SDMS DocID 548836

1. Copy of Jeffrey Lawson's field book.

Superfund Records Center
SITE: Wells G+H
BREAK: 11.9
OTHER: 548836

9

11/1/86 clear cool

6:50

10

11/3/86 clear cool

7:25 Thru First Volume

Gary Lipson } EPA
Ed Kim

John Cherry

Dave Delaney
Barbara Newman

Chris Dennis

→ @ S71 Delaney says that perc. high near top, went down, then up again as the bowry proceeded

also looked for diatomaceous earth – found none

→ transmission fluid from excavator analyzed in packet from EPA

3:45 depart

11/4/86 cloudy cool

6:55 an Ohnfirst Wolmum

Do: 1.) run clean water, hydraulic system leaks

2.) get blank from well screen

Drilla -> Daniel Green
Helper Paul Green

=> Chris is ERT lab ok — has not been audited by Region I

Call Barbara Newman re: what Region I needs for lab QA

as long as ERT lab data

check w/ EPA QA check the data are acceptable

→ augers & casing rinsed down & cleaned w/ tap water, air dried over

933-5860
x557
Lyman

426-3600

vegetable shortening used for red dope

sniff shallow holes poked with a stick along rear fence line & @ salt pile — no HNu reading

Dave is curious about conditions to rear of plant — concerned about potential for disposal under addition

inspect wells S81, G01, S63
w/ Dave Delaney – G01 is
located ~50 NW of former
Johnson Store Co. well, which
was ~300' deep, Dave does not
know when this well was
last pumped, WRG will
install transducer during
the proposed extraction well
pump test, 1 well to be
installed at SW corner &
another

234·640 Mass. Gray Farms

11/5/86 cloudy cool ~35°

7:00 Alvin First Woburn
Delaney & Ed Kim arrive
~8:00
Dave departs ~8:30

Dave is concerned lack of
analysis of soil samples –
EPA will perform full VOA
concern about clean up criteria

2:30 Dave Tang arrives

sample DI rinse of my
hands; and hydraulic
fluid dripping from feed
piston

15

11/6/86 rain cool
6:45 Unit First Woburn
7:00 Drillers
7:30 Delaney, Ed Kim — Ed leaves HDU & goes back to ESD

Dave wants commitment on whether & the extent to which we propose to test pit; he will analyze soil samples if we don't or limit test pits

Chris Davis — can't make any commitment 'til Monday

→ get more detail from Dave re: test pits, sketch out plan

Dave says that he can't comment to the extent of commenting on a proposed

16

test pit plan —

9:30 rain continues — depart no drilling

11/6/86

→ Dave wants some commitment on extent of test pitting around east end of site — will hold soil sample until then

→ review conf. call

☆ Call Chris — communicate Dave's urgency re: testpitting commitment

Rodine de Rice DEQE
person @ DEQE who is most familiar w/ EPA RI/FS

17 11/7/86

6:45 cloudy cool
Uni First Volume
6:50 drillers arrive, bring
~50' steam cleaned NW
casing & Longyear split
inner tubes

~8:30 Delaney arrives w/ HNu

ADR has a lab
10:55 sample storm drain outside
ADR ~ 250 HNu response

NEED: ~Kimwipes~
DI water
Methanol
brush

Delaney also sniffs
UniFast storm drain —
no response

18

Call Cherry re: screen
placement

boring left plug

Willum
cattle tube ✓
compressor ✓

.43 401/434-0750

19

11/10/86 clear cool

700 Mr First Walmm

shuttle drivers cars in
way of deep holes until
return ~10:00

need tremie tube 1/2"
fix rig

Bob Shaftoe - helpless

→ sewer system map

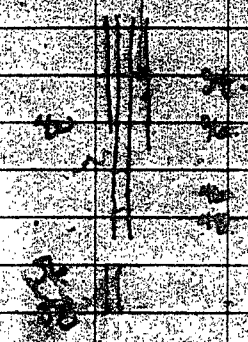
→ test pit @ fill pipe

→ give Gary little map
check RI/FS
show but don't give
my map

20

Delaney
565-3615

Gwen Ruta
565-1919



UC7 sample @ surface
below bituminous concrete
pavement no HNU response,
no response @ ~0.8, same
at 1.5 HNU jar headspace ~700

pavement 0.4 ft thick
yellow-tan crs - fine
SAND & GRAVEL trace silt

sample @ 2.2 tan - yellow
crs - f SAND & GRAVEL
trace silt no HNU Response
HNU jar headspace ~400

need surveyor

sample drill from mud tank @ UC6

breakdown rig to repair & clean

UC-4 ▽ 6.5 below rim of box
6.5 + 0.55 = 7.05
8 beats full

UC 5 9.5 + .59 = 10.09 ▽
3 beats full

UC-4 recovers ~2 ft after ~10 min

UC-5 recovers ~1.5 ft after ~10 min

UC2 box needs to be raised — surface water

is able to flow into well

tomorrow bring —

pipe wrenches

bung wrench

11/11/86 wet snow, cool
w/ Larry Hogan

UC-5 ▽ 10.06
W.L.
(.59 + 9.12) = 9.71
(L.S.) + .35
10.06

UC-4 ▽ 7.04
W.L.
(.59 + 6.17) = 6.76
(L.S.) + .28
7.04

▽ 12.8
2.70 UC6 13.24 + .59 toc
1.03 stick up

1324
59
1383
103
12.80

odor from bailed water @ UC6

UC 5 surface runs into casing → get cap from driller & build berm around hole

UC4 & 5 bail each down twice, sample upon partial recovery

UC6 pump down w/ hand pump twice, sample upon recovery, water is odorless

.125

11/12/86 clear cool

7:30 Unifirst Woburn
7:45 driller arrive, rig has been cleaned, feed pistons have not been repaired

UC6 ground surface to top of tub-collar 1.4 ft

1.40
.35
1.05 → 0.35 top of NW to top of tub-collar
ground surface to top of NW

13.75 + .55

56.95 + .55 57.5 56.4'

4 in @ ~45
NW @ ~55'

grout w/ 1 bag cement
< 1/4 bag bentonite

pull 55 ft NW + shoe
.45

grout drops to ~51',
put 2 handfuls sand
drops to 52.6'
~100 bentonite balls
2 handfuls sand ~51'
expands ~49.5 →
4 handfuls sand 47'

1.4' gs to sand tube
collar

sand @ 44.5'
mask riser & screen w/ MeOH & DI
insert well, floats, pull it,
grout has not settled

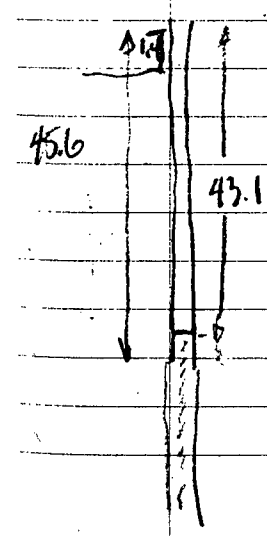
bail down to top of
grout

Lenny bails UC4 & 5

11/13/86 cloudy cool

7:00 Mm First Watson
UC6 – grout settled to 42 ft
bail down water clear,
clouds up towards end
of bailing – bail down ~10 ft

wash 10' & 2' ft grout
pipe – push methanol
soaked cinnamon thru
well riser & screen



well @ 44.9

~~45.5~~ 46.5
~~3.6~~ 3.6
~~41.9~~ 42.9 good

45.5
3.6 casing
41.9

22

put trailer down [illegible]
suspended clay & sand

try to flush out suspended
grout w/ water

goo @ 43.0
41.9 casing

6.3	50.0	49.6	45.3
1.4	7.7	7.7	3.6
7.7	42.3	41.9	41.7

Sand

well rise 9.9 ft. long

well tip @ 41.6 - measured
w/ tape outside rise

sand @ 41.7 filled from
42.3 → washed out
grout depth

tub collar to top of PVC
~~2.3~~ ~~3.6~~ 3.2 above
ground

2.6			
1.4			
2.2	42.6	41.9	
	3.6	4.2	
	40.2	1.7	tube casing
	1.4		45.35
	3.25		4.65
3.2	4.65		Sand 40.70
2.2	2.5		
1.0	3.1		top of rise

well tip @ 40.7

45.5
4.85
40.8
casing 39.9
1.9

→ well drops 1.0 ft.
upon humping
casing

44.1	43.6	4.2	4.6
4.7	4.7	1.4	5.6
39.4	38.9	5.6	40.4

45.5	6.1
5.6	5.6
39.9	.5

humping rising to 39.9 well
drops to 0.5 below surface

29

top of well pulled
back up to 43.0

sand = 42.2
.6
41.6

pull well up to 41.5 ft.
add sand as we pull

0.15 above collar, cut PVC

40.5
1.6 → bump casing to
38.9

well disappears
pull well back up
41.5 ft

41.3
1.6
39.7 sand

1.4
.45
1.85

40.0
1.85
38.15
~~bump casing~~
sand

1:00 Delaney arrives

casing @ 40.5
1.85
38.65

sand 38.0
2.25
35.75

.85
1.4
2.25

well top @ 0.4 above ground
bump casing to 35.5
sand @ 37.0
top of well @ 0.15 above ground

41.5
1.6
43.1
.15
42.95 top of well @

37.2
1.9
35.3 top of sand

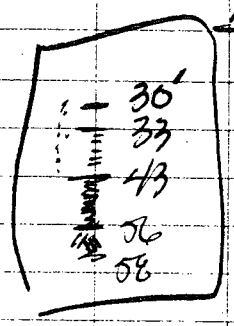
32.7 top of sand

34.4 31.3 top of sand
2.7
1.4
4.1

43

34.7
5.3
29.4

3.9
1.4
5.3



37.0
5.5
31.5

33.3
2.3
31.0

31.8
2.3
29.5

29.5 top of sand

bentonite 31.5
2.3
29.2

565-36 [illegible] Delaney

11/14/86 see UC6 log p. 4

UC5 bail down
▽ 10.04' below road box

18.78' total depth

UC4 bail down
▽ 6.95'

19.85 total depth

321.421

11/17/86 p.c. Coal

7.00 Alm First Wolcott
Pete Peterson new helper

continue to repair rig

7:30 UC6 ▽ 13.06 ft below
street box

12.5
.56
13.06

bottom of well 43.33 below
street box

42.78
.56
43.33

bail down to 0.5'
water → 28 bails

7:45 Ed Kim Amines
repair rig pressure
clean, angles & HW too

8.30
Delaney
arrives

grout around manholes
12/29/31/42
hammer striking against
drive head

10.48 new HW casing shoe
Longyear econoshoe

1.20 Ron Croatte - quick
review of progress →
maybe advisable to
drill inside @ old sump/
well in old loading
dock pit

1:40 UC5 9.46 ▽
.56
10.02

1:45 UC4 6.37 ▽
.56
6.93

bail UC4&5

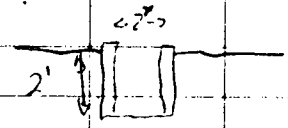
UC7 use Wesson oil in place of A&P solid shortening (vegetable) for easing joints

UC6 ⊘ 13.52 bail to
3:00 .56 0.5' inside
14.08 ft

methanol
DI water

3:30 depart

Call Doug Beldrain
after 10:00 11/18
416/335-5611



11/18/86 p.c. cool

6:50 Olive First Volume

7:30 bail down UC5

8 - 8240,

9:20 bail down UC4

need two feet below top of manhole

11:15 UC6 bail down

core barrel 8.0 ft

2:20 fan belt broke

3:00 head out

Call Mark Paré
292-5893

Ed Bouwer

Tire 18 x 6.50 - 8
GOODYEAR

11/19/86 Snow ~10-12" cold

drillers can't make it

12/1 & 2 Solinst

12/3 Cyn Oil TP's

12/4-5 Tank Removal

11/20/86 cloudy cold

7:00 Uni First Walum

slow start in snow

drill to 63.0, leave
58.0-63.0 hanging

highly fractured cored
caused bulging of inner
tube, required pulling
drill string and shorter
runs, last 3 runs full
5 ft.

bail down UC4, 5 & 6

→ KEEGAN; 1) core display
area

2) map

→ Daniel's change

11/21/86 cloudy warm wet

7:00 Uni First Walvin

9:15 rain shows work

bail down UC 4, 5 & 6

drill to 103 UC7

3:00 Depart →

Call: Mastone
Bates

11/24/86 rain warm

7:00 Uni First Walvin

7:40 Delaney arrives, discuss progress, show him rock — say it's the most fractured that he's seen — had not heard about "tank spill" down the street, ran into another consultant who waiting @ the rig this a.m. said he was working on contamination problem down the street

spill inside @ Hemingway

10:00 Delaney departs

10:15 woman drops by looking for Dave

bail down UC4, 5 & 6

Mastaro – 2 GC's down
no other lab is set
up to do screening –
may have headspace
back today, will
call Enisco to check
its availability for 601
analyses

Bates → depending upon
gw results → sniff out
back

need $ estimate for testpits
& sniffing

→ arrange conf call Tues
12/2 w/ Cherry & Bates
early Tuesday

maybe put 6 in well
@ 570

11/25/86 clear cool

7:00 Uni First Wolium
new helper Al

bump HW casing out of
UC7

UC5 bail down, sniff
drum w/ HNu response <5

UC4 bail down, sniff w/
HNu no response

Bates – ok for conference
call 11/26 4:30

UC7A trouble spinning HW,
casing wanders, augers
had wandered before

UC6 2nd filled barrel HNu
max 2

empty freshly opened
barrel HNu 1 max

1st filled barrel HNu
max 4.5

filled barrel readings
rapidly dissipate to
background w/in
~ 1 min

→ copy logs for Daniel

baildown UC6

{ Rich Juliano
{ Joe Desario

→ if Gary not available

11/26/86 cloudy cool

6.50 Alm First Walum

bail down UC4, 5, 6

UC7A 28.0 18.6
5.4 4.0
22.6 22.6
4.4
27.0

and then the rains came

drill to 53.0

45

11/28/86 clear cool

7:00 Ahn First Walkum

hail UC4,5 twice
UC6 twice

finish @ 93.0

Al Stanley - helper

[illegible] p.c. cool

6:45 Ahn First Walkum

hail UC4,5 & 6 twice

S70's 1½ in PVC & S71
all lock screws missing

108.0
.65
107.35 → 107.4 hit replace

Gwen Ruta
565-3643

Delaney home
546-6517

47

12/1/86 clear cold

6:00 Ulm First Woburn

~8:00 Delaney arrives, review schedule for test pits & Solinst

→ check on water analysis method description

→ write up GC Scan method

~9:00 Delaney leaves

Nick Marino III core

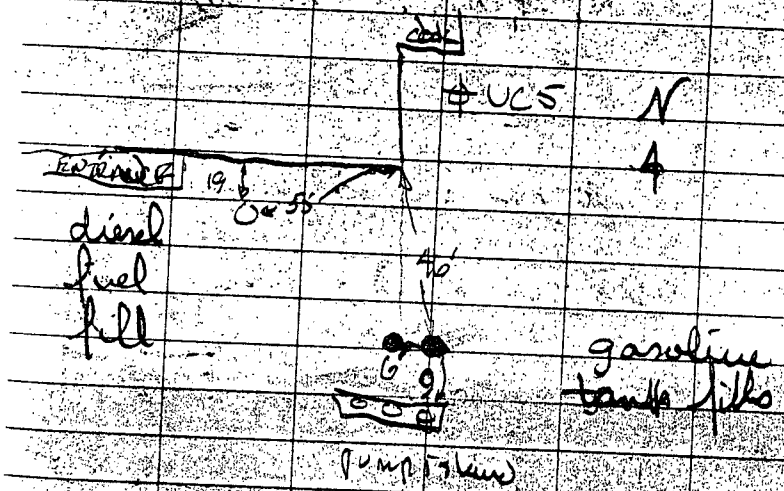
UC7A finished @ 147.0

bail UC4, 5 & 6

48

12/3/86 warm rain

7:30 Ulm First Woburn
trailer dump & Komatsu
PC220LC here



Totman Trucking
Middleborough

HNU readings for headspace

gasoline tanks

south wall below East corner of pump island NR

west wall ~ 4' down NR

west corner of pump island some staining below diesel pump – HNU response 2-3 odor

some discoloring of pavement appears to be diesel fuel drippage from gas side of pump

gray soil around both gasoline fill pipes HNU ~ 8 odor

4:30 Cherry arrives

tank lightly rusted, encrustation @ spots in paint, welds appear intact no evidence of leakage

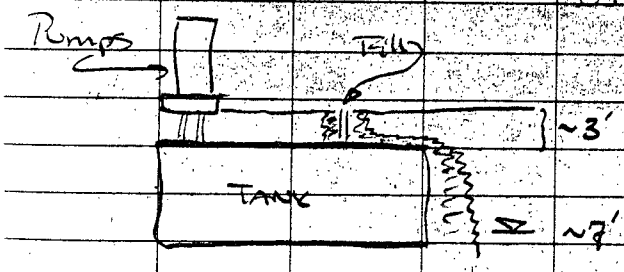
eastern tank, no HNu response from soil, gw yields strong response

west tank - gas stained (gray) soil around fill pipe from surface to top of tank ~1' Ø; thence along top of tank to N and down N end of tank to the water table, light sheen on trapped water in excavation, put pads in

Don Doyle - Walnum FD observes tank removal, discuss pattern of stained soil & need to report to DEQ

3:00 report relevant to DEQ leave my name & CynOil

west tank & pipes intact - no evidence of leakage



Check CynOil -

→ vertical gradient

→ QED cost & delivery date of packerpum
313/995-2547

→ UC5 Sample

→ play w/ S70 & S71

S70 find depth of obstruction, see if a tube can be slipped by

v_i S71 not measured
S70 -2×10^{-3}

12/4/86 clear cool

7:30 Mini First Volume
Cherry
Delaney
Ed Chu & another EPAer

excavate TP1, see log

Diesel fuel tank
Cyn Oil cleaned

HNu - no response under pavement

HNu - gw exposed @ East end of diesel tank ≅ ~8.5'
~ 2

10:25 Don Doyle WPD arrives

TP1 drive 3/4" black steel pipe into NW corner - HNu pops up to <20 & quickly dissipates w/in 10 secs to background

IEA

diesel fuel fill – minor spill @ fill, ~10 HNu remove stained soil

25 ml syringes gas

diesel tank set on bedrock, bump in bottom

~3 reworked sandy till of fill over sandy till

bedrock exposed along bottom of south side of tank – removal excavation

bump on E end of bottom, appears intact

lower 1/3 tank encrusted w/ FeO & sand & pebbles

HNu 2-3 in jar headspace from gw, ~1 from wet soil @ base of diesel tank excavation

dry soil – no HNu response

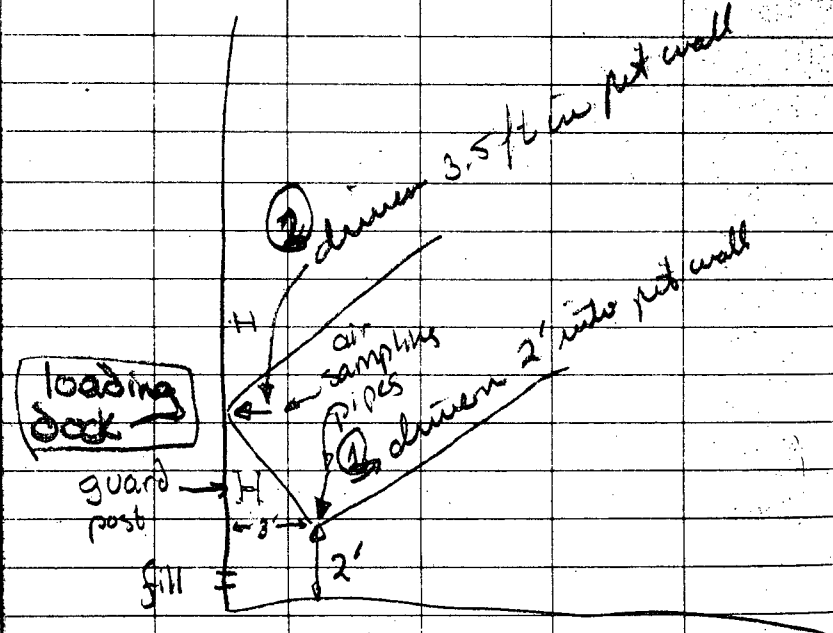
Doyle satisfied w/ removal – ok to backfill

0.0-0.3 Bit Conc.
0.3-3.0 c-f SA & GR tr si
tan – lt brown
3.0-9.0 bouldery c-f S & G
tr si
gw ~8.5

sample gw

(DE2E NE Region)

1:15 Roger Chu arrives
wants gw sampled
→ backfill ↔ analyzed
for petroleum hydrocarbons

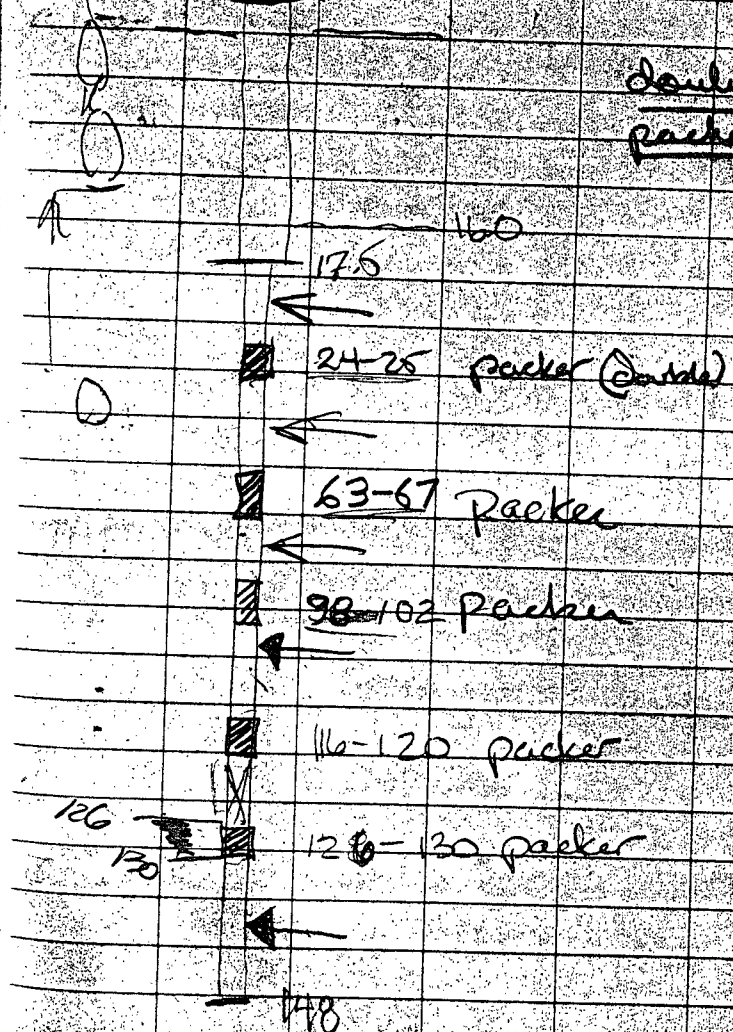


① HNu ~3 max. rapidly dissipates < 15 sec

② HNu ~1 max rapidly dissipates

Louis Pounds - samples
each w/ 25 ml syringe

UC7



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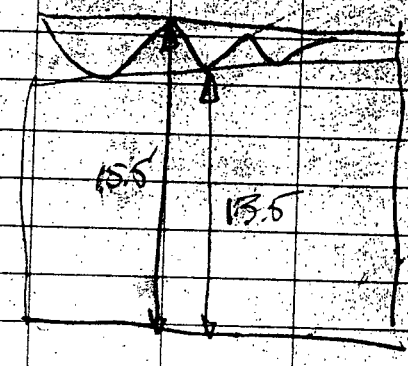
→ measure ▽ when pumping
UC7 & UC7A

→ Call Doug Belshaw,
check rek. still
12/11, John here
12/10 pm

60

12/5/86 pc cold windy
12:45 [illegible] Walker

loading dock door
H 8' W 7.5'



To Rains

▽ UC7 11.1 + .55 = 11.65

▽ UC7 11.05 + .55 = 11.60

limit UC4,5,6

S71 S 11.1 + .55 = 11.65
14.75 total depth
D ▽ 11.05 [illegible]

install new bailers
& rope in UC 4, 5, 6
& sample each a/t
partial recovery from
bail down

12/8/86 clear cold
11:00 Rem First Volume

pump UC7 w/ submersible moisture
~.9 gpm lowered to 118
150gal 100gal

	UC7	UC7A	S700	S703	
2:30 initial	10.7	10.7	10.6	10.55	
3min					
15		10.8			
45		10.8			
					centrifugal
48	11.4				UC7
60	11.5				
2w 90					
95	sample UC7A				
113	11.5				
110	sample UC7				

UC7 water slightly turbid
UC7A water clear

bail down UC4, 5 & 6

UC7 water clears
during pumping, but fine
sand still visible after
150 gallons pumped

I88I Blk Olds

A
H 22·119 Wht Mazda Pickup

12/9/86 UC7 150 gallons
UC7 100 gallons

12/10/86 pc cool
1:30 Uni First Webinar
pump UC7 & 7A

	UC7A	UC7
initial	10.55 (+.6)	10.6 +
2:10 UC7A		
2:15 UC7	11.45	
3:40		

S70D ▽ 12.15 +.6
obstruction 57.7 +.6
push to 61.9 w/ 3/4 in ID
Conduit

Conduit bounced on
initial blows because
winding

bail UC4, 5, 6
UC5 twice

12/11/86 cloudy cold

7:50 Uni First Walum
Donald Toon
Dave Delaney
Richard Willey EPA
Larry Hogan

Don completes installation of UC7 samplers, must get ~ 20 ft more riser for ▽ measuring ports installation

bail UC4, 5 & 6
more cow

12/15/86 cloudy cool

10:30 Uni First Walum

HNU "sniffing", probe

soil w/ 1/2 in ID steel pipe & HNU

w/ L. Hogan

HNU Calibration 11.7 probe
iso butylene
14 ppm 3.12 span

finish sniffing 84 points along entire front adjacent to bldg & rear along fence between UC & 128 ramp

4:00 depart

67

12/16/80 cloudy cold

9:20 Unitent Woburn

HNu "sniffing" w/ Hogan

HNu starting span 3.12 [illegible]

Calibrate to

loading dock modification

~1979 done @ same time as

office renovation

11:30 1.26 recalibration span

11:45 detector loose, tighten,

recalibrate 2.08 span

3:15 HNu dies @ sta. 172

12/17/80 [illegible]

HNu calibration span [illegible]

10:40 [illegible] NR

Sta. N	HNu [illegible]			O2
176	[illegible]	NR	[illegible]	
175		NR	"	
174		NR	[illegible]	
173		NR	"	
172		NR	"	
171		O2	[illegible]	
170		NR		
169		NR		
168		NR		
167		NR		
166		NR		
165		O2		
164		O2		
163		O.1		
162		NR		
161		NR		
160		O2		
159		NR		
158		NR		NR
157		NR		

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Sta	HW 11.7	10.2
156	NR	0.1
155	NR	0.1
154	NR	NR
153	NR	NR
152	NR	NR
151	NR	NR
150	1.1	
149	0.3	
148	NR	
147	~	refusal ~
146	NR	
138	8.0	steady
84	6.2	steady
46	3.0	"
53	0.3	"
35	0.5	dissipates
37	3.2	dissipates

70

2:05 John [illegible]

— ok to install D measuring Solinst

— fill up sampling Solinst w/ water ~ packer station on water

— fals that since he participated in choosing packer zone & observed 1st installation that he is comfortable w/ quality & design of installation

12/18/86 UniFirst Woburn
7:30 Dave Tour Subject
Shannon assists w/ installation

Frank Deselas

short 2 ten-foot sections
Doug will T/R 6 - 5 ft.

→

Henry purges UC7 twice
5th purge altogether
UC7 top of riser w/ 2 qts
water

initial purge

UC7 8 55 gal drums
UC7A 7 55 gal drums

perc pipe — inside
cut off — open could
thread or seal auto

outside — threaded,
plugged w/ mortar

air test vent, air or water
fill pipe

see Rich Juliano
re: drilling in loading
dock

ERT to schedule pipe
test

Copy Keegan or sub's
invoice

floor to truss .13.5'

loading dock height 3.5'
door 7'H 8'W

Lamy bails UC 4, 5 & 6

boring location ~10 feet
from door

vent pipe 90° lateral sweep
exposed in loading dock
2 in galv. NPT

- old dry well in center
~1 ft. off dock

- tell Rich Giuliano

12/19/86 rain mandy warm

8:40 [illegible] Walum
Dan Tony Schott & Shannon

→

20½" or 1.7 cut off
iron

F/R arrives ~10:00

75

12/30/86

11:00 C

Mazda 557 DKN 76

1/6/86 clear cold ~20°F

7:30 Rhinfirst Walcum

UC 4 & 6 snow covered & undisturbed

UC5 hand knocked over — street bags & curb ok — truck backed over @ loading dock

shovel out UC7 & 7A — undisturbed — risers need topping off

Frank Dunphy
John Madeiros

rig & tools steam cleaned at shop

9:30 Butlers arrive

77

2:20 ~~start~~ ~~thin wall thru~~ floor

3:10 depart

Part B6 7.1.85 ch
Method 602/624

1/7/86 cloudy cool

6:45 Uni First Waterman

7:00 Delaney, Ed Chu arrive
→ Shannon

8:00 Green Rutes

9:00 Cherry

Call Solinst - re: ? measure

both installations leak
v. slowly - may have to
trench hole

UC7 900 HNU Reading
3
6-7
15-20
150-200

→ Sample UC7 for 601
analysis

→ UC8 purge and sample
open & cased

UC7 purge like hell & sample

plan a full sampling round

Solinst, put tube to bottom
of well & retract

calculate Solinst vol. of
purge

such gauge I in Solinst
risers

→ Belshaw → automatic
purgers

1/8/87 clear cold

6:45 Alex Just Wilson

UC8 I ~4.0 below
loading dock floor

10:00 Gwen Ruta & Bob Agostino
stop in briefly

plastic sheeting $10.00
for Solinst test

finish UC8

purge UC7 w/ Larry

"solvent" type odor noted
when installing road box

from water surface around
road box HNU ~300

81

546-6517

1/8/87 H.NU AMBIENT TEST'S on UC8 SAMPLES

SS-1 - 6 ppm
SS-2 - 5 ppm
SS-3 - 20 ppm DEFINITE ODOR
SS-4 - 7 ppm
SS-5 - 4 ppm
SS-6 - 1 ppm

renovation of loading dock
fill loading dock pit
→ roughly same time as office renovation

renovation of dock →

82

1/9/86 clear cold

9:50 Uni First Volume

10:10 UC8 ▽ 7.05 ft to rim of road box

16.75 electric sounder goes off - odorous on w/drawal

plopper yields odor of "solvent" when pulled from bottom

10:40 Sample stagnant water at top of UC8

bailer ~ 3/4 full of dark brown odorous liquid; top 1/4 turbid tan aqueous phase

UC8 comes to ~ 11 ft

12:44 Delaney:

inform of UC8 & desire to proceed w/ remedial action - ok technically but will be @ Uni Trib risk although he sees little risk - will discuss w/ Lisa Evans - call Monday to discuss EPA position further

1:10 PCA Engineering, pipe testing → ~$450 to test fill & vent → probably do it Tuesday

1/14/87 Uni Trib Woman
1:45 arrived w/ Hogan

UC8 ▽ 8.2'
obstruction @ 10.3'
cannot get electric ▽ sounder past after repeated attempts

UC7 sample UC7-1 thru 5

UC7-5 turbid & slightly effervescent small bubbles accumulate on shoulder of rial

sample riser

& Liberty
ultural

85

UC8 blocked hand @ 10.8'
try snaking tubing by &
ramming w/ conduit to
no avail — pump
tube plugged → down w/ peristaltic -
tubed odorous water

separate phase comes out
in beaker - blebs adhere
to beaker side of bottom —
also see brown blebs
in tubing moving up
during pumping > 6 min/gal

1/15/
8:0
Fire
Turner
Burke

∇ 1
after
~2

Uni Press Workman

1/16/87 ∇ measured by Hogan 12/18/86

UC4 4.62 below roadbox min
UC5 8.97 "

1/7/87
? UC7A -1 9.25
-2 11

89 Uni First Volume

2/3/87 pc warm ~ 45°
Sample UC4, 5, 6, 7 & 7A
S71 S40
before & after purging

Check for product in all wells

Tom Slocum
Lannie Newman
Larry Hogan

Sample wells

UC7 sample before purging
much difficulty getting
bubbles out of mak

UC4 & 5 ice covered water
running into riser

UC6 looks ok

90

UC7A	▽	top of tubes	8.55
	1	8.55	
	2	8.40	
	3	8.06	
	4	7.75	
	5	3.17	13.95

water running into manholes

UC8 ▽ 5.9
obstruction 10.9
no product above
obstruction, put
bailer down, odor
discernable