTAL NUMBER CORE BOXES							
DIRECTIO	N OF HOL	.Е		16. DATI		6	RTED -20-95	COMPLETED 6-20-95			
THICKNES	S OF OVE		N 3.01	17. ELEVATION TOP OF HOLE 14.25							
DEPTH DR				19. SIGNATURE OF INSPECTOR							
. TOTAL DE	EPTH OF	HOLE	31	1							
	<b>DEPTH</b>	LEGEND. c			CORE RECOV- ERY	BOX OR SAMPLE NO. f	(Driffing time, v	MARKS water loss, depth of Ic., if significant) 9			
0			sand very cale brow	<u>м.</u>							
	-		sand vesy pale brow 104R 7/4, Loose, wet, M grained, vormed.	ed:um	i.		•				
		Sm	Grained would	-							
			U cronne.								
						Į		·····			
	_		same as above 104/26/6, brownish yellow.			· ·					
	-		10×16/6, brownish			1					
		sm	Yellow.								
	2_	<u>}</u>	end indet	,		<u>├</u> ─── <b> </b>	·····				
			sand, gray, 104K5/1, 1 wed, wedium grained, round.	0050							
		5n-	wer, medium grained								
	=		round.								
	l <u>⊹</u> =										
	3-		E.O. B @ 3.0	1							
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			VISION	INSTALL	ATION	ILA	4F	H728-H		
	ING LOG							OF ( SHEETS		
I. PROJECT	AAE P	bu:b	inc. 728. Phase I	10. SIZE 11. DATU	AND TYPE	OF BIT	HAW AUS SHOWN (TBM or MO	er 13		
2. LOCATION	(Coordinate	Seven	wind 614	12. MAN	JFACTURE	R'S DESIG	5 C	•		
3. DRILLING		MHE				NA		UNDISTURBED		
4. HOLE NO. and file ru						OVER. LES TAKEI	N 3	0		
5. NAME OF						R CORE B	and the second second second second second second second second second second second second second second second			
6. DIRECTIO	N OF HOLE	, hor	vel		······	I ST AI	ATED I	COMPLETED		
		LINED	DEG. FROM VERT.	16. DATI		· · · · · · ·	·20-95	6:20-85		
7. THICKNES	S OF OVER		N 3.0'			P OF HOL	FOR BORING	·		
8. DEPTH DF	ULLED INTO	D ROCK			ATURE OF	INSPECT				
9. TOTAL DE	EPTH OF HO		3/	<u> </u>	G. I	Rowell	OX OR BEMARKS			
ELEVATION	DEPTH L1		CLASSIFICATION OF MATERIA (Description)	LS	RECOV-	SAMPLE NO.	(Drilling time, w weathering, et	eter lose, depth of c., if eignificant) 9		
<u> </u>		¢	Sitter Sand 5-10% 5:	14						
			si Hy sand, 5- 10% 5: dark gray ish brown 10YR 4/2, loose, wel, f: grained, subround	ζ.						
		sm	10YR 4/2, loose, wel, f:	NP	]					
			grained, subround							
	1									
			Same as above		1					
		m								
							ODOR			
	12									
			Samp as above	2						
	<u> </u> ≾	m								
		3					$\cdot \rightarrow \neg $			
							DDOR			
			E.O.B @ 3.01		1					
	E				1					
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			1		1	1				

							Hole Na	
	ING LO	G	VISION	INSTALL	ATION	AAF	*	SHEET   OF ( SHEETS
			01	to. SIZE	AND TYPE	OF BIT	HAnd Aug	er / 3"
HA.	AF BO	i.b.in	13 728- Phase I	11. DATI	M FOR EL	EVATION.	SHOWN (TBM & M	iL) /
LOCATION	(Coordin	ate or Sti Das 181	much GAT	12. MANU	FACTURE	R'S DESIG	SNATION OF DRILL	
. DRILLING	AGENCY	Mte					DISTURBED	UNDISTURBED
HOLE NO.	(As show	• • • •	ng title	13. TOT/ BURI	L NO. OF	LES TAKE	N 3	D
and file nu	mb ec)		H728-H125	14. TOT/	L NUMBE	R CORE B	the second statement of the second statement of the second statement of the second statement of the second statement of the second statement of the second statement of the second statement of the second statement of the second statement of the second statement of the second statement of the second statement of the second statement of the second statement of the second statement of the second statement of the second statement of the second statement of the second statement of the second statement of the second statement of the second statement of the second statement of the second statement of the second statement of the second statement of the second statement of the	•
S. NAME OF	DRILLER	G. ho	well	18. ELE	ATION GF		<u> </u>	COMPLETED
DIRECTIO		.Е		16. DATI		(	0-20-95	6-20-95
<u> </u>			· · · · · · · · · · · · · · · · · · ·		ATION TO			
. THICKNES					ATURE OF		Y FOR BORING	
. TOTAL DE			3		S. Ro			
			CLASSIFICATION OF MATERIA		* CORE		REN (Drifting time, w	ARKS eter loss, depth of c., il significant)
ELEVATION	b	LEGEND	(Description) d		ERY	NO. Í	weathering, et	c., il aignificant) 9
0			En d yeary Dale brow	24				
	=	1	sand, very pale brow 104R714, Loose, wet, grained, vound.	mak				
		Sm	grained sound	med .uu	~			
	=		( , vourg.					
			· · · · · · · · · · · · · · · · · · ·					
	' =		3:14,1 sand 58-10%	5:14,				
			dark gray, 104R 4/1 100	se				
		sm	Jilty sand, 5%-10% door gray, 104R 4/1, 100 wet, fine grained, round	1		i i		
	_	]					DOR	
	2-						02015	
	_		Same as above				1	
		Sm						
	3_	1					ODOR	·
			E-0.B. @ 3.01			1		
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									Hole	No. 1778-111			
DPI1 1	ING LO		VISION			INSTALL	ATION	AAF		SHEET   OF / SHEET			
		<u>_</u>		20 DI	- <del>-</del>	10. SIZE		OF BIT	HAND A SHOWN (TEM or	u zer / 3"			
H.A.	4F D	4: 10 . 1	1 8/ 7	28- Phase	<u></u>	1		M	54				
		Sava	nnah	GA		12. MANU	FACTURE	R'S DESIC	A-	LL			
3. DRILLING		VVIT				13. TOT	L NO. OF	OVER-					
A HOLE NO.	(As show nos:	n on drawi	ng title	H728- HA	176	- 14. TOTAL NUMBER CORE BOXES							
S. NAME OF	DRILLER	5. Rou	oll			15. ELEVATION GROUNO WATER							
. DIRECTIO	N OF HOI	-E				16. DATI	HOLE	STA	RTED	6-20-95			
VERT	CAL []	INCLINED		DEG. FNO	W VERT.	17. ELEVATION TOP OF HOLE 20.16							
. THICKNES				3'					FOR BORING				
DEPTH DR						19. SIGN	ATURE OF	INSPECT	<b>P</b> R				
. TOTAL DE			CL	ASSIFICATION OF	MATERIA	LS	* CORE	BOX OR	R (Dritting time)	EMARKS water lose, depth of			
ELEVATION a	_	LEGEND		(Description	v			NO. f	weathering,	etc., if eignificent) g			
				d, grayish bi wet, fine g d.	CIRA DA	10VR 5/2							
	-		loose	wet fine a	rainad	1							
		50h	Your	d.		,							
	Ξ												
	1				6 14	2							
			San	re as a	Juon								
		sm							6				
	=												
	Z	<u> </u>	<u>-</u>	d in									
			5:14	Sauce, 15%	5.14	very				-			
		SM	wet,	brown, 15% fine graine	I vou	nd.	i i						
				0	•	•		1	and				
	3-			E.O.B. C.	3.01	····			ODOR				
		]		C.D. C.									
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	1-	<u> </u>	<u> </u>						· · · · · · · · · · · · · · · · · · ·				
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								Hole H	lo. H728-HA	127	
	ING LO	G	VISION	·····	INSTALL	ATION	HAAF		SHEET / OF / SHEET		
				Q ₁	10. SIZE		OF BIT	HAW AU	ger / 3"		
HA LOCATION	AFK	Duildin	19 778.	Phase <u>I</u> A			H:	5			
LOCATION	{Coord 21	Sovo	nnah (	A	12. MANL	FACTURE	R'S DESIG	SNATION OF DRI			
. DRILLING	AGENCY	ME			13. TOT/	L NO. OF	OVER-	DISTURBED	UNDISTURBED	-	
A. HOLE NO.	(As show	n on drawt	ng title	728-H127		DEN SAMPI		1 0			
S. NAME OF (	DRILLER	c A		100 1101		ATION GR					
S. DIRECTION	N OF HOL	G. Ro	weer_		16. DATI	<u></u>	ISTA	RTED 0-20-95	COMPLETED	-1	
			·	DEG. FROM VERT.		1	-				
THICKNES	S OF OVE		N 2	0'		ATION TO		LE 16.7 Y FOR BORING		•	
. DEPTH DR	ILLED I	TO ROCK				ATURE OF	INSPECT	OB/			
, TOTAL DE	PTH OF	HOLE	2'	····	<u> </u>		Rower				
ELEVATION		LEGEND	CLASS	Description	ALS	RECOV-	BOX OR SAMPLE NO.	(Drilling time.	water loss, depth of etc., it significant		
a	b	c	= 1/4 =	and, 5% silt.	14001					7	
	_	l	davik a	radithe lamon	very					F	
		Sm	3/2, La	ray. The brown, 1 se, wet, fine gi	rained						
	_		round		, construction						
	, -									-	
	' =		sand	davk grayigh #12, loose wet	brown						
			JOYK	1/2, loose wet	fine						
		500	Juniar	a, vouro.							
		1									
	2-		E	.O.B @ 2.0'						_	
	-					1					
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							Hoie No	. H728 Ishee	
	ING LO		VISION		LATION			OF (	SHEETS
PROJECT	HUNT		AF	10. SIZ	E AND TYPE	OF BIT	614 ID HS SHOWN (TBM or MS	A L)	
LOCATION					MSL		NATION OF POLL		
					Diet		DILO		
DRILLING		PSI	 	13. <u>TO</u>	TAL NO. OF		and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s	UNDI	TURBED
HOLE NO.	(As show	i on drawb	H728-5B1						<u>0</u>
NANE OF					TAL NUMBE				
	-		Finkenbinder			1ST A	RTED	COMPLET	
DIRECTIO			DEG. FROM	4 VERT	TE HOLE			1 Aug	95
•					EVATION TO			· ·	
THICKNES	the second second second second second second second second second second second second second second second s				TAL CORE P		Y FOR BORING		
DEPTH DR			<u>    0                                </u>	19, SIG	Tana				
LEVATION			CLASSIEICATION OF	MATERIALS	% CORE RECOV- ERY	BOX OR SAMPLE NO.	REM (Dellling time, w weathering, etc	ARKS eter lose, , if signi	depth of ficent)
a	ь	e,	d	i di t		· · ·	Posthole to :	SPT -	o Clear
	=		Grassy soil and or	game and		ļ	utilities, then	auger.	
				· · · · · · · · · · · · · · · · · · ·		<u> </u>	ļ		
	'	•	Fine sand, trace si 10YR 5/1, secondary 100se to firm, wel subangular, moist ne	It, SM	,	#1	Headspace = 0	rpm	
	=		10YR 5/1, secondary	color 104KS	4				
		•	loose to firm, we	n sorred,					
		• •	SUBARQUIAL, MOIST						
	3 -						7.2.4.5	· ···	
	<b>–</b>		Sand as above, sans 8" wood Frugment	uple saturated		Castle we	2-2-4-5 Headspace 0.	8ppm	
,		•	8" wood Fragment	r at 20400	1 18/24	42	Readspace	••	
			of spoon.		1				
		• • •							,
	5	· · · ·	c. I yery fine to	fine, trace	2	#3	6-11-21-23	·	1000
		• • •	Sand, very fine to silt, SM, 2.5Y6	.5/1, moderal	ely		6-11-21-23 Headspace We	of Colle	ected (NC
		••••	Firm, well sorted,	subangular	· ·				
	=		to subround.		22/24				
		· · ·							
	7		12" sand as about	Je,		#4	9-12-21-23	•	
	=	ľ	8" sand very fir trace silt, SM, 2	ie to fine,	20/24		NC		
		]	trace silt, SM, 2	,5 ¥ 5,5/1,	1/24	1			
	1 =		firm, well sorted,	subangular	•				
	_ 				_	1 10-			
		·· · · ·	Sand as above.			¥5	5-6-7-16 NC		
	=				20/24		~~		
		1			/24				
	=								
	0 <u> </u>		- 0			#46	8-8-13-20		
	=	1	Sand as above.			· ·	NC		
	=	1			22/24		<b>1</b> ′		
		· · ·			/24				
	=	] ,					Luger to 1	4'	
	13	],		<u> </u>	-	1	EOBE 14'	<u> </u>	
	1 =				-				`.

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						0. <u>FITA</u>	8-5B2
DRILLING LOG	DIVISION	INSTAL	ATION			OF	SHEETS
PROJECT		10. SIZE	AND TYPE	OF BIT	6'/4 ID HS	A	
Hunter		11. DAT	UN FOR EL	EVATION	SHOWN (TBM or M	136)	
LOCATION (Coordinates	pr Station)	12. MAN	UFACTURE		SNATION OF DRIL	L	
DRILLING AGENCY	ст ⁻		etrich	¥		1 + 114 201	STURBED
HOLE NO. (As shown on	SI trawing title	13. TOT BUR	AL NO. OF	OVER-	IN G		0
and file number)	H728-SB2	14. ТОТ	AL NUMBE	R CORE B	OXES		•
NAME OF DRILLER	m Flukenbinder	15. ELE	VATION GP	ROUND WA	TER		
DIRECTION OF HOLE		16. DAT	EHOLE		rted tvg 95	LAUS	15
XVERTICAL MINCL	INED DEG. FROM VE		VATION TO			5 (	<u> </u>
THICKNESS OF OVERBU	RDEN JU				Y FOR BORING		,
DEPTH ORILLED INTO	AOCK O		ATURE OF		OR 1	-	
TOTAL DEPTH OF HOL	ε <u>μ</u> ('		- Mar	BOX OR		MARKS	
LEVATION DEPTH LEG		ERIALS	CORE RECOV- ERY	SAMPLE NO.	(Drilling time, s weathering, e	ter loss, te., it sign g	depth of lificant)
	. Gross, Organic dirt.				Post hole di	ેલુ	
						U	
		<u>, 11.</u>		#(	Headspace =	Dun	
= - :	: Fine gand, track 4		[		rieur Space -	11	
	BM 7.542 3/2.5, 1005 well sorted, subangu		MA				
	well sortes, subango	~~ .					
	.: Job gravel (1-3cm)	' ( '					
3	- Sand as above, with 20% gravel (2-4cm, bottom of spoon,	h 10-		#2	Begin auge	r and	split
	· 120% gravel (2-4cm)	) at	1%24		spoon (3") 3-2-2-2	>	-
	+ hottom of spoon.		/24	1	3-2-2-2		
= . `					Head space "	:Oppm	
	Fine saul, trace sile Bra 7.54R 3.5/2, mod	5		#3	2-4-6-4 Headspace=	Own	
	" BM 7.5YR 3.5/2, MOUS	herostely		_			Grand
	" loose to firm, well	Souter,	22/24	Sumple we	Sample Wet	+	l over
	Subangular. Top 8"	ary.		1	any - 20		
	· Some darke staining -m	<u></u>		#4	6" travsi 4-2-4-7.		Linch sre
	Sand, very fine to 6 trace silt, firm, when	ortel, sob	wer.		4-2-4-4. Healspace No	,f Collec	tel (NC
	$\cdot$ 1/4 $\sim$ 110416 $\pm$ 14		1 1/211				
	10" same mill die br	~ 5YR 3/2.					
	-					<u> </u>	<u> </u>
9	Very fine same, trace firm, well sorted, subo	Silfi		#5	1-2-5-7		
	- firm, well sorted, subo	engular to			NC .		
;,	Subround. 54 7/2.		14/24		OVA (stain)	) - 0.0	rrn 👘
	. Some dark stains have	ar top	164				
u <u> </u>	: of sample. No odor.	<del></del>				1	
	Veryfine sand, 10% si	ilt, 5M,		#6	3-8-12-1 NC	د	
	· SY7/25 firm well so	rter,	201		~~		
	. · subadgular, no stain	ing.	20/24				
					hurse 1.	u	
13	<u></u>				LoBensi		. <u></u>
					Copers		`.

DRILLIN	NG LOO		ISION		INSTALL	NUN			SHEET	
									OF / SHEET	5
	,				10. SIZE	AND TYPE	OF BIT	BIAY ID HSA	,	
	11-	ster 1						SHOWN (TEM or MS		1
LOCATION (C	Coordina	tes or Sta	BLDG 728	2	<u>M5</u>	L.	R'S DESIG	NATION OF DRILL		
	GENCY		11600160			Dredri		120		
		PS	Γ		13. TOTA	L NO. OF		DISTURBED	UNDISTURBED	,
HOLE NO. (A and file number	a shown	on drawb	H728	-383				1	<u>_</u>	
NAME OF DR						ATION GR				_
	/		Gribble		10. ELEV				COMPLETED	—
DIRECTION	OF HOL	E		EG. FROM VERT.	16. DATE	HOLE	8	11/95	COMPLETED	
/ <u> </u>					17. ELEV	ATION TO	P OF HO	LE 21.1		
THICKNESS					16. TOT	L CORE P	ECOVER	Y FOR BORING		*
DEPTH DRIL	LED IN	TO ROCK			19. SIGN	TURE OF	INSPECT	OR		
TOTAL DEPT	TH OF H	OLE	13.0		L	D. T.		REV	ARKS	
		LEGEND	CLASSIFICA	TION OF MATERIA	LS	RECOV-	SAMPLE NO.	(Deilling time, w weathering, et	eter loss, depth of c., if significant	
<u> </u>				6 	due	Post		BLOWS	Healso	ni
	7	• • • •	SAND: Finermed Wellsonter, sm	bag. 10% ett.	, .,	hile to		- None -	Headsp OVA.11	144
	2 <u> </u>		(at y above a second	0,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		3′	'	- None -	0	,
ļ ⁴			(stol-cm)				ļ			
	크		" as doore,	4-3+ 7.54R 6/3 +	Br 7/4,	14	2	4-8-11-20	0	
10	4 –		wetath	ston v. war-h	wm, tr.	58		Wet-sample	C 10.35	
	1		(SM)	Br 104R 5/3, U.	silt.	20				
	, =		· 90 about	Br 10% 5/3, U. fr. micn,	loose - U.	83	3		s not colle	Ŀ
	6	• • • •	(SHD)	Promiter,		00		\$ 6.10'ba	» not colle	AP.
	ヨ	• • • • • •	i as alian	, few maca - 10%	, loose form.	21		10-15-16-17	N	C
	8		wet	· · · · · · · · · · · · · · · · · · ·	• •	88	4		\ ~	
	<u>۲</u>	<u>· · · · · · · · · · · · · · · · · · · </u>	(519)					2-1.7.19		
	<del>ا</del> م	· · · · ·	i fine-wal,	45% silt, weti , tr. b/k muumals,	¥. 10054- 1+ D-	100	5	3-4-7-12	\ NC	-
1	10	••••	64 2.54 6/2.		-1- <b>07</b> .		⁻			
}		• • • • •	: eschave.	very lloon, tr. gl	mismite!		6	5-7-11-15	\ NO	-
	12		tr. mica, tr. f	errowigs, bose	form, we	100	Ĩ	1	$\backslash$	
'		• • •	]			<u> </u>			<u>_</u>	
.	, 1		E.0	B @ 13.0'		1	1		, i	
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								Hole No.	
ו וופח	ING L		IVISION		INSTALL	ATION			SHEET   OF / SHEETS
PROJECT		<u> </u>			10. SIZE		OF BIT	61/4 1D HSA	
PROJECT			AAF		11. DATI	IN FOR EL	EVATION	SHOWN (TBM or MSL)	)
LOCATION		TER				MSL			<u></u>
					12. MAN	FACTURE		SNATION OF DRILL	
DRILLING	AGENC	PS				Dietr		VILO	1.110101-0010-0-0-0
	(A :				13. TOT/	AL NO. OF	OVER-	N (	UNDISTURBED
HOLE NO.	(As shot mbee)	m on draw	11 H	28 - SB4					<u> </u>
NAME OF						AL NUMBER			
- · ·		T.T	=inkenb	inder	15. ELE	ATION GF			MPLETED
DIRECTIO			-		16. DATI	E HOLE			Aug 95
	CAL	INCLINE	D	DEG. FROM VE		ATION TO			
THICKNES	S OF OV	ERBURDE	IN 14						
DEPTH DR					· · · · · · · · · · · · · · · · · · ·	_		FOR BORING	
			<u> </u>	<u> </u>	19, SIGN	721	HU V	<u> </u>	
TOTAL DE	PTHOF	HOLE				S CORE	BOX OR	REMA	RKS
	DEPTH	LEGEN	CLASS	(Description)	CKIALD	% CORE RECOV- ERY	BOX OR SAMPLE NO.	(Drilling time, wat) weathering, etc.,	er loes, depth of if eignificand
o _	Ъ	c		d		•	<u> </u>	9	
		-1	Grassy S	ioil and organ	nc dirt			Post hole alig	-
	-	1							
	<u>-</u>	1				_ <u></u> .			
	' -	- · · .	Five son	1, 10% silt, 5	M, 104R3/1,		玉	Hendspace = 32	ppn
	-	7 * . •	loose to	ar. Sample '	1 sortes	2 FAL			
		<b>1</b> · · · .	c. hanul	ar. Samole i	is moisti				
		+.	120.00	i i i i					
	-	1.							
	3-	1			<u>.</u>			. دا دست د مت	+ = 1===
	_ د	Ⅎ. • ∵	Fine son	2, 10% cilt, 30% in botto	increasing		#2	Brgin 3° spli 4-6-5-7 Headspace -	Spoor
	-	- · · ·	silt to	30% in botto	m 6° of		]	4-6-5-7	
	-	1:	5000 ,2.5	30% in 6000 V 415/1, firm, subangular. S	moderately	22/24		Nordeneres	350ppm
	_	- · · ·	sorted,	subangular. S	ample 15	,,,,		Hearspire	F I
	_	<u></u> ∙	woist	-	·				
	5-	-	1				10		
			10" Fine	Sand, 10% +	(IT, SPC		#3		
	-	-	2.54 5/3	, loose to	s loon,	141		4-4-5-6	
		1	well Sor	hed, sobangula		11/24			
	-	1	93000000	- 1. 20% silt	2.513/1			Headspace = 32	-ppm
	-	1	5 VF 3	sorted, subar	ing to subo.		Sorvewet	,	
	7-	1	J. 1, ~ 24	The state	V WRT			1-8-0-11	
		1 .	Fine sand	, trace silt,	all cashol		#1	5-8-9-11 Headspace Not	- collected (VC)
	-	<b>d</b> • • •	10YR 6/1	mod firm, w	~~ 301.00/			meanspace Nor	
	_	$+\cdot$	SUBROUND	wet.		24/24			
		<b>-</b>				- /24			
	-								
	1 —		-	and, trace s	H. Sm	14	#5	5-8-11-15	
		<b>H</b> 6 1 1 1	1- the se	and proved by	Gra	24		NC	
	-	- `		المعميا وإسمس	~ ~ · · · · · ·				
	-		- VR. C	c = 1 + 1 = 1 = 1 = 1	Jon Land.				
	-		- VR. C	ortel, subro	und, wet.				
			- VR. C	c = 1 + 1 = 1 = 1 = 1	ind, wet.			· ·	
			- VR. C	c = 1 + 1 = 1 = 1 = 1	und, wet.				
	=		75 YRS well se	ns/1, loose t	und, wet.	10	<u>, 1 / </u>		
			- VR. C	ns/1, loose t	und, wet.	20	\$6	8-11-5-25	
	=		75 YRS well se	ns/1, loose t	und, wet.	20 24	\$6		
	=		75 YRS well se	ns/1, loose t	un d, wet.	20/24	#6	8-11-5-25	
			75 YRS well se	ns/1, loose t	un Ø, wet.	20/124	\$6	8-11-5-25	
	= = 		75 YRS well se	ns/1, loose t	un d, wef.	20 24	\$6	8-11-5-25	
			75 YRS well se	abore.	υn θ, we ⁴ .	20 24		8-11-5-25 NC	
	11-		75 YRS well se	ns/1, loose t	υnθ, we ⁴ .	20 24		8-11-5-25 NC	
			75 YRS well se	abore.	υnθ, we ^{-{} ,	20/24		8-11-5-25	

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<del>~</del> .,				1				. H728 - 385
DRILL	ING LO		VISION	INSTALL				OF / SHEET
1. PROJECT	H	AAF		10. SIZE	AND TYPE	OF BIT	6 1/4" ID 1451	f sL)
2. LOCATION	(Coording	tes or Sti	Bldg 728	12. MANU	150 JFACTURE		NATION OF DRIL	<u>.</u>
3. DRILLING		<u>AAF</u> PSI		Ĩ	Died	hich I	651	UNDISTURBED
4. HOLE NO. and file nu	(As shown	n on drawi	H728 - 585	L		OVER- LES TAKEI	6	
S. NAME OF		<u> </u>				R CORE B		
6. DIRECTIO		<u>e 6.</u>	ribble	16. DATI			1/95	COMPLETED 8/1/95
				17. ELE	VATION TO	P OF HOL		0/1/13
7. THICKNES							FOR BORING	
8. DEPTH DR 9. Total Di			14.0'	19. SIGN	. /	INSPECT	DR	
ELEVATION		LEGEND	CLASSIFICATION OF NATERI	ALS	* CORE RECOV- ERY	BOX OR SAMPLE NO.	REI (Drilling time, s weathering, a	MARKS mater loss, depth of tc., if significant)
d	ь	с 	SAND: fin-well : Dr. Gr. Br. 10	YR 4/2			Blans	#5
		'	SMAND: fine und ; Dr. Gr. Br. 10 +. grandes, dry. 20% sitt. Subary, will sixted.	,,	Post	1	- None -	O A J
	2	• • • •			10 3'		,	U
		• • • • •	(SW) : as above - to L+1ell B+10/1	P 6/4	18		4-7-9-8	
	4_		most, u. louse-lase., tr. granel,	10%5,14.	67	2	-	0
	· _	• • • • • •	(5w) ; U. DR GRBR 2.54 3/2, #. fer		ł		- 1- 7- 57/5 - E	= initial wetsamplot nats' Collected NC 15' SOUTH
	μĒ		tr. remnanthanding. wet.	Windys Million	38	3	Obstruction	nats! Collocted
1	<b>1</b>	· · ·	(5w)				4-4-7-20	15' 504TH
	8		fire-wel; Gray 2.546/1, + . clayay 5-402, this lange	ne Aclay.	69	4	4-4-7-20	NC
		· · · · · ·	wet v. lopse firm. (SC) : as ploone : 2" ur/gr					
			: As above : 2" orlar incontor.	cloyofloyo	58	5	15-17-13-13	N
		بر . ب	(50)			1 1		
	,	• • • •	Al 10B bley, Micathin lam		46	6	4.5-6-5	NC
	/2				70	Q		
							Auger	
	/4		E.O.B. C 14.	.01			WaterLevel	6.20 ft 6gs 6 hr.
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···- ,						•			Hol	e No	· H728-	586
			VISION			INSTALL	ATION				HEET /	
DRILL	ING LO	G	50 1	Arc.					Lilan in		OF , SHE	ETS
I. PROJECT	4 AND	B 72	P					EVATION	614" 1D SHOWN (TBM	07 145L)		<u> </u>
Z. LOCATION	(Coordin	ates or Sta	tion)		· · · · · · · · · · · · · · · · · · ·	<u>M</u>	54					
54	w. 64		. 72	8		12. MAN	Dictine		INATION OF			
. DRILLING	AGENCY	DSI				13. TOT	L NO. OF		DISTURBE		NDISTURE	ED
ANDLE NO.	(As show	n on draw!	ng title	H728	-SRL							<u> </u>
S. NAME OF				<u>n 120</u>	350		AL NUMBE					
•	$\sim$	like br	, bble			15. ELE	ATION GF		RYED			
S. DIRECTIO			5		EG. FROM VERT	16. DATI	EHOLE	8	2/2/95		2/95	
			<u> </u>				ATION TO	POFHO	.E 20	.4	<u> </u>	
7. THICKNES				<u>140'</u>	· · · · · · · · · · · · · · · · · · ·				FOR BORING	3	<u></u>	*
. DEPTH DR				5 1 ~ ~ ~ ~		19. SIGN	ATURE OF	inspect	OR			
. TOTAL DE	PTH OF	HOLE		(4.0'				S				
ELEVATION	DEPTH	LEGEND	- C	LASSIFICA	TION OF MATER	IALS	% CORE RECOV- ERY	BOX OR SAMPLE NO.				ih of ni)
a	b	c	<u> </u>		d	77.1	•		BLOWS	9	HS.	
	=		SAND	f-medge,	Brojel 104R6/6 to	DRUR 3/3	Post				OUA,	pn
				y 5-25 h A Polola	motor, day-	ang, tr.	hole, to 3	)	None -		100	101
	2	<b> </b> ∵ .	1	SC)		· - 1492						
	=		{	as a Sone	2.543/1 0.2	KGr.	17		3-3-5-5		10	nne
	4-		u u	iet at bith	m, v. loose - loose	e. odur	71	2	I INST	poon	Lab	907
	' =	<u> . · ·</u>		()	-	<u> </u>	15		4-4-59/5	-	Sample	L-
	, =	<b> </b> ∶	i alau	f-wood gr, 10-30	VAK 6r. 2.5 / 3 , tr growel with	stom,	63	3	44-545	(new)	N	c
	= 0	]		oose. (s	() <del>X</del> Au	ers walker	65		_ OFFSET	3' Eas	+	
		]	L	c. Lang					4-2-2-3			$\mathcal{I}_{\mathcal{I}}$
	8		Ξ3"γ 8-	- 5/3, west	mod-coarse, 10%. ly med sond , clay 11 pse, wet,	2-30%, H.	7/	4			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
	_		<u>9'</u>	s have t	nse, wer,		10		4-15-5-4	,		
	10-	1		grovel/come	nte atbottom ;	v.loose .	58	5			N	C
		0.00	(:	sC)	7			<u> </u>	1.200			
			95	above , c	Tayoy 10-3070 Tayer 1 gray.	, v. loose.	71	6	4-32-2		N	c.
	12-	1		c)			/ (	6			7.0	•
	=	· · · ·					1		1 Anger			
	14						<u> </u>		they are a second			
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		100	VISION	INSTALL	ATION			0.4728-587
DRILL	ING LO							OF / SHEET
. PROJECT	, (			10. SIZE	AND TYPE	OF BIT 6	14 ID +ISA	ISL)
LOCATION		TER	AAF		MSL			
LUCATION	100000000			12. MANU	FACTURE		NATION OF DRIL	.L
. DRILLING	AGENCY				Vietr	1	DIZO	UNDISTURBED
4. HOLE NO.	(As show	: n on drawt	ng title (1777 - 177		DEN SAMPI	OVER- ES TAKEN	6	0
and file nu	nbee)		H728-5B7	14. TOT	AL NUMBE	R CORE BO		
5. NAME OF	DRILLER	Τ. Τ	Fintenbinder	15. ELE	ATION GR	IOUND WAT		
6. DIRECTIO	OF HOL			16. DATI	E HOLE	ZA.	<b>۲ED</b> ۸۹ 95	2AUQ95
VERTI	:AL []	NCLINED	DEG. FROM VE			P OF HOL		<u> </u>
7. THICKNES	S OF OVE	ROURDE	141				FOR BORING	
a. DEPTH DA	ILLED IN	TO ROCK	0'			INSPECTO		
9. TOTAL DE		HOLE	14		Fal	Mu d	where the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second	
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MAT (Description)	ERIALS	% CORE RECOV- ERY	BOX OR SAMPLE NO.	RE (Drilling time, ) meathering, d	MARKS water loss, depth of tc., if eignificant)
G	. ь	. <u>.</u>	dd		•			9
		<del>7/ 7/</del>	Grass				Post-hole	dig to s'
	-							
	1	<u> </u>	The and 10% sill, but	104R5/5/3.	<u> </u>	#\	HEADSPACE =	3.0 ppm
			Five sand, 10% silt, ba well sorter, subangular, a	noist, loose			-	
			to firm		-			
		·						
	-	·~						
	3	· 10	Fine sand, silt 10% a	lecreasing		#2	Begin 3"	split spoon 13 540ppm
	-		Lo trace, SM. Blac	k 104R2/1	241		5-8-11-1	13
		•	to trace, sm. Blac firm, slightly moist, u	ell roomfref,	HE /24	V.	HEADSPACE =	540 ppm
	-	•- :	Lesh anoular			samplewel		
	/ =	11	Very pale brown fac It grey L	0412/2				<u> </u>
	5		F( , 0 , 11 10%	KM. CH		#3	3-10-20-2	.8
	-		decreasing to trace	a f bot			HEADSPACE -	98ppm
			the send, sitt 1010, derreasing to trace of spoon. Black 1 to 10426/2, firm,	oyrz/	24/24			
	=		to 10426/2, time	WE " SOFIE				
	ج =	• • • •	subagular, sample	wet				
	1-		Five sand, trace silt,	sm. 2.5 Y7/1		मन	Bigh 2" 5 5-17-15-1	100n
		• • • •	firm, well sorted, s.	, bangular,	1		loudinace A	13 Pot Collocted (N
				-	20/24			
	_							-
	a -	<u> </u>	A 1	/)	RAL	\$5	\$8-10-12	- 12
		1	Flace sand, froce sil	t, sur lotte			38-10-1 C eK	
	=	₽°````	104R515/1, firm, we	~ 701710,	22/24		NC	
		$\left  \cdot \right\rangle$	subangular.		I TM		~	
	-	· · ·			1			
	N —	<b>1</b> • •				36	7-10-14-1	2.0
	=	<b>1</b>	Sant as above.		_	1	NC	
	_	] "_ •′			22/			
		]			""			
1		]·			1			
1	13-	<u> </u>				<u> </u>	Auger to 1	
		], ·· ;	as above		-	-	EOB CI41	•

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				-			Haie N	lo. #728-538
DBUI	ING LO		DIVISION	INSTAL	LATION			SHEET / OF / SHEETS
1. PROJECT				10. 517	AND TYPE	OF BIT	611" DH	SA
I. PROJECT	HA	AF I	B16728	11. DA1	UM FOR EL	EVATION	SHOWN (TBM or	MSL)
2. LOCATION	(Coordin	ates or S	tation)		しら と	P'S DESU	INATION OF DRI	
3. DRILLING	SAVANU AGENCY	ah G	<u>#</u>		Diedu		120	
		PSI	<i>t</i>	13. TOT	AL NO. OF		DISTURSED	UNDISTURBED
4. HOLE NO. and file nu	(Ås show mbec)	n on drav	H728-588					
S. NAME OF	DRILLER	M 1		14. 101	AL NUMBE			· · · · · · · · · · · · · · · · · · ·
6. DIRECTIO			Gribble					COMPLETED
S. DIRECTIO			D DEG. FRO	M VERT	TE HOLE		12/95-	8/2/95
					VATION TO			
7. THICKNES 8. DEPTH DR					AL CORE P		Y FOR BORING	X
9. TOTAL DE			14.0		DA	mohs		
			CLASSIFICATION OF	MATERIALS	& CORE RECOV-	BOX OR	RE (Dailting time	MARKS
ELEVATION		LEGENI	D (Description	บ	ERY	NO.	weathering,	water loss, depth of etc., if eignificant)
<u>a</u>	<u> </u>	<u>с</u>	Sand: f-med gr. Dx Br	7.5VP 3/ 2	Post		Blows	HS
		•••	clay 5-25%, dw, th	MICA. Potrol.	hole	<b>,</b>		OVA, ppm
	$2^{-1}$	]	clay 5-25%, day, the otor. someclay ball	s. sabong, well	103'	1 1	-None	500
			(50)	sorted				-
		• •	: AS above, v.loose		21		4-3-4-4	1000+
	4		lighter groy color ban	wing.	88	2	E initral wetsample	
		<u> </u>	(Sc) rs above. DK/olls	- UNP3/2	AL		= wefsample 2-1-2-2	Soupe
	6-		viloose. clay 102, +	· · ·	1 1 4 1 1	3	2-1-2-2	NC
	6-		(SC)	HCodor	<u> </u>			not collectal
		•	As above; grading:	to GRE by 6/10B	\$ 100		7-1-3-4	NC
	8-	نيند ا	GLEY, oil staining, ci	by 10%, fr. grad	1 100	4		pC
	=		(SC) clay thin lamin : med-course, 686	NC.	/ 18		4-5-7-10	
	10-		clay 5% aboin thin	laminae, viloa	75	5		NC
	′° =		losse, no stains, wet. (	(SC) tr. mica.				
	. =		: as above.		1 41	6	4-7-10-12	
	12		• 		71	6		NC
	=	$\downarrow$					I Augor	
	14	1				<u> </u>		
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ING L			;	1				OF / SHEETS
(Coord							City in ite	(
(Coord			1.4-	10. SIZE	AND TYPE	E OF BIT	G1/LID HSP SHOWN (TBM or M	t
		_	AAF		MSL			
	istaten c	r ote				R'S DESIG	NATION OF DRILL	1
AGENC	Y 72/	· 7	<u> </u>			rich	DIZO	UNDISTURBED
(A.a. a.b.a	<u>r :</u>	<u>لر د</u>	ng tille ulance cra	13. TOTA	L NO. OF	OVER-	N G	0
nber)			H728-589	14. TOT		R CORE B		
DRILLE	R	T	inkenbinder			ROUND WA	·····	<u></u>
		-	In & ENDINCIEI				ATED	COMPLETED
		NED	DEG. FROM VERT.					3 Avg 95
				1				*
			0	19. SIGN	ATURE OF	A		
PTHO				<u> </u>	CORE	BOX OR	RE	ARKS
DEPT	LEGI	END	CLASSIFICATION OF MATERIA (Description)		RECOV-	SAMPLE NO	(Drilling time, w	neter loss, depth of ic., if significant)
Ь	<u> </u>	<b>V/</b>	d		•	f	7 11-6 0	0 In Theat
	₫. ″.		Grassy soil and organi	C ((1")		1	rosthole dis	to steel
	<u></u> .	۰. ا						
) _	<u>] · ·</u>		En al damas all SM 1	ialt		41	UEADORA-E -	3.2 000
	۰ ` [	`,	upl-bin 104R 515/3. 1005-	2		"₩ <b>#</b>	11-17-21-462 - 2	
-	٦٠.	•	well corted. subangular.		N/A			
	-	·.						
-	Ξ.`	·						
3 —	╡	<u> </u>		0		1	Ruis 2" C	lit sroon
-	<b>1</b> .	•	Clayey silty save, notice	X		#2	Degin C =	ku, staa
	<u></u> ∃∙∖`	••	appearance, brn 7,042 515/9	and	10/11			1
	<u>-</u>	•	grey 754R 55/1, 20% sil	1,1070	/24		HEADSPHILE = A	6
	1.	•	clay, moderately to poor	7 110				
<u>ر</u>		÷	sorted, subangular, ary, rol	ot mtijs.				
· ·	- ·	۰ <u>-</u>	Clayey sand, fine, tre	ace .		#3	9-4-4-5	
	<b>-</b> "·		1 10% sitt bry 7.5	125/8	<i>с,</i>		HEADSPACE = 2	.2
	<b>-</b>	:	and minor grey FISYR:	5/1,	°/24			
	<b>-</b> 1:					7		
	╡ᆞ	- •	wet ar bottom of s	poor,S.		Samplewet		
7 -	╡╤┊		1 wet clarge same as a	Sove		#4	11-17-22-17	I CR. LOCNO
	<b>ゴ</b> .・		18" fine sand, trace silt	sm	2-1	v v	Headspace N	lot collection (100
_	<b>-</b>   · ·	2	104RG.5/1, Firm, well s	ortel,	1/24		•	
	<b></b>							-
	`_`ב`					1		
1 –	<u></u>	•	The Good as about 104	R7/1		#5	3-3-4-5	
	₫``	· •	The same is moved (a)					
	<u></u>				21/2.1		, <del>-</del> -	
	<u>-</u> ] · .	••			100			
	'					1		
ıı –	<u></u>			-751	<b>∤</b>		9 1-10-15	
	٦. '		Fire Sand as above, Z.S	יין כי כ		-#v		
	1.	٢.	2' Interval with increa	sed	22/ .			
_	1.		day content (0+ to 30	%).	N			
:	<b>1</b> :)	٠.	Alactic					
13 -	1	•	· · · · · · · · · · · · · · · · · · ·			<b> </b>		a.tl
	<u></u> ∃∵,	٠.	as above				Auger to	14.
	<u>-</u> ] · `						EOBE 14	·( ·
	CAL C IS OF OV INILLED DEPTH OF 5 3 5 7 7 7	S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S OF OVERBUI S	CAL DINCLINED	CAL DINCLINED DEG. FROM VERT. IS OF OVERBURDEN 14 ¹ MILLED INTO ROCK 0 ¹ EPTH OF HOLE 14 ¹ DEPTH LEGEND CLASSIFICATION OF MATERIA DEPTH SOFTER, SUBANZULAR, SN, 1 CLAYER SOLAR, BURNALL, 100 CLAYER SAND, FIN, 100 CLAYER SAND, FIN, 100 DEC. FINE SAND AS ADDUC, 107 DEC. SIDANGULAR, FINE, SN, 1 DEC. SND AND AND AS ADDUC, 107 DEC. SND AND AS ADDUC, 107 DEC. SND AND AS ADDUC, 107 DEC. SND AND AS ADDUC, 107 DEC. SND AND AS ADDUC, 107 DEC. SND AND AS ADDUC, 107 DEC. SND AND AS ADDUC, 107 DEC. SND AND AS ADDUC, 107 DEC. SND AND AS ADDUC, 107 DEC. SND AND AS ADDUC, 107 DEC. SND AND AS ADDUC, 107 DEC. SND AND AS ADDUC, 107 DEC. SND AND AS ADDUC, 107 DEC. SND AND AS ADDUC, 107 DEC. SND AND AS ADDUC, 107 DEC. SND AND AS ADDUC, 107 DEC. SND AND AS ADDUC, 107 DEC. SND AND AS ADDUC, 107 DEC. SND AND AS ADDUC, 107 DEC. SND AND AS ADDUC, 107 DEC. SND AND AS ADDUC, 107 DEC. SND AND AS ADDUC, 107 DEC. SND AND AS ADDUC, 107 DEC. SND AND AS ADDUC, 107 DEC. SND AND AS ADDUC, 107 DEC. SND AND AS ADDUC, 107 DEC. 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TOTA IDEPTH LEGEND CLASSIFICATION OF MATERIALS DEPTH LEGEND CLASSIFICATION OF MATERIALS DEPTH LEGEND CLASSIFICATION OF MATERIALS DEPTH LEGEND CLASSIFICATION OF MATERIALS DEPTH LEGEND CLASSIFICATION OF MATERIALS DEPTH LEGEND CLASSIFICATION OF MATERIALS DEPTH LEGEND CLASSIFICATION OF MATERIALS DEPTH LEGEND CLASSIFICATION OF MATERIALS DEPTH LEGEND CLASSIFICATION OF MATERIALS DEPTH LEGEND CLASSIFICATION OF MATERIALS DEPTH LEGEND CLASSIFICATION OF MATERIALS DEPTH LEGEND CLASSIFICATION OF MATERIALS DEPTH LEGEND CLASSIFICATION OF MATERIALS DEPTH LEGEND CLASSIFICATION OF MATERIALS DEPTH LEGEND CLASSIFICATION OF MATERIALS DEPTH LEGEND CLASSIFICATION OF MATERIALS DEPTH LEGEND CLASSIFICATION OF MATERIALS DEPTH LEGEND CLASSIFICATION OF MATERIALS DEPTH LEGEND CLASSIFICATION OF MATERIALS CLAYEY SILL, SUBANGULAT. CLAYEY SILL SOLUTION OF MATERIALS CLAYEY SAND, FINE, TOOT MISSIENT CLAYEY SAND, FINE, TOOT MISSIENT CLAYEY SAND, FINE, TACE TO 10% SILL SOLUTION, WELL SOLUTION, WELL SOLUTION, WEL AR BOTOM OF SPOON, SC. NET NO SOLUTION, WELL SOLUTION, WELL SOLUTION, WEL AR BOTOM OF SPOON, SC. TO YRCS/1, FIRM, WELL SOLUTION, WEL AR BOTOM OF SPOON, SC. TO YRCS/1, FIRM, WELL SOLUTION, TO YRCS/1, FIRM, WELL SOLUTION	CAL DINCLINED DEC. FROM VERT. IS OF OVERBURDEN 14" IS. ELEVATION TO SOF OVERBURDEN 14" IS. ELEVATION OF MATERIALS PETH OF HOLE 14" DEPTH LEGEND CLASSIFICATION OF MATERIALS WWW GIRASSY Soil and organic dirt SCORE HERV A CLASSIFICATION OF MATERIALS WWW GIRASSY Soil and organic dirt SCORE HERV A CLAYEY Soil and organic dirt SCORE HERV A CLAYEY Silfy Sawd, mothed A CLAYEY Sawd, Fine, trace CLAYEY Sawd, Sabove, Sobory, Sabove No 10% Sottel, Dense, Sobory, Sabove No 10% Fine Sawd as above, (0%R f(1) Subangular, T T T T T T T T T T T T T	A DE MOLE CAL DINCLINED DEC. FROM VERT. S OF OVERBURDEN 14 ⁽¹⁾ BLLED INTO ROCK 0 ⁽¹⁾ II. ELEVATION TOP OF HOLE DEPTH OF HOLE 14 ⁽¹⁾ DEPTH LEGEND CLASSIFICATION OF MATERIALS PAY OF CLASSIFICATION OF MATERIALS DEPTH LEGEND CLASSIFICATION OF MATERIALS PAY OF CLASSIFICATION OF MATERIALS DEPTH LEGEND CLASSIFICATION OF MATERIALS DEPTH LEGEND CLASSIFICATION OF MATERIALS NO. 1 DEPTH LEGEND CLASSIFICATION OF MATERIAL DEPTH LEGEND CLASSIFICATION OF SPORTS NO. 1 DEPTH LEGEND CLASSIFICATION OF SPORTS NO. 1 DEPTH LEGEND CLASSIFICATION OF SPORTS NO. 1 DEPTH LEGEND CLASSIFICATION OF RESCI DEPTH LEGEND CLASSIFICATION OF RESCI DEPTH LEGEND CLASSIFICATION OF RESCI DEPTH LEGEND CLASSIFICATION OF RESCI DEPTH LEGEND CLASSIFICATION OF SPORTS DEPTH DEPTH LEGEND CLASSIFICATION OF RESCI DEPTH LEGEND CLASSIFICATION OF RESCI DEPTH LEGEND CLASSIFICATION OF RESCI DEPTH LEGEND CLASSIFICATION OF RESCI DEPTH LEGEND CLASSIFICATION OF RESCI DEPTH LEGEND CLASSIFICATION OF RESCI DEPTH LEGEND CLASSIFICATION OF RESCI DEPTH LEGEND CLASSIFICATION OF RESCI DEPTH LEGEND CLASSIFICATION OF RESCI DI	NO PHOLE Sold and the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of the sold of

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Hole No. H728-SB10 SHEET INSTALLATION DIVISIÓN OF ( SHEETS DRILLING LOG 10. SIZE AND TYPE OF BIT 64 10 +154 1. PROJECT 11. DATUM FOR ELEVATION SHOWN HUNTER AAF WSL 12. MANUFACTURER'S DESIGNATION OF DRILL TION (Coordinates or Station) Dietrich D120 3. DRILLING AGENCY PSI DISTURBED UNDISTURBED 13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN H728-SB108 PAL n 4. HOLE NO. (As shown on drawing title and file number) 14. TOTAL NUMBER CORE BOXES NAME OF DRILLER 15. ELEVATION GROUND WATER Fiakenbinder COMPLETED 8/3/15 STARTED 6. DIRECTION OF HOLE 16. DATE HOLE 95 3Avg VERTICAL INCLINED 19.4 17. ELEVATION TOP OF HOLE THICKNESS OF OVERBURDEN 18. TOTAL CORE RECOVERY FOR BORING 19. SIGNATURE OF INSPECTOR DEPTH DRILLED INTO ROCK 0 9. TOTAL DEPTH OF HOLE 14' * CORE BOX OR RECOV-ERY NO. REMARKS CLASSIFICATION OF MATERIALS (Description) (Drilling time, water lose, depth of weathering, etc., if significant) ELEVATION DEPTH LEGEND Grussy soil and organic dirt Posthole dig 5 trace Fine sand, toto sill, 7.54RC.5/1 #{ ( Headspace = Opp nottled with fine sand and sortel, subangular, dry NM RAL HZ Begin z" split syoon 5-3-5-5 ζ st as above 12" fine sand, track silt, 5M, 20/24 Headspace = Oppm 7.5426.5/1, well sorted, subary, dry, loose Sand us about, sumple moist #3 5-6-6-8 Headspace=0,0ppm 6/24 sample wet V Fine Sand, trace silt, sm, 봐니 5-10-6-8 Head space Not Collected (NC 7.5427/1, well sorted, suberguhn 205/24 sumple saturated. Truce be mineral grains in such. Fire sand, trace sill, SM #5 5-5-9-8 7.5YR 5/1, well sorted, subargular, firm. NC 2/24 11 \$6 Sant us above 5-9-15-15 NC 20/14 Auger to 14' 13 as above EOBC14

					I INCOMENT	ATION			SHEET /	ጎ
DRILL	ING LO		VISIÓN		INSTALL				OF / SHEETS	
1. PROJECT					10. SIZE	AND TYPE	OF BIT	6 14" ID HS	5A	4
	AAP				MSC		EVALUM	SHOWN (18# @ #		
2. LOCATION	Savi	annah	GA		12. MANL	FACTURE	$D/z^{c}$	SNATION OF DRIL	.L	1
4. HOLE NO.		P31	ng title		13. TOTA	AL NO. OF	OVER-	N DISTURBED	UNDISTURBED	
and file nu	mb ec)			H 728 - 58	14. TOT/		R CORE B	OXES	,	
5. NAME OF	DRILLER	e Grib	le		15. ELE	ATION GP				4
6. DIRECTIO	N OF HOL	E		DEG. FROM VERT			8	-/	8/3/95	_
7. THICKNES				14.01	1	VATION TO				-
8. DEPTH DR				14.0		AL CORE F		Y FOR BORING	······································	4
S. TOTAL DE				14.01		S. Hun	nphris			
ELEVATION		LEGEND		CLASSIFICATION OF MATERI (Description)	ALS	S CORE RECOV- ERY	BOX OR SAMPLE NO.	RE (Drilling time, weathering, e	MARKS water lose, depth of to., if significant	
•	ь	1,115/14		d	0 101/27/-	•	<b>-</b>	Blows	OVA ppm	╞
	=	1	SAN	D: f-medgr, V.DK GRE SIHY 25%, dry, wellsorted	~ 104K3/2 1. cul				HS	٦Ļ
				r. organics.	, saving.	hole	1	- None-	0	þ
	2-	1.1.1	"	(SM)		tu, 3	1			þ
1	=			: Dr. Yell Br 1018 #4 + St.BI	- 7.SYRTH	21		3-4-5-8	^	þ
	4		mol	Hing, clay 10-40%, moist,			2		0	þ
			(sč	) fr. unica.						F
		·	15	sabore : grading to LtBr 61 -40% clay, most, v. lose h	1 10YR6/2	17		2-4-6-9	- 0	Ŀ
	6-			wybotton (SC)	wer wer	71	3	I mitie	l'sample.	F
1	=	· · ·			4			= 141 Hi wei 3-3-6-7	NC	þ
	8_		//////////////////////////////////////	above, grading to mas Grioverili, clay-5-15%, w	tly modeson	100	4		NC	E
	l ° =		100	se, wellsosted, subang, (5	<u>د</u> \		7	L		þ
		1.1.1		medcourse, 104R.5/2 6RB	r. clay10%	14		8-12-10-10	NC	. k
	10-	••••••	tr.	formings, wet, loose-fir	m. +r.	58	5			Ŀ
	=	$\frac{1}{2}$		159. tr. clay (aminge (this) as above, v. base-100 so.		17		2-3-5-8		t
	12		± 3"	layer of samly clay Yell Br 101 astry 1	RS18, very	71	6		NC	Ŀ
	1 ¹⁶ =		آم - این - ا	lov chonger 20412512 6+Br.	. ,	<u> </u>				ŀ
	=	$\overline{1 \cdot \cdot \cdot \cdot}$	1	<u></u>		1		Auger		
	14	··· '. ·		E.O.B.@ 14.0	21		1			E
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Hole No. H 728-5811

									Hole I	No.41728-5B1	2
DRILL	.IN	GLC		IVISION		INSTALI				SHEET J	ETS
1. PROJECT	μ	0.1.1-	TER	AAF					61/4 ID HS		(
2. LOCATION	1 (C	oordin	etes or S	ation)			MSL				
3. DRILLING	AG	ENCY			<u></u>	112. MAN		er's desi にとん	DIZO	LL	
4. HOLE NO.	(A.	ahow	PST.			13. TOT BUR	AL NO. OF DEN SAMPI	OVER-			ED
and file nu	nb ei				H728-SB/2	14. ТОТ	AL NUMBE	R CORE I	·····	i,	
S. NAME OF	DRI		Tom	Fiat	renbinder	15. ELE	VATION GP				
6. DIRECTIO				D	DEG. FROM VER	. 16. DAT	EHOLE		Aug 95	4Aug 95	
7. THICKNES	s oi	FOVE	RBURDE	EN 14	,		VATION TO			>	
8. DEPTH DR				,			AL CORE P		Y FOR BORING		
9. TOTAL DE	PTI	I OF	HOLE	14'		1 1	http://	$\mathcal{N}$			
ELEVATION	DE		LEGEN	, c	LASSIFICATION OF MATER (Description)	IALS	% CORE RECOV- ERY	BOX OR SAMPLE NO.	(Drilling time.	EMARKS water loss, depth o etc., if significant)	<i>u</i>
Q		<u>ь</u>	<u>с</u>	Ames	y soil over sandy	gravel	•	· · ·	Begin posth	ole dig to 3	┍╼╋╧
		111		Carter	1	0			- 0 1	5	E
	1			E	sand, trace silt, sm	, bra		#1	Headspace ?	71000ppm	<b> </b>
			•`•;	IOYR	6/4, some dasker	staining			1.1 ( · ·	11	E
			•	Eurl	oil ador. gravel at	y toy					E
		11		ofi	oil over, gravel at	1 to					F
	3		. ~	well 5	corted, subangular, a	10157		47	2	. Lite a startio	E-
	/	TT -	.,	Fine	sand, trace silt, sm 25,5/1, minor derk	1 grey		#C	Begin 2" 5	phit syoun	E
			• • •	stain	ing, fuel oil odor sorted, subungular,	7	18/24		B- 13-15-18 Headspace >	1000111	ᄐ
		11		well.	sorted, subwagular,	moist			FITAD STATE		F
	_	ㅋ					supe wet				<u> </u>
	5			Fire ,	Gund, 10% sitt, SM 6.5/1, south durk	1 377		#3	15-17-11-10	lot Gleded (	ALCE
		_	•••	2.5Y	6.5/1, some darte	staining 5/1	701		fleadspace N	ot concorence	~~F
					op of spoon 2.543 oil odor, well sor	fel	20/24				E
		Ξ		+vei Laban	yular, suturated.	1					F
	7			The.	cand trace sitt SM,	grey		#4	12-13-12-18	M	— <del> </del> —
		Ξ		2.5Y	0.5/1, no staining, Dor, well sorted, su	faint	/		NC		E
i				f.o. 0	Dor, well sorted, Jul	sungular,	20/24				╞
ľ			• 7 •	4" 4	olor charge to 7,54R.	5/1 27					Ē
	٩			bottom	of sybon. us above, 7.541251	(			a a /a h(		E
-		-	· · · ·	Sand	2000, 101125/	1 minor		#5	5-7-13-14 NC		F
		_	· · · ·	[ <del>[</del> , ø ,	90011		16/24				E
		Ξ	• • •								E
	11		• •								<b>È</b> _
		=		Sand	as above, no f.o.	color		#6	8-11-20-23	<b>k</b>	E
		Ξ					22/24		рС		E
			· • • ,				124				
	13	_=	• • • •					-			_E
	()		• • •		as above				Juger to 14		
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107 Bar

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			VISION		INSTALL	ATION			SHEET	
	ING LO				10. SIZE	AND TYPE	OF BIT E	514" ID HSA		
1. PROJECT	Ц	AAF			11. DATU	M FOR EL	EVATION S	SHOWN (TBM or MS	L)	
2. LOCATION	10		tion) ( A		<u>M5</u>	L				
		Savann	ah 611		12. MANU	FACTURE	DI2	NATION OF DRILL	<u>.</u>	
3. DRILLING	AGENCY	PSI			13. TOTA				UNDIST	URBED
4. HOLE NO.	(As show	n on drawl	ng title	-312	BÜRC	EN SAMPL	OVER-	6		
and file nu			H/28	513			R CORE BO			•
5. NAME OF	M.	Brill			ts. ELEV	ATION GR	OUND WAT			
6. DIRECTION	N OF HOI	LE			16. DATE	HOLE	STAR S/	3/95	COMPLETI 8/3/	
	EAL 🗖	INCLINED	DEG. 1	FROM VERT.		ATION TO	P OF HOL			
7. THICKNES	S OF OVI	AAF nies or Station pavannah GA PSI n on drawing title H728-5B Grillle E INCLINED DEG. PRO ITO ROCK Ø HOLE 14.0' CLASSIFICATION OF						FOR BORING		X
8. DEPTH DR		DG AAAF Interes or Station Savanuch GA PS I m on drawing title H728-5E Guillle LE INCLINED DEG. PRO ERBURDEN 14.0 HOLE 14.0 HOLE 14.0 HOLE 14.0 LEGEND CLASSIFICATION OF (Description CLASSIFICATION OF DEG. PRO DEG.				MSPECTO				
9. TOTAL DE	PTH OF	HOLE	14.0			DH	umphie			
· · · · · · · · · · · · · · · · · · ·			CLASSIFICATION	OF MATERIA	LS	% CORE RECOV- ERY	ISAMPLEE	REW (Drilling time, w weathering, et	IARKS neter loss, d	lepth of
ELEVATION		LEGEND	(Deeci)	ption		ERY •	NO.	weathering, et	c., if eigniti 9	
0	<b>b</b>	· · · · ·	Smr. C. medor, D	CGR INYRALI	, dry	Part		Blows		HS
		· · · · · ·	2075511T, Vlouse 1	vell sortel,a	bang.	hole	,			Aippon
	2			,	0	+0 3'		fould not use hammer-over		0
		];	(sn)		•			hammer-over	lend lines.	
	-							- push spoors		$\mathcal{O}$
	4 —		SAND: f-med; 4+ Beb	e 10786/2, 51.	14 10%,	67	2			0
	-	1	moist, wellsorted , 7	r. overje mot	Ting (in)			<u>.</u>		~
	, =		Cinoc 59 well control i	mast, tr. fen	DMAg Mik		-		Cib Conste	$\mathcal{O}_{\mathbb{R}}$
	6-		( <w) evals,="" td="" tr<=""><td>. clay balls 2</td><td>in int .</td><td>58</td><td>3</td><td>1 /</td><td>9</td><td></td></w)>	. clay balls 2	in int .	58	3	1 /	9	
	-	<u> </u>	: AS above, SH	hursted				= E initial wetspo	m	NC.
	8-	1				70	4		n	of collecte
	× =	<u>:</u>						<u> </u>		
	=		riastic (CL)	(Br IVYK 578; H	noist;	0	5		-	NC
	<i>10</i>		SAND: mostly med or 1	)kgr. 2.574/1 51.1) Wellcout	, Stoting,	50				NC
		l	: AS Above, fa	why and form	1.	·		_		
	/2	··· · · · ·			•	75	6			NC
i								- <b>A</b> A		NC
		1:00						Angor		
	14	+ · · · · ·	F.O.B. 1	4.0'		<u>}</u> −				
	=	1				1				
	16	1								
		1								
		1								
	18-	1	•							
	-	-								
	20-	4				Į				
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Hole No. <u>H728-SB14</u> ISHEET 1 INSTALLATION DIVISION OF / SHEETS DRILLING LOG 10. SIZE AND TYPE OF BIT 6/4" ID HSA 11. DATUM FOR ELEVATION SHOWN (TBM or MSL) 1. PROJECT AAF MSL 2. LOCATION (Coordinates or Station) 12. MANUFACTURER'S DESIGNATION OF DRILL Savannah 6A Diedrich Dizo 3. DRILLING AGENCY 25 I UNDISTURBED TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN DISTURBED 13. 6 4. HOLE NO. (As shown on drawing title and file number) H728-SB14 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. ELEVATION GROUND WATER Mike Gribble COMPLETED STARTED 6. DIRECTION OF HOLE 16. DATE HOLE 8 /4/95 VERTICAL INCLINED DEG. FROM VERT -19.0 17. ELEVATION TOP OF HOLE 7. THICKNESS OF OVERBURDEN 18. TOTAL CORE RECOVERY FOR BORING 8. DEPTH DRILLED INTO ROCK 19. SIGNATURE OF, INSPECTOR D.4 umphis 9. TOTAL DEPTH OF HOLE % CORE BOX OR RECOV-ERY NO. f REMARKS CLASSIFICATION OF MATERIALS (Description) (Drilling time, water loss, depth of weathering, etc., if eignificant) LEGEND DEPTH ELEVATION • 9 d c a OVA, ppm SAND - mustly medge, D - Er 104R 4/1, clayey 2070, morst, wellsorted, subay ۰. Blows Post Hendepue . ſ hole No blows -+03' cant use hammer (50)  $\mathcal{O}$ Ζ Ξ. due to Overhend lives : AS above, clay 30-40%, moist.  $\mathcal{O}$ 100 ۰Ļ Z (sc)(50) ب as above, 50 3 - less lay 10 15% , wet at bottom <u>ا</u> # initial d: mostly med sr, Pinkich Gr 7.5YR6/2, wet sample Not wef, fricky 5%, tr. ferrom symmaries Collecter 63 4 (Sw) wellsorted, sub any, (Sw) : Bhist Gr-6109 5/108, med.gr, elay balls 2-3mm, thin lawrinse, fr. mica, NC 50 5 £) 5-15% day. (SW-SC) - 4" Die Bro Bt 57R 3/2, plastic, 20% soud worst. (CL) Saud j Blue or of ab over little fires 5% 50 6 NС 12 (sw) Augor '4 E.O.B. @ 14.01 b 4 18 20 Ø ÷

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<del></del>		DI	VISION	INSTALL	ATION		Hole No	H728-58	15
DRILL	ING LO							OF I SHI	EETS
1. PROJECT	HUN	TER	AAF	10. SIZE	AND TYPE	OF BIT	10" 45A SHOWN (TBM or MS	L)	
2. LOCATION				.M.S		PIS OFSI	GNATION OF DRILL		
3. DRILLING	AGENCY	DC		Dì	e frich	<b>.</b> .	20		
4. HOLE NO.	(As show	n on drawt	ng title . 1	13. TOT	L NO. OF	OVER-		UNDISTURI	HED IL
and file nu	mb ec)		HT28-5615	14. TOT/	L NUMBE	R CORE E	IOXES	^.	
5. NAME OF		lom	Finkenbinden	15. ELEV	ATION GP			OMPLETED	
6. DIRECTIO			DEG. PROM VERT.	16. DATI		14	Aug 95	4 Aug 95	-
7. THICKNES	S OF OVE	ROURDE	N 14	· · · ·	ATION TO		LE <u>37.5</u> Y FOR BORING		
8. DEPTH OF	ULLED IN				ATHRE OF				
9. TOTAL DE	PTH OF	HOLE	14'	1	alwig.	V.	L	ARKS	
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIA (Description)	LS	N CORE RECOV- ERY	BOX OR SAMPLE NO.	(Drilling time, we weathering, etc	ter lose, depth	) of D
a		• • • •	Concrete			<u> </u>	Concrete ce	5)re	
	_								
		1.2							
	1.5' =		Fine sand, trace silt, k.brn 2.5 15.5/6, loose firm, well sorted, subo	SM		#1	Posthole dig	to 3'	
	2		1. brn 2.5 15,516, loose	to	Na		Headspace =	öpin	
			firm, well sorted, subo	ingulary	7		1		
	3 —		Slightly MOISE			#2	Bei 2° c	olit spoon	<u>,</u>
		• ••	2" sand as above gri to Sand; fine suffrace mineral grains, white 2 well sorted, subangular	black		* <u>∕</u> _	Begin 2° 5 8-8-10-14		
			mineral grains, white 2	548/1,	22/24		Headspace .	Oppm	
			well sorted, subangular	, tirn,	12.		•		
	5_		moist			<u> </u>		•	·
			Sand as above, samp	(د		\$3	8-12-13-11 Headspace =	Open	
	_	• , •	noist		201	-	here of the second	1)	
					2%24				
		· · · ·				and wet			
	7		Sand as above, sau	nple		\$4	7-8-15-11	A 4.42	
		· ' .	wet	•		ł	Headspace =		
					18/24				
	=								
	9		Sand as above	. <u>.</u>		<b>#</b> 5	9-11-14-16		``
	_					[	9-11-14-16 Heulypace Not	Collected (N	c)
					22/24		'		
							12 14 20	24	
	` =		Fine sand, trace silt	sortel		\$6	13-11-30- NC	1	
			white 2.547.5/1, well subangular, firm to v	1. firm	22/24		/~~		
			Source of the second	*	121				
							Auger to 14'		
	13-	•	as above				End of bor	ing at	เศ'
1									•
	IM					<u> </u>			

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			,					Hole I	No. <u>H728</u>			
	ING LO		VISION		INSTALL	ATION			SHEET	) Sheets		
1. PROJECT					10. SIZE	AND TYPE	OF BIT	614" ID H.	5A			
	HAA.			11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL								
2. LOCATION	(Coordin	stor or sta Sav. (	A.		12. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D 120							
3. DRILLING	AGENCY	PSI					UNDIS	TURBED				
4. HOLE NO.	/ (As show	n on drawl	ng title		13. TOTA	L NO. OF	N 6	1				
and file nu			H 728-58/6	2		L NUNDE			/			
		<u> 1. 6</u>	ribble		15. ELE	ATION GR		TER	COMPLET	ED /		
6. DIRECTIO			DEG. FRO	M VERT.	16. DATI	HOLE		8/4/95	8/4/	a5		
						ATION TO			9			
7. THICKNES 8. DEPTH DR						ATURE OF		Y FOR BORING		*		
9. TOTAL DE			14.0'		13. 310A	. Hum	phint					
	DEPTH	LEGEND	CLASSIFICATION OF	NATERIA	LS	* CORE RECOV- ERY	BOX OR SAMPLE NO. f	Ri (Drilling time, weathering,	EMARKS water lose, d etc., if eignifi	iepth of icant)		
0	ь.	<u> </u>	Concrete					BUWS		SUA , ppm		
		11								Herkspree		
	2	- 	Post hole / Auger	INVR RII				2-3-3-5				
	-		SAND: F-walger, White Joli Br-6/4 ; dry, wet	Sorted,	suborg.	100		2		0		
			fr. SIT. V. 10050 to 100.	#e, (Sh	)					•		
	4- <b>-</b>		as above: (SW)	-		100	2	2-2-2-1		0		
	, =		- V. DK Br WYR Z/2, UTgl V. 1055 No odor,	mierich,	wet	100	4	3-5-9-15	E wet			
	6		: ASAbone SAND: V. DKBr LOYR 2			16	3	3-5-9-15	= Sample	Not		
			fine-med, wet v love	- Arm, tr.	wica.	67	5		1	o neer oc		
	8		1 1 ale Br 1048613.+	Give most	ly wed.			3.5.15-18		NC		
			tr. silt, wells orteds we	t. tr. fei	rromags.	50	4			NC		
	10 <u></u>		(SW) v bose firm, as above : Lt. Brb	4 2.5461	le, tr.			3-8-15-21		-		
			ylancomite.			50	5			NC		
	12-	· · · ·	(SW)	R 573 an	lunto			2-3-10-12				
		]	ins above, Br 1041 white - 8/1 last 31ml	· (5u	َ) (ر	67	6			NC		
	14	1. 12						-				
	''=	1	E.O.B.C	<i>H.o</i> '								
			•									
		-										
÷	=	1										
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							Hole No. #728 - 515	17
DRILI	LING L	og 🕛	IVISION	INSTAL	LATION		SHEET ) of ( she	ETS
PROJECT	,1		AIT	10. SIZE	AND TYP	E OF BIT	6'/1 10 +/ 5 A N SHOWN (TBM or MSL)	
LOCATION	+UN	JT ER	AAF		um for ei MS(.	LEVATIQ	n Shown ( <i>tem of MSL</i> )	
COCATIO				12. MAN	UFACTUR		IGNATION OF DRILL	
DRILLING	AGENC	PSI	r.		<u>Dietr</u>		DIZO	
HOLE NO.	(As sho		Ind IIIIa	13. TOT	AL NO. OF	LES TAK	EN 6 0	20
NAME OF		R	H1728-SB17	14. ТОТ	AL NUMBE	RCORE	BOXES	,
		<u>T.</u> F	inkenbinder	18. ELE	VATION G			
DIRECTIO			D DEG. FROM VERT		E HOLE	8	ANTED COMPLETED Aug 95 8 Aug 95	
					VATION TO			
DEPTH DR				1			Y FOR BORING	,
TOTAL DE			<u> </u>	19. SIGN	ATUREO			
		T		ALS	CORE	BOX OR	REMARKS	
LEVATION	<b>ДЕРТН</b>	]	) (Description)		RECOV-	SAMPLE NO.	(Drilling time, water loss, depth o weathering, etc., it significant)	of
a			Concrete				Concrete core tarmac to	0
	-						1.5	
		- <u>(</u> ) ( )			Į			
	1,5 =	]	 		<b> </b>			
			Fine sand, Sw, olive yel 2.546/6, well sorted, subangular, slightly me	10051		#/	Posthole dig to 3' Headspace = Oppm	
		1:	1.57610, we spiritly me	14.	NA		here off.	
		<b>1.</b>	sugarguin , mont	51				
	3 —	••••	Fine sand, Sw, white ic well sorted, subargular, to firm, slightly moist	128/1,		₩Z	Begin 3" split spoon	
	-	]	well sorted, subargular,	oose	ant		7-9-8-12	
		]	to firm, slightly moist	•	27/24		Headspice = Oppm	
	=	1 • •:						
	5				Sample wet			
	_		Sand as above, extremely	1	-Y	#3	14-16-9-8 Headspace : Oppm	
	-	]	uniform.		21/		histor and a start	
		]			767			
1	. –			•				
	7-		Sund as above			#4	Begin 2° split spoon	
	_		Juna as arove		701		7-8-12-18, 1 111	.\
1		} · · ·			20/24		7-8-12-18 collected (NC.	)
	-							
	9	1						
		• •••	Sant as above, white 1011	-8/1		₩5	10-15-18-27	
		1	to the gray 104127/1		24/24		NC ·	
	-				/29			
	-							
	11		Sand as above, while 1011	2811		#6	10-30-30-40	
ļ	_	•••••	to grey 104RG.5/1	'			NC	
					22/24			
	_							
	13-	۰	· · · · · · · · · · · · · · · · · · ·					
			as above			_	Auger to 141'	
	, =				_	-	EOB CHI	•
	14		<u> </u>				· · · · · · · · · · · · · · · · · · ·	

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## Hole No. 4728-5818

			DIVISION	INSTAL	LATION			SHEET (	7		
	LING LI	UG					11 - 161	OF SHEETS	4		
1. PROJECT	11		AAF	10. SIZE	UN FOR EI	E OF BIT	6/4 ID +15A N SHOWN (TBM or MSL)		-		
2. LOCATION		UTER			MSL				ŀ		
-				12, MAN			IGNATION OF DRILL		7		
3. DRILLING	AGENCI	PS:	I	12 707	<u>Dietric</u>		DISTURBED !	UNDISTURBED	-		
4. HOLE NO. and file nu	(As show		and title	13. TOTAL NO. OF OVER- DISTURBED UNDISTURBED UNDISTURBED O							
5. NAME OF			11120 0010	14. TOT	AL NUMBE	RCORE	BOXES	•	_		
		Τ,	Finken binder	15. ELE	VATION G	ROUNDW					
6. DIRECTIO				16. DAT	EHOLE	ат. 9		AUG 95			
				17. ELE	VATION TO		A	10613	1		
7. THICKNES	S OF OV	ERBURD	EN14'	18. TOT	AL CORE I	RECOVER	Y FOR BORING	7	5		
8. DEPTH DR				19. SIGN	ATU PA	MSPEC	TOR		]		
9. TOTAL DE	PTH OF	HOLE	14'		Fg/W	<u>1. x</u>			-		
ELEVATION a	рертн Б	LEGEN	CLASSIFICATION OF MATERIA (Description) d	LS	% CORE RECOV- ERY	BOX OR SAMPLE NO. f	REMAR (Drilling time, water weathering, etc., j 9	ks ⊨lose, depth of f eignificent)			
			Concrete to 1.5'				Concrete core	tormer	Ľ		
	-	12							E		
		11-						•	E		
	1,5 =						·····	<u></u>	Æ		
		1	Fine sand, trace silt, SM yel-brn, 25 Y#6/4, well son	light		<b>#</b>   {	Begin posthole a Headspace = 0	digging to 3'	E		
			subangular, loose, slightly	unict	N/4		Headspace = 0		E		
	_	] · · ·	505249014r, 1005r, 511 g -119	~~~~~~					F		
	3		17" Sound and above aread	ing to		#1	Reals 2" enlit		╞		
		l. · ·	12" Soud as above grad Fine sound, SW, 2.547/4,	well		-0 -	Brgin 3" split 7-12-11-10 Hendsforr= 0	Spiri	F		
			Fire sandy to very Al	'n	24/24		Hendsfore - O		F		
		• •	sorted, firm to very Al (1-3cm discreet chunks), su	banavke	741				F		
	_ =		day	( `ť` )					F		
Í	5	<u> </u>	10" Sand, Fina, Swa, white 1	0717.5/1		#1 <b>7</b>	7-10-9-9		F		
		۰.	10" Sand, Fine, Swo, white 1 well sorted, subungulun dry, 10	050			Hendspace=0		F		
		· · · ·	to firm.	, dk.	18/24		1		E		
			to fine. B" Fine sand and silt, SM yel-brn 104R314, well sort.	S.					E		
	11	\$`	subanquilar, loose to firm, me	DIST.					E		
	1		Fire Sand, SW, brn 10YRS	73,	saspenet	क्स स्	Bezix Z" split 7-10-10-15	spour	F		
		-	well sorted subangular, lo	nose			7-90-10-15 Headspace not a	1. follows)	Þ		
			to firm, wet.		16/24		Hear space not a		F		
		• • •							F		
	9 -	- , -							F		
		•••	Fine sand, SW, white 104R	8/1 ₁		#5	NC		F		
			well sorted, subangular, firm	n,	15/24		7-10-10-15		E		
					167				E		
	· –								E		
	n —]	<u>-</u> -		neli		46	4.0		F		
	3		Sand as above, white loy	ye/6/1	18/24	4.	NC 7-12-30-42		F		
		•	with 10% streaks grey 10	· · · · ·			4-2-20-10		F		
	_	` • •	firm to very firm.						F		
									F		
	13-	• • •	as above				Auger to 14'		F		
	-	1			~		C PAW	```	F		
1	14'						EOBOIN		E		

				INSTAL				1728-	
DRILL	ING LO					_		OF	SHEET
I. PROJECT				10. SIZE	AND TYP	EOFBIT	10" HSA		
	HUNT				un for ei NSL	LEVATION	SHOWN (TBM or MS)	J	
LOCATION	(Coordin	etes or S	tation)			ER'S DESI	GNATION OF DRILL		<u></u>
DRILLING	AGENCY	DCT		$\mathcal{D}$	ietricl	D1:	20		
		PSI		13. TOT	AL NO. OF DEN SAMP	OVER-	DISTURSED	UNDIS	
and file rus	nber)		H728-5B19						<del>.</del> ,
S. NAME OF	DRILLER	π.	Finkenbinder		AL NUMBE				
6. DIRECTIO			FIRENDINGET			STA	RTED C	OMPLET	ED
			D DEG. FROM VERT.	16. DAT	EHOLE	61	Aug 95 1	<u>Avg</u>	25
7. THICKNES		PAURD	EN /4'	17. ELE	VATION T	OP OF HO	LE <u>33.3</u>	۱ 	
B. DEPTH DR		<u> </u>					Y FOR BORING		
9. TOTAL DE			14'	19. SIGN	ATURE OF		×		
			CLASSIFICATION OF NATERI	ALS	CORE	BOX OR	REMA	RKS	
ELEVATION	DEPTH	LEGEN	D (Description)		ERY	SAMPLE NO.	(Drilling time, was weathering, etc.	, if aignifi	icent)
- 0	b	<del>\/ •</del> √	Grussy soil and dirt				Posthole dig L	3,54	
	1	<u>د</u> • • •					٩	-	
	, _]		•		ļ				
		•••	Fine sand, SW, pole bru I well sorted, subangular, slightly moist.	04R7/3		<i>₽1</i>	Headquare =	V	
		• • •	well sorated, subangular,	loose			·		
			slightly moist.		N/A				
	_	•••-,	σι						
	3-	• • •							
		•••.	6" sand as about			#2	Begin 2" split 2-7-7-10 Headspace = 1	spoon	
	H		10" Fine sund, SW, whit	e	161		2-7-7-10	•	
		· · ·,	10' Fine sund, SW, whit 2.54.8/1, well sorted, subar loose to firm, slightly in	gran,	19/24		Headspace =	9	
	_	• • •	loose to firm, slightly in	oist			•		
	5				-			-	
	、 一	• . • .	Fire sand, Sus, white 2.	YR 9/1		#3	6-4-4-5 Headspace=0		
	_	• • •	11. 10 hrs 10 1R7/3 4" of	ark	27/24		Headspace=0		
l l		•••	staining at bottom, well sorted subangular, slight	11	/24		ſ		
	Ξ	• •	sorfed, subangular, slight	thy	wet sample				
	- F		moist, loose to tirm.		wet sample 				
	7		Fine sand, Sw, black 1	OYR41		44	8-10-12-14		
	$\exists$	· ` ` .	(14") to arey 10(R/6/1,	well	141		Headspace No	+ 61	ccled
		۰.	LA Contraction	en alle	18/24		Gwe sis' (sel + 5 hours after -	u groun	l surfa
	Ξ	• • • •	hat Possibly amaric mit	causar	Gw@5hrs		5 hours after .	اعدا آسه	allati
	۹ <u></u>		wet. Possibly organic mill dark color.	3					. <u></u>
1	' -	• • • •	IN" crus sent as about gro	witz		#5	7-3-6-10		
	Ξ	••••	to very fine sand, 20%	sitt	241		NC		
ļ		- ·	20% day, Mol. sortel, su	AAGU W	24/24				
	1		very firm, brn 10/125/3,	ક્ઽે ૽					
	" <u>–</u>	·* .*							
	" <del>-</del>		Fine sand, 10% silt, Sm,	ARY		#6	7-13-15-18		
	-	•	10.4R6/1 to 5m 104R5/	Ζ,	241		NC		
			well sorted, subargular	•	24/24		-		
	ヨ	· **							
	13 =	. · ·	firm.	1994					
			as above				Auger to 14	(	
	_	• •	1		· · · ·			A	1 .
	-			1		i i	End of bori	~ U !'	1.

Hole No. +1728-51320

							INSTALL	ATION			SHEET	1	1
DRILL	ING LO		DIVISION									HEETS	
1. PROJECT	. (	I.,	1 .								14 ID		
	HUN			F			····	IN FOR EI	LEVATION	SHOWN (TBM or MSL)			
2. LOCATION	(Coordan		Carlony				12. MAN	JFACTURI		GNATION OF DRILL	<u></u>		1
3. DRILLING	AGENCY	PSI						<u>letric</u>			UNDISTU		4
4. HOLE NO. and file ma	(As show			1/228	r-SB2		13. TOTA 80R1	AL NO. OF	OVER-		D		
S. NAME OF				1 10 1 10		<i></i>	14. TOT	AL NUMBE	R CORE I	BOXES		•	
-	•	Tom	Fink	enblud	er		15. ELE	ATION GI			MPLETED		-
6. DIRECTIO			ъ		DEG. FR	M VERT.	16. DATI	E HOLE			, Aug 9		
							17. ELE	ATION TO	OP OF HO	LE 39.9			ļ
7. THICKNES 8. DEPTH DR	· · · ·			<u> </u>			18. TOT	AL CORE	RECOVER	Y FOR BORING		7	-
9. TOTAL DE			14				19. SIGN	1241	1 · Z				
					CATION OF	MATERIA	LS	% CORE	BOX OR	REMAR		wh of	1
ELEVATION	рертн Ъ	LEGEN			(Deecsiptie A	an)		ERY	NO.	(Drilling time, wate weathering, etc., 9	it aignitica	ni)	
a		₩-₩	Grass	v soil	and d	lint				Posthole dig	6 3'		E
	_		:	l									E
	,	-	<u> </u>			11 6			#1				E
	· _	۲.۰. ۲.۰.	. Fine	Sand,	traces	siH, 54	at of		-	Headspace = 0	ppm		F
	=	- `.	ben-y	21107	R6/6;	e elich	11.	N/A					E
		ļ, · · ,	5059	L	-, 10050	e, <b>s</b> IIg.	''/	ł					F
		• • •	mois	Ε.									F
	3		100	4	siff as	chout	(6')		#2	Rain 74 sol	4 5000	~	╞
	_	· • •	Sand	and i	said,	V. fine	to		" <i>`</i> _	Begin Z' spli 3-6-5-3	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		F
	=	•. •.	gian	Gial 6	yrey io'	127.5/1	<b>.</b> .	16/24		Headspace = 0			F
				contel	, suban	aslar, s	light			Head space o	II. S		Þ
	-		weist	, toose	,	J .	ο (						F
	5 -					ale ho	0.30		#3	4-4-4-5	<u> </u>		Þ
			1+1A4	sand reli	, sw, well s	pare of			1	Headspace =	Doom		F
			IOYIC	6.5/7,	well 5		1 I	15/24		nearrait	-11 ⁻¹		F
	11	, .	15050	ingular	, loose	, mors	τ.						F
	11	11							suple wet				F
	7		1		, 510,	white 2.	547.5/1.		HU	7-8-9-1-			F
		•••••	Fine	sand	, 500, 1, 505a	a lar	wet			Took geotech s. Headspace Not a	angle.		F
		•••	1 ven	10 1	Cirun .	3.1.1	,	16/24		Herdspace Not a	plater	(NC)	E
			10050	140 1	-1.0								E
	. 11												F
	1	· · · .	Fine	Sand, 5	W, pale	yel 2.54	8/2,		#5	6-10-13-13			E
	11		well	sortel	subarg	jlar, f	irm.	<b>.</b>		NC			E
		·. ·		,				22/24	[				F
	_	•											E
	. =	: • •											E
			Fine	Sand, S	w, It.	grey Z.S	77.5/1		#C	16-30-32-37			F
	=	• •	to a	2	545is) sangula	1, wel	1	0.11		NC			F
		••••		. d . 1	anaula	, firm	n fo	24/		Gwe 12.1' (rel to	ground)	4 60015	E
	7	•	2657	en su	4	· ) ·		1-1	equis	after well insta	lation		Þ
		· · · ·	v. fi					<u> </u>					上
	"			as a	bone					Auger to 14'	•		F
		• .								End of Borin	@14	• •	F
	14	· · ·								EVER OF LOUIS	ð		F

			VISION	······································	INSTAL	ATION		noje -	No. 4728-582		
DRIL	LING L				10. SIZE AND TYPE OF BIT G 1/4" ID H5A						
PROJECT	1	4 An			10. SIZE		E OF BIT	GIA" ID I N SHOWN (TBM or	45A		
LOCATIO	N (Coord)	MATP nates or S	tation)			15 L	LEVATIO	H 2HOMM (15M 94			
		Sav.		····	12. MANUFACTURER'S DESIGNATION OF DRILL						
DRILLING	AGENC	PSI	<u> </u>		Die drich D120						
HOLE NO.	(As sho	mi on drav	ring title	11700 10	13. TOTAL NO. OF OVER- BURDEN SAMPLES TAKEN						
NAME OF				11/20 30 20	- 14. TOTAL NUMBER CORE BOXES						
NAME OF	/	Й. Gr	ibble		15. ELE	VATION G	ROUNO W	ATER			
DIRECTIC						EHOLE		ARTED	COMPLETED 8/8/45		
	CAL [	INCLINE	P	DEG. FROM VERT		VATION T		· · · · · · · · · · · · · · · · · · ·			
THICKNE	SS OF OV	ERBURD	<u>en /</u>	4.0'				Y FOR BORING	*		
DEPTH D	RILLED	NTO ROC	<u> </u>		19. SIGN	ATURE OF					
TOTAL D	EPTH OF	HOLE	/	4.0 /		· · · · · · · · · · · · · · · · · · ·	mples	1			
LEVATION		LEGEN	1	CLASSIFICATION OF MATER (Description)	IALS	CORE RECOV- ERY	BOX OR SAMPLE NO.	(Deilling time,	EMARKS weter lose, depth of etc., it eignificand		
a	ь —	WILLEN.		D' marthumadan, Fala Ra	avents	R.F		Blows	OVA, ppm		
	=		My	D: mostly nedge, Fole Br 1, tr. black minerals, fr.	sit.	Post	ļ ,		Hendspace		
	2-			-		fo 3'	/	-None-	Ó		
	=	<u> ```</u>		5W)					-		
	, =			as above, tr. promo +/ to	in bending	0-		7-11-14-11	1~1		
	а —	1```		dry, loose-firm.		92	Z		100		
	-	1.1.1	:					12-7-7-7 E	Emifiel 11-		
	6 —	]	, K	DKGrB+ INVR 3/8, SILY	30% , organ	1110	3	I With	sample cal		
	-	<u>, (, %)</u>	······	11 var 1100se tim (SM	), wet	· · ·		=@3hr 6-4-4-3			
	8-	5.7	a D	DKGrBr 19417 3/2, SIHY HCuder 1005e- firm (SM sabove : 1" Wood piece Br + Black mothing, v. 600	co la contra	m	۵	0-4-4-5	Not		
	<u>-</u> ۲		we	, (SM)	+ - TOOL	5D	4		Collected		
				as above-clay of 20%	,			4-3-2-4	NC		
	10			tr, clay thin laminne ,	v.loose.	50	5				
	-	$[, \cdot, \cdot, \cdot]$	:	BriorRals, tr. orgonics,	511+10%		·,	5-4-1-5-	NC		
	12-	· · . ·	<i>'</i>	luose-loose.		62	6		NC		
	-	<u> </u>	6100	n clay - and of spoon, irgun	nics, plastic						
						_	)	J Anger			
	14 -			E.O.B@ 4.0'							
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	16-										
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							_			Hol		728-SB	2	
DRIL	LIN	GL		VISION			INSTAL					HEET ; F / Sheets		
1. PROJECT		/	HAA	Ē			11. DAT			6'/4" /1	) HSA a MSL)		7	
2. LOCATIO	N (C	oordir		tation)	···· ··· ···		MSC. 12. MANUFACTURER'S DESIGNATION OF DRILL							
3. DRILLING	S AGI			GTT			Diedrich DIZO							
4. HOLE NO. and file no.	. (Åe	ahor		ring title	4720-	C 0 0 0	13. TOTAL NO. OF OVER- DISTURBED UNDISTURBED BURDEN SAMPLES TAKEN							
S. NAME OF					H728-	51522		AL NUMBE				•		
. DIRECTIC			<u> 17. </u> [	bribb	le			VATION G		ATER		LETED	-	
VERTI				» <u> </u>	DEG	. FROM VERT.	16. DAT		8	18/95	8/	8/95-	_	
7. THICKNE	SS OF		ERBURDE		14-0'		·	AL CORE I	· · ·	Y FOR BORING	2.7			
B. DEPTH DRILLED INTO ROCK							19. SIGN	ATURE OF	INSPERT	OR			1	
. TOTAL DI	EPTH	1 OF	HOLE	T	4.0'	N OF MATERIA		S. FTU	M/hri	's	REMARKS		-	
ELEVATION a	OE	РТН Ъ	LEGEND		Dee	artption)	123	RECOV- ERY	SAMPLE NO. f	(Driffing tim weathering	e, meter la 1, etc., if e	ee, depth of		
			VU Ou	5AND	fine-medy	25% Grovel, 21 mottling, mo	to silti	Post		Blows		OVA, ppm	ŧ	
		_	. 0 0.		remselbrlbik	motfling, mo	nst.	hole		None-	0	Headspace	E	
	2		·	6) (6	c)			**3'		due to averte Ines	2 <b>44C</b>	ple ple ple ple ple not collected	F	
		_		1.	3r 7.54R4/3	med soud , h	sell surteo	<u> </u>			wetson	ple_	F	
	4			wet,	hr. mica 1 i	tr. 51/t.		63	Z	(* 18hn		1 210	E	
		111	· · · · ·		SW) Sr WR 5/3 to	DKBr 7.5YP 3/	/_			-	5 m	ple	E	
	6			s	11+ 10%, wet	tr. organics,	z, sl. indur	100	3			Collected	上	
				K-DKI	ed at bottom	(SW)	<del></del>			-			F	
	8			SAND: 1 SUIT	nostly medgr.	DK Br 7.54R	3/2,	17				NC	E	
	0	11	•	Cemer	ted granules, 1	mics , trimica, vet, wells orted	(SW)	67	4			• -	E	
	6		0.00	: 6	sabore 1 1ther zone	to Rx frages	one PH	50	-			NC	Þ	
	10		المباجبة وبجد	¥ 9	17786 Zona	-3 3% 0	o al	50	5				F	
			0 0 M	: 1	is above.			2	1	<b></b>			E	
	12					A ( ) A		83	6			NC	F	
		=	20  - - -		Fe cementer					J Augor			F	
	14			- Green	clay, plastic	وما '٥٠٥ ج				1 mger	···		E	
		Ξ		:	E-0.B	وما 14.0 0	۲,						E	
	16.												Þ	
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	· · · · · · · · · · · · · · · · · · ·			VISION	INSTAL	LATION		Hole No.	H728-SBZ
/****	DRIL	LING L	<u>oc</u>					7 (1) ID 110	OF   SHEETS
(		H	FAMP				LEVATION	6//4" ID HSA	)
	2. LOCATIO		nates or Sti Sav - 6			SC.	ER'S DESI	GNATION OF DRILL	<u></u>
	3. DRILLING			T		Diedru			
	4. HOLE NO. and file m	(As show	m on draw		13. TOT	AL NO. OF Den Samp	OVER-		UNDISTURBED
	5. NAME OF			H728-SB23		AL NUMBE			
			<u>M. Gri</u>	bble	15. ELE	VATION G			
	6. DIRECTIO		INCLINED	DEG. FROM VERT.		EHOLE	8		8/6/95
	7. THICKNE	SS OF OV	ERBURDE	N 14.0'	<b> </b>	VATION TO		LE 32./ Y FOR BORING	*
	8. DEPTH D	RILLED I	NTO ROCK	¥		ATURE OF	INSPECT	OR	
	9. TOTAL DI	EPTH OF	HOLE	14.0			tungh		
	ELEVATION	DЕРТН Ъ	LEGEND	CLASSIFICATION OF MATERI (Description)	ALS	S CORE RECOV- ERY	BOX OR SAMPLE NO.	REMAF (Deliling time, wate weathering, etc., o	r loss, depth of
	<u> </u>			SAND: fire-wedge, U. DE GrBr	10YR3/2	Rust		Blows	OUA, ppm
		-		SAND: fire-walge, V. DE GrBr Wellsorted, subang, marst, Si	17-10%	hole	,	-rone-	Hendspice
		2		(SW/SM)		tu 3'	'		TW.
		=		: as above . wet \$44	/5m			* initial	at 1.5hr
		4		_ 2" possible officing, black, sh	ght odor	100	2	due to overhead Innes Innes Intial Ivetsouple	Lab 4 Sample 4
			<u> </u>	\$11ty 30%, akyen Br 104R3/4	(54)	<b> </b>		-	
$P \rightarrow 0$		6		- a's above - mostly mod, tr.c fr. mica.	oarse .	100	3		Not- Collected
(		=		SAMD Wostly wed , to coarse, DKB	R. 7.5VR			<b>-</b>	NC
		8-		SAMD.: Mostly Med, tr course, DKB 3/2, fr. mica, Well surted, su low 51/t 25% (SW)	bang.	100	4		
				, as above		80			NC
			· · · · · ·	(SW)		90	5		
		12 =		: mostly coarseflower gr. to wed			/		NC
		12-	•••••	black FeOlHgo ? nodules 2-3 mm. (SW)	s <b>s</b> 17-5%	80	6		
		· , , =		as above			/	I Anger	
		14		E.O.B 14.0'			·		··
			]		:				
		16-	1						
			1						
		18-						·	
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	j í	l l							
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( ;									
<b>V C</b>								· •	
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				1 IN 1979 4 1 1	17101		Hole No.	<u> 4728-SBZ4</u> TSHEET 1	٦
DRIL	LING LO		IVISION	INSTALI	.A HQN			OF ( SHEETS	
1. PROJECT			11 -	10. SIZE	AND TYP	E OF BIT	64 ID HSA	-•	1
2 1 0 0 1 7 1 0		TER 1			UM FOR EI	LEVATIO	SHOWN (TBM or MSL	)	
2. LOCATION	(Coordin	ares of Jr				ER'S DESI	GNATION OF DRILL		1
3. DRILLING	AGENCY	PSI	-	<u>×</u>	ie tric		>120		1
4. HOLE NO. and file nu	(As show		ine title	13. TOT	AL NO. OF Den samp	OVER-			
			H728-5B24	14. TOT	AL NUMBE	RCORE	BOXES	*	1
5. NAME OF	DRILLER	TF	intentinder	15. ELE	VATION G	ROUND W	TER	· · · · · · · · · · · · · · · · · · ·	1
6. DIRECTIO	N OF HO			16. DAT	EHOLE			AVA 25	1
VERTI	CAL	INCLINE	DEG. FROM VERT.		VATION TO				
7. THICKNES	S OF OV	ERBURDE	N 14(*	<u> </u>			Y FOR BORING	¥	
8. DEPTH DF	RILLED				ATURE OF		. ,		1
9, TOTAL DE	PTH OF	HOLE	14'	<u> </u>	Kar	<u>AA. K</u>	n		4
ELEVATION		LEGEND	CLASSIFICATION OF MATERIA (Description)	L\$	& CORE RECOV- ERY	BOX OR SAMPLE NO.	REMAI (Drilling time, wet) weethering, etc.,	ir loss, depth of	
d	<u>ь</u> 	W w	Grassy sand and dirt			· ·	Posthole dia	1031	乍
	=	• • •						l de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la consta	F
	ı <u> </u>								F
	' <u>-</u>		Fine sand, trace sit brown 10YR 5/6 to 10YR	t, sm		<b> </b> #I	Headspace = 0		
			brown 10412 5/6 to 10416	414	. 10				F
			well sorted, cubangular, slightly noist	iouse,	P [!"				E
	-		Slightly Moise						E
	3-			1.		#7	Rada 7" SA	it spoon	E
			Five gand, SW, It. yel.	9rn		10	Begin Z" spl 1-4-1-1-1		
		•. ••	2.546/3, well sorted, si	shang,	20/24				
			loose, slightly moist	-	, - •		Headspace = 0		
									F
	5-		Flue sand, pule brn 2.5" well sorted, subangularyv.	(7/3	,	#3	2-3-5-5	<u> </u>	F
	-		will sorted, subangulary.	0058,	18/24		Headspace -0		F
			sample wet a 6'.	,	Ζ.		neur spine		E
	1				superet				E
									E
	}		Fine sand, Sw, light gre	Υ.		<b>#</b> 4	7-8-10-14 Not collecter	(NC)	F
	П		2.517/2, wel sorted, sot	angular	101		NOT CONVERCE		F
			2.517/2, well sorted, sol	-	20/24				F
	11	·							F
	9 —			· t		40	in the state of the		E
	- T		Fine said, trace silt, whi siles I are 2547	7		Ħ5	18-18-20-37	-	E
			2.548/1 to H. grey 2.547/ well sorted, subangular, v.	firm	21/24		NC		E
1		•	well softed, subanguin, V.		1/29				E
									F
		· · ·	Fine sand trace silt. It. a	Nes		\$G	10-15-20.25		F
	=	•	Five sand, trace silt, It. 9 2.547/2, well sorted, sube	ingular,		-	NC .		F
1		• • •,	vifirm to firm,	U 1	24/ /24		Geotech sangle	2	F
	_		•		144		1		P
	L =							<u></u>	F
	13	1.00	as above		[		Auger to 14	<i>p.H.</i>	E
						-	End of Boring	Q 14 14'	Ē
	비크	<u> </u>					ENK OF DONING	1-04	F
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Hole No. 14728-582       DRILLING LOG       INSTALLATION       EYATION SHOWN (TBM or MSL)       INSTALLING ACENCY       DIFECTION (Coordinates or Station)       INSTALLING ACENCY       SAV       CONTREMENDED       INSTALLING ACENCY       DIFECTION (Coordinates or Station)       INSTALLING ACENCY       SAV       INSTALLING ACENCY
1. PROJECT 1. PROJECT 1. DRILLING AGENCY 2. LOCATION (Goordnaise or Station) SAV: 64 3. DRILLING AGENCY 3. DRILLING AGENCY 4. NOLE NO. (As shown on deaming fills) 4. NOLE NO. (As shown on deaming fills) 4. NOLE NO. (As shown on deaming fills) 5. NAME OF DRILLER 6. DIRECTION OF HOLE 5. NAME OF DRILLER 6. DIRECTION OF HOLE 6. DIRECTION OF HOLE 7. THICKNESS OF OVERBURDEN 6. DIRECTION OF HOLE 6. DIRECTION OF HOLE 7. THICKNESS OF OVERBURDEN 6. DEPTH OF HOLE 6. CONFILER 6. DIRECTION OF HOLE 7. THICKNESS OF OVERBURDEN 6. DEPTH OF HOLE 7. THICKNESS OF OVERBURDEN 6. DEPTH OF HOLE 7. THICKNESS OF OVERBURDEN 6. CONFILER 6. CONFILER 7. THICKNESS OF OVERBURDEN 7. THICKNESS OF
2: LOCATION (Coordinates or Station)       MSL         3: DRILLING AGENCY       PSI         4: HOLE NO. (As shown on drawing title and file number)       H 728-SB25         5: NAME OF DRILLER       H 728-SB25         6: DIRECTION OF HOLE       H 728-SB25         7: HOLE NO. (As shown on drawing title)       H 728-SB25         8: NAME OF DRILLER       H 728-SB25         9: DIRECTION OF HOLE       H 728-SB25         9: DIRECTION OF HOLE       BISELEVATION GROUND WATER         6: DIRECTION OF HOLE       BISELEVATION GROUND WATER         6: DIRECTION OF HOLE       DEG. FROM VERT.         10: DEPTH DRILLED INTO ROCK       III. TOTAL CORE RECOVERY FOR BORING         11: SELEVATION OF HOLE       JS. SIGNATURE OF INSPECTOR         12: TOTAL DEPTH OF HOLE       A. O'         13: TOTAL DEPTH OF HOLE       A. O'         14: TOTAL CORE RECOVERY FOR BORING         15: SELEVATION       DEPTH DRILLED INTO ROCK         16: DEPTH OF HOLE       A. O'         17: SIGNATURE OF INSPECTOR         18: TOTAL DEPTH OF HOLE       A. O'         19: SIGNATURE OF INSPECTOR         10: TOTAL DEPTH OF HOLE       A. O'         10: OF ALC OF FORM, WATERIALS       RECOV.         10: OF ALC OF FORM, WATERIALS       RECOV. <t< td=""></t<>
SAV. 6A 12. MANUFACTURER'S DESIGNATION OF DRILL Die Arch D 120 13. DRILLING AGENCY PSI A. MOLE NO. (As shorm on drawing fills) H. 728-5825 I. HANGE OF DRILLER M. Gribble I. TOTAL NUMBER CORE BOXES I. ADTE NO. OF OVER. BURDEN SAMPLES TAKEN I. DIRECTION OF HOLE I. TOTAL NUMBER CORE BOXES I. TOTAL CORE RECOVERY FOR BORING I. DEPTH DRILLED INCLINED DEG. FROM VERT. I. DELEVATION OF HOLE I. TOTAL CORE RECOVERY FOR BORING I. TOTAL DEPTH OF HOLE I. CLASSIFICATION OF MATERIALS ELEVATION DEPTH LEGEND CLASSIFICATION OF MATERIALS STAVD : f. unofly V. DEGZ 2.5731, dwy, STAY 10%, tr. unich, HC offor I. SIGNISCH I. SIGNIS
13. TOTAL DEPTH LEGEND       13. TOTAL NO. OF OVER. BURDEN SAMPLES TAKEN       DISTURBED       UNDISTURBED         6. DIRECTION OF HOLE       14. TOTAL NUMBER CORE BOXES       14. TOTAL NUMBER CORE BOXES       15. ELEVATION GROUND WATER         6. DIRECTION OF HOLE       15. ELEVATION GROUND WATER       16. DATE HOLE       STARTED       COMPLETED         7. THICKNESS OF OVERBURDEN       14.01       16. DATE HOLE       STARTED       COMPLETED         8. DEPTH DRILLED INTO ROCK       19. SIGNATURE OF INSPECTOR       38.5       17. THICKNESS OF OVERBURDEN       14.01         8. DEPTH DRILLED INTO ROCK       19. SIGNATURE OF INSPECTOR       19. SIGNATURE OF INSPECTOR       19. SIGNATURE OF INSPECTOR         8. TOTAL DEPTH OF HOLE       10. O'       19. SIGNATURE OF INSPECTOR       19. SIGNATURE OF INSPECTOR         8. TOTAL DEPTH LEGEND       CLASSIFICATION OF MATERIALS       \$CORE BOX OR       10. THEOREM, water lose, depth of water lose, depth of water lose, depth of model, v. Die GR2 2.57 31, dwy, hole fo       1         8. TOTAL DEPTH Concert       SAMPLE       Post       10. WATER       10. WATER         9       11. Concert       10. ONE CONCERT       10. WATER       11. Nome       14. Edgelificant         9       11. Concert       10. STARTER       10. STARTER       10. STARTER       10. STARTER       10. STARTER       10. STARTER
and the number of the T28-SB25 I. ATTEN BOLLER M. Gribble I. TOTAL NUMBER CORE BOXES I. TOTAL DUNDER CORE BOXES I. TOTAL DEPTHOF HOLE I. DECTION OF HOLE I. DECTION OF HOLE VERTICAL DINCLINED DEG. FROM VERT. I. DATE HOLE VERTICAL DINCLINED DEG. FROM VERT. I. DATE HOLE VERTICAL DINCLINED I. DEG. FROM VERT. I. DATE HOLE I.
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6- Sw Asphalt/ItCodur 67 3 Net firm-v. firm. black stamming 58 4 Sw Asphalt odor 10 Sw Asphalt odor 15-7-19-18 = 70min Sw Asphalt odor 15-7-19-10 4145
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5. NAME OF			<u></u>	SB26		AL NUMBE				•		
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6. DIRECTIO	N OF HO				16. DAT		ST	ARTED	COMPLETED			
	CAL	INCLINE	P	DEG. FROM VERT.		VATION TO		P/7/95 LE 37.6	8/7/95			
7. THICKNE	SS OF OV	ERBURD	N /	4.01	j			Y FOR BORING	*			
8. DEPTH D	RILLED I	NTO ROC	ĸ	p	1	ATURE OF						
9. TOTAL DI	EPTH OF	HOLE	<u> </u>	4.0	·	<u>). He</u>	BOX OR		iARKS			
ELEVATION a	<b>ДЕРТН</b>	LEGEN		CLASSIFICATION OF MATERIA (Description) d	LS	% CORE RECOV- ERY	SAMPLE NO.	(Driffing time, w	uter lose, depth of G., il significant)			
		540	Asphi	ref 7.54	· · · ·	Post		Blow 5	OVA ippm			
	=	<u>-</u>		D.f. need gr, 2+ Oline Br 2.515 H, will sorted, sabong, dry	16, fr.	hde.	1		Hondspace			
	2			(SW)		<i>103'</i>	'	None	8.5			
	=		4					2-3-4-6				
	4-	5.55	SAND	Fine- sitty 35%, Black 101R.	211, long-	100	2	- 5 4 - 6	ab 300			
		/ <u>···</u> ··	wer	aborton, V. losse-losse, (SH) s abore, 15% organics. W	tr organics	20		3-5-5-11 1	2 indial,			
	6-			1005e-firm.	et.	83	3	1 (R) 10 Say	2 indial Job 200			
		بت بت	[	(5M)		0)		Li	- F			
		· · · · · · ·	6	25 above. V firm- V. donse	, wetter	50	4	24-596	allafred			
	8-	:	, .	(SM)		00	4		collect a			
	11		'İ ;	as above-mustly med, fr.	glairconite	57	-	7-11-11-14	Not Collecter			
	10			Fe comenting, grading to eBr. 2.54516, 511+ 572 Joos		50	5		Lollect ex			
		• • • •	L . I	AS above, tr. mica. (e)	) ¯			6-15-17-22	Not E			
	12-		to the	loose - a firm, wellsorted	silary	67	6		Collected			
	11	• • • •	5	AS above				J Auger	F			
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			<u>.</u>					Hole	No.	<u>H728-</u>	29	
DRILL	ING LO				INSTAL	ATION					EET\$	
1. PROJECT	E.	HAAF	=			AND TYP		6 1/4" 1D		r		
2. LOCATION	(Coordin	ates or St	ation)		MSL							
3. DRILLING			-		12. MANUFACTURER'S DESIGNATION OF DRILL Diedrich D120							
4. HOLE NO.	(As show	P57		// <b></b>	13. TOTAL NO. OF OVER- BURDEN SAMPLES TAKEN							
end file num				H728-5829		AL NUMBE		•			•	
6. DIRECTIO		<u>M. 6r</u>	,6ble		15. ELEVATION GROUND WATER ISTARTED /   COMPLETED							
VERTIC			·	DEG. FROM VERT.	16. DATE HOLE 8/9/95 8/9/95							
7. THICKNES	S OF OVE	RBURDE	N 7.	4.0'	<u> </u>	VATION TO		Y FOR BORING	7-4			
8. DEPTH DR	ILLED IN	TO ROCH				ATURE OF			-			
S. TOTAL DEPTH OF HOLE 14.0'			D. Humphris									
ELEVATION	ОЕРТН Ь	LEGEND		LASSIFICATION OF MATERIA (Description)	NLS	* CORE RECOV- ERY	BOX OR SAMPLE NO.	(Driffing time weathering,	REMARI , weter , etc., ii	(S loss, depth   significant	) ^{of}	
	P	NEN	Aspha	et ak base				Blows	¥	OVA ,,	open	
	1.1		SAND:	med, 6-B-104R 512, 102 sil	t, dry		1	None		Hendspi		
	2-	••••		alson						12		
		÷.	5125	Sandy 30%, organic rich, 12, wet at bostom, loose - fin	U DKBR	20		311 Spor		0	أسسره	
	4	- <u>1</u> 7. -77	loyr 2 Clay I	12, wit at bottom, loose first him laminne, SAND-BrioyRSI	n, fr.	83	Z	14-10-11-11			5	
	-	<u> </u>	n > 1.0	over				11-7-6-7	₽ mit s wet	sound.		
	6-		and	DrBr 104R 3/2, Silfy 10-20 is, tr. 51k minerals, wet	, tr.org.	85	3	1 7// Care -	230m1+	23	50	
		<u> </u>		above, loss of H 5-10%, Hr.				4-10-11-26		Not	4	
	8-	•••••	tr.l	ik minerals, V. loose-V. firm	unet	83	4			Collec		
	-		`: A	is above Dr. Red Br SYR	3/2			23-33-50/6	;		10	
	//□]		· ·	. mica, tr. silt, ho organ	(C S	75	5			K		
	=	<u> </u>	<u>(</u> )	w) s above, St Br 7.5 YR 4/6, t	r. dark.			23-50/6			1	
	12-		spot	frig.		75	6			h	K	
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2. LOCATIO			tation)		,	56			´			
3. DRILLING	SAV	'. GA			12. MAN			GNATION OF DRILL				
	<u> </u>	<u>22</u>		·		AL NO. OF			UNDISTURBED			
4. HOLE NO. and file ru	(As show mber)	m on dran	ning title	H728-SB30					<u> </u>			
5. NAME OF	DRILLER	М. е	bribb	le	14. TOTAL NUMBER CORE BOXES ' 15. ELEVATION GROUND WATER							
6. DIRECTIC		LE			16. DAT	EHOLE	ST /	8/15/95	8/15/95			
	CAL	INCLINE		DEG. FROM VERT.								
7. THICKNES				4.0'	18. TOT	AL CORE P	RECOVER	Y FOR BORING	2			
8. DEPTH DI						ATURE OF						
9. TOTAL DI	EPTH OF	HOLE .	1	.0'			Maris		RKS			
ELEVATION	DЕРТН Ь	LEGENE		CLASSIFICATION OF MATERIA (Description) d		RECOV-	BOX OR SAMPLE NO.	(Driffing time, wat weathering, etc., a	er lose, depth of			
	-		Concre	fe .	<u> </u>	-		BLWS	OUAIppm			
		(c)	15"		,	Post			Headspace			
	2		d7	med-fine , DKBr 104/2 3/3; to 1 , well sorted, subang.	5717,	wheto 3'		-NA -	50			
	_			5W) V. DKBr 104R 2/2, as ,	aline	21		8-10-9-8	F			
	4-			lamps loose, tr. organic		88	2		7.60			
		· · · · ·		5W) 6+ 10YR 4/1 as above		• -		10-13-18-26	E			
	6—		34 V.	DK GRBR - 312 domp, orgoni	is	100	3	3'spoon	fial, 1000+			
	ľ =		21-8	DK GRBR - 312 domp, organi ir GH - 6/2 - wot, firm-v.fir (SW)	m; silt 5%	100		3'spoon IIIII 3-4-5-8 6.91 @15m	mple Lord F			
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	10			st. industed, Fe cemented n. SILT 5 to (SW)	odulas	50	. 5		Ē			
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# APPENDIX E

# FIELD EQUIPMENT CALIBRATION SHEETS

### FIGURE B4.4 SOIL GAS INSTRUMENTATION CALIBRATION

### Date: 07/10 - 07/15/95

### Instrument: HP 5890 Series II Gas Chromatograph equipped with a flame ionization detector (FID)

**Calibration Standard:** 

Primary Standard Manufacturer: National Institute of Science

Lot #: 09214BZ 03456AZ 02504MY 00921KY

Concentration: Benzene 10,000 mg/L Toluene 10,000 mg/L Ethyl Benzene 10,000 mg/L Ortho Xylene 10,000 mg/L

All Primary Standards were prepared by Scott Norris in the Tracer Research Laboratory in Tucson, Arizona. Primary Standards were prepared in methanol.

Calibration Standards used in the field are prepared by injecting 4 microliters ( $\mu$ L) of primary standard into a 40 milliliter (mL) VOA filled with distilled water.

### TRACER RESEARCH CORP.

JOB: 5S50302S/METCALF & EDDY/HUNTER AIR BASE/SAVANNAH, GEORGIA DATE: 07/10/95 ANALYST: DAVID KOVACH FIELD ASST.: DOUG WILSON

### CALIBRATION WORKSHEET

 COMPOUND
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 AREA CT.
 CONC.[ug/
 RF
 AVE RF SSTD
 %RSD
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COMPOUND DETINJ SIZE AREA CT. CONC.[ug/ RF AVE RF SSTD %RSD ACC RG TOLUENE A 100 2901104 1000.0 3.4E-14 4E-14 4.8E-15 11.911 25

> 100 2377808 1000.0 4.2E-14 100 2313290 1000.0 4.3E-14

 COMPOUND
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100 2857296 1000.0 3.5E-14 100 2751470 1000.0 3.6E-14

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DATE: 07/12/95 ANALYST: DAVID KOVACH FIELD ARRT. CRIMIN WILSON

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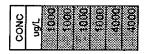
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ANALYST: DAVID KOVACH DATE: 07/15/95

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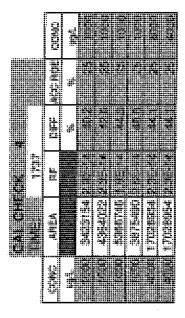
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ANALYST: DAVID KOVACH FIELD ASST. DOUNT WALGON

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	READING/AD.	USTMENT			·····		
BAT	TERY CHECK:						
	E CALIBRATED:		0150				<u> </u>
CALI	BRATED BY:		BR			······	
CALI	BRATION CHECK:					 	
	TIME:		1830				
	BY:		GR				
	STATUS:		89 ppm		<del></del>		
	TIME:				⁴		••
	BY:	•				·····	<u></u>
	STATUS:			<del> </del>			
1.	OVA-FED:	Organic Vapor	Analyzer, Flame Io	nization Detection	or manufactured by F	oxbora	<u></u> _
	pH PEN:		ester manufactured		_		
	COND PEN:	Total dissolved	solids tester with a by Fisher Brand.				
		<b>6</b>					

CGI: Combustible Gas Indicator manufactured by Industrial Scientific Devices.

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Photo - Ionization Detector manufactured by HNu. HNu-PID:

DATE.	6-14-	95

INST	RUMENT (1)		OVA·FID	PH PEN	COND PEN	CGI	HNu-PID		
	MODEL NUMB	ER	128	<u> </u>					
	SERIAL / ID NU	JM8ER	<u>A 41828</u>						
CALI	BRATION STANDA	RD							
	MANUFACTUR	ER	Eagle						
	IDENTIFICATK	ON (LOT #)			····				
	CONCENTRAT	NON	95.5 PPM						
	READING/ADJ	USTMENT	97 ppm		<u></u>				
ZERC	GAS:						. •		
	MANUFACTUR	ER		<u>.</u>	,				
	IDENTIFICATO				<u> </u>	<u></u>			
	READING/ADJ	USTMENT					<u> </u>		
ватт	ERY CHECK:			· <u> </u>					
TIME	CALIBRATED:			·			(		
CALIE	RATED BY:								
CALIB	RATION CHECK:								
	TIME:		1830	·					
	BY:	-	GL						
	STATUS:		95 pp/h						
	TIME:								
	BY:			·					
	STATUS:		<del></del>			, <del></del>			
1.	OVA-FED:	Organic Vapor	Analyzer, Flame k		or manufactured by F	oxbore			
	pH PEN:		Inic Vapor Analyzer, Flame Ionization Detector manufactured by Foxbore Ironic pH tester manufactured by Fisher Brand						
	COND PEN:	Total dissolved	I solids tester with by Fisher Brand.	•					
	CGI:	Combustible G	as Indicator manuf	actured by Indu	strial Scientific Devic	:05.			

DATE. 6/15/95

INST	RUMENT (1)	OVA-FID	pH PEN	COND PEN	CGI	HNU-PID
	MODEL NUMBER	128	<u> </u>			
	SERIAL / ID NUMBER	A 41858	<u></u>	<u>-</u>		
CALI	BRATION STANDARD					
	MANUFACTURER	Eagle				
	IDENTIFICATION (LOT #)	•	·····			
	CONCENTRATION	95.5 pp	~~			
	READING/ADJUSTMENT	<u>95pp</u> ~				·
ZER	D GAS:	NA				. <b>-</b>
	MANUFACTURER					
	READING/ADJUSTMENT					
<b>.</b>					<u> </u>	
	ERY CHECK:	0726	<del></del>		••••••••••••••••••••••••••••••••••••••	<u> </u>
IME	CALIBRATED:	0738		<u> </u>	····-	
CALI	BRATED BY:	<u>HTH</u>			·	
CALIE	BRATION CHECK;		<u> </u>		,	· ····
	TIME:	1800			-	
	BY:	GL				
	STATUS:	<u>94 ppm</u>				
	TIME:	<u></u>	<u> </u>			
	BY:			<b></b>		
	STATUS:		<b>.</b>			
1.	OVA-FED: Organic Va	ipor Analyzer, Flame k	onization Detect	or manufactured by F	oxboro	
		H tester manufacture				

Total dissolved solids tester with automatic temperature correction. Manufactured by Fisher Brand. COND PEN: CGI:

Combustible Gas Indicator manufactured by Industrial Scientific Devices.

Photo - Ionization Detector manufactured by HNu. HNu-PID:

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DATE 6/16/95

	OVA-FID	PH PEN	COND PEN	CGI	HNu-PID
MODEL NUMBER SERIAL / ID NUMBER CALIBRATION STANDARD	128 A 41828				
CALIBRATION STANDARD MANUFACTURER IDENTIFICATION (LOT #) CONCENTRATION READING/ADJUSTMENT	<u>Engl</u> e <u>95,56</u> Hy <u>95pp</u> m				
ZERO GAS: MANUFACTURER IDENTIFICATION (LOT #) READING/ADJUSTMENT					
BATTERY CHECK: TIME CALIBRATED:	0730				(
CALIBRATED BY:	GR	<u></u>	<b></b>	, <u></u> ,	······
CALIBRATION CHECK: TIME: BY: STATUS: TIME:	1830 D1 H 98		······································	~	
BY: STATUS:					

1.	OVA-FED:	Organic Vapor Analyzer, Flame Ionization Detector manufactured by Foxbore
	pH PEN:	Electronic pH tester manufactured by Fisher Brand
	COND PEN:	Total dissolved solids tester with automatic temperature correction. Manufactured by Fisher Brand.
	CGI:	Combustible Gas Indicator manufactured by Industrial Scientific Devices.
	HNu-PID:	Photo - Ionization Detector manufactured by HNu.

DATE. 6/ 1/6/95

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# INSTRUMENT CALIBRATION

INST	RUMENT (1)		OVA-FID	pH PEN	COND PEN	CGI	HNu-PID		
	MODEL NUM	3ER	128	. <u></u>					
	SERIAL / ID N	UMBER	<u>A41828</u>	<u></u>	······				
CALI	BRATION STAND	ARD							
	MANUFACTU	REA	Eagle		·····				
	IDENTIFICAT	ION (LOT #)	•	····					
	CONCENTRA	TION	95.5 CH		+		<u> </u>		
	READING/AD	JUSTMENT	<u>96 pp</u> m		<u> </u>	<u>-</u>	<u> </u>		
ZERO	D GAS:								
	MANUFACTUR	<b>E</b> A	<u> </u>						
	IDENTIFICATI	ON (LOT #)							
	READING/AD.	USTMENT		<u> </u>					
0.4.77	ERY CHECK:			-					
TIME CALIBRATED:		0755		<u> </u>	<b></b>				
T INNE,			<u> </u>	<u></u>					
CALI	BRATED BY:		DLH						
CALIE	BRATION CHECK:						<del></del>		
	TIME:		1830	· .					
	BY:		DLH						
	STATUS:		<u>98 ppm</u>		•		······		
	TIME:					<u> </u>			
	8Y:			•					
	STATUS:								
 1.	OVA-FED:		or Analyzer, Flame lo		ar manufactured by F	ioxbora			
	pH PEN:		i tester manufactured		-				
	COND PEN:	-							
	CGI:		Gas Indicator manuf	actured by Indu	striat Scientific Devic	:03.			
	HNu-PID:		ation Detector manuf						

	INSTRUMENT	CALIBRATION
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DATE. _6/18/95

INSTRUMENT (1)	OV.	A-FID	pH PEN	COND PEN	i DO	HNu-PID
MODEL NUMBE SERIAL / ID NUM		<u>1828</u>				· · · · · · · · · · · · · · · · · · ·
CALIBRATION STANDAR	Ð					
MANUFACTURE	а <i>Е</i>	agle	<del></del>	·		
IDENTIFICATIO	N(LUI#) ·					<u></u>
CONCENTRATE	<b>n</b> 9 <u>5,</u>	5 CH4		······································		
READING/ADJU	STMENT 9	<u>lepp</u> r		<del></del>		<del></del>
ZERO GAS:						
MANUFACTURE	R \				<u></u>	
IDENTIFICATION	N(LOT #)			<b>-</b>		·····
READING/ADJU			<b></b>	·		<u> </u>
BATTERY CHECK:	L	$\leq$				
TIME CALIBRATED:	07	<u>740</u>				(
CALIBRATED BY:	K	5	<del></del>			
CALIBRATION CHECK:	<u> </u>					
TIME:	18	00		<u> </u>		<u></u>
8Y:	$\partial z$	<u>H</u>	<u> </u>	<u></u>		
STATUS:	<u>9</u>	5ppm				
TIME:			<del></del>			
BY:						
STATUS:	<del></del>		. <u> </u>	<u></u>		
1. OVA-FED: рн PEN:	Organic Vapor Analyza Electronic pH tester ma			•	oxboro	

COND PEN: Total dissolved solids tester with automatic temperature correction. Manufactured by Fisher Brand.

CGI: Combustible Gas Indicator manufactured by Industrial Scientific Devices.

DATE. 6/19/95

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INSTRUMENT CALIBRATION

INSTRUMENT (1)	OVA-FID	pH PEN	COND PEN	CGI	HNu-PIO
MODEL NUMBER	<u> 28</u> A <u>418</u> 28				
CALIBRATION STANDARD	$\sim$ .				
MANUFACTURER	Eagle				
IDENTIFICATION (LOT #)					
CONCENTRATION	95.5 CH4	·	<u>.                                    </u>		
<b>READING/ADJUSTMENT</b>	95ppm		<del></del>	<del></del>	
ZERO GAS:					
MANUFACTURER	<u>\</u>				
IDENTIFICATION (LOT #)	<u> </u>	·····			
READING/ADJUSTMENT		. <u> </u>			
BATTERY CHECK:					
TIME CALIBRATED:	0750				
CALIBRATED BY:	DZH	·	`		
CALIBRATION CHECK:					
TIME:			· · · · · · · · · · · · · · · · · · ·		
BY:					
STATUS:					
TIME:			. <u></u>	. ·	
BY:			·		
STATUS:			······································	·	

1.	OVA-FED:	Organic Vapor Analyzer, Flame Ionization Detector manufactured by Foxboro
	ρΗ <b>ΡΕΝ</b> :	Electronic pH tester manufactured by Fisher Brand
	COND PEN:	Total dissolved solids tester with automatic temperature correction. Manufactured by Fisher Brand.
	CGI:	Combustible Gas Indicator manufactured by Industrial Scientific Devices.
	HNu-PID:	Photo - Ionization Detector manufactured by HNu.

DATE. 6/20/95

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# INSTRUMENT CALIBRATION

INSTRUMENT (1)		OVA-FID	OH PEN	COND PEN	CGI	HNu-PID
MODEL NUMBE	R	128		·		
SERIAL / ID NUM	ABER	A 41858	<u></u>			
CALIBRATION STANDAR	Ð	_				
MANUFACTURE	R	Eagle				<del>,</del>
IDENTIFICATIO	N (LOT #)		·	<del></del>		
CONCENTRATIO	ж	95.5 CH4				. <u> </u>
READING/ADJU	STMENT	<u>94pp</u> ~	<u> </u>	·	<u> </u>	
ZERO GAS:						-
MANUFACTURE	R					
IDENTIFICATION	(LOT #)	<u> </u>				
READING/ADJU	STMENT	/		<u>-</u>		
BATTERY CHECK:				<del></del>		
TIME CALIBRATED:		0750		<u> </u>		
CALIBRATED BY:		DT A		<u> </u>		•
CALIBRATION CHECK:		· · · · · · · · · · · · · · · · · · ·	<u></u>			
TIME:		1920				
BY:	14.5	DXH				
STATUS:	·	9.4ppm				
TIME:				· · · · ·	<u> </u>	
BY:						
STATUS:			······	·		
1. OVA-FED;	Organic Vapor A	nalyzer, Flame lor		r manufactured by Fo		<u> </u>
PH PEN:		ster manufactured		-		
COND PEN:		solids tester with a	-			

CGI: Combustible Gas Indicator manufactured by Industrial Scientific Devices.

DATE 6/21/95

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## INSTRUMENT CALIBRATION

INSTRUMENT (1)	OVA-FID	pH PEN	COND PEN	CGI	HNu-PID
MODEL NUMBER	128	<u> </u>			<del></del>
SERIAL / ID NUMBER	A41858				
CALIBRATION STANDARD					
MANUFACTURER	Eagle				·····
IDENTIFICATION (LOT J)	•		····		····
CONCENTRATION	95.5 cHy				
READING/ADJUSTMENT	95ppm		······	<del></del>	·····
ZERO GAS:					
MANUFACTURER	<i> </i> -			<u>-</u>	
IDENTIFICATION (LOT #)				<u>-</u>	
READING/ADJUSTMENT	_/				,
BATTERY CHECK:	$\checkmark$				
TIME CALIBRATED:	0750				
CALIBRATED BY:	D1 H		_ <u></u>		
CALIBRATION CHECK:	·····			· · · · · · · · · · · · · · · · · · ·	<u></u>
TIME:	<u>1930</u>				
8Y:	DZH				
STATUS:	<u>94pp</u> m				
TIME:				<u> </u>	
BY:	B		<u> </u>		
STATUS:			·····		

 1.
 OVA-FED:
 Organic Vapor Analyzer, Flame Ionization Detector manufactured by Foxbore

 pH PEN:
 Electronic pH tester manufactured by Fisher Brand

 COND PEN:
 Total dissolved solids tester with automatic temperature correction. Manufactured by Fisher Brand.

 CGI:
 Combustible Gas Indicator manufactured by Industrial Scientific Devices.

 HNu-PID:
 Photo - Ionization Detector manufactured by HNu.

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DATE. 6/27/95

INSTRUMENT (1)		OVA-FID	pH PEN	COND PEN	CGI	HNu-PID
MODEL NUMB	UMBER	<u>128</u> <u>A 4185</u> 8				
CALIBRATION STANDA MANUFACTUR		EAGLE				
IDENTIFICATI CONCENTRAT READING/ADJ	TON	<u>75.5 MM</u> 93				
ZERO GAS:	USIMENI					
MANUFACTUR IDENTIFICATK READING/ADJ						
BATTERY CHECK: TIME CALIBRATED:		0815				(
CALIBRATED BY:		ks		+		۰
CALIBRATION CHECK:	······					
TIME: BY: STATUS:		1900 6L 96 ppm				
TIME: BY: STATUS:					· · · · · · · · · · · · · · · · · · ·	
1. OVA-FED: pH PEN: COND PEN: CG1:	Electronic pH tes Total dissolved s Manufactured by	ter manufactured olids tester with Fisher Brand,	d by Fisher Brand automatic temper			

DATE. 6-28-95

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INSTRUMENT (1)		OVA-FID	PH PEN	COND PEN	CGI	HNu-PID
MODEL NUMB	ER	128				
SERIAL / ID NO	JM8ER	<u>A4185</u> 8			* <u>-</u>	
CALIBRATION STANDA	RD					<u>_</u>
MANUFACTUR	ER	Foqle				
IDENTIFICATE	ON (LOT #)	I 	<u> </u>			
CONCENTRAT	TON	95.5 pponchy				
READING/ADJ	USTMENT					
ZERO GAS:						
MANUFACTUR	ER	<u> </u>				
IDENTIFICATK	DN (LOT #)		<del></del>			
READING/ADJ	USTMENT		<u>.</u>			<u></u>
BATTERY CHECK:		<u> </u>				
TIME CALIBRATED:		0805				
CALIBRATED BY:		<u>61</u>	<u>-</u> -			
CALIBRATION CHECK:		<u></u>				
TIME:		1800				
BY:		GR			<u> </u>	
STATUS:		Py ppm				······
TIME:						
BY:						······
STATUS:						
1. OVA-FED:	Organic Vacor Ar	nalyzer, Flame Ioni	tation Detector m	andadurad by Cov		
pH PEN:		er manufactured b		environing of Lox		
COND PEN:		olids tester with au		ure correction.		

CGI: Combustible Gas Indicator manufactured by Industrial Scientific Devices.

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DATE. 7/10/95

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INSTRUMENT (1)		OVA-FID	PH PEN	COND PEN	CGI	HNu-PIO
MODEL NU	MBER	128				
SERIAL / ID	NUMBER HAECO	2399				
CALIBRATION STAN	DARD					
MANUFACT	URER	EAGLE				
IDENTIFICA		029194		· <u> </u>	*	
CONCENTR	ATION	95.5		······································		
READING/A	DJUSTMENT	84				
ZERO GAS:						
MANUFACTI	JRER	Ambient				
IOENTIFICA						
READING/AL	DUSTMENT	0				
BATTERY CHECK:		0K				
TIME CALIBRATED:		0715				
				<del></del>	<del>`</del>	(
CALIBRATED BY:		<u>DH</u>				<u> </u>
CALIBRATION CHECH	<: <:		<del></del>			··
TIME:		1650				
BY:		DA				
STATUS:		86	*********************** <b>*</b> *		·····	
а. С				·	<u></u>	
TIME:		<del></del>	··		<u>.</u>	
BY:						
STATUS:			<u></u>	<del></del>		
1. OVA-FED:	Organic Vapor An	alyzer, Flame k	onization Detector	r manufactured by Fe	oxbore	
pH PEN:	Electronic pH test					
COND PEN:	Total dissolved so Manufactured by I	ilids tester with				
CGI:			factured by Indus	trial Scientific Devic	e\$.	
HNu-PID:	Photo + Konization					

HNu-PID: Photo - Ionization Detector manufactured by HNu.

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DATE. 7/11/95

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## INSTRUMENT CALIBRATION

INSTRUMENT (1)	OVA-FID	OH PEN	COND PEN	CGI	HNu-PID
MODEL NUMBER	12.8	,			
SERIAL / ID NUMBER	Hitzco 2397	<u> </u>	·····		
CALIBRATION STANDARD					
MANUFACTURER	Eagle	··	•	·	
IDENTIFICATION (LOT #)	· 029194				
CONCENTRATION	95.5				
READING/ADJUSTMENT	94	······			
ZERO GAS:					•
MANUFACTURER	Ambiant	·			
IDENTIFICATION (LOT #)					
READING/ADJUSTMENT	D	••••••••••••••••••••••••••••••••••••••	·		
BATTERY CHECK:	OK	·			
TIME CALIBRATED:	0705	<u> </u>		· · · · · · · · · · · · · · · · · · ·	
CALIBRATED BY:	DH			<u></u>	
CALIBRATION CHECK				· · · · · · ·	
TIME:	1530				
<b>BY:</b>	DA				· · · ·
STATUS:	86				· · · · · · · · · · · · · · · · · · ·
TIME:	<u></u>				
BY:					
STATUS:					

۲.	OVA-FED:	Organic Vapor Analyzer, Flame Ionization Detector manufactured by Foxboro
	pH PEN:	Electronic pH tester manufactured by Fisher Brand
	COND PEN:	Total dissolved solids tester with automatic temperature correction. Manufactured by Fisher Brand.
	CGI:	Combustible Gas Indicator manufactured by Industrial Scientific Devices.
	HNu-PID:	Photo - Ionization Detector manufactured by HNu.

DATE 7/12/95

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INSTRUMENT (1)	OVA-FID	pH PEN	COND PEN	cGI	HNu-PID
MODEL NUMBER	128				
SERIAL / ID NUMBER	HAZCO 2399				
CALIBRATION STANDARD					
MANUFACTURER	Eagle				
IDENTIFICATION (LOT #)	· 029194	<u> </u>			<u></u>
CONCENTRATION	95.5				
READING/ADJUSTMENT	100				
ZERO GAS:					
MANUFACTURER	Ambient	- 			<u></u>
IDENTIFICATION (LOT #)	•	<u> </u>			
READING/ADJUSTMENT	0	·			
BATTERY CHECK:	OK			<del></del>	
TIME CALIBRATED:	0655		<u> </u>		(
CALIBRATED BY:	DH			:	
CALIBRATION CHECK:		<u> </u>	·		<u>_</u>
TIME:	1710		· · ·		
BY:	DH.		-		<u>_</u>
STATUS:	95		·		
TIME:					
BY:			<del></del>		
STATUS:					
1. OVA-FED: Organic Vaco	or Analyzer, Flame lo		manufactured by E		

 t.
 OVA-FED:
 Organic Vapor Analyzer, Flame Ionization Detector manufactured by Foxboro

 pH PEN:
 Electronic pH tester manufactured by Fisher Brand

 COND PEN:
 Total dissolved solids tester with automatic temperature correction. Manufactured by Fisher Brand.

 CG1:
 Combustible Gas Indicator manufactured by Industrial Scientific Devices.

 HNu-PID:
 Photo - Ionization Detector manufactured by HNu.

DATE. 7/13/95

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INSTRUMENT (1)	OVA-FID	PEN م	COND PEN	CGI	HNu-PID
MODEL NUM	BER <u>128</u>				
SERIAL / ID N	NUMBER HAZCO 2391				
CALIBRATION STAND	ARD				<u> </u>
MANUFACTU	REA <u>E-gle</u>				
IDENTIFICAT	ION (LOT #) · <u>0 2 9/9 4</u>				
CONCENTRA	TION 95.5	————			
READING/AD	JUSTMENT 92				
ZERO GAS:					. •
MANUFACTU	RER Andient				
IDENTIFICAT					
READING/AD					·····
BATTERY CHECK:	_ CK_				
TIME CALIBRATED:	0650				
CALIBRATED BY:	3H		<u> </u>		
CALIBRATION CHECK			<del>.</del>		<u></u> -
TIME:	1800			-ii-2*i-2*	1 1 1 1 1 1
BY:	DH				
STATUS:	90			· · · · ·	
TIME:					
BY:		****			
STATUS:				, <u> </u>	
1. OVA-FED:	Organic Vapor Analyzer, Flame	Ionization Detecto	or manufactured by F	expere	
pH PEN:	Electronic pH tester manufactur		-		
COND PEN:	Total dissolved solids tester will Manufactured by Fisher Brand.				
CGI:	Combustible Gas Indicator man	iufactured by Indu	ustrial Scientific Devic	:05.	

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DATE. 7/14/95

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INS]			OVA-FID	pH PEN	COND PEN	ŝ	HNu-PID
		BER	128				
	SERIAL / ID N	UMBER	HAZED 2317				
CAL	IBRATION STAND	ARD				<u></u>	, <u> </u>
	MANUFACTU	RER	Engle				
	IDENTIFICATI	ION (LOT #)	029194				<u> </u>
	CONCENTRA	TION	95.5				
	READING/AD.	JUSTMENT	98				
ZER	O GAS:						
	MANUFACTUR	<b>E</b> A	Andrawt				
	IDENTIFICATI	ON (LOT #)					
	READING/ADJ	IUSTMENT	0		·		
ват	TERY CHECK:		<u> </u>	<u></u>			
TIME	CALIBRATED:		0650				
CALI	BRATED BY:		DA		•		( <u></u>
CALI	BRATION CHECK:		. 1-			······································	
	TIME:		1400				
	BY:		794	·	<u></u>		· • • • • • • • • • • • • • • • • • • •
	STATUS:		DA				
	TIME:						
	8Y:			·		<u></u>	
	STATUS:						
1.	OVA-FED:	Organic Vapor	Analyzer, Flame Io	nization Detecto	r manufactured by Fe	oxboro	
	pH PEN:		ester manufactured				
	COND PEN:	Total dissolved Manufactured b	solids tester with a by Fisher Brand.	automatic tempe	rature correction.		
	C <b>GI</b> :	Combustible G	as Indicator manuf	actured by Indu	strial Scientific Devic	•\$.	
		<b>Ch</b>	<b>.</b>				

DATE. 7/15/95

128 HAZLO 2399				
HAZIO 2399				
		·		-
Engle				
· 029194		··	······	
95.5				
100 94		*····		
				r a
Ambient			······································	
			<u></u>	
0		······	<u> </u>	<u> </u>
OK		<del></del>		
0650		<u> </u>	<u> </u>	
DA	<u></u>			
1210	<u></u>			
DH				1 4 2 -
98				
			·	
	· 029/194 95.5 100 94 Ambount 0 0K 0650 DK 1210 DK	· 029/194 <u>95.5</u> <u>NOD</u> ^{PH} 94 <u>Aml.mt</u> <u>-</u> <u>0</u> <u>0</u> <u>0</u> <u>0</u> <u>0</u> <u>0</u> <u>0</u> <u>0</u>	· 029/194 <u>95.5</u> <u>NOD</u> <u>NM</u> <u>Aml.mt</u> <u>-</u> <u>0</u> <u>0</u> <u>0</u> <u>0</u> <u>0</u> <u>0</u> <u>0</u> <u>0</u>	$\begin{array}{c} 0 = 9/194 \\ 95.5 \\ \hline PTO 94 \\ \hline \\ \hline \\ D \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \\ 0 \\ \hline \hline \\ 0 \\ \hline \\ 0 \\ \hline \hline \\ 0 \\ \hline \hline \\ 0 \\ \hline \hline \\ 0 \\ \hline \hline \\ 0 \\ \hline \hline \\ 0 \\ \hline \hline \\ 0 \\ \hline \hline \\ 0 \\ \hline \hline \\ 0 \\ \hline \hline \hline \\ 0 \\ \hline \hline \hline \\ 0 \\ \hline \hline \hline \\ 0 \\ \hline \hline \hline \\ 0 \\ \hline \hline \hline \hline$

pH PEN: Electronic pH tester manufactured by Fisher Brand

COND PEN: Total dissolved solids tester with automatic temperature correction. Manufactured by Fisher Brand.

CGI: Combustible Gas Indicator manufactured by Industrial Scientific Devices.

DATE. 7/31/95

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541	<u> </u>			,				
INST	RUMENT (1)		OVA-FID	PH PEN	IDAC 910 CONDPEN	CGI	HNu-PID	
	MODEL NUM	8ER	128	9	10			
	SERIAL / ID N	IUMBER	A41858	HAZG	5127			
CALI	BRATION STAND	ARD	Caraan		_			
	MANUFACTU	RER	Eagle	Fisher	Fisher	· · ·		
		ION (LOT #)	· NA		1268			
	CONCENTRA	TION	98.7	7.0/10.0	996	بد		
	READING/AD	JUSTMENT	86	7.0/10.0	996	·	· · · · · · · · · · · · · · · · · · ·	
ZERO	D GAS:		,				• ••	
	MANUFACTU	REA	Ambient		<u> </u>			
	IDENTIFICAT	ION (LOT #)		<u> </u>	<u> </u>			
	READING/AD	JUSTMENT	0	<u> </u>	<u> </u>			
BATT	ERY CHECK:		OK					
TIME	CALIBRATED:		1255	/415	1415		·	
CALIE	BRATED BY:		RAL	DH	DH			
CALIE	BRATION CHECK	· · ·			-			
	TIME		1715	1715	1716			
	8Y:		-DM	DH	, DA			
	STATUS:		90	6.90/9.65	875		· <u>· · · · · · · · · · · · · · · · · · </u>	
	TIME:				н 		·	
	BY:	·						
	STATUS:		<u> </u>	·	·			
 1.	OVA-FED:		or Analyzer Elama		mandadured by C			
•.	pH PEN:	Organic Vapor Analyzer, Flame Ionization Detector manufactured by Foxboro Electronic pH tester manufactured by Fisher Brand						
	COND PEN:	Total dissolved solids tester with automatic temperature correction., Manufactured by Fisher Brand.						
	CGI:		Combustible Gas Indicator manufactured by Industrial Scientific Devices.					
	HNu-PID:							

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DATE. <u>I Avg. 95</u> INSTRUMENT (1) OVA-FID D MODEL NUMBER <u>IZS</u> <u>IZS</u> SERIAL / ID NUMBER <u>A42.171</u> <u>A41.958</u> CALIBRATION STANDARD CanaRIN MANUFACTURER PAL <u>Footbord</u> CanaAN IDENTIFICATION (LOT #) <u>98-14736</u> <u>88-14736</u> CONCENTRATION <u>98.7</u> <u>98.7</u>	CGI HNU-PI					
INSTRUMENT (1) OVA-FID OHTPEN CONDIPEN MODEL NUMBER <u>128</u> SERIAL / ID NUMBER <u>A42.171</u> <u>A41.958</u> CALIBRATION STANDARD Canaan MANUFACTURER PAL <u>Foxboro</u> Canaan IDENTIFICATION (LOT #) <u>98-147.36</u> <u>88-147.36</u>	CGI HNu-PI					
SERIAL / ID NUMBER <u>A42171</u> <u>A41858</u> CALIBRATION STANDARD Canaan MANUFACTURER BAL <u>Foxbord</u> Canaan IDENTIFICATION (LOT #) <u>98-14736</u> <u>88-141736</u>						
CALIBRATION STANDARD Canaan MANUFACTURER BAL <u>Foxbord</u> Canaan IDENTIFICATION (LOT #) <u>685-14736</u> <u>88-141736</u>						
IDENTIFICATION (LOT #) · <u>68-14736</u> <u>Canaan</u>						
MANUFACTURER BAL <u>Foxbord</u> Conson IDENTIFICATION (LOT 1) <u>98-14736</u> <u>88-14736</u>						
CONCENTRATION <u>98.7</u> 98.7						
READING/ADJUSTMENT 84 86						
ZERO GAS:	1. <b>1</b>					
MANUFACTURER anbient ambient						
READING/ADJUSTMENT 0 0						
BATTERY CHECK: ok ok						
TIME CALIBRATED: 0710 0715						
CALIBRATED BY: RAL PAL						
CALIBRATION CHECK:						
TIME: 1620 15- RAL						
BY: DH PAL						
STATUS: <u>94</u> <u>\$0</u>						
TIME:						
BY:						
STATUS:						
OVA-FED: Organic Vapor Analyzer, Flame Ionization Detector manufactured by Foxi						
• • • • • • • • • • • • • • • • • • • •	Electronic pH tester manufactured by Fisher Brand					
COND PEN: Total dissolved solids tester with automatic temperature correction.						
Manufactured by Fisher Brand.						

CGI: Combustible Gas Indicator manufactured by Industrial Scientific Devices.

DATE. 8/2/95					1
INSTRUMENT (1)	OVA-FID	OVA Z DHPEN	COND PEN	CGI	HNu-PIQ
MODEL NUMBER	128	128			
SERIAL / ID NUMBER	A 42171	HA 1858			
CALIBRATION STANDARD					<del></del>
MANUFACTURER	Ca	naan	<u> </u>		
IDENTIFICATION (LOT #)	<u> </u>	A736			
CONCENTRATION	48.7	98.7			·
READING/ADJUSTMENT	40	94			
ZERO GAS:					
MANUFACTURER	millant				
READING/ADJUSTMENT	<u> </u>	0	<u>-</u>		· · · · · · · · · · · · · · · · · · ·
BATTERY CHECK:	()K	OK			
TIME CALIBRATED:	0705	0715	····		(
CALIBRATED BY:	<u></u>	<u></u>	<u> </u>		
CALIBRATION CHECK:	······································	-+ <u>+</u> - <del>-</del> - <del>-</del> - <del>-</del> -			
TIME:	<u>1530</u>	1530			
BY:	KS	<u>ks</u>			
STATUS:	98	92		<b>_</b>	
TIME:					
BY:	<b>_</b>				
STATUS:		<del></del>	·		

pH PEN: Electronic pH tester manufactured by Fisher Brand

COND PEN:Total dissolved solids tester with automatic temperature correction.<br/>Manufactured by Fisher Brand.CGI:Combustible Gas Indicator manufactured by Industrial Scientific Devices.HNu-PID:Photo - Ionization Detector manufactured by HNu.

	oll		INSTRUM	AENT CALI	BRATION		
DATE	e. <u>8/3/9</u>	5		OVA #2			
INSTR	RUMENT (1)		OVA-FID	OH PEN	COND PEN	œı	HNu-PID
	MODEL NUMBI	EA	1	28			
	SERIAL / ID NU	MBER	A42171	HA2-858			
CALIB	RATION STANDA	RD					
	MANUFACTUR	ER	<u>(</u> a)	14736			
	IDENTIFICATIO	W (LOT #)	88	-14736			
	CONCENTRAT	ION	<u>98.7</u>	98.7	+		
	READING/ADJ	JSTMENT	90	96.0		·	
ZERO	GAS:						
	MANUFACTUR	EA .	4	Subject.			-
		N (LOT #)			· · · · · · · · · · · · · · · · · · ·		
	READING/ADJU	JSTMENT	0	D		<u>_</u>	
BATTE	ERY CHECK:		OK	OK			
	CALIBRATED:		0645	0745		<del></del>	<u> </u>
			~ 4				<u> </u>
CALIBI	RATED BY:		<u>_274</u>	KS			
CALIBI	RATION CHECK:		- · · · · · · · · · · · ·		<u></u>	<u></u>	
· .	TIME:		1518	1615	· · ·		-
	8Y:		2H	RAL			
	STATUS:			98			
	TIME:						
	BY:						
	STATUS:						
	014 CCD		· · · · ·			<u></u>	
1.	OVA-FED:			Ionization Detector	-	oxboro	
	pH PEN:			id by Fisher Brand			
	COND PEN:	Total dissolved Manufactured	d solids tester with by Fisher Brand.	automatic temper	ature correction.		

í

CGI: Combustible Gas Indicator manufactured by Industrial Scientific Devices.

Photo - Ionization Detector manufactured by HNu. HNu-PID:

DATE. 8/4/95

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					ĺ
INSTRUMENT (1)	OVA-FID	OVA Z	COND PEN	CGI	HNu-PID
MODEL NUMBER	-12	8 -			
SERIAL / ID NUMBER	A 42171	A 4 2.858			
CALIBRATION STANDARD	-				
MANUFACTURER	<del> </del>	naan			
	· <u>8</u> 8-	14736			
CONCENTRATION	- 9.	8.7 -			
READING/ADJUSTMENT	100				
ZERO GAS:					
MANUFACTURER	An	nbient			
IDENTIFICATION (LOT #)				<u></u>	
READING/ADJUSTMENT	0	0	······		
BATTERY CHECK:	OK	OK	<u> </u>	<u></u>	
TIME CALIBRATED:	0650	<u>030</u>	<del></del>	<u>-</u>	(
CALIBRATED BY:	DH	KS			
CALIBRATION CHECK:					
TIME:	1616	1416	تر ر _مر معرور در 	: 	
BY:	DH	165		c	
STATUS:	98	94			
TIME:					
BY:		<u></u>			
STATUS:		<u>_</u>			
1. OVA-FED: Organic Vap	or Analyzer, Flame		manufactured by Fr		
	l tester manufacture				
COND PEN: Total dissolv	ed solids tester with d by Fisher Brand.	-			

CGI: Combustible Gas Indicator manufactured by Industrial Scientific Devices.

DATE. 8/5/95

	OVA-FID	OVA 2 PHPEN	COND PEN	cai	HNUPID
MODEL NUMBER	- /2	8			
SERIAL / ID NUMBER	A4 2/11	A 4 2858			
CALIBRATION STANDARD					<del></del>
MANUFACTURER	Сан	am	·		
IDENTIFICATION (LOT #)	•	14736		<u></u>	
CONCENTRATION	98.			<u> </u>	
READING/ADJUSTMENT	94	94			
ZERO GAS:					
MANUFACTURER	Am	bent			
		-			
READING/ADJUSTMENT	0	0		<u>-</u>	
BATTERY CHECK:	UK_	OK			
TIME CALIBRATED:	0655	0710			
CALIBRATED BY:	DH	RAL	<u>-</u> -		
CALIBRATION CHECK:			<u> </u>		
TIME:	1550	1530			
BY:	DH	ks			· · · · ·
STATUS:	100	84			
TIME:					
BY:					
STATUS:	· · · · · · · · · · · · · · · · · · ·		······································		
	'apor Analyzer, Flame k		manulactured by Fe	oxbore	

pH PEN: Electronic pH tester manufactured by Fisher Brand

COND PEN: Total dissolved solids tester with automatic temperature correction. Manufactured by Fisher Brand.

CGI: Combustible Gas Indicator manufactured by Industrial Scientific Devices.

8/1/05

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				(
OVA-FID	OVA #2	COND PEN	CGI	HNu-PID
/2	28 -			
A42171	<u>A42858</u>		· ····································	
			· · · · · · · · · · · · · · · · · · ·	
Car	naan			
. 88	- 14736	_		,
97	_98			
Am	biont			
0	0	·		
<u>OK</u>	DK			
0700	0715			(
DH_	KS			······
1615	1625			
KS	KS			
94	.93		·····	
<u> </u>				
	/2 <u>A 4 2/7/</u> (a) 	OVA-FID DATPEN $ \frac{-1/28}{A42171} - \frac{-1/28}{A42858} $ $ \frac{-1/28}{A42858} - \frac{-1/28}{A42858} $ $ \frac{-1/28}{A42858} - \frac{-1/236}{-1/4736} - \frac{-1/28}{-1/4736} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - 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\frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} - \frac{-1/28}{-1/68} $	OVA.FID DITPEN CONDPEN $ \frac{-1/28}{A42171} - \frac{1}{A42858} - \frac{1}{A42858} - \frac{1}{A42858} - \frac{1}{A42858} - \frac{1}{A42858} - \frac{1}{B8} - \frac{1}{4736} - \frac{1}{98} - \frac{1}{97} - \frac{1}{98} - \frac{1}{97} - \frac{1}{98} - \frac{1}{97} - \frac{1}{98} - \frac{1}{97} - \frac{1}{98} - \frac{1}{98} - \frac{1}{98} - \frac{1}{98} - \frac{1}{98} - \frac{1}{1615} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1615} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1615} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - \frac{1}{1625} - 1$	OVA-FID       DHTPEN       CONDPEN       CGI $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ $-1/2.8$ <t< td=""></t<>

 1.
 OVA-FED:
 Organic Vapor Analyzer, Flame Ionization Detector manufactured by Foxboro

 pH PEN:
 Electronic pH tester manufactured by Fisher Brand

 COND PEN:
 Total dissolved solids tester with automatic temperature correction. Manufactured by Fisher Brand.

 CGI:
 Combustible Gas Indicator manufactured by Industrial Scientific Devices.

 HNu-PID:
 Photo - Ionization Detector manufactured by HNu.

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DATE. 8/7/95

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INSTRUMENT (1)		OVA-FID	ova 2 <del>DH PE</del> N	COND PEN	CGI	HNu-PIO
MODEL NUMBER		/	28 -			
SERIAL / ID NUMB	ER A	42/7/	A42858			
CALIBRATION STANDARD						
MANUFACTURER		Сан	aan			
IDENTIFICATION (	LOT #)	- 88 -	14736	<del></del>		
CONCENTRATION		98	2.7 -	<del></del>		
READING/ADJUST	MENT	90	100	•		
ZERO GAS:						
MANUFACTURER		Am	bent			
IDENTIFICATION (L	OT #)				<del></del>	
READING/ADJUST	MENT	0	0			
BATTERY CHECK:		OK	OK			
TIME CALIBRATED:		0655	0715		<del></del>	·
		**				
CALIBRATED BY:		<u>DM</u>	RAL			<u> —                                   </u>
CALIBRATION CHECK:	<u> </u>					
TIME:		1607	1640			
BY:		DH-	PAL			
STATUS:		18	95		· · · · · · · · · · · · · · · · · · ·	
TIME:						_
BY:			• <del>••</del>	·		<u>-</u>
STATUS:	•				<del></del>	
••••••	·	- :		<u></u>	· ····	
1. OVA-FED: 0	rganic Vapor Ani	alyzer, Flame	Ionization Detector	manufactured by Fe	oxboro	
pH PEN: El	ectronic pH teste	ir manufacture	d by Fisher Brand			
COND PEN: TO M	otal dissolved so anufactured by F	lids tester with Fisher Brand.	automatic temper	ature correction.		
CGI: C	ombustible Gas I	Indicator man	ufactured by Indus	trial Scientific Devic	<b>63</b> .	
HNu-PID: PI	1010 - Ionization	Detector man	ufactured by HNu.			

DATE 8/8/95

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INSTRUMENT (1)	OVA-FID	OVA #2 OTPEN	COND PEN	CGI	HNu-PID
MODEL NUMBER	<u> </u>	28			
SERIAL / ID NUMBER	A42171	4421858			· · ·
CALIBRATION STANDARD					
MANUFACTURER	<u>Ca</u> +	1 aan			
IDENTIFICATION (LOT #)	89	- 14 736	·	·	
CONCENTRATION	- 9.	8.7			
READING/ADJUSTMENT	100	100			
ZERO GAS:					. •
MANUFACTURER	Aubient	Ambient			
IDENTIFICATION (LOT #)					
READING/ADJUSTMENT	0	0			
BATTERY CHECK:	ok	ok			
TIME CALIBRATED:	0710	0710			(
CALIBRATED BY:	RAL	SAL			
CALIBRATION CHECK:		<del></del>	· · · ·		<u> </u>
TIME:	1450	1700	line i line i Line i line i	•	
BY:	DH	<u>KS</u>			
STATUS:	100	92			
TIME:				·	
BY:					
STATUS:					
	Applying Flows				

 1.
 OVA-FED:
 Organic Vapor Analyzer, Flame Ionization Detector manufactured by Foxboro

 pH PEN:
 Electronic pH tester manufactured by Fisher Brand

 COND PEN:
 Total dissolved solids tester with automatic temperature correction. Manufactured by Fisher Brand.

 CG1:
 Combustible Gas Indicator manufactured by Industrial Scientific Devices.

 HNu-PID:
 Photo - Ionization Detector manufactured by HNu.

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			INSTRU	MENT CALIB	RATION		
DAT	E. 8/9/93	<u> </u>					
INSTI	RUMENT (1)		OVA-FID	OVA Z DH PEN	COND PEN	CGI	HNu-PID
	MODEL NUME	BER					
	SERIAL / ID N	UMBER	A4 2171	<u>A42858</u>			
CALIE	BRATION STAND	ARD					
	MANUFACTUR	RER .		na <u>n</u>	·		
	IDENTIFICATI	ON (LOT #)		14736	·		
	CONCENTRA	TION	- 98	°.7 -			
	READING/AD.	JUSTMENT	100	92		<u></u>	<u></u>
ZERO	GAS:						. •
	MANUFACTUP	<b>E</b> A	An	ibient	······		<u> </u>
	IDENTIFICATI	ON (LOT #)					
	READING/ADJ	IUSTMENT	0	_ <u>_</u>		<u> </u>	<u> </u>
ватп	ERY CHECK:		OK	<u>OK</u>			<u> </u>
TIME	CALIBRATED:		0630	<u>0710</u>	<u> </u>		
CALIB	RATED BY:		DM	KS			
CALIB	RATION CHECK:	-			<u></u>		
	TIME:		1000	1004	<u> </u>		
	8Y:		DH	DH			
	STATUS:			94_			
	TIME:					, 	
	BY:						
	STATUS:			<del></del>		·	
1.	OVA·FED:	Огдаліс Vapor /	Analyzer, Flame	Ionization Detector	manulactured by F	oxbora	
	pH PEN:			ed by Fisher Brand			
	COND PEN:	Total dissolved		h automatic tempera	iture correction.		
	CGI:			ufactured by Industi	nat Scientific Devi	C <b>03</b> .	
	HNu-PID:	Photo + Ionizatio	on Detector man	ulactured by HNu.			

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DATE. 8-15-95

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# INSTRUMENT CALIBRATION

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INSTRUMENT (1)	OVA-FID	pH PEN	COND PEN	cai	}{Nu-PID
MODEL NUMBER	128				
SERIAL / IO NUMBER	<u>A42171</u>	<u> </u>			
CALIBRATION STANDARD					
MANUFACTURER	CANAAN				
IDENTIFICATION (LOT #)	. 88-14934				
CONCENTRATION	<u>98.799</u> - 241				
<b>READING/ADJUSTMENT</b>	84				,
ZERO GAS:	. 4				• .
MANUFACTURER	Ambient		<u>-</u>		
IDENTIFICATION (LOT #)					
READING/ADJUSTMENT	ø				
BATTERY CHECK:	OK				
TIME CALIBRATED:	0710		<del></del>		
CALIBRATED BY:	GR				
TIME:	1510	•	. •.	· · ·	
BY:	DH			· · · · · · · · · · · · · · · · · · ·	<u>_</u>
STATUS:	89 ppm				
TIME:		<u></u>			
BY:					
STATUS:			· · · · · ·		

1.	OVA-FED:	Organic Vapor Analyzer, Flame Ionization Detector manufactured by Foxboro
	pH PEN:	Electronic pH tester manufactured by Fisher Brand
	COND PEN:	Total dissolved solids tester with automatic temperature correction. Manufactured by Fisher Brand.
	CGI:	Combustible Gas Indicator manufactured by Industrial Scientific Devices.
	HNu-PID:	Photo - Ionization Detector manufactured by HNu.

DATE 8/16/95

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INSTRUMENT (1)	OVA-FID	рн PEN	Y, P.A.C. COND PEN	CGI	HNu-PID
MODEL NUMBER	128	91		<u></u>	
SERIAL / ID NUM	IBER A42171 / A42858	HA200 2511	HARCO 5127		
CALIBRATION STANDARI				·	
MANUFACTURE	A Canaan	HAC	Η		
IDENTIFICATION	(LOT 1) .88 - 14 136				
CONCENTRATIO	N <u>98.7</u>	7.0/10.0	7.0/100 199	6	
READING/ADJUS	STMENT 99 <u>/97</u>	7.0/10.0	7.0/100 199 7.0/100 99	6	
ZERO GAS:					. •
MANUFACTURE	Am biant	_ <u></u>	\		
IDENTIFICATION			<u>\</u>		
READING/ADJUS	STMENT _		<u> </u>	<u> </u>	<b>_</b> _
BATTERY CHECK:	OK	ok.	DK	<u></u>	
TIME CALIBRATED:	0705	0715	0715		<u> </u>
CALIBRATED BY:	DH-/GR	DN	PA		
CALIBRATION CHECK:	,			<u></u>	<u> </u>
TIME:	1556 1557	1606	7		,
<b>BY:</b> -	DH DA	DA	TEP		1997) 1997) - 1997
STATUS:	92 88	7.05/10.01 450 cond,	<u>y</u>	,	······································
TIME:		750 2014,	<u></u>		
BY:	<u>وي ، ، ، ، ، ، ، ، ، ، ، ، ، ، ، ، ، ، ،</u>				
STATUS:	1 . <u>1</u>	<u></u>			
1. OVA-FED:	Organic Vapor Analyzer, Flame Io	nization Detector	manufactured by Fo	xbore	
	Electronic pH tester manufactured		-		
COND PEN:	Total dissolved solids tester with a Manufactured by Fisher Brand.	-			

CGI: Combustible Gas Indicator manufactured by Industrial Scientific Devices.

	_		INSTRUM	ENT CALIE	BRATION		
ÐA	ге. <u>8-17-</u>	95			,		Ć
INS			OVA-FID	OVA OHPEN-	1-1, dae cond pen	ପ୍ରୋ	HNu-PID
		BER	128	128	910		
	SERIAL / ID N	UMBER	A42171	<u>A42858</u>			
CAL	IBRATION STAND	ARD					
	MANUFACTUR	RER.	(Anton	CAN Ada	HACH		<u> </u>
	IDENTIFICATI	ION (LOT #)	. <u>88-147</u> 30				
	CONCENTRA	TION	<u>98.7</u> ch	n 98.7 ppm	7.0/10.0/9	76	
	READING/AD.	JUSTMENT	96	98	7.0/10.0/990	6	
ZER	O GAS:			<b>A A</b>	•		
	MANUFACTUP	<b>E</b> A	Anne. en	Apriliens	#		
	IDENTIFICAT	ON (LOT #)		<u> </u>	····-	<u> </u>	
	READING/AD.	USTMENT		0	· · · · · · · · · · · · · · · · · · ·		<u> </u>
BAT	TERY CHECK:		OK	ok	012		
TIME	CALIBRATED:		0719	0719	07/14		í
CALI	BRATED BY:		GR	GN	Gol		
CALI	BRATION CHECK:					<u> </u>	<del></del>
• •	TIME:		1520	1520	1730		
	BY:		<u>PH</u>	DH =	DH		
	STATUS:		94	12 6	97 <u>]9.86/</u> 972		
	TIME:						
	BY:					···	
	STATUS:		<u> </u>	<u></u>		, <del></del>	
 I,	OVA-FED:	Organic Vapor	Analyzer, Flame Io	nization Detector	manufactured by Fo	orodx	
	pH PEN:		ester manufactured		·		
	COND PEN:	Total dissolved Manufactured t	solids tester with by Fisher Brand.	automatic temper	ature correction.		
	CGI:	Combustible G	as Indicator manuf	actured by Indust	mat Scientific Device		
	HNu-PID:	Photo - Ionizate	on Detector manuf	actured by HNu			(

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DATE. 8/18/95

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INSTRUMENT (1)	OVA-FID	OVA HPEN	Hydae CONDPEN	Hydaa Gat	HNu-PID
MODEL NUMBER	128	/28	910	910	
SERIAL / ID NUMBER	A42171	A42858	2511	2619	
CALIBRATION STANDARD			_		
MANUFACTURER	CAMANAN	CAMAAN	Hisett	HACH	
IDENTIFICATION (LOT #)	88-14736	88-1476	·		
CONCENTRATION	98.7 ppm	28.7 pp	7/10/996	7/ 10/986	
READING/ADJUSTMENT	97	94	7.410.0 /996	7.0/10.0/996	÷
ZERO GAS:			•		
MANUFACTURER	Ampient	Autient			
IDENTIFICATION (LOT #)					
READING/ADJUSTMENT	<u> </u>	Ø			
BATTERY CHECK:	DĽ	OK	<u>OK</u>	OK	
TIME CALIBRATED:	0110	0710	0715	0715	
CALIBRATED BY:	ch	Gh	GL	al	
CALIBRATION CHECK:	·····		<u> </u>		
TIME:	1231	1232	1245	1243	÷
8Y:	DH	SA	D4-	DA	
STATUS:	86	89 6	.96/ <u>9.95/98</u> 3	101/00/999	
TIME:			•	1	
BY:					
STATUS:					
	Analyzer, Flame lo oster manufactured		manulactured by Fo	xbore	
		oy risner brand			

COND PEN: Total dissolved solids tester with automatic temperature correction. Manufactured by Fisher Brand. 1 CGI:

Combustible Gas Indicator manufactured by Industrial Scientific Devices.

HNu-PID: Photo - ionization Detector manufactured by HNu.

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DATE. 8-19-85

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INST	RUMENT (1)		OVA-FID	ova Phpen	Hydae COND PEN-	Hyche	HNU-PID
	MODEL NUME	BER	128	128	910	910	
	SERIAL / IO N	UMBER	A42171	<u>A42858</u>	2511	2619	
CALI	BRATION STAND	ARD					
	MANUFACTUR	<b>VER</b>	CANAth	Ciannan	Hach	Hach	
	IDENTIFICATI	ON (LOT #)	8-14736	88-14736			
	CONCENTRA	TION	98.7 pm	98.7 ppm	<u> 1/10/9</u> 96	7/10/996	
	READING/AD.	IUSTMENT	78 ppm	97 ppm	7/10/996	7/10/896	
ZERG	D GAS:						u
	MANUFACTUR	ER	Andiand	Ambient			
	READING/ADJ	USTMENT	Ø	ø			
BATT	ERY CHECK:		OK	OK	OLL	OK	
TIME	CALIBRATED:		0720	0720	0715	0715	(
CALIE	BRATED BY:		GR	Gl	GK	or	·
CALIE	BRATION CHECK:					······	<u> </u>
	TIME:	~~	1535	15.35	1531	1531	
	8Y:		DH_			 	
	STATUS:		57	95 73	9/233/933	7.26/10-23	
	TIME:		<b>-</b> -	·	• •	, 	
	BY:					. <u></u>	
	STATUS:			·			
1.	OVA-FED:	Organic Vapor /	Analyzer, Flame Io	nization Detector r	nanulactured by Fo	xboro	<del></del>
	pH PEN:		ster manufactured		· · · · · · · · · · · · · · · · · · ·		
	COND PEN:		solids tester with a	automatic tempera	ture correction.		

COND PEN: Total dissolved solids tester with automatic temperature correction. Manufactured by Fisher Brand.

CGI: Combustible Gas Indicator manufactured by Industrial Scientific Devices.

DATE. 8/20/95

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INSTRUMENT CALIBRATION

INSTRUMENT (1)       OVA-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID       ova-FID <thova-fid< th="">       ova-FID       ova-FID</thova-fid<>	DAT	E. <u>0/20/9</u>						
SERIAL / ID NUMBER $A42174$ $A42853$ $2511$ $100$ CALIBRATION STANDARD       MANUFACTURER       CAMMANA       Hack       Hack       Hack         IDENTIFICATION (LOT #)       85.14736       81.14736       101.1401       Hack       Hack       Hack         IDENTIFICATION (LOT #)       85.14736       81.14736       81.14736       210.1986       71.10/986       71.10/986         CONCENTRATION       98.5.14736       81.14736       21.01.986       71.10/986       71.10/986         CONCENTRATION       98.5.14736       81.14736       71.10/986       71.10/986       71.10/986         ZERO GAS:       MANUFACTURER       Ambiend       100.111.0197       100.111.0197       100.111.0197         READING/ADJUSTMENT $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ BATTERY CHECK: $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$	INST	f RUMENT (1)		OVA-FID	_	,	Hydae	HNu-PIO
CALIBRATION STANDARD MANUFACTURER IDENTIFICATION (LOT #) 88-14736 CONCENTRATION 98-5 M ²¹ 28-5 M ²¹ 28-5 M ²¹ 28-5 M ²¹ 28-5 M ²¹ 28-5 M ²¹ 28-5 M ²¹ 28-5 M ²¹ 28-5 M ²¹ 28-5 M ²¹ 28-5 M ²¹ 28-5 M ²¹ 22-5 MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFACTURER MANUFA			BER	128	128	910	910	
MANUFACTURER       CANANT       Hack       Hack         IDENTIFICATION (LOT #)       88-14736       83-14736       83-14736         CONCENTRATION       98.5       94.5       74.02         READINGVADUSTMENT       100       98.5       94.5         ZERO GAS:       100       100       98.5       100         MANUFACTURER       Annbiant       100       98.5       100         IDENTIFICATION (LOT #)       78.5       71.01/926       71.01/976         READINGVADUSTMENT       78.5       78.5       71.01/926       71.01/976         BATTERY CHECK:       78.5       78.5       71.01/926       71.01/976         BATTERY CHECK:       78.5       74.5       71.01/976       71.01/976         BATTERY CHECK:       78.5       75.5       71.01/976       71.01/976         CALIBRATED:       06.50       0610       26.53       26.53       26.53         CALIBRATION CHECK:       1355       1355       11.03.5       13.30         BY:       74.4       9.3       6.9794.49/100.8       71.12/10.01/91.9         STATUS:       14       9.3       6.9794.49/100.8       71.12/10.01/91.9         1       OVA-FED:       Organic Vap		SERIAL / ID N	UMBER	A42171	A 42858	2511	The 19	
IDENTIFICATION (LOT #) $\frac{8_{2}}{M}$ $\frac{8_{3}}{2}$ $\frac{11}{200}$ $\frac{28_{3}}{M}$ $\frac{28_{3}}{2}$ $\frac{11}{200}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{996}$ $\frac{710}{906}$ $\frac{906}{996}$ $\frac{916}{906}$ $\frac{91}{906}$ $\frac{91}{906}$ $\frac{91}{906}$ $\frac{91}{906}$ $\frac{91}{906}$ $\frac{91}{906}$ $\frac{91}{906}$ $\frac{91}{906}$ $\frac{91}{916}$ $\frac{91}{916}$ $\frac{91}{916}$ $\frac{91}{916}$ $\frac{91}{916}$ $\frac{91}{916}$ $\frac{91}{916}$ $\frac{91}{916}$	CALIE	BRATION STAND	VRD					
CONCENTRATION       28.5 Mill       28.5 Mill       7/10/976       7/10/976         READING/ADJUSTMENT       /00 ff/m       /00 ff/m       /00 ff/m       7/10/976         ZERO GAS:       MANUFACTURER       Aumbient		MANUFACTUR	NER .	CANAda	Citure In	Htelt	HACH	
READING/ADJUSTMENT       Image: Constrained formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the second formation of the s		IDENTIFICATI	ON (LOT #)	88-14736		<u></u>		
ZERO GAS:       MANUFACTURER       Amubi.out		CONCENTRAT	TON	98.5 ppm	<u>98.5 ppin</u>	<u>7/10/99</u> 6	7/10/956	
MANUFACTURER       Ambient       Ambient         IDENTIFICATION (LOT #)       IDENTIFICATION (LOT #)       IDENTIFICATION (LOT #)         BATTERY CHECK:       DE       DE       DE         SATTERY CHECK:       DE       DE       DE       DE         TIME CALIBRATED:       OLGSD       OLGSD       OLGSS       OLESS         CALIBRATED BY:       STATUS       STATUS:       ISSS       ISSS       ISSS       ISSS       ISSS       ISSS       ISSS       ISSS       ISSS       ISSS       ISSS       ISSS       ISSS       ISSS       ISSS       ISSS       ISSS       ISSS       ISSS       ISSS       ISSS       ISSS       ISSS       ISSSS       ISSSS       ISSSS       ISSSS       ISSSS       ISSSS       ISSSS       ISSSS       ISSSS       ISSSS       ISSSSS       ISSSSSS       ISSSSSSS       ISSSSSSS       ISSSSSSS       ISSSSSSSS       ISSSSSSSSSSSSSSSSS       ISSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSS		READING/AD	IUSTMENT	100 ppm	<u>100 pm</u>	7/10/996	7/10/996	<u></u>
IDENTIFICATION (LOT #)       IDENTIFICATION (LOT #)         READING/ADJUSTMENT       IDENTIFICATION (LOT #)         BATTERY CHECK:       DE       DE       DE         TIME CALIBRATED:       D(650       D(655       0455         CALIBRATED BY:       CH/DH       CH/DH       CH/DH       CH/DH         CALIBRATED BY:       CH/DH       CH/DH       CH/DH       CH/DH         CALIBRATION CHECK:       TIME:       /355       /353       //635       /330         BY:       DH       CH       DH       CH       DH       CH       DH         STATUS:       144       93       6.974(48)/1008       7.12/10.07/1993       TIME:         BY:       STATUS:       IDH       CH       DH       CH       DH         STATUS:       144       93       6.974(48)/1008       7.12/10.07/1993       TIME:         BY:       STATUS:       IDH       IDH       IDH       IDH       IDH       IDH       IDH       IDH       IDH       IDH       IDH       IDH       IDH       IDH       IDH       IDH       IDH       IDH       IDH       IDH       IDH       IDH       IDH       IDH       IDH       IDH       IDH <td< td=""><td>ZERO</td><td>GAS:</td><td></td><td></td><td></td><td></td><td></td><td>-</td></td<>	ZERO	GAS:						-
READING/ADJUSTMENT $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ <		MANUFACTUR	ER	And ent	Ambient			
BATTERY CHECK: $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$ $DL$			ON (LOT #)		<u> </u>		<u> </u>	
TIME CALIBRATED:       D650       D650       D655       0455         CALIBRATED BY:       CH/DH       CH/DH       CH/DH       CH/DH       CH/DH         CALIBRATION CHECK:       TIME:       1355       1355       1435       1330         BY:       DH       DH       CH       DH       DH       DH         STATUS:       14       93       6.9746.9 ⁵ /008       7.12/10D ¹ /1993       1         TIME:       1       OVA-FED:       Organic Vapor Analyzer, Flame Ionization Delector manufactured by Foxboro       pH PEN:       Electronic pH tester manufactured by Fisher Brand         COND PEN:       Total dissolved solids tester with automatic temperature correction. Manufactured by Fisher Brand.       CGI:       Combustible Gas Indicator manufactured by Industrial Scientific Devices.		READING/ADJ	USTMENT	ļ_	Ø		<u> </u>	
CALIBRATED BY:       CH/DH       CH/DH       CH/DH       CH/DH       CH/DH         CALIBRATION CHECK:       1355       1355       1355       1435       1330         BY:       DH       DH       CH       DH       DH       DH         STATUS:       144       93       6.9746.95/1008       7.12/10.07/1993       TIME:         BY:       1       0VA-FED:       Organic Vapor Analyzer, Flame Ionization Delector manufactured by Foxboro       PH PEN:       Electronic pH tester manufactured by Fisher Brand         COND PEN:       Total dissolved solids tester with automatic temperature correction.       Manufactured by Fisher Brand.         CGI:       Combustible Gas Indicator manufactured by Industrial Scientific Devices.	BATTE	ERY CHECK:		OK	DK	DK	OK	
CALIBRATION CHECK:         TIME:       /355       /353       //635       / 330         BY:       DH       DH       DH       DH       DH         STATUS:       94       93       6.97469 //208       7.12/10.0 //993         TIME:       94       93       6.97469 //208       7.12/10.0 //993         STATUS:       94       93       6.97469 //208       7.12/10.0 //993         TIME:       97       98       97.12/10.0 //993       993         STATUS:       94       93       6.97469 //208       7.12/10.0 //993         1.       OVA-FED:       Organic Vapor Analyzer, Flame Ionization Detector manufactured by Foxboro       94         pH PEN:       Electronic pH tester manufactured by Fisher Brand       COND PEN:       Total dissolved solids tester with automatic temperature correction. Manufactured by Fisher Brand.       CGI:       Combustible Gas Indicator manufactured by Industrial Scientific Devices.	TIME (	CALIBRATED:		0650	0670	0655	0655	
TIME:	CALIB	RATED BY:		87/04	B4DH	Ch/DH	<u> OK/0</u> 4	
BY:       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D++       D	CALIBI	RATION CHECK:		· · · · · · · · · · · · · · · · · · ·				2. 
STATUS:       94       93       6.9746.9 / 100 8       7.12/10.0 / 1993         TIME:	÷ .	TIME:	- · · .	1355	1353	1635	1330	
TIME:		BY:		DH	DH	of	DH	
BY:		STATUS:		94	<u>93</u> 6	97/195/1008 7	1.12/10.03/993	
STATUS:         1. OVA-FED:       Organic Vapor Analyzer, Flame Ionization Detector manufactured by Foxboro         pH PEN:       Electronic pH tester manufactured by Fisher Brand         COND PEN:       Total dissolved solids tester with automatic temperature correction.         Manufactured by Fisher Brand.       CGI:         Combustible Gas Indicator manufactured by Industrial Scientific Devices.		TIME:						
1.       OVA-FED:       Organic Vapor Analyzer, Flame Ionization Detector manufactured by Foxboro         pH PEN:       Electronic pH tester manufactured by Fisher Brand         COND PEN:       Total dissolved solids tester with automatic temperature correction.         Manufactured by Fisher Brand.       CGI:         CGI:       Combustible Gas Indicator manufactured by Industrial Scientific Devices.		BY:						
pH PEN:       Electronic pH tester manufactured by Fisher Brand         COND PEN:       Total dissolved solids tester with automatic temperature correction.         Manufactured by Fisher Brand.       CGI:         Combustible Gas Indicator manufactured by Industrial Scientific Devices.		STATUS:			<del></del>	<u> </u>		<u> </u>
pH PEN:       Electronic pH tester manufactured by Fisher Brand         COND PEN:       Total dissolved solids tester with automatic temperature correction.         Manufactured by Fisher Brand.       CGI:         Combustible Gas Indicator manufactured by Industrial Scientific Devices.		OVA-FED:		Analyzer Flame in		nanderturad by E-		<u> </u>
COND PEN:       Total dissolved solids tester with automatic temperature correction.         Manufactured by Fisher Brand.         CGI:       Combustible Gas Indicator manufactured by Industrial Scientific Devices.						unimersing of L(		
CGI: Combustible Gas Indicator manufactured by Industrial Scientific Devices.			Total dissolved	solids tester with a		ture correction.		
		CGI:		-	actured by Industr	al Scientific Devic	<b>83</b> .	
		HNu-PID:						

DATE. 8/21/95

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INSTRUMENT CALIBRATION

3410	·	<u>•                                    </u>					f
INSTRI	/ UMENT (1)		OVA-FID	OU A	Hydae Cenopen	Hydae -col	HNu-PID
	MODEL NUMB	ER	128	12.8	910	910	
	SERIAL / ID NU	IMBER	A42171	A42858	2511	2619	
CALIBR	PATION STANDA	RD					
	MANUFACTUR	ER	CAngun	CAMAN	Hack	Hack	
	IDENTIFICATK	ON (LOT #)	88-14736	88-14736			
	CONCENTRAT	ION	8.5 the	98.5 cHy	7/10/986	7/10/55%	
	READING/ADJ	USTMENT	21 plu	100 ppm	7/10/896	2/10/996	<del></del>
ZERO	GAS:						
	MANUFACTUR	ER	Ampient	Ambrent			
		XN (LOT #)		<del></del>	·		·
	READING/ADJ	JSTMENT	<u>_Ø</u>	<u> </u>		<del></del>	
BATTER	RY CHECK:		OK	OK	ok	OK	<u></u>
TIME C.	ALIBRATED:		0655	0655	0705	0705	(
CALIBR	ATED BY:		or	or	ch	Cit	
CALIBR	ATION CHECK:	·			· · · · · · · · · · · · · · · · · · ·	<u></u>	<u></u>
	TIME:		1356	1354	1348	1349	-
	8Y:		DAT	<u>D</u> N	DH	DH	······································
	STATUS:		90	yA 6	97 <u>9.94/9</u> 87	701/10.0/98:	z
	TIME:						
	BY:			<u> </u>	·		
	STATUS:				<b>-</b>		
1.	OVA-FED:	Organic Vapor	Analyzer, Flame k	nization Detector	manufactured by Fo	xboro	
	pH PEN:		ester manufactured				
	COND PEN:	Total dissolved Manufactured I	I solids tester with by Fisher Brand.	automatic tempera	atura correction.		
	CGI:	Combustible G	as Indicator manuf	factured by Indust	Inal Scientific Device	8.	

DATE. 9-5-95

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INSTRUMENT (1)	OVA-FID	PH PEN	COND PEN	CGI	HNu-PIO
	129 <u>A4185</u> 0	<u></u>		<u> </u>	·
CALIBRATION STANDARD	- <u></u>			<u> </u>	<del></del>
MANUFACTURER	Etale				
IDENTIFICATION (LOT J)	. 950751		······································		<u> </u>
CONCENTRATION	95ppm cHy				
READING/ADJUSTMENT	J# 78				
ZERO GAS:				`	· •
MANUFACTURER	Ambient	r			
IDENTIFICATION (LOT #)	<u> </u>	<b></b>			
READING/ADJUSTMENT	<u> </u>				
BATTERY CHECK:	DK				
TIME CALIBRATED:	1445		······		
CALIBRATED BY:	ch				
CALIBRATION CHECK:					
TIME:	1830				
BY: Charles and the	al			·····	
STATUS:	90 ppm				
TIME:					<u> </u>
BY:	<u>-</u> -			· · · · · · · · · · · · ·	
STATUS:					·····
	apor Analyzer, Flame ło pH tester manufactured		-	xbore	

COND PEN: Total dissolved solids tester with automatic temperature correction. Manufactured by Fisher Brand.

CGI: Combustible Gas Indicator manufactured by Industrial Scientific Devices.

HNu-PID: Photo - Ionization Detector manufactured by HNu.

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0.1.0	INSTRUM	MENT CALI	NOITARE		
DATE. 9-6-95				11	Ó
INSTRUMENT (1)	OVA-FID	OH PEN	COND PEN	- <del>ca⊢</del>	Cond HINUPIO
MODEL NUMBER	128	910	910	910	910
SERIAL / ID NUMBER	<u>A 41858</u>	9305	9305	9303	9303
CALIBRATION STANDARD					
MANUFACTURER	Garle	Fisher/HAC	H <u>Fisher</u>	Fisher/H	ACH_Eisher
	· <u>950751</u>	<u>228</u> 35-1	1 0-9-328-	32283511	1 09-328-
CONCENTRATION	95ppm CHy	4/7	996	4/7	996
READING/ADJUSTMENT	78	4 <u>.01/7.</u> 00	996	4.02/7.05	- 196
ZERO GAS:					·
MANUFACTURER	Ambient	2.	<b>\</b>	٨	
	Ø			$\overline{\ }$	$\overline{}$
READING/ADJUSTMENT	Ø			$\overline{}$	
BATTERY CHECK:	oK	oK	oK	ak	ak .
TIME CALIBRATED:	Ø 0720	0745	0745	1350	1340
CALIBRATED BY:	of	DZH	DLH	DZH	DXH
CALIBRATION CHECK:	· · · · · · · · · · · · · · · · · · ·				
TIME:		· · ·			
BY:	· · · ·	· · · · · · · · · · · · · · · · · · ·	· · ·		
STATUS:					
TIME:					
BY:					
STATUS:	<u> </u>				<u> </u>
1. OVA-FED: Organic Vac	or Analyzer, Flame I				
•	l tester manufacture		menulectured by Fr	720010	
COND PEN: Total dissolve	ed solids tester with by Fisher Brand.		ature correction,		
	Gas Indicator manu	factured by indust	rial Scientific Devic	61.	-
	ation Detector manu				(

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DATE.	9-7-95	
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INSTRUMENT (1)		OVA-FID	PH PEN	COND PEN	P ^H _⊊ar	Cond HNUPID
MODEL NU	MBER	HyDreg.	HyDac 910	HyDac 910	H. Daca	18 H. Dac 9 13
SERIAL / 10	NUMBER		9303	9303	<u>9'305</u>	9305
CALIBRATION STAN	IDARD					
MANUFACT	URER	<u></u>	Fisher/HACH	Fisher	Fisher/HA	104 Fisher
IDENTIFIC			22835111	09-328-3	9466262	4/ 09-328-3
CONCENT	RATION		4/7	996	4/7	996
READING/A	OJUSTMENT		4.02/7.05	996	4.01/6.9	
ZERO GAS:						
MANUFACT	URER		<u> </u>	×	\	<u> </u>
IDENTIFICA	TION (LOT #)	<u>_</u>	<u> </u>	<u> </u>	$\sum$	$\overline{}$
READING/A	DJUSTMENT	·	<u> </u>		<u> </u>	
BATTERY CHECK:		<u>_</u> _	ok	oK	oK	willout al
TIME CALIBRATED:		<u>-</u>	0716	0716	0716	
CALIBRATED BY:			224	DX X	DXA	DZH
CALIBRATION CHEC	к:			<u></u>	······································	
TIME:						
BY:	. :				0111 - 1. 1913	
STATUS:					· · · · · · · · · · · · · · · · · · ·	
TIME:				<u></u>	•	
8Y:			,,,,,,,			
STATUS:	÷.	<del></del>				
1. OVA-FED;	Organic Vapor	Analyzer, Flame	Ionization Detector (	manufactured by Fr		
pH PEN:			ed by Fisher Brand			
COND PEN:		solids tester with	automatic tempera	ture correction.		

COND PEN: Total dissolved solids tester with automatic temperature correction. Manufactured by Fisher Brand.

CGI: Combustible Gas Indicator manufactured by Industrial Scientific Devices.

DATE. 9/8/95

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INST	RUMENT (1)	OVA FID	OH PEN	COND PEN	CGI	HNu-PID
			HyDacg10	HyDac 910		
	SERIAL / ID NUMBER	·····	9302	<u>9303</u>	·	
C AL II	BRATION STANDARD	·	<u></u>	4500		
	MANUFACTURER		Fisher 1 HACH	Ful		
			946626.24 22835-11	,	· · · · · · · · · · · · · · · · · · ·	
		·	22835-11 41/-		······	
	CONCENTRATION		7/7:	996		
	READING/ADJUSTMENT		4.07/004	<u>qqu</u>	<u>-</u>	
ZERC	GAS:					
	MANUFACTURER			\ \		
			$\overline{\}$	$\overline{}$	•	
	READING/ADJUSTMENT					<u></u> -
			<u>·</u>			
BATT	ERY CHECK:		<u> </u>	<u>ok</u>		
TIME	CALIBRATED:					(
CALIB	RATED BY:		DIH	DIH		·
CALIB	RATION CHECK:	·····				<del>~</del>
	TIME:					
	8Y:	· · · · · · · · · · · · · · · · · · ·				
	STATUS:				,	
	TIME:					
	BY:				<del></del>	
	STATUS:	••••••••••••••••••••••••••••••••••••••				
1.	OVA-FED: Organic	Vapor Analyzer, Flame	Ionization Detector	manufactured by Fo	xboro	

pH PEN: Electronic pH tester manufactured by Fisher Brand

COND PEN: Total dissolved solids tester with automatic temperature correction. Manufactured by Fisher Brand.

CGI: Combustible Gas Indicator manufactured by Industrial Scientific Devices.

### APPENDIX F

### SOIL AND GROUNDWATER SAMPLING SHEETS

#### FIELD LOGBOOK SOIL/SEDIMENT SAMPLING DATA

Location H728-HA01 Date <u>6/13/95</u> Daniel How and Greg Rowell Samplers Used Drawing of sampling location (including location description as well as the presence of debris, surface sheens, recent excavations, vegetation, etc.) t breeze, temp 80-85°F Weather , Soil/sediment sampling parameters: Description of sample samply soil with gran C Time of sample collection  $\frac{1.59}{1.59}$ Depth of water (for sediment sampling) Total: 3ft sample' 2ft Decontamination (page number reference) _ m2 CDAP B-37 Spoons or spatulas Aforn Trowel Hand corer Hand auger hand anger Bowls Split spoons Photograph frame numbers Signature (of field team personnel making data entry) Howar

## FIELD LOGBOOK SOIL/SEDIMENT SAMPLING DLTA

Date <u>(</u> Samplers	Used D. Howard G. Rowell
Drawing of the prese etc.)	of sampling location (including location description as well ance of debris, surface sheens, recent excavations, vegetations
Weather	Summy, slight breeze, teng 285°F
	iment sampling parameters:
	cription of sample sandy soil with deal brown wit
Time	th of water (for sediment sampling) total; 4ft sample !
	ination (page number reference) $\frac{17h Q}{CDm^2 B \cdot 37}$
Spoo	ons or spatulas <u>spoons</u>
Trov	vel
Hand	i corer
Hand	i auger
Bow.	8
Spl	t spoons
Photogra	ph frame numbers
Signature	e (of field team personnel making data entry)

## FIELD LOGBOOK SOIL/SEDIMENT SAMPLING DLTA

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Samp	lers used D. Howard, G. Rowell
Draw the etc.	ing of sampling location (including location description as well as presence of debris, surface sheens, recent excavations, vegetation,
Weat	ner Sunny, slight breeze tamp 85.F
Soil	/sediment sampling parameters: Description of sample gray samply soil with and unounty; Time of sample collection
Deco	Depth of water for sediment sampling; $tatal: 3ft sample: 3ft$ . ntamination (page number reference) $\frac{\delta m^2}{2M} \frac{MMB-37}{2M}$ Spoons or spatulas $MMM MML$
	Trowel
	Hand auger
	Bowls
Phot	ograph frame numbers
Sign	ature (of field team personnel making data entry)

## FIELD LOGBOOK SOIL/SEDIMENT SAMPLING DATA

Date <u>6/13/95</u> Location <u>H728-HA04</u>
samplers used D. Howard, G. Rowell
Drawing of sampling location (including location description as well as the presence of debris, surface sheens, recent excavations, vegetation, etc.)
Weather Surray, slight breeze, temp 80-850 F
Soil/sediment sampling parameters:
Description of sample see boring log
Time of sample collection <u>1430</u>
Depth of water (for sediment sampling) Total: 3ft sample ; 2ft
Decontamination (page number reference) CDAP B-37
Spoons or spatulas <u>spron</u>
Trowel
Hand corer
Hand auger
Bowls
Split spoons
Photograph frame numbers
Signature (of field team personnel making data entry) Daniel Howard

## FIELD LOGBOOK SOIL/SEDIMENT SAMPLING DATA

Drawing o the prese	f sampling location (including location description as we
etc.)	nce of debris, surface sheens, recent excavations, vegets
,	
Weather _	Sunny slight breage, trup 80-85.F
· –	
•	ment sampling parameters:
	ription of sample <u>see boring log</u>
Time	of sample collection
Dept	in of water (for sediment sampling) total : 3 Sample
Decontami	nation (page number reference) (DMP B-37
Spoo	ons or spatulas <u>Apon</u>
Trow	rel
Hand	
Hand	auger
BOMI	
	t spoons

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