

**APPENDIX A**

**Field Notes**

Revision 1.0 - 16 August 1996

DATE: 29 April 96 Time: 12:15 [INNER HARBOR NAVIGATIONAL CANAL JOB ACCURACY]

SITE: #10 GPS READING: 29°57'41.7"N 90°1'38.7"W ± 40'  
(WPI)

No Deep borings will be taken - no excavation will occur on this side.  
New Orleans district did not have utility information. They sent out  
Tim Flaherty and two drill operators. They arrived at IHNC Lock  
around 730-800. Sites were located. Coordinated w/ Coast Guard.

Lockmaster not in, at mtg in Baton Rouge. Coast Guard installation manager  
said they would assist in locating electrical lines. Also called Port of New Orleans  
Tony Laparade who said he would try to find utility drawings.

→ Site #10 Deleted DB1-8 added 3 + 4 shallow sample.

IHNC-S10-1 Taken @ 1245 @ 2' depth no HNU reading  
@ 0-20 range from 0'-2' depth.  
Samples were analyzed at every full auger.  
VDA, BNA, etc, + Asbestos taken

IHNC-S10-2 Taken @ 1310 @ 0' depth  
No HNU reading from 2'-0'.  
VDA, BNA etc taken.

Tim arrived on site ~ 1245 while taking first sample  
(and that is all assistance!)  
(constantly writing notes) He called Dell Britch and utilities  
are supposed to be cleared by 1100 today. The drill crew did  
not show up with any equipment + had to go back and get stuff. Dell Britch was  
notified @ 80 on 28 April. Tim has some utility drawings - but no shoring.

- This site is on the canal ~~water~~ dike. The toe should be left  
untouched when levee is built up.
- Hard auger was scrubbed w/ soapy water + Diwater + methanol. Rinsate  
will be contained in 5 gallon barrel til can be put into  
drum for storage (if methanol combined with water mixture)
- The decontaining is conducted on tailgate + contained in stainless  
steel pan. Methanol equipment left to air dry. No mixture  
w/ water.

JEB

2

yes  
yes  
yes

D: 30 April 96 T: 1350

SITE # 10(3/4) GPS: 47' from #1/2 29° 57' 42.10" N ± 40'  
90° 01' 38.36 W WP#2

Took S10-3 @ ~ 1400 @ 2'

HNU reading is still 0 (actually .1 but that is the background calibration for 0-20 range) HNU shows no change.

No QA/QC taken - No rinsate taken. VOA + BNA etc collected at S10-3. This site looks like it had been rebuilt for some reason. This site is not to be excavated.

Took S10-4 @ 1415 @ 6'

HNU reading from 2'-6' still 0. Did find coal deposit in sample. This could be the source of soil gas readings.

This site and the first one was marked with yellow paint on nearby riprap. [Tim picked up + analysed coal deposit without gloves] Auger was cleaned + deconed after sampling. The decon was Alconox water, DI water + methanol spray.

Samplers: Beth Brown, Rich Hagan, Todd Gentles with Tim Flaherty observing. All samplers wore gloves (rubber) + safety boots.

No other protection was needed. Only sampler was a hand

auger. Tim was told by Rich that while we were augering the drill crew should be decontaminating + filling water for tomorrow he said he would tell them.

Site 10(1/2) measured from center line of Burgundy with level to first boring. 30' Samples were collected, HNU reading is still zero.

Site 10(3/4) - 83' GPS reading taken and recorded for both sites.

All gloves + baggies put in trash bag for proper disposal. all sample containers sealed up in bubble wrap. Soap DI water rinsate poured on site.

No methanol in water ∴ Not contaminating site.

yes

D: 20 April 96 T: 1510

Site # 1HNC - S9 - 5  
(0-6' site)

GPS: 29°57'37.42" N WP#3  
90°01'47.33" W ±50

Samplers: Beth Brown, Rich Hagan, Todd Gentles.

Sampling equip: hand auger, (in safety boots + wearing rubber gloves)  
Decon equipment, hammer, spoons, baggies + HNU.

[HNU @ 0-20 range is reading 0.1]

At 1520 the soil started smell of fuel and

@ 2' Change in material HNU reading 0-200 range peaked  
at 2 ± Stimulorganic.

Ambient in hole 6" down on 0-20 range <sup>HNU</sup> peaked @ 16 ppm

Sample collected from next auger dig. VOA + BVA, etc taken.

Sample taken had a reading of 12 ppm after setting sealed for  
a few minutes. Both samples were tightened and  
sealed in bubble wrap.

~~Next~~ Next baggie sampled had a reading of 40.

@ 3.5' to 4' had a reading of 10 ppm on the HNU 0-20 range.

4.5' 7.5 ppm

5.0' 3 ppm

5.5' 2 ppm

Took 6' + 6.5' at 6' combined with soil from 5.5' and 6.5' in order  
to get enough sample for sampling BVA, etc. VOA sample was  
taken first at 6'.

Safety: All samplers had read and are familiar with SSHP.

Sampling conducted today did not have the potential  
to be hazardous to the samplers. James E. B.

Not used

JEB

41

~~SB~~  
~~MAY 94~~ - Arrive at lock @ 0555 No NOD people.

SAFETY MEETING ROSTER → 0730 am when NOD people showed up at lock

- Beth Brown
- Richard 'Buck' Hagan
- Benjamin D. Stewart
- Cal. Q. [unclear]
- Jimmy [unclear] P.G. - NOD
- [unclear]

Things discussed:

Level 0 - safety boots + hard hats

Drilling safety

Biological hazards - snakes

Chemical hazards - using gas monitor + HNU

Physical hazard - tripping/slipping  
(on ~~wooden~~ ~~boards~~ ~~staircase~~)

Where the medical facility, who is qualified in CPR (both)

Coast Guard also has medical facility

Overhead utilities + underground utilities safety.

General comments were made about drilling safety.

~~SB~~ D: ~~30 Apr 94~~ T: 810 Samplers: Beth Brown Richard Hagan

SITE # 9 GPS: Coordinating personnel: Todd Gentles + Tim Flagarty.

HNC - 59 - 1/2

HNU calibration → 41 ppm (conducted by Todd Gentles @ 815)

@ 0.5' → HNU = 0 ppm

@ 1' → HNU = 0 ppm

2'-4' → HNU = 0 ppm sample was collected @ 2-2.5 VOA, BNA etc, As Destos. @ 825

@ 4'-4.5" → HNU = 12 ppm

4.5 → HNU = peaked at 4 ppm without peaking up sample @ 835

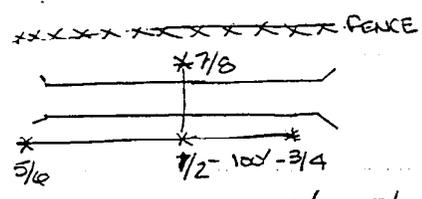
Due to high reading 9-2 was collected @ 4.5 to 5.0' VOA + BNA, etc were collected.

SB

JEB  
 D: ~~3/14/96~~ <sup>1 MAY 96</sup> T = 840 SITE: S9-1/2 GPS  
 @ 5.0' sample HNU peak of 9ppm (sample was broken up)  
 @ 6.0' " HNU = 2ppm w/o breaking up sample  
 Took 3<sup>rd</sup> sample at 6' (INHC-S9-2-1) sampled for  
 VOA + BNA etc (845)

NOTE: sample No. WAS SWITCHED 1/2 is 7/8 (SITE NO. ACCORDING  
 TO SAP) #1/2 WAS SAMPLED closer to the levee.

From last pt. S9-5/16 DISTANCE = 82'  
 T = 905 SITE: S9-7/8 D: ~~25 April 96~~ <sup>1 MAY 96</sup> GPS  
 Distance from 1/2 = 37' AND 6' off of fence.



Still no drill crew, Tim told Buck  
 that they were our responsibility not  
 his. Buck went to get drill crew +  
 Tim helped hard auger site 7/8  
 (920)

HNU Reading from 0'-5' = 0 Sample was taken @ 2'  
 with HNU = 0 took VOA + BNA etc samples. At 3.5' hit water  
 table. HNU = 0 Took 2<sup>nd</sup> <sup>(935)</sup> sample at 5'-6' HNU Reading = 0  
 collected VOA + BNA samples. Again location 1/2 and 7/8 were  
 switched. The auger hole had to be dug twice @ 1.5' ran into  
 a layer that was impermeable and hole redug adjacent  
 to site ~ about 4'-6" away.

SITE: S9-DB SETUP @ 1010 GPS  
 Collected Rinsole samples before started to drill → drilling  
 equipment is rusting - main concern is metal contamination. Sample #  
 INHC - R - 1 Rinsole 5 bottles (BNA, TPH, Metals + 2-VOA)

First → 1110 Oxygen = 21.30  
 0-2' Recovery 1.7' HNU = 0 T: 1120  
 2'-4' " " HNU = 0 T: 1130  
 4'-6' " " HNU = 0 T: 1245 Sample #1 taken at this  
 site @ 1250 the sample is for VOA + BNA, etc.

JEB

6/

Date: ~~3/17/96~~ <sup>8B</sup> ~~1 MAY 96~~ SITE = S9DB

0'-8' HNU = 0

8'-10' HNU = 0 T: 1320 Sample taken (S9DB-2) sampled for VOA, BNA, etc.

Tim is collecting geotech data and filling out boring logs. Have 2 drillers do drilling and assisting with decon. Tim is primarily conducting decon. No rinsate will need to be drummed, the methanol is being allowed to <sup>go</sup> air dry. Remaining rinsate only has materials organic to creosote in water.

10'-12' sample HNU = 0 @ T: 1335 Hit water table

12'-14' sample HNU = 0 @ 1400 Added DI water

14'-15' took sample HNU reading = 0 @ 1430

New HNU (#2) has a background of 0.4 ppm

Hit bedrock stopped drilling and started on adjacent hole down to 18'. Collected rinsate sample #2 from water being used for ~~the~~ drilling. Probably metal contamination. Collected 2 VOA's, BNA, TPH, Metals. @ 1500. Samples preserved and iced.

16'-18' HNU = 2.0 ppm collected sample in baggie to compare with 18'-20' sample. Will take the higher HNU reading between the two samples. Screened sample at 1525.

1555 HNU = 9 ppm (0-20 scale) for 18'-20' collected sample S9DB-4. Stopped drilling @ 1600 due to the time. The water being generated for drilling will be deposited on the ground. We know the composition of the water and the soil from drilling. Tim showed some concern about this.

Overall the drilling setup being used does not meet our needs. This volume of water can't be generated on the other pits due to disposal prob. Bob seems reluctant in getting a hollow shaft auger (this would eliminate need for H<sub>2</sub>O in drilling). Tim said that he is not here to manage drill crew only observe. Location of utilities still unknown. Drilling is slow w/ only one sampler. Job

DATE: ~~5/11/96~~ <sup>8B</sup> 5/11/96 T: 1400

SITE: IHNC-59-3/4 GPS =

- Took sample @ 3' HNU = 0 collected UVA, BVA etc. (1415)
- @ 4' → HNU = ~~8~~<sup>5B</sup> 5 ppm
- 4.5' → HNU = 3.3 ppm water table = 2'
- 5.2' → " = 3 ppm
- 5.7' → " = 2 ppm
- 6.4' → " = 10 ppm collected second sample. (1445)

collected UVA and BVA, etc samples. Samples ~~A~~<sup>3B</sup> were collected in baggies, and screened ~~to~~<sup>3B</sup> 20 minutes later. Samples were not broken up until they were screened. This site is 100' from site 7/8. HNU on 0-20 range w/ background = 0.4

SITE: IHNC-58-1/2 GPS =

water table = .3' HNU = 0-20 range

Samples collected <sup>for SB-1</sup> from 1520 → 1540 located down gradient from <sup>3/4</sup> SB-1/2 is 150' from 3/4.

- 0.0-0.7' = 15 ppm 0-20 range
- 0.7'-1.8' = 10 ppm 0-20 range
- 1.8-3.0' = 4 ppm on 0-200 range
- 3'-3.5' = 3 ppm " " "
- 3.5'-4' = 4 ppm " " "
- 4-4.5' = 5 ppm " " "
- 4.5-5.0' = 1 ppm " " "
- ~~5-5.5~~<sup>3B</sup> = 6 ppm " " "
- 5.5-5.7' = 2.5 " " "
- 5.7-6.0' = 2 ppm " " "

(1545) collected SB-1 for <sup>Asbestos, UVA</sup> BVA, etc.

collected SB-2 @ 1615

At each auger depth the auger sample was collected <sup>in baggies</sup> and then later screened with HNU. Drill crew and Tim left at 1640. Buck, Todd & I finish deconing hand auger and left site at 1655. Have another cooler full and ready to be shipped <sup>3B</sup>

8/

~~Site: S9DB~~ 1 MAY 96

T: 0600 @ Hotel

Both HNU calibrated @ 61 ppm. Talked w/ Ted about status of the project. Discussed stopping drilling after completion of site S9DB, due to lack of proper drilling equipment and lack of NOD support to get the proper equipment. Will go ahead with hand augering and see if drill crew will assist in this work. Status of drilling still needs to be decided. One consideration is to do hand augering - maybe go deeper than 6', analyse this data then come back with own (probably rented) drill rig (that is properly set up) and do 40' at that time. Still need to get w/ Coast Guard on utilities.

Still need to get concrete saw for at least 2 hand augering sites.

Also suggested to Ted about bringing Barry <sup>(SP?)</sup> down to help if NOD is unwilling. Tim did assist on the hand augering sites S9 7/8 + 3/4 and S8 1/2. The drill crew worked with Rich 'Buck' and S9DB. Water was added to push sampler through on 1 MAY 96.

T: 0750 Buck + I arrived on site S9/S8 at 0750, no Tim no drill crew. We ran late talking with Ted and traffic problems. The plan is to finish S9DB then do some additional hand auger sites around S8. This should give general idea of plume. The sites would be located on either side of railroad bed approximately 50'-75' down from S8 1/2. After this maybe move to S6.

T: 840 Static water level @ 3.7'. Tim and drill crew arrived at 0830.

Site: S9DB Time: 0900

HNU Reading @ 20' = 0.4 full sample not collected. Background is 0.1 ppm. HNU battery is low will probably switch soon!

22'-24' Recovery 1.5' HNU = 0.3. Background still 0.1 Still not getting good recovery. Tim is decontam. samplers.

T: 950 Collected S9DB-5 at 25'. A bit of wood chips in the soil. Collected UBA, RNA, etc. HNU Reading was 0.7. BS = 0.1 ppm

0-20 range -  
JEB

DATE: 2 MAY 96 TIME: 1005 SITE: 1 HNC S9DB-6 on HNU Reading @ 28' = 0.1 ppm (that equals background (0.1)) <sup>still w/ wood debris.</sup>

[NOTE: Call Shelia @ ARDL the shipment sent Wednesday 1 May 96 had the wrong dates. Had to change dates in logbook too. All were initialed.] Next sample will be 28'-30' sample.

The HNU reading @ 0.1 (equal to background). The soil is clay. Sample S9DB-6 will be taken next @ 30'-31' → 30'-32' push

only had a recovery of .5'. will try and collect sample at next. Collected S9DB-6 @ 1130 @ 32' (silty (sandy) clay) HNU=0. Collected S9DB-7 @ 1145 @ 35' " " " HNU=0

30'-38' brought up @ 1305 holding in sampler until 38'-40' is brought up. <sup>Did</sup> have to run composite of two to get S9DB-8, 8A, 8B.

All S9DB sites are only tested for VOA + BNA, etc. VOA will not be a composite it will be collected automatically from sample.

HNU reading = 0 [had to switch HNU other one ran out of battery]

The soil was sandy. VOAs were taken first. Sample was collected @ 1330. 38'-40' sample brought up at 1375 VOA came from 40'- depth. The drill crew cleaned up site while

Rich + I went to hand auger site SB-3/4.

SB-3/4 approximately 75' from SB 1/2.

0-1.5 HNU = 0

2.0' HNU = 8

2.5' HNU = 10 collected sample SB-3 @ 1425

<sup>SB</sup> @ 2.8' on 3<sup>rd</sup> attempts met w/ refusal

Moved to 91' <sup>off SB 1/2</sup> because at 75' met with refusal in 4 locations.

New hole → 1.8' bottom HNU = 0 ppm

2.2' " " = 2.2 ppm (0-200 range) collected SB-3-1 (1500)

2.7' " " = 10 " " " "

3.1' " " = 3.0 ppm " " "

3.8' " " = 3.0 ppm " " "

DEB

10/

D: 2 May 96

Site: S8 3/4 Time: 1505 GPS:

4.3' bot depth	HNU = 2.4	(0-200 range)	
4.7" " "	" = 3.0	" "	
5.0"	4.0	(0-200 range)	
5.5"	2.0		
5.9"	8	(0-20 range)	
6.1"	2	(0-200 range)	S8-4 (1513)
6.7"	4.0	" "	
7.3"	5.0	" "	
7.8"	2.5	" "	
8.1"	2.0	" "	
8.8"	1.0	" "	
9.1"	3.0	" "	collected S8-5 (350)

Dot  
3'  
3'  
3'  
3'  
4'  
4'  
4'  
5'  
N  
SITE  
To

Samples were iced down and the auger was deconned. Tim and the drill crew helped collect the samples at this site. The water in the hole had an <sup>S&B</sup> oil sheen on the surface. The water percolated up within a 1/10 inch of the surface. It was decided that the NCO drill rig would not be used due to water waste generated and because not equipped w/ hollow shaft augers. Tim agreed to this decision.

DATE: 3 May 96 Time: 0700 arrived on site at lock talked to lockmaster about renting equipment to cut through concrete. Tried to go over and do GPS reading at S8 + S9 sites.

Site: S6-1 Time (0745)

(Auge = 13" Rod = 3') ~~Background = 3~~ <sup>S&B</sup> Change HNU Background = .4

8.10" ⇒ HNU @ (0-20) = .2 (over background)

1.2"	= .2
1.7"	= 0
2.4"	= 0

JCB

1.7'  
2'  
2.5'  
3.1'  
3.9'  
4.2'  
4.6'  
5.  
6.  
SITE  
.6"  
1'  
1.4'  
1.6'  
2'

Date: 3 May 96 Site: S6-1 (continued)

3'0" = 0

3'5" = 0 HNU Collected S6-1 for Asbestos, BVA etc, YOA sandy material. Free water at 3'0" (0205)

3'8" => Below water table having casing HNU=0

4'3" = .2 HNU reading

4'6" = 0

4'7" = 0

5'3" = 0

No significant HNU reading - too much fill in from sides. ∴ did not take S6-2.

SITE: S4-1/2 Time: 0900 In front of Diesel AST (steel in conc. tube)

To get below gravel went down 6" first. (BG = .4)

6" = 1' = .2 HNU (0-20 range)

1' = 1.0 HNU

2' = 1

2'5" = .4

3'1" = .4

3'9" = .6 collected S4-1 Asbestos, YOA, BVA, etc @ 910

water at 3'9" clay material

4'2" = .4

4'9" = .4

5'4" = .4

6'0" = .4 collected S4-2 (VOA, BVA, etc) @ 0920 clay material, water below

SITE: S4-5/6 T: 0930 BG = 0

.6" = 0 HNU

1' = 0

1'4" = .6

2'5" = .6

2' = .6



GPS: N 29° 57' 58.76" ±70  
W 90° 01' 36.90" ±70  
WP11

GPS: N 29° 57' 58.8" ±40 WP12  
W 90 01' 37.65

JEB

12/

Site: S4-1/6 Date: 3 May 96

BG = 0.2 ppm HNU reading (0-20 range)

2'4" = .4

2'8" = .4

3'3" = .2

3'8" = .2

4'4" = .2 HNU (S4-5) collecting sample @ 945 VOA sand/ clay material beginning of clay layer

5'0" = .4

5'5" = .4

6'0" = .2 (S4-6) collected sample @ 1050 (VOA, BNA, etc) clay material.

This site next to generator and hazardous material storage building. Upgradient of diesel fuel AST -> concrete tube, steel tank. Electrical wires from generator on the ground. Fuel lines from tank to generator below surface. Shutoffs at both ends, shutoff at tank within concrete barrier. Dumpster and metal collection dumpsters in between generator and tank.

Site: S4-7/8 Time: 1100 (18' from corner of Build (NE) 7' away from Build)

Background = .3 HNU

.4" = .4 (0-20 range)

1.0" = .4

1.5" = .6

1.9" = .4

2'4" = .4

2'8" = .6

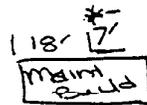
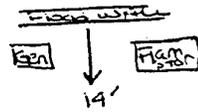
3'3" = .4

3'7" = .6 collect sample 1110 (VOA, BNA, etc)

4'2" = .4

4'7" = .10

5'3" = .10



GPS = N 29° 57' 58.41" ±40  
W 90° 01' 37.51" (WP13)

hit water table

JEB

D  
5  
6  
C  
W  
S  
#  
1.2  
1.4  
1.6  
2.  
2.  
2.  
3  
3.  
4.  
4  
4  
E  
E  
H  
St  
0.  
1.  
1  
2

Date: 3 May 96 Site: S4-7/8 (continued)

5.7' = .6

6.3' = .4 Collected sample (VOA BNA, etc) sand material 1115

Collected insate after S4-7/8 from auger after decoring collected 2VOA, BNA, metals + TPH @ (1055)

SITE: S4-3/4 Time: 1135 BG = 0 GPS = N 29° 57' 58.40"

~~1.2' = .4~~ ~~1.4' = .4~~ ~~1.6' = .2~~ ~~2.1' = .4~~ ~~2.5' = 0~~ ~~2.7' = .2~~ ~~3.1' = .4~~ ~~3.5' = .4~~ ~~4.0' = .2~~ ~~4.4' = 0~~ ~~4.8' = 0~~ ~~5.3' = 0~~ ~~5.8' = 0~~ ~~Measurement 23' NW corner 24' out from building~~ ~~hit water table.~~ ~~1145~~ ~~collected sample~~ ~~sandy clay material~~ ~~clay material~~

W 90° 01' 38.19" ±40  
(wp14)

1.2' = .4

1.4' = .4

1.6' = .2

2.1' = .4

2.5' = 0

2.7' = .2 (1145) collected sample sandy clay material

3.1' = .4

3.5' = .4 hit water table.

4.0' = .2

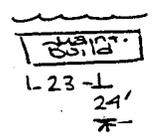
4.4' = 0

4.8' = 0

5.3' = 0

5.8' = 0 (1155) collected sample clay material

Measurement 23' NW corner 24' out from building



SITE: 1HNC-S5 3/4 Time: 1330 GPS = N 29° 57' 59.41 ±50

0-.6' = 0 HNU

~~1' = 0~~

1.5' = 0

1.8' = 0.6

2.0' = 0.2

W 90° 01' 39.77 wp21

JEB

141

DATE:

3 May 96 Site: S5-3/4

This site was dropped. The area appears to have a deep layer of shells that we were unable to penetrate this layer. In addition the shell layer started to cave in. A deep boring will be done near this same site. The HNU readings were zero for the material screened.

SITE: 1HNC-55 1/2 T: 1330

0-.5' = 0 HNU

.5'-1' = 0

1.5' = 0

2.3' = .2

2.6' = 0

3.0' = 1.0

3.5' = 0.4

3'7" = 3.0

4' = 1.6

4.5' = 1.0

5' = 1.0

5.5' = 1.0

6.0' = 1.0

collect sample 1355 <sup>Asbestos</sup> YDA, BNA, etc

new hole 2' adjacent to first hole.

collected sample 1430 <sup>YDA</sup> BNA, etc

SITE: 1HNC-S2-1/2 T: 1500 Site on the east side of fenced in storage area. within first foot running into resistance from shells.

0-.6' = 0 HNU (0-10 range)

.6-.9' = 0 " " "

1.2' = 0.4

1.4' = 1.2

1.8' = 0

GPS N 29° 58' 07.40" ± 40

W 90° 01' 36.81"

wp22

JLB

DATE: 3 MAY 96 SITE: S2-1/2 (continued)  
2.3' = 0 2.4' free water

2.8' = 0  
3.4' = 0 collected sample (1515)  
3.9' = 0 sand is caving in.

4.2' = 0  
4.7' = 0  
5.2' = 0  
5.8' = 0 collect sample (1525) UOA/BNA, etc

DATE: 4 MAY 96 SITE: S3-7/8 T: 0840  
Near the diesel storage + generator.

0-.5' = 1 HNU reading (0-200)

1' = 2.6

1.4' = 4.0

1.8' = 1.0

2.2' = 3.0 (0-20 range)

2.6' = 2.0

BG = .4

3.1' = 1.0 collected 850

3.4' = 1.0 BG = 0

4.1' = .8

4.6' = .4

5.3' = .2

6.0' = .2 collected 910

GFS: 29° 58' 01.73"  
90° 01' 39.04" ± 40  
wp. #39

T = 0930 SITE: S3-3/4

1.1' = .4 (0-20 range)

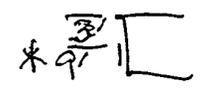
1.3' = .2

1.5' = .6

1.8' = .2

2.2' = .6

Floor



JEB

10/

D=4 may 96 Site: S3-3/4 (continued)  
HNU Readings (0-20 RANGE)

2.5' = 6.0 HNU

2.6' = 4.0 HNU.

2.9' = 3.0

3.3' = 3.0 (945) collecting sample.

3.6' = 3.0

4.0' = 3.4

4.3' = 1.6

4.7' = 0.4

5.0' = 1.0

5.3' = 1.0

5.7' = 0.6 collected sample @ 1010

Site: S3-1/2 Time: 1035

HNU readings (0-20 range)

0.4' = 0.4 ppm BG = 0.2 ppm

1.1' = 0.4 ppm

1.3' = 0.4 ppm

1.5' = 0

1.8' = 0.6 ppm

2.0' = 0.4

2.3' = 0.4

2.6 = 0.4

2.9 = 0.2

3.3 = 0.6 ppm collecting @ 1050

3.5' = .4

3.8' = .4

4.2' = .6

4.2-4.6' = .4

4.6'-5.1' = .4

GPS = N 29° 58' 02.74"  
W 90° 01' 38.19" ±50  
WP15

GPS = N 29° 58' 03.88" ±50  
W 90° 01' 37.79"  
wp15

Addressed  
VORJ BWTek

2/6

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D = 4 May 96 Site: S3 1/2  
0' = 0.4 QA/QC (1100) collect sample

Site: S2 11/12 Time: 1235

0.5' - 0

1.0' - .2

1.3' - .2

1.5' - .2

1.8' = .2

2.3' = .6

2.6' = .4

3.0' = .4 → sampled (1240)

3.3' = .4

3.6' = .4

4.0' = .4 BG = 0.2

4.7' = .6

5.4' = .6

6.0' = .2

sample @ 1300

GPS: N 29 58 05.88 ± 50

W 90 01 36.96

(wp17)

Site: S2 7/8 T: 1140

0.4 - 3.4

0.8' - 1.0

1.0' - .4

1.9' - .4

1.6' - .6

2.0' - .4

2.3' - .4

2.5' - .4

3.0' = .4 (1250)

3.2' = .4

3.5' = .6

4.1' = .6

4.4' = .4

GPS: N 29 58 06.22" ± 50

W 90 01 36.96"

(wp18)

SEB

181

5.1 - .4

5.5 - .6

6.0 - 1.0

sample 1310

Site: S2- 3/4 @ 1345

HNK readings

0.5' - 1.2 ppm (0-20 range)

1.1' - 2.4 ppm

1.5' - 2.6 ppm

2' - 1.6 ppm

3' - 1.4

(1350) collected sample UFA, BUA, etc.

4' - .6

4.3' - .4 sandy material with some fall in.

4.7' - .6

5.1' - .6

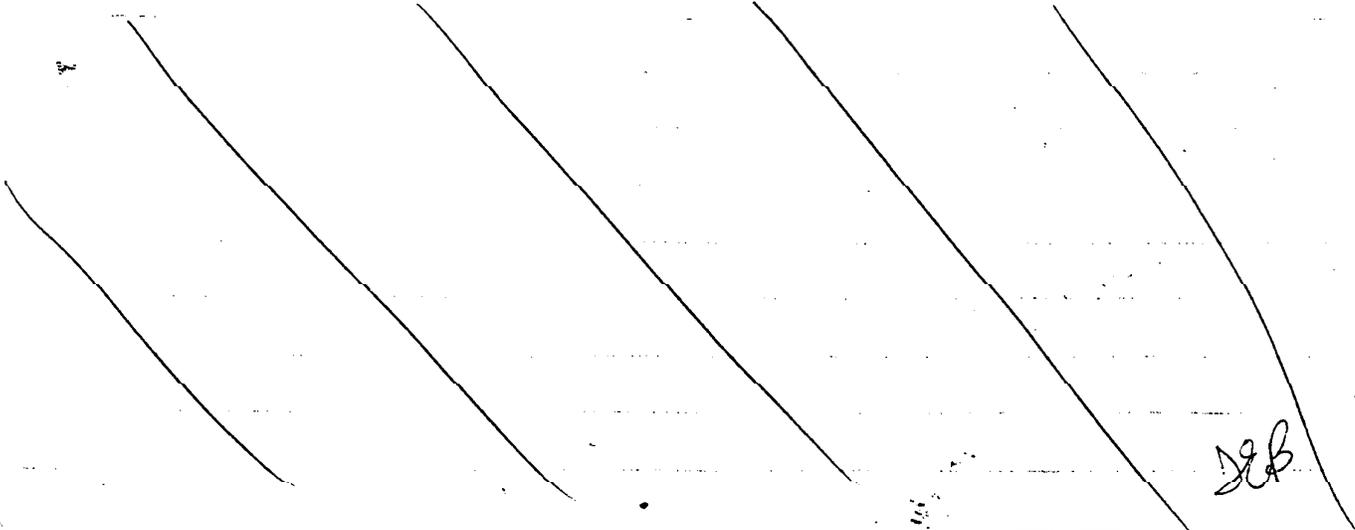
5.7' - .4

(1400) collected sample have a lot of fall in

GPS for S2-3/4

N 29° 58' 06.56" ± 40

W 90° 01' 36.72" wp 19



JEB

3:5 May 96 Site: S2-7/8 - water

Collected VOA, TPH, metals + BNA @ 800

Static level at 1.7' No problems were experienced in collecting sample. Bailed the VOA sample. Then used a pump to collect the other samples.

Site S2-7/8 - water T = 0820

Static level = 2.9' This site is a QA/QC site. The VOA's were bailed. Then the <sup>other</sup> samples were pumped thru teflon tubing the metals were collected first then the hole was allowed to recharge. Finished at 0945. Filled all samples by groups.

Date: 6 May 96 Site: ~~S2-7/8~~ S7-1/2

Need new bottles for S3-10, S3-5 (VOA), S3-6 (VOA), and S3DB-2.

HNU

0.5 = 0 ppm

1' = 2 ppm

1.4' = 0 ppm

1.8' = 0 ppm

2.1 = .6 ppm

2.5 = .6 ppm

2.8' = .4 ppm

3.4' = .4 ppm

3.7' = .4 ppm

3.9' = 0 ppm

4.3' = 0 ppm

4.8' = 0

5.5' = 0 collected S7-2 @ 0735

GPS: N 29° 57 53.64 ± 50

W 90° 01 41.80 (wp23)

collected sample @ 0715 Asbestos (2)  
VOA + BNA

TEB

20/

Date: 5 May 96 Site: S2-17/18

Time: 0815 GPS: N 29° 58' 08.62" up 24 ± 50  
W 90° 01' 36.74"

HNU Readings: (0-20 range) unless specified otherwise.

1.0 = 0

1.4 = 0 already hit a clay layer

1.6 ⇒ 0 hit a pipe have to relocate site.

1.9 = 0

2.3 = 0 hit something again collecting @ 835

collected VOA, BNA, etc. material - clay 0 HNU readings.

The site is 8' inside the flood wall.

The GPS station is 7' east of site. Couldn't get any

closer due to power cord.

Time: 0900 Site: S2-13/14

GPS: N 29° 58' 07.72" ± up 25  
W 90° 01' 36.19"

HNU Readings: (0-20 range) unless otherwise specified

0-1' = 4 ppm

1'-1.4' = 1 ppm

1.4'-1.8' = 6.4 ppm BG = 0.2

1.8'-2.1' = 2 ppm w/o breaking it up.

2.5' = 2.4 ppm broke up slightly (collected sample @ 0905)

3' = 1.8 ppm

3.4' = 0.4 ppm

3.9' = 1.0 ppm

4.4' = 1.6 ppm

5.0' = 2.6 ppm BG = 0.4

5.5' = 1.0 ppm

6.0' = 1.0 ppm collected sample @ 0920

StB

Date: 5 May 96 Site: SZ 15/14

Time: 0940

GPS: The site is 22' from SZ-13/14 To the N. along floodwall.

HNU Readings (0-20 range)

0-1.1' = 1 ppm

1.3' = 0.6 ppm

1.7' = 0.6 ppm

2.0' = 0.6 ppm

2.3' = 0.4 ppm

2.8' = 0.4 ppm

3.3' = 0.4 ppm

3.6' = 0.4

4.0' = 0 ppm

4.5' = 0.4 ppm

5.0' = 0 ppm

5.5' = 0.4 ppm

BG = 0.4 ppm.

BG = 0.2 ppm

collected sample @ 0950 (VOA BNA etc.)

BG = 0

GPS: N 29 58 07.82 ±40  
W 90 01 36.07  
wp24

clay material collected sample @ 1000

Site: S1-1/2

Time: 1100

GPS: N 29 58 13.24 ±40  
W 90 01 31.04  
wp27

This is a 0-6' soil site and water site (MS-MSD)

HNU Reading (0-20 range) BG = 0.4 ppm

0-1.8' = 0 ppm

0-1.4' = 0

1.9' = 0

2.4' = 0 ppm

2.6' = .4

2.9' = .4

3.2' = 0 ppm

3.6' = 0 ppm

4.2' = 0.2

4.5' = 0.2 ppm

collected sample 1115

hit water table.

JEB

221

3' = 0.2 ppm

5.3' = 0.4 ppm

5.8' = 0.2 ppm collected sample (VOR BNA) @ 1130 sandy/silty material hole was caving in.

will attempt to recharge after 1 hour to give hole time to recharge and collect water sample if hole does not cave in.

Asbestos was taken from a surface sample, not at 2.9'.

~~Frances E. Bu~~

<u>SITE</u>	<u>GPS Reading</u>	<u>WP#</u>
o S10-1/2 ✓	N 29 57 41.7 W 90 01 38.7	wp 1
o S10-3/4 ✓	N 29 57 42.0 W 90 01 38.36	2
o S9-5/16 ✓	N 29 57 37.42 W 90 01 47.33	3
o S9-1/2 ✓	N 29° 57' 38.25" W 90° 01' 47.39"	5
o S9- <del>5</del> DB ✓	N 29° 57' 38.59" W 90° 01' 48.0"	4
o S9- <del>5</del> 7/8 ✓	N 29 57' 38.32" W 90 01 47.14"	6
o S8-3/2 ✓	N 29° 57 40.55" W 90° 01' 46.54"	8
o S9-3/4 ✓	N 29 57 39.20" W 90° 01' 46.92"	7
o S6-1/2 ✓	N 29° 57 54.99" W 90° 01' 38.88"	10
o S4-1/2 ✓	N 29° 57' 58.76 W 90° 01' 37.90"	11
o S4-5/16 ✓	N 29° 57' 58.8" W 90 01' 37.65	12
o S4-7/8 ✓	N 29° 57' 58.41" W 90° 01' 37.51	13
o S4-3/4 ✓	N 29° 57' 58.40" W 90° 01' 38.14"	14
o S5-3/4 ✓	N 29° 57' 59.41 W 90° 01' 39.77	21
o S5-1/2 ✓	N 29 57' 59.73 W 90° 01' 39.0	20
o S2-1/2 ✓	N 29° 58 07.46 W 90° 01' 36.81	22
o S3-7/8 ✓	N 29° 58' 01.73 W 90 01' 39.04	39
o S3-3/4 ✓	N 29° 58' 02.74" W 90° 01' 38.19"	15
o S3-1/2 ✓	N 29° 58' 03.88" W 90° 01' 37.79"	14
o S2-1 1/2 ✓	N 29° 58' 05.88" W 90° 01' 36.96"	17
o S2-7/8 ✓	N 29° 58' 06.22" W 90° 01' 36.96"	18
o S2-3/4 ✓	N 29° 58' 06.30" W 90° 01' 36.72"	19
o S7-1/2 ✓	N 29° 57' 53.64" W 90° 01' 41.80"	23
o S2-17/18 ✓	N 29° 58' 08.62" W 90° 01' 36.74"	24
o S2-13/14 ✓	N 29° 58' 07.72" W 90° 01' 36.19"	25
o S2-15/16 ✓	N 29° 58' 07.82" W 90° 01' 36.07"	26
o S1-1/2 ✓	N 29° 58' 13.24" W 90° 01' 34.04"	27
o S8-3/4 ✓	N 29° 57' 41.40" W 90° 01' 46.23	9

JEB

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PROJECT: IHNC - Drilling

DATE: 4 Jun 96

<sup>NOD</sup> <sup>set up</sup> Failing 1500, 8" hollow stem auger, continuous 1 3/8" split spoon TO Plastic water tank, 2 equipment trucks. All equipment on site.

Beth Brown & Rich Hagan (LMS); Todd Guttles & Dale Hayes (ARX) arrived on site @ 0700. Drill crew (NOD) 0730. Missing a adaptor for split spoon sampler, drill crew went back to base & picked it up.

~ 0815 Allen Blake (Geotech NOD) & a drill warehouse guy showed up to see what was going, make sure the drill crew had correct equipment. Arrived at site SB ~ 0945 and began set up of drill rig. The drill crew supervisor showed up to double check that his drill crew had the proper equipment.

→ SITE: SB DB

Time:

GPS: WP#3e N 29 57 43.33 ± 70  
W 90 01 45.57

HNU Readings = BG = ~4 ppm (2 1/2' sampler)

2'-4' (1st sample) - 0<sup>ppm</sup> about 5" recovery (not enough) to sample ~1030

→ Progress is slow. The crew does not seem experienced in using augers. In addition, the equipment is old & primitive. The auger is too large for the type of work and produces a lot of spoil. The rig is not equipped to properly drill with these augers. The sample collected first was taken without a catcher, the ones they brought were too big.

2'-7' = Oppm HNU VOA & BVA, etc soil sample collected #1 1230

MATERIAL → silty/clay had some stiffness.

7 1/2' - 10' = Oppm (HNU) collected @ 1250 VOA, BVA etc #2

MAT. → clay / stiff

10' - 12 1/2' = ~~SB~~ Oppm = HNU

MAT → Clay / stiff

SEB

264

DATE: 4 Jun 96

SITE: S8-DB

Depth	HNU Reading	Sample / Time	Notes
12 1/2 - 15	Oppm	Collected S8 DB-3 @ 1425	stuff gray MAT = clay
5 - 17 1/2	Oppm	None taken	
17 1/2 - 20	Oppm	@ 1513 collected S8 DB-4	VOA + BNA, etc. MAT = clay w/ wood fragments

Stopped drilling around ~ 1600. Drill crew went back to get a cable to hoist the sampler out. With one cable hoist it takes a long time to switch the cable connection from split spoon, or auger. There is only one cable, needs to be two or three. The system is slow. With this rig there is no way can get two holes a day.

The samples have been showing good recovery.

5 Jun 96 → 0915

Have decided to stop at 20' at site S8-DB based on the <sup>lab</sup> data from S9. no contamination was found below 20'.  
~~300~~ HNU readings from 0-20' at this site.

Francis EB

DATE: 5 Jun 94

Time: 0701

Site: SB-DB

Lms crew arrived on site, around 0700, + the NDD Drill crew arrived on site around 0710. New problem river stage is high - definitely above our heads. Checking into policy about drilling during high water. If we hit a sand layer we will have problems. Called Ted Postal to inform him of the inadequate equipment and of the river stage problem. The lack of experience and the slow equipment is still the main problem. The high water is just an obstacle. Unless the equipment is changed, this rig will only do one hole a day (if lucky). Recommendation: get equipment that works. Also called Allen Blake about water problem - he's checking into it and will call back. There is about 13' head. River stage is 14.5'. 0840 Still waiting for decision on whether to drill or not with high water. Buck/dill crew are now trying to get hoisting plug for rig. Call Mike Naim - he suggested going only to 20'. Looked at analysis from SI-DB, below 20' no contamination.

The area around lock + East Guard area has more fill and more potential for seepage. Joe Dredway told Ted Postal that the stage has to be at 15', now at 14.5' with no indication of rise. Buck call into NDD and had them order a hoisting plug. If only go to 20' we won't be running rods. Less time. Moving rig to SI-DB in the Port of New Orleans Maintenance area. Started around 0930 to break down rig, to move to next site.

Removed two augers by trying to backfill - slow and boring augers @ 1000 started to pull the remaining augers up, roughly scrap and spray with power hose. ~~3/24~~ <sup>3/28</sup>  
 In a 1/2 hour have pulled 4, still at least 3 more.

JEB

Date: 5 Jun 96 Time: 1040 Site: SS-DB

Continuing to remove augers + clean. Removed all augers by 1050, gave spool to refill and augers to clean. 1100 all augers clean and hole filled with spool.

Date: 5 June 96 Time: 1305 Site: SI-DB

GPS = wp#37 N 29° 58' 12.05" ±50  
W 90° 01' 34.43"

HNU Calibrated ok. (0-20 range)  
 2 1/2' - 7' HNU = 0 ppm @ 1330 collected SI-DB-1 sandy/silt  
 7 1/2' - 10' " = 0 ppm @ 1400 collected SI-DB-2 silty/clay  
 11' - 12' " = 0  
 13' - 15' " = 0 @ 1445 collected SI-DB-3  
 15' - 17' " = 0 @ 1450 No sample collected  
 17' - 20' = 0 @ 1515 collected SI-DB-4 clay, mostly decayed wood soft.

6-22' " = 0  
 22 1/2 - 25' " = — @ 1600 NO Recovery collected SI-DB-5  
 5' - 27' " = 0 @ 1605 collected SI-DB-5

DATE: 6 Jun 96 TIME: 0645 SITE: SS SI-DB

40' boring in the Port of New Orleans Claiborne Warehouse. Have 27'-40' left to drill.

depth	HNU Reading (ppm)	NOTES	
27' - 29 1/2'	0	collected SIDB-6 @ 0815	2 1/2' recovery silty/clay
30 - 32'	0	2' sampler	2' recovery s/c
32 1/2 - 35	0	SI-DB-7 @ 0930 2.5' recov. clay	15' -
5 - 37	0	use for BVA sample SIDB-7	full recov. 1/2
37 - 39 1/2	0	Composite for 8, 8A, 8B BVA taken from 37-39 depth	20' -
39 1/2 - 41 1/2	0		

clay/stuff full recov on both @ 1015  
 JEB