APPENDIX C

FIELD NOTES, BORING LOGS AND TEST PIT LOGS

FIELD NOTES

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] function [illegible]

[illegible] Have directed [illegible] start [illegible] to be [illegible] to [illegible] background [illegible]

[illegible] 30 [illegible] background [illegible]

NECRBRG1	8-17-06	[illegible]	0-6"
BRG2	8-17-06	[illegible]	0-6" [illegible]
BRG3	8-17-06	[illegible]	0-6"
BRG4	8-17-06	[illegible]	0-6"
BRG5	8-17-06	[illegible]	0-6"
BRG6	8-17-06	[illegible]	0-6"
BRG7	8-17-06	[illegible]	0-6"
BRG8	8-17-06	[illegible]	0-6"
BRG9	8-17-06	[illegible]	0-6"
BRG10	8-17-06	[illegible]	0-6"
BRG11	8-17-06	[illegible]	0-6"
BRG12	8-17-06	[illegible]	0-6"
BRG13	8-17-06	[illegible]	0-6"

8/17/06

Background [illegible]

NECRBRG14	8-17-06	[illegible]	[illegible]
NECRBRG15	[illegible]	[illegible]	[illegible]
NECRBRG16	[illegible]	[illegible]	[illegible]
NECRBRG17	[illegible]	[illegible]	[illegible]
NECRBRG18	8-17-06	[illegible]	[illegible]
NECRBRG19	[illegible]	[illegible]	[illegible]
NECRBRG20	8-17-06	[illegible]	[illegible]
NECRBRG21	[illegible]	[illegible]	[illegible]
NECRBRG22	[illegible]	[illegible]	[illegible]
NECRBRG23	[illegible]	[illegible]	[illegible]
NECRBRG24	8-17-06	[illegible]	[illegible]
NECRBRG25	8-17-06	[illegible]	[illegible]

1200 Finish background [illegible]

1230 [illegible]

[illegible]

1240 [illegible]

[illegible]

[illegible] finishing [illegible] the [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] 72° [illegible]

[illegible]

[illegible]

[illegible]

[illegible] minute readings [illegible]

[illegible] on a different [illegible]

[illegible]

[illegible]

[illegible] the accelerated point

2000-02

[illegible] at the same as above

2000-04

[illegible] between the sediment pad + backyard

[illegible]

[illegible]

[illegible]

[illegible]
[illegible] measurements
[illegible] to BRC [illegible]
[illegible] Head back to mill site office and
[illegible] gear + Samples

dwn
6/18/06

11/7/06 mostly sunny low 40's calm
08:00 Hans + Leah arrive on-site
Meet AVM, start discussing field plan
08:15 AVM calibrate detectors + unload
field gear, MWH organize field gear
09:15 NNEPA Reps - Jerry Begay,
Stanley Edison, Eugene Esplain onsite
Coast Guard strike team member
Butch onsite, Leah-MWH holds
H+S briefing, Larry Bush, Max
NNEPA, AVM, MWH in attendance.
0925 All members onsite today scan
hands, clothing, bottom of shoes as
part of Health+Safety daily protocol in
Mill office building - Model 2241-Ludlum
alpha survey meter
10:00 AVM locate + collect 1 minute
static readings @ NECR-1, Leah
gives Butch from Coast Guard + Hans a
tour of the site + each survey area
1105 NECR-1 113 check handheld
vs. backpack
394904.0 Nm 725558 Em - handheld
394903.38 Nm 725558 m - backpack
AVM continue to locate + measure static pt

11/7/06 con't mostly sunny, 50s, light breeze
11:30 NNEPA representative, Eugene, Jerry + Stanley leave site, perform exit scan with alpha probe, scans of hands + probes below ~~40~~ 11/7/06 71 counts per minute (cpm), background 0.0 cpm
Max calibrated alpha probe, determined efficiency, + exceedance level this morning
Hans begin marking Pond 3/3a static pts with pin flags, Butch leaves site to read RSEWP
12:00 Leah back on minesite after letting NNEPA out of gate and witnessing exit scan
12:10 AVM + Max locating + measuring static on NECR-1, Leah meet up with Hans on Pond 3/3a flagging
13:00 AVM + MWH break for lunch
13:50 AVM continue @ NECR-1, MWH flags Pond 3/3a, Max assists AVM
15:30 AVM's GPS batter dies, AVM begins static measurements at flagged locations at Pond 3/3a
16:30 MWH + AVM finish onsite work
62 pts GPS + static 1min cnts @ NECR-1
69 pt GPS @ Pond 3/3a
pts 1min. static measurements @ Pond 3/3a
16:45 Go to UNC office bldg, scan hands + clothes, leave site
[illegible] 11/07/06

11/8/06 sunny, calm, upper 30°
0745 Arrive on site - Leah + Hans
AVM on site, calibrate detectors.
0805 H+S tailgate meeting, attendees
NNEPA - Eugene Esplain, Jerry Begay, Stanley Edison
EPA rep - Butch Willoughby - Coastal Giard
AVM - Nat + Victor Patel
MWH - Leah + Hans
0815 AVM continue on NECR1 locating + take static measurement
0830 MWH continue flagging Pond 3/3a
0850 MWH finish flagging pts at Pond 3/3a
A total of 73 grid pts, 4 not located due to standing water in eastern side of ponds
15 blue flags located to indicate a dual surface soil + static gamma measurements
Pond locations #44, 45, 52, 53 not located due to the water
Surface soil samples # 1, 7, 11, ~~13~~ 14, 15 [illegible] 11/12/06
27, 29, 38, 42, 46, 57, 59, 61, 63, 65
0900 Flag locations @ Sediment Pad
13 blue flags, total of 29 pts, blues - 5, 6, 7
11, 12, 14, 15, 18, 20, 21, 22, 25, 26
1025 Finish flagging sed pad
1045 Begin flagging sandfill no. 3

[illegible]

11/09/06 Con't Sunny, windy/gusty, 60°s F
11:30 Hans + Butch finish flagging pts at Pond 1/2 and then go locate a driveable road to Sandfill No 1, good road is past NECR-2
11:45 Victor + NNEPA finish pts at Pond 3/3a w/ #33 detector
12:30 Break for lunch - Leah + Hans, Butch
12:45 AVM, NNEPA, EPA Break for lunch
13:25 Head back to Site, UNC-Max provides generator & set up to collect air sample w/ an Eberline.
Regulate Air Pump Sampler DEL RAS-1
13:48 Begin pump sampler, flow [illegible]
[illegible] Leave air sampler to run off generator, go back to [illegible] flagging [illegible] at NECR-2, Hans + Butch flagging [illegible] at Sandfill No. 2, Victor, Bailey + Jerry NECR-2, [illegible] Nat + Max head to Pond 1/2
[illegible] Leah, Nat, Max start [illegible] at Pond 1/2
15:30 [illegible] Eberline, Max begins to collect [illegible] Victor + Bailey at Pond 1/2, [illegible]

11/09/06 [illegible]
15:[illegible] [illegible] moved to the Sandfill No 1 [illegible] exception [illegible] at Sandfill No 2 [illegible] flagging [illegible] Butch at Sandfill No 1, [illegible] air sampler
16:45 Hans + Butch [illegible] few more pts [illegible] back to [illegible] NECR-2
17:00 Meeting [illegible] Site [illegible]

[illegible] sunny, clear, calm, upper 20
0 [illegible] AVM, [illegible] + Mwrl arrive [illegible]
[illegible] scan
[illegible] tailgate meeting, [illegible]
[illegible] AVM [illegible] Victor [illegible]
[illegible] Hans
[illegible] Andy, Nat + Victor [illegible] Site [illegible]
[illegible] pts + static readings @ NECR-2, Hans +
[illegible] finish flagging @ Sandfill No. 1, Leah
[illegible] hospital [illegible] to Bill, [illegible]
[illegible] more bags [illegible], leaves [illegible]
0905 [illegible], meet AVM + Andy @ NECR 2
drum pieces near NECR-9, [illegible] NECR-2
10:30 [illegible] have finish flagging
Sandfill [illegible]
[illegible]
[illegible] Andy continue taking static
measurements at Sandfill No 2, Leah, [illegible]
+ Max [illegible] to Pond 1/2 to continue taking
measurements
11:40 Andy + Nat finish Sandfill 2, [illegible]
static 1 minute counts
12:00 Leah, Victor, + Max finish primary pts
around Pond 1, break for lunch
13:20 Head back to Site, Nat + Andy go to Sandfill
No. 1, Victor + Max back to Pond 2, Butch + Hans to
Pond 2/3

11/10/06 con't sunny, clear, light breeze, low 50s
14:00 Leah meet up w/ Victor + Max @ Pond 1/2
15:15 Leah, Max + Victor finish 85 static
measurements @ Pond 1/2, head up to meet
Andy, Nat + Hans @ Sandfill No. 1
16:50 Complete static measurements
at Sandfill No. 1
17:00 Head back to Office, scan,
17:25 Leave for the day

dwM
11/10/06

11/11/06

0900 Arrive on site, Leah, Butch, Andy + Butch, scan hold H+S briefing, Took at aerial photos in mill office building Identify action items to discuss with Roy 1) Operational History of IX Plant, where did stripping occur 2) static measurements at on-site homesites 3) vent hole areas North of NEMSA, 4) change sampling depth of homesites from 0-6" to 0-3" 4) FCR for arroyo

1000 AVM arrive on site, Work w/ Max to count airfilter, Butch + Hans go to site w/ micro-r-meter + drive up to vent hole North of Boneyard + NEMSA to look at disturbed area around vent hole as indicated on aerial photo, Leah + Andy mark six subsurface locations @ NECR-1 based on static gamma readings and spatial coverage on NECR-1, talk to NC re: a 6th location, remove Pt 95 if only 5

11:00 Andy, Leah, AVM head to Boneyard + NEMSA Mark 5 loc in Boneyard, need to GPS + GPS new boundary 2 up West canyon, 3 along current boundary AVM take readings along NEMSA w/ micro-r-meter, readings will equate to above 2.2 pCi/g field level, soil cover not blocking all gamma below soil cover, AVM need to discuss this Harry Allen + Carl Paladino next week + possibly [illegible] sampling method for NEMSA + Boneyard

11/11/06 con't ~~cloudy~~, breezy, 50°F

1230 Discuss locations for subsurface @ Pond 1/2, 1 in bottom of pond 2, 2 in bottom of Pond 1, 1 in berm, 1 near correlation sample on NE corner of Pond 1

1245 Head back to office for lunch, AVM leaves for the day, Andy Bain leave Site to fly out, Butch, Leah + Hans break for lunch

1340 Butch, Leah + Hans go back to site to GPS and mark subsurface locations, go GPS 5 locations in Boneyard for surface + subsurface samples - judgemental, BYSub#1 in southern end, BYSub#2 south of N/S center BYSub#3 in NW corner, ~~they~~ need to revise Boneyard + NEMSA joint boundary to cover buried material in SW corner of NEMSA, BYSub#4 in west canyon arm of boneyard BYSub#5 in far west ~~of west~~ canyon arm of boneyard, need to GPS west canyon arm

dwm 11/11/06

1400 Head to NECR-2 to mark locations for subsurface samples, Mark the following flagged locations for subsurface NECR2-20, NECR2-39, NECR2-15, NECR2-35 + NECR2-52

14:45 Mark 5 subsurface locations @ Sandfill No. SF2-7, SF2-11, SF2-12, SF2-17, SF2-19 choosing subsurface pts @ blue surface sample flags that have a greater static gamma readings + are spatially distributed

11/11/06 con't cloudy, breezy, 50°-60°F
15:30 Butch, Leah + Hans head to Sandfill No1 to mark 5 subsurface locations, locate w/ follow blue flagged surface soil locations SF1-43, SF1-63, SF1-68, SF1-30 + SF1-49 Make SF1-48 a red flag + SF1-49 a blue flag (switch them around) so that there is a surface + subsurface sample at SF1-49 near center of Sandfill No1 + the most elevated static gamma measurement @ Sandfill No.1, choose subsur locations based on spatial distribution + elevated gamma
1600 Butch, Leah + Hans mark subsurface locations @ SEDPAD, 5 locations co-locate w/ blue surface flag use green pin flag to denote, SEDPAD-26, SEDPAD-21, SEDPAD-12, SEDPAD-14, SEDPAD-06.
1625 Mark 5 subsurface locations at Sandfill No.3 co-locate w/ blue surface locations, SF3-25, SF3-14, SF3-09, SF3-05, SF3-06
1645 Leave mine site, go to mill office bldg to scan + leave
1700 Scan, unload field supplies + leave site - Leah, Hans + Butch

DWM 11/11/06

11/12/06 partly sunny, light breeze
12:00 Leah + Hans arrive on site, see Larry Bush who informs us that a powerline is out + no phone/power is available at the mill site office, Leah + Hans scan, sign in + head to mine site to finish flagging subsurface locations @ Ponds
1220 Arrive @ Pond 1/2 to mark subsurface areas, due to discussion w/ Andy Bain - EPA will co-located green subsurface flags w/ red (static only) flags vs. w/ blue (static + surface) flags. Flag following locations Pond 12 - 82 (red), Pond 12 - 35 (blue), Pon 12 - 58 (blue)

Switch flags #49 + 35 so that #35 which has a elevated gamma reading will have a surface + subsurface sample
1305 Mark 5 subsurface pts @ Pond 3/3a mark @ following blue surface locations Pond 3 - 38, Pond 3 - 61, Pond 3 - 7, Pond 3 - 14 Pond 3 - 29, switch ~~Pond~~ 13 + 14 so that there is a surface sample + subsurf sample at 14, making for easier acess
1350 Head back to mill office, scan + leave site for the day

DWM 11/12/06

11/13/06 cloudy, calm, 30°F
0730 Leah + Hans arrive on-site, organize field gear, scan
0745 Harry Allen + Butch - EPA + Coast Guard onsite, Roy Blickwedel - UNC on-site
0755 AVM - Nat + Arvind on-site
0800 Group scan, function check equipment
0815 Discuss plan for step-out borings for NECR-1 north boundary
0825 Start HTS briefing, discuss getting scanning procedure documented
0840 Discuss step-out plan - start step-out on North end of NECR-1 determine triangular grid coordinates find location w/ GPS, flag, + take 1-minute static gamma measurement Discuss field change request - remove 20% judgemental scan for Boneyard NEMSA, discuss FCR for arroyo, scan banks vs centerline for soil samples @ each transect take 1 centerline subsurface sample 0-1, 1-2, 2-3ft bgs vs. 3 0-1 ft bgs along transect
0915 AVM + Butch head to step-outs
0950 Leah, Hans + Harry head onsite to collect surface soil samples

11/13/06 con't cloudy, windy, 30°F
10:15 Leah, Hans + Harry start collecting surface soils at Sandfill No. 1 Need to collect 15 soil samples, 2 ag collect extra bag for SPLP
✓1025 Collect SAND1-SS-021 for prelim COCs, take photo #3
✓1035 Collect SAND1-SS-027 for prelim COCs, take photo #4
✓1045 Collect SAND1-SS-028 for prelim COCs + Ag, EPA collect split for ~~SPLP~~ AVM 11/13/06 prelim COCs, take photo 5
✓1055 Collect SAND1-SS-011 for prelim COCs, take photo 6
✓1100 Collect SAND1-SS-017 for prelim COCs + Ag, take photo 7
✓1105 Collect SAND1-SS-009 for prelim COCs, take photo 8, EPA collect split
✓1110 Collect SAND1-SS-041 for prelim COCs, take photo 9
✓1125 Collect SAND1-SS-044 for prelim COCs, take photo 11 - Hans collect
✓1130 Collect SAND1-SS-043 for prelim COCs, take photo 10 - Hans collecting 044 + while Harry [illegible] 043

11/13/06 con't

1140 Collect Sand1-SS-51 for prelim COCs take photo 12

1145 Collect SAND1-SS-50 for prelim COCs take photo 13

1210 Collect SAND1-SS-63 for prelim COCs take photo 14, EPA split

1215 Collect SAND1-SS-68 for prelim COCs, EPA split, photo 15

1225 Collect SAND1-SS-49 for prelim COCs, MWH duplicate, photo 16

1215 Collect SAND1-SS-30 for prelim COCs, no photo, collected by HANS

1230 Break for lunch, Call Toby confirm he's coming out w/ drillers (WDC) on wednesday

Talk w/ EII confirm that we can collect one fuller 1 gallon Ziplock for both SPLP + prelim COCs

1340 Butch + Harry back from lunch, AVM goes out to step-outs @ NECR-1, north side

1400 Jerry Begay + Stanley Edison - NNEPA arrive on-site, Jerry goes with Leah, Harry + Hans, Stanley heads out w/ AVM + Butch

AVM collected 1-min static gamma readings on ~30 locations this morning

1405 Leah, Hans, Harry + Jerry head to Sandfill No. 2 to collect grided surface soil samples 0-6" w/ dedicated stainless tablespoons

11/13/06 con't partly sunny, windy, 40°F

Sandfill No. 2

Sample ID	Time	Analytes	Photo
Sand2-SS-010	14:35	COPCs	17
Sand2-SS-006 EPA split	14:40	COPCs	18
Sand2-SS-014	14:55	COPCs + Ag	19
Sand2-SS-004	15:05	COPCs	20
Sand2-SS-003	14:50	COPCs	21
Sand2-SS-007	1510	COPCs	22
Sand2-SS-011 EPA split	1515	COPCs	23
Sand2-SS-012 MWH split	1525	COPCs	24
Sand2-SS-017	1530	COPCs	25
Sand2-SS-015 EPA split	1530	COPCs	26
Sand2-SS-019 EPA split	1540	COPCs	27
Sand2-SS-016	1545	COPCs	28
Sand2-SS-020	1550	COPCs	na

16:00 Finish soil sampling @ Sandfill No. 2

EPA collect 5 splits, MWH collect 13 + 1 rep + 1 foreg + PCOCs

1615 AVM finish 64 step out north of NECR-1 - Louis - EPA comm stop by site

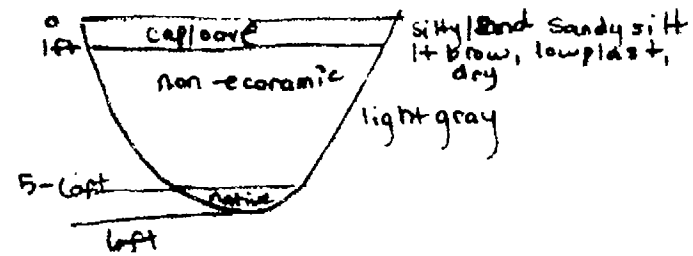
1645 Back at mill office, Scan, all but Leah + Hans leave site, Leah + Hans double bag samples + fill out COCs

1730 Leah + Hans leave site

dwm 11/13/06

11/14/06 partly cloudy, 30°F, windy
0735 Arrive on-site Leah+Hans, AVM arrive on-Site, Larry Bush opens office AVM performs function check, Leah+Hans prepare coolers for shipment - will ship 2 coolers w/ SANDFILL NO1 + SANDFILL NO.2 soil samples to ELI, Casper, WY via UPS 2day
0755 EPA - Harry Allen, Jeff Woodley + Butch Willobey on site, everyone scans in
0830 H+S tailgate meeting in conference room - Harry Allen - EPA, Butch Willoughby-Coast Gaurd, Jeff Woodlee - EPA, Luis Garcia - EPA, Lily Lane - NNEPA, Roy Blickwedel - UNC, Nat + Arvind Patel - AVM, Leah+Hans - MWH discuss testpit + backhoe H+S, discuss brushing off visible particles at gate, wiping w/ wet wipes, Louis + Lily talking w/ homesite residents, AVM performing Step-Out measurements @ NECR-1 + 2, Butch + Jeff set-up data ram air monitor, 4 folks have personal air monitors -
1000 Start Surface soil sampling NECR-2
1045 Leah leaves Harry + Hans to soil sample @ NECR-2 + goes + meets Roy + Ronald w/ backhoe @ NEMSA to start testpits

11/14/06
1050 NEMSA - TP - 001 (0-0.5ft)
Sample of cover soil @ TP1
1100 NEMSA - TP - 001 (1-1.5ft)
Sample of precap surface @ TP1
1115 NEMSA - TP - 001 (4-5ft)
Sample of nonecomic material
1120 NEMSA - TP - 001 (~~5-6.5ft~~ 5-6ft) LWM 11/14/06
sample of native



* found discrepancy of [illegible] YARD-TP-004 [illegible]

1145 Move to testpit @ Boneyard
1150 Collect ~~NEMSA - TP - 00~~ HH [illegible] (0.0-0.5ft)
Sample of cover soil, stop since Leah does not have containers out in field for [illegible]

11/14/06 con't sunny, windy, 50°F
12:00 Leah head back to NECR-2 to help Hans + Harry finish surface soil @ NECR-2, Collect 15 primary, 1 rep, 2 of primary for ag also, EPA collect 5 splits
12:30 MWH head back to office for lunch, AVM come to office for lunch
30 step-out north + east of NECR-1 finish NECR-1 step-out for now
1320 Leah, Hans + Ronald go get backhoe from Boneyard + head to Sandfill No. 2
1340 Set up on subsurface location SF2#17, Hit native @ 1.5 ft bgs, ledge that SF2#17 is on appears to be native backfill location, move to SF2#12 + attempt a 2nd pit, hit rock @ 3 @ 12 + @ 1 ft fos SF2#1, collect a subsurface sample of what appears to be native at all 3 locations, unable to collect a rock sample
1350 Diane Malone, Arlene Luther, Jerry Begay Stanley Edison - NNEPA arrive on site
1600 Move a subsurface pt from SAND27 to SAND28 since SAND27 on rock
1645 Finsh 5 test pits at SAND2 + NECR2

11/14/06 con't sunny, windy, 40-50°F
Test Pits @ SAND2 - 8, 11, 12, 17, 19
Test Pits @ NECR2 - 35, 39, 20, 52, 15
1700 Hans + Leah go back to office, EPA, NNEPA + AVM left for day, Hans + Leah scan + leave for day

dwm
11/14/06

11/15/06 sunny, calm, 18°F
0735 Leah + Hans arrive onsite
0740 AVM + Butch arrive onsite
0745 Roy arrive on-site
0800 Luis, Carl, Jeff, Harry, - EPA at office
Dave Taylor, Lillie Lane - NNEPA onsite
Stanley + Jerry Begay + Diane Malone
0830 Hold H+S brief discuss
home site sample strategy + drilling
0930 Head to and mark corners,
start scan + sample @ Homesite 9
1120 Finish scan + collection of
5 surface soil samples on each
Home 9 + Home 8
1210 Finish scan on Home 6 +
Home 7, Collect 5 samples on
Home 7, need to collect 5 on
Home 6 after lunch, break for
lunch
1250 WDC - Tom + + Toby
arrive at Site, go through H+S briefing +
scan
1330 Leah + Toby + WDC head to Site,
Max, Hans, AVM, EPA head back to
homesites, WDC drop decon trailer

11/15/06 con't sunny, light breeze, 50°F
1400 WDC setting up on NECRI-90
north edge of NECR-1, will sample
w/ split spoon every five ft
Leah collect SS sample ~~NECR~~-1 - dwm 11/15
NECRI-SB-090 (0-0.5 ft) for
COPCs - (Ra-226 + As, Ma, Se, U, V)
1430 Start drilling NECRI-90 - Toby
on rig, NNEPA - Jerry, Diane, Stanley
+ Lillie watching drilling
1445 head goes to homesites to allow
Hans to go w/ Toby on the rig
1640 EPA, AVM, Leah + Max finish
judgemental scan + collect 5 surface
soil samples from each of the nine
homesites
1650 Toby, Hans + WDC finish up drilling
NECR-90 - drill 45 ft, native ee 30 ft
1700 EPA, NNEPA, AVM Scan + check out
MWH double bag sample + organizes
samples
1725 MWH scan + leave site

dwm
11/15/06

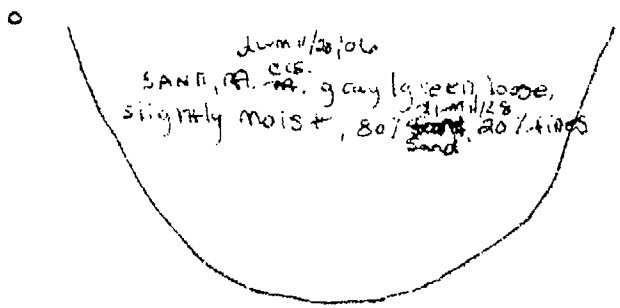
11/16/06 Sunny, clear, 25°F
0745 MWH, AVM + Butch arrive on site
0825 H+S Briefing @ mill site office
AVM - Nat + Arvind, MWH - Leah, Toby, Hans,
EPA - Harry, Butch, Carl, Jeff, Robin +
Stanley Edison - NNEPA, WDC
0845 Toby, Hans + WDC (Tommy + Jesse)
head to drill locations on NECR1
0900 AVM, MWH, + EPA discuss field
changes - step-out + sampling, new survey
areas, arroyo, Scanning + boneyard, Carl,
Harry, Robin, Stanley, Leah, Nat, Arvind discuss
field changes, especially, step-out
NECR-1 areas, NECR2 stepouts, between SEPPAD
+ NEMSA, other fill in's, collect soil sample
at boundary limits at 4-6 K range + cliffs
to confirm that boundary cliff pts are not
elevated, trailer park, vent holes
1000 AVM + Stanley head out to finish
step-out locations in NECR-1 + NECR-2
areas, Carl, Robin, Harry go drive to
vent holes, Leah + Butch go test hand
auger @ ponds
1219 Go + fill out COCs + bag samples
1245 Break for lunch
1300 AVM head back to site to continue

11/16/06 con't sunny, calm, clear, 60°F
1400 Head out SAND 3 w/ Harry, Butch,
+ Jeff to collect 13 surface soil

SAMPLE ID	Date	Time	Comment	Photo
SAND 3-SS-025	11/16/06	1425		59
SAND 3-SS-026	11/16/06	1420		60
SAND 3-SS-022	11/16/06	1435	EPA SPLIT	61
SAND 3-SS-024	11/16/06	1440		62
SAND3-SS-014	11/16/06	1445	MWH SPLIT EPA SPLIT	63
SAND3-SS-027	11/16/06	1450	AGRO	64
SAND3-SS-010	11/16/06	1455	EPA SPLIT	67
SAND 3-SS-009	11/16/06	1500		66
SAND 3-SS-017	11/16/06	1505	AGRO	65
SAND3-SS-005	11/16/06	1510		68
SAND3-SS-006	11/16/06	1515		69
SAND3-SS-002	11/16/06	1520	EPA SPLIT	70
SAND3-SS-008	11/16/06	1525	EPA SPLIT	11
NECR2-SS-027	11/16/06	1545		72

when sorting NECR-2 samples realize
1 ss location is missing, Leah collect
15 ss sample from NECR-027
1550 Leah checks in on drilling
Toby + Hans on last hole in NECR-1
1600 Leah + EPA fill out COCs, fill put samples
in coolers, get 6 coolers ready to ship
1800 MWH scan + leave the office
AVM 11/16/06

11/28/06 SS, cloudy, snowy, windy
0745 Leah + Hans arrive on site.
0900 Bill + Robin – E+E, Colleen – EPA
+ Butch – Chief Enviro arrive on site
Discuss road step out areas east of
Pond 1/2, road to SEDPAD/NECR2,
scan of vent hole 8. H+S tailgate
0930 Robin, Leah + Hans head to
Sedpad for test pits, waiting for
Ronald w/ backhoe, Nat, Victor, Max
head to vent hole 8 for transect scan
Butch gives tour to Bill - E+E +
Colleen
0958 Start test pit 21 at SEDPAD



10:00 SEDPAD - TP - 021 (5.0 - 5.5ft)
Photo 71

10:20 Backhoe arm bows/bends, head back to office, Larry calls RES, will get a backhoe rented + delivered this afternoon

11/28/06
1030 Hans + Leah look @ NECR-1 map
+ pick out 13 surface soil samples
1100 Hans, Leah, Butch + Robin
head to NECR-1 + collect SS.

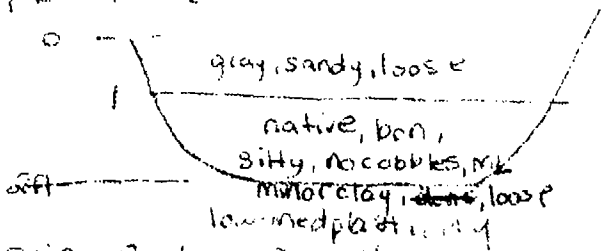
ID	Date	Time	Depth	Comment
NECR1-SS-289	11/28/06	1105	72	EPA SPLIT
NECR1-SS-293	11/28/06	1110	73	
NECR1-SS-240	11/28/06	1120	74	MAX SPLIT
NECR1-SS-238	11/28/06	1125	75	
NECR1-SS-262	11/28/06	1130	76	EPA SPLIT
NECR1-SS-265	11/28/06	1135	77	
NECR1-SS-281	11/28/06	1145	78	
NECR1-SS-184	11/28/06	1150	79	
NECR1-SS-307	11/28/06	1200	80	
NECR1-SS-266	11/28/06	1212	81	

1230 break for lunch, go back at shift

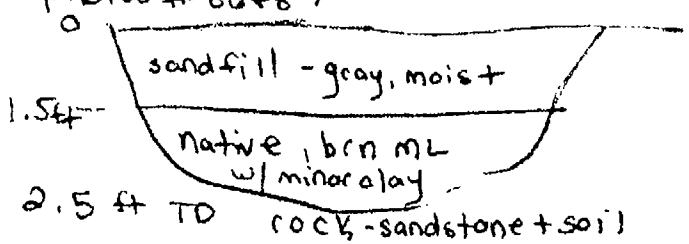
NECR-SS-207	11/28/06	1415	82	
NECR-SS-164	11/28/06	1430	83	
NECR-SS-173	11/28/06	1425	84	

15:00 Rental backhoe on site, continue
digging TP-021
1505 SEDPAD-TP-021 (10-10.5)
AVM leaves after scan @ vent hole,
water farms + skip out on SEDpad

11/28/06 con't cold - 35°F, snow, windy
Reached limit of backhoe @ TP-021
SEDPAD, total depth = 11 ft bgs
sandy, gray/green fill sediments entire
depth, unable to collect native soil sample
1520 SEDPAD-TP-014 (0.5-1.0) 1530
Start TP SEDPAD-TP-014 (1.0-1.5) 1535
photo # 88

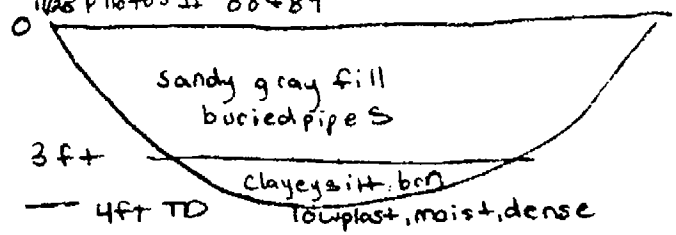


1540 End TP-014, head to TP-012
+ start TP-012 @ 1542
1545 ~~TP~~ SEDPAD-TP-012 (1.0-1.5)
1548 SEDPAD-TP-012 (1.5-2.0)
Photos # 86+87



1600 Finish TP-012 at SEDPAD
1602 Start TP-006 at SEDPAD

11/28/06 con't, snowing 33°, windy
SEDPAD-TP-006
1600 SEDPAD-TP-006 (1.5-2.0)
1603 SEDPAD-TP-006 (3.0-3.5)
dwm 1625 Photos # 88+89



1615 Finish TP-006 @ SEDPAD
1620 SEDPAD-TP-026 (0.5-1.0)

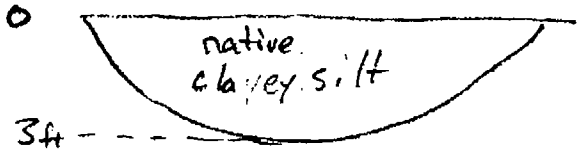


Photo # 90
1625 Stop test pits for the day
head back to office, meet
Larry + Robin @ gate, they are
waiting for AAA to unlock Bill
car, locked w/ engine running
1715 Hans + Leah leave site
for day

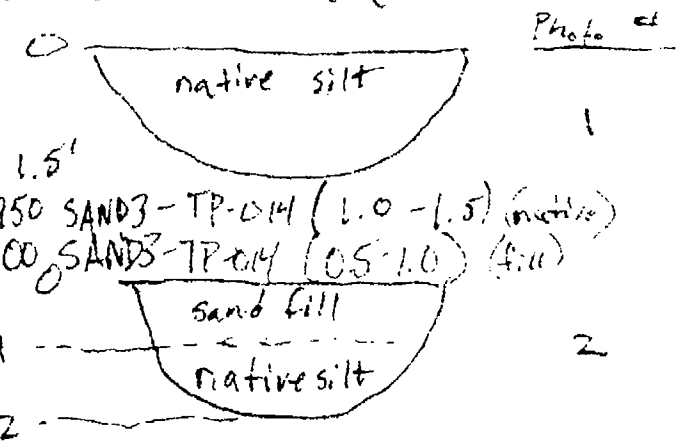
dwm 11/28/06

11/29/06 snow, windy, 20°F
0820 Leah + Hans arrive on site
Robin + Bill - E+E, Butch - USCG, JoAnn - EPA
arrive on-site, due to 3 in snow on
site, cold weather, high winds + no
backhoe operator (Ronald - UNC called
in today) UNC EPA encourages MWH to
delay field activities today. Robin calls
Andy to discuss whether EPA remains
unsite to wait for potential tour of
uranium conference folks from Window Rock
Andy Bain advices not to wait on
site due to weather
1000 Robin E+E heads to ABQ, Butch,
Bill, JoAnn leave site for day
1030 Leah + Hans leave site for
day, MWH will catch up on photo log
paperwork rest of day

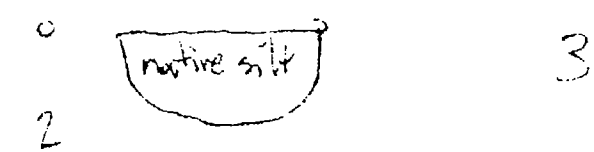
HWM
11/29/06

11/30/06 clear, sunny, -7°F
0800 Leah + Hans arrive on site,
Butch - USCG, Colleen - EPA, Carl - Palladino
Bill - E+E, go over plan for day, let
it warm up a few degrees before heading
out to site, plan for site - test pits
at SAND3, try to move to NEMSA next
Hans work on test pits, Leah go and
surface soil sample

0940 SAND3-TP-025 (0.5 - 1.0)



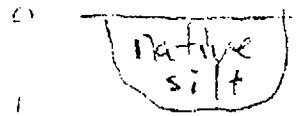
1005 SAND3-TP-009 (0.5 - 1.0)



11/30

Photo

1010 SAND3-TP-006 (~~0-0.5~~) (0.5-1.0)



4

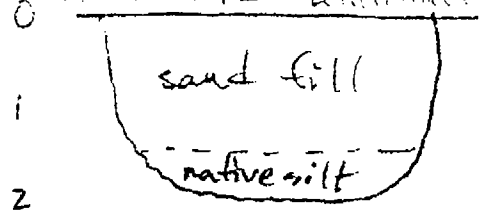
1010 SAND3-SS-004 - Leak collect boundary contamination

1030 SAND3-TP-005 (0.5-1.0)

1025 SAND3-TP-005 (1.5-2.0)

5

1020 SAND3-SS-012 - Leak collect boundary contamination



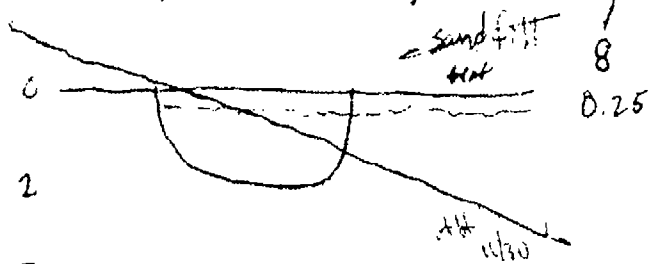
1040 NEMSA-TP-002 (0-0.25)

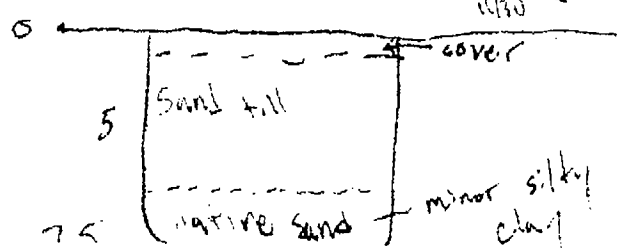
6

1045 NEMSA-TP-002 (0.25-0.75)

7

8





11/30

Photo

1100 NEMSA-TP-002 (5.5-6.0)

9

1115 NEMSA-TP-002 (7.0-7.5)

10

1120 Start NEMSA-TP-003

120 NEMSA-TP-003 (0-0.5)

- COPC + Hg

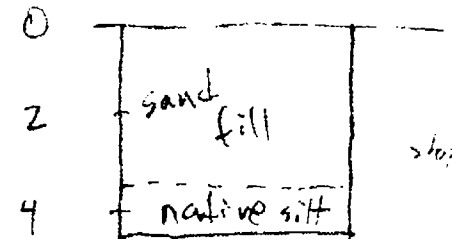
1125 NEMSA-TP-003 (1.5-2)

- pre-cap

11

1130 NEMSA-TP-003 (4.0-4.5)

12



stop @ 1140

1145 NEMSA-TP-006 (no sample)

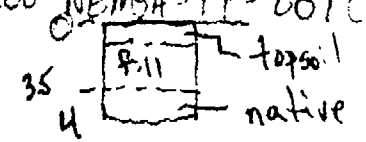
13

- for delineation purposes
- native soil @ 2.0'

1150 boneyard test

- all native

1200 NEMSA-TP-007 (no sample)



1230 Break for lunch

11/30

2:00 Lead to Boneyard w/ Bill, Carl, Leah, Ron

HH 113006 ~~1400~~ ~~BYSOST~~ 110006 (0-0.5) COPC + Ag

YARD-TP-001 ~~SVOC, moisture~~, ~~TCLP~~ HH

0
2 [<] all native soil

205 YARD-TP-001 SVOC + Moisture
215 YARD-TP-001 (1-1.5) VOC
215 YARD-TP-001 (1-1.5) CPOC
215 YARD-TP-001 (1-1.5) TCLP
- photo #15
1430 YARD-TP-002 (0-0.5) CPOC
1440 YARD-TP-002 (1.5-2.0) SVOC + moist
1440 YARD-TP-002 (1.5-2.0) VOC
1440 YARD-TP-002 (1.5-2.0) CPOC
1440 YARD-TP-002 (1.5-2.0) TCLP

0
1
2
3
HH 3.5

reworked native sand

no visible pre-cap

← refusal @ rock

HH

11/30/06

HH 11/30/06

1500 Move to YARD-TP-004
1505 YARD-TP-004 (0.5-1.0) VOC
1505 YARD-TP-004 (0.5-1.0) SVOC + moist
1505 YARD-TP-004 (0.5-1.0) CPOC
1505 YARD-TP-004 (0.5-1.0) TCLP
Photo #19-26
1530 YARD-TP-004 (5.5-6.0) VOC x2
1530 YARD-TP-004 (5.5-6.0) SVOC
1530 YARD-TP-004 (5.5-6.0) CPOC
1530 YARD-TP-004 (5.5-6.0) TCLP

sandy cap
0
1
2
3
4
5
6

sand fill + debris

- buried cable, rubber, misc. metal
- could not reach native due to debris

End YARD-TP-004 @ 1550
Start YARD-TP-005 @ 4:05
1605 YARD-TP-005 (0-0.5) COPC+Ag
1625 YARD-TP-005 (2.5-3) VOC
1625 YARD-TP-005 (2.5-3) SVOC
1625 YARD-TP-005 (2.5-3) COPC
1625 YARD-TP-005 (2.5-3) TCLP

sand + debris

12/1/06 Sunny, clear, cold, 10°F

0820 Bill-E+E, Colleen, Butch, Carl, AVM (Nat + Victor) + Hans + Leah onsite, Hold H+S briefing + daily planning meeting

TP + Vent 3/8 - isolated areas/localized hotspots, MWH proposing 5 samples at each area confirmation sampling at each of these areas to confirm both low spots + elevated areas

0440 JoAnn, Butch, Carl + Leah collecting 5 ss samples @ Venthole 3/8

Bill + Hans @ Boneyard for tespits

Sample ID	Date	Time	Photo	Notes
VENT8-SS-019	12/1	0950	34	EPA SPLIT
VENT8-SS-[illegible]	12/1	1000	35	
VENT8-SS-031	12/1	1005	36	
VENT8-SS-002	12/1	1015	37	MWH DUP
VENT8-SS-034	12/1	1022	38	EPA SPLIT

Bill + Hans confirm native at Boneyard 323, 326, 316

NECR1-SS-323	12/1	1100	39	EPA SPLIT
NECR1-SS-324	12/1	1109	40	
NECR1-SS-316	12/1	1119	41	
FUND12-SS-003	12/1	1134	42	
FUND12-SS-032	12/1	1158	43	
FUND12-SS-[illegible]	12/1	1222	44	

12/1/06

1440 Carl + Leah at Trailer Park to collect surface soil samples

Sample ID	Date	Time	Photo	Notes
TP-SS-001	12/1/06	1441	46	EPA split
TP-SS-009	12/1/06	1448	47	
TP-SS-024	12/1/06	1455	48	EPA split
TP-SS-024	12/1/06	1503	49	MWH split
TP-SS-013	12/1/06	1510	50	
SAND1-SS-033	12/1/06	1527	51	
SAND1-SS-032	12/1/06	1542	52	
SAND1-SS-065	12/1/06	1552	53	
NECR2-SS-109	12/1/06	1605	54	EPA split
NECR2-SS-103	12/1/06	1615	55	
NECR2-SS-083	12/1/06	1622	56	
NECR2-SS-096	12/1/06	1630	57	

1645 Finish [illegible] confirmation samples, Hans, [illegible] finish 4 test pits @ Boneyard [illegible] 2 test pits [illegible]

1740 Leave site [illegible]

[illegible] 12/1/06

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] to handauger

Start @ downstream transect, next to culvert and road

1205 ARROYO-SB-~~010~~ 001 (0-1)

1220 ARROYO-SB-~~010~~ 001 (1-2)

1232 ARROYO-SB-~~010~~ 001 (2-3)

decon 1 3/4" hand auger w/ alconox, 2 DI rinse, 10% HNO_3 rinse in between each 1 foot sample, change ID from 010 too 001 for furthest downstream sample due to figure generated by MWH that has transect # from 1 downstream to 10 upstream (near NECR-1)

1240 start arroyo #2

1245 ARROYO-SB-002 (0-1)

1252 ARROYO-SB-002 (1-2)

1259 ARROYO-SB-002 (2-3)

1305 start arroyo #3

1311 ARROYO-SB-003 (0-1)

1318 ARROYO-SB-003 (1-2)

1325 ARROYO-SB-003 (2-3)

1340 start arroyo #4

1340 ARROYO-SB-004 (0-1)

1348 ARROYO-SB-004 (1-2)

[illegible]

12/03/06 con't sunny, calm, 35°F
1406 Start Arroyo #5
1408 ARROYO-SS-005 (0-1)
1414 ARROYO-SS-005 (1-2) wire in sample
1429 ARROYO-SS-005 (2-3)
1435 Start Arroyo #6
1439 ARROYO-SS-006 (0-1)
1447 ARROYO-SS-006 (1-2)
grayer material in 1-2
1450 ARROYO-SS-006 (2-3)
stop hand augering after last decon
head back to office to get rinsate
blank + organize samples, bill leaves
1535 pour lab grade DI over hand
auger into ½ gallon w/ HNO3 preservative
to collect rinsate blank
ARROYO-RB-001 @ 1535
1550 Start organizing samples
1845 Hans + Leah scan out, lock up
office + leave for day

[signature]
12-03-06

12-04-06 Sunny, calm 10°F
0815 Leah + Hans arrive onsite after
picking up DI water ice, Bill [illegible]
waiting @ office bldg
0840 Leah + Hans make copies of COCs
after signing, fill out UPS labels, tape
up 7 coolers - 7 coolers tape picked by
UPS for delivery to Energy Labs
0950 Scan in, hold H+S tailgate
get supplies to finish [illegible]
sampling
1035 Arrive @ Arroyo #7 [illegible]
1041 Arroyo-SB-007 (0-1) [illegible]
1050 Arroyo-SB-007 (1-2)
1056 Arroyo-SB-007 (2-3)
1111 Start Arroyo #8
1112 ARROYO-SB-008 (0-1)
1125 ARROYO-SB-008 (1-2)
1129 ARROYO-SB-208 (1-2)
auger [illegible] hole [illegible]
1-2 level collect sample + [illegible]
hole mix total sample in a bag w/
a spoon + split
1135 ARROYO-SB-008 (2-3) [illegible]
1135 ARROYO-SB-208 (2-3) [illegible]
1140 Arrive @ ARROYO #9

[illegible]

1140 [illegible] - [illegible] (0-1) photos

1140 [illegible] - 10 - SB 001 (1-2) photos

1200 ARROYO - SB 001 (2-3)

1203 Arrive @ ARROYO next to RICK 1

1205 ARROYO SB-010 (0-1)

1212 ARROYO - SB - 010 (1-2) photos

1213 ARROYO - SB 010 (2-3) photos

[illegible] Safety [illegible] [illegible] [illegible] [illegible] were [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

1225 Finish 10 auger handauger soil borings, collect 3 [illegible] down to 10.5 ft for each boring

1230 Head back to [illegible] for lunch

1300 [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

12-05-06 Sunny, clear, calm, [illegible] F
[illegible] Leah + Hans arrive on site, meet
Bill from [illegible], hold HS briefing, clean out
car, organize equipment
0850 Bill + Hans head out w/ Ronald to
Pond 3 to work on excavting road into
Pond 3, take approx. 12 scoops of soil
0905 Complete access into Pond 3
Start TP-037
Complete 5 sampling test pits in POND 3,
perform TP @ 030 for depth in [illegible] only
1205 Digest adjacent to NEMGA-004 to
obtain 2 missed sample intervals
1230 Break for lunch
1330 Dump extra samples from SAND/SPLP
bag in Pond 1, lab did not require extra volume
lab will hold all samples until SPLP samples
chosen
1400 GPS boundaries + features + collect
missed Ag sample @ NEOR1-028
1500 Head back to office bldg, demob equip
+ supplies
1600 Leah scan backhoe w/ hydraulic [illegible]
+ alpha probe after Ronald decon, backhoe did
not [illegible] levels above background, no visible [illegible]
1715 Finish demob + leave site

NECR 11-14-06

10:00 Arrive @ NECR2 w/ Leah Martin (MWH) and Harry Allen (EPA) to continue soil sampling. Cloudy, breezy, cold...
1 dup, 2 Ags (borrow area)

Sample ID	Time	Analysis	Photo #	Sampler/Misc
NECR2-SS-050	10:10	PCOC	29, 30	Harry
NECR2-SS-033	10:20	PCOC	31	Harry
NECR2-SS-057	10:30	PCOC	32	Home EPA split
NECR2-SS-056	10:35	Ag	33	Harry
NECR2-SS-069	10:40	PCOC	34	
NECR2-SS-074	11:05	PCOC	35	EPA split
NECR2-SS-039	11:10	PCOC	36	Multisplit
NECR2-SS-015	11:15	PCOC+Ag	37	EPA split
NECR2-SS-017	11:35	PCOC	38	EPA split
NECR2-SS-018	11:25	PCOC	39	EPA dup
NECR2-SS-020	11:30	PCOC	40	
NECR2-SS-004	12:05	PCOC	41	
NECR2-SS-035	12:10	PCOC	42	EPA split
NECR2-SS-052	12:15	PCOC	43	

12:30 Break for lunch
1:00 Test Pitting w/ LWM in afternoon at NECR2 and SANDZ

11-15-06

10:00 Head to homesites w/ Nat + Arvind Patel (AVM), Leah Martin (MWH), Carl P, Louis, Jerry, Stan, Butch, Lillian, Diane, ...
10:15 Begin surveying + sampling @ homesite 9

SAMPLE ID	Time	Analysis	Photo #	Misc.
HOME9-SS-001	10:25	PCOC	5	
HOME9-SS-002	10:30	PCOC	6	
HOME9-SS-003	10:35	PCOC	7	
HOME9-SS-004	10:40	PCOC	8	
HOME9-SS-005	10:45	PCOC	9	
HOME8-SS-001	11:20	PCOC	14	
HOME8-SS-002	11:15	PCOC	13	
HOME8-SS-003	11:10	PCOC	12	
HOME8-SS-004	11:00	PCOC	10	
HOME8-SS-005	11:05	PCOC	11	
HOME7-SS-001	11:40	PCOC	15	
HOME7-SS-002	11:45	PCOC	16	
HOME7-SS-003	11:50	PCOC	17	
HOME7-SS-004	12:00	PCOC	18	
HOME7-SS-005	12:05	PCOC	19	

Break for lunch at 12:10

Date 11-15-06

→ Back to homesites w/ Max after lunch

SAMPLE ID	Time	Analysis	Photo #	Misc
HOME6-SS-001	1:45	COPC	20	
HOME6-SS-002	1:50	COPC	21	
HOME6-SS-003	1:55	COPC	22	
HOME6-SS-004	2:00	COPC	23	
HOME6-SS-005	2:05	COPC	24	
HOME5-SS-001	2:25	COPC	25	
HOME5-SS-002	2:30	COPC	26	
HOME5-SS-003	2:40	COPC	29	
HOME5-SS-004	2:50	COPC	30	
HOME5-SS-005	3:00	COPC	31	
HOME4-SS-001	3:45	COPC	36	
HOME4-SS-002	3:10	COPC	32	DUP. TAKEN
HOME4-SS-003	3:20	COPC	33	charcoal present
HOME4-SS-004	3:35	COPC	35	
HOME4-SS-005	3:30	COPC	34	

DWM 11/15

Location Homesite Date 11-15-06

Prepared by VNC NER

SAMPLE ID	TIME	ANALYSIS	PHOTO #	MISC.
HOME2-SS-001	1650	COPC	~~34~~	
HOME2-SS-002	1655 5 DWM 11/15/06	COPC	~~28~~ 37	
HOME2-SS-004 204	1600 1602	COPC	~~39~~	Duplicate taken
HOME3-SS-005	1555	COPC	40	
HOME3-SS-004	1600	COPC	41	
HOME3-SS-003	1605	COPC	42	
HOME3-SS-001	1558	COPC	43	
HOME3-SS-002	1603	COPC	~~44~~ 3	PHOTO SKIP TO 43
HOME2-SS-003	1613	COPC	~~45~~ ~~46~~ 44	
HOME2-SS-005	1620	COPC	~~47~~ 46	
HOME1-SS-001	1622	COPC	~~48~~ 47	
HOME1-SS-003	1620	COPC	~~49~~ 48	
HOME1-SS-002	1625	COPC	~~50~~ 49	
HOME1-SS-004	1630	COPC	50	
HOME1-SS-005	1627	COPC	51	

DWM 11/15

NECR 11-17-06

0745 Arrive on site w/ Theeson. Leah leaves for home after briefing in am. Butch, Carl, Robin, Jesse + Tom (Drillers), Nat, and Arvind arrive.
0815 Safety meeting, stressing concerns for slips, trips, falls, arsenic, and dehydration
0830 Toby heads out to rig to drill two holes by Ponds 1+2. I prepare samples (7 coolers) to be shipped out today.
0930 Meet up w/ Nat and Arvind to help with stepouts on Sed Pad, Pond 3/3a, and NECR1 (Arroyo Bank; AB1). Toby finished both holes by noon, and met with AVM crew, along w/ Carl + Robin.
12:30 Break for lunch
1:30 Head back to site with Toby and Robin to sample Pond 3/3a and Sed Pad.
3:00 Carl and Butch meet up with us to help collect the samples.
4:00 Finished sampling Sed Pad and Pond 3/3a. Head back to office to sort samples

POND 3

SAMPLE ID	TIME	ANALYSIS	PAGE #	COMMENTS
✓ POND3/3A-SS-[illegible]	1330	COPC	1	
✓ POND3/3A-SS-[illegible]	1335	COPC	2	
✓ POND3/3A-SS-[illegible]	1340	COPC	3	
✓ POND3-SS-[illegible]	1345	COPC	4	
✓ POND3-SS-[illegible]	1350	COPC	5	
✓ POND3-SS-[illegible]	1400	COPC	6	
✓ POND3-SS-[illegible]	1410	COPC	7	
✓ POND3-SS-[illegible]	1410	COPC	8	
✓ POND3-SS-[illegible]	1420	COPC	9	
✓ POND3-SS-[illegible]	1430	COPC	10-11	
✓ POND3-SS-[illegible]	1435	COPC	12	
✓ POND3-SS-[illegible]	1440	COPC	13	
✓ POND3-SS-[illegible]	1445	COPC	14	
SED PAD				
✓ SEDPAD-SS-[illegible]	1500	COPC	15	
✓ SEDPAD-SS-[illegible]	1510	COPC	16	
✓ SEDPAD-SS-[illegible]	1514	COPC	17	
✓ SEDPAD-SS-[illegible]	1515	COPC	18	
✓ SEDPAD-SS-[illegible]	1517	COPC	19	
✓ SEDPAD-SS-[illegible]	1522	COPC	20-21	
✓ SEDPAD-SS-[illegible]	1524	COPC	22	
✓ SEDPAD-SS-[illegible]	1525	COPC	23	
✓ SEDPAD-SS-[illegible]	[illegible]	COPC	24	

Sample ID	Time	Analysis	Photo #	Comment
[illegible]	1535	COPC	25	
[illegible]	1534	COPC	26	[illegible]
[illegible]	1542	COPC	27	
[illegible]	1543	COPC	28	

HH 11-17-06

NECR 11-18-06

7:50 arrive on site, and do usual check-in scan, & sorting more samples, and safety meeting Prepare to Sample NECR1 w/ Robin, Carl, ~~Butch~~ HH and Toby
8:40 Leave for site w/ Toby while Carl + Robin prepare COCs and Butch and Jack test Jack's rad-meter @ Pond 1

Sample ID	Time	Analysis	Photo	Comment
✓ NECR1-SS-093	8:50	COPC	29	
✓ NECR1-SS-092	9:00	COPC	30	HH 11-18 ~~EPA DUP~~
✓ POND12-SS-077	9:15	COPC	31	
✓ POND12-SS-069	9:25	COPC	33	
✓ POND12-SS-076	9:20	COPC	32	
✓ POND12-SS-061	9:28	COPC	34	EPA DUP
✓ POND12-SS-050	9:30	COPC	35	
✓ POND12-SS-035	9:35	COPC	36	EPA DUP MIGH DUP
✓ POND12-SS-047	9:40	COPC + Ag	37	Ag
✓ POND12-SS-058	9:50	COPC	38	EPA DUP
✓ POND12-SS-023	9:54	COPC	39	EPA DUP
✓ POND12-SS-014	10:00	COPC	40	
✓ POND12-SS-[illegible]	10:08	COPC	41	EPA DUP
✓ POND12-056	10:15	COPC	42	

	Time	Anal	Photo	Misc
POND 1-2-SS-019	10:25	COPC	43	MWH DUP
PONDI2-SS-042	10:25	COPC	44	
PONDI2-SS-011	10:35	COPC	45	
PONDI2SS-041	10:45	COPC	47	EPA Split
PONDI2-SS-020	10:47	COPC + Ag	46	

Started sampling NECR1 w/ Toby, but moved to PONDI2 after taking 2 samples b/c Nat had NECR1 map + coords. Sampled PONDI2 w/ Toby. Took samples at seventeen locations, but did not sample PONNDI2-SS-040, because only 17 samples were required. Returned to NECR office to organize samples and give EPA their 5 splits from PONDI2. Pt 77 was recorded (initially) as an EPA DUP, but the sample was not found, and split PONDI2-SS-041 instead. Butch + Jack finished w/ their gamma readings - the purpose of which was to give Jack a little on-site ~~experience~~ training. Probably not necessary, but HH

HH

NECR-1

Sample ID	Time	Analysis	Photo #	Misc
NECR/1-SS-[illegible]	[illegible]	COPC	43	
NECR1-SS-013	[illegible]	COPC	44	
NECR1-SS-020	[illegible]	COPC	50	EPA Split
NECR1-SS-025	[illegible]	COPC	51	AG
NECR1-SS-030	[illegible]	COPC	52	Zn Blank Dup
NECR1-SS-049	[illegible]	COPC	53	
NECR1-SS-047	[illegible]	COPC	54	EPA Split
NECR-1-SS-044	[illegible]	COPC	55	AG
NECR-1-SS-066	[illegible]	COPC	56	
NECR-1-SS-065	[illegible]	COPC	57	EPA Split
NECR-1-SS-067	[illegible]	COPC	58	
NECR-1-SS-068	[illegible]	COPC	59	
NECR-1-SS-070	[illegible]	COPC	60	
NECR1-SS-127	[illegible]	COPC	61	AG EPA Split
NECR1-SS-126	[illegible]	COPC	62	
NECR1-SS-129	[illegible]	COPC	63	
NECR1-SS-133	[illegible]	COPC	64	EPA Split
NECR-1-SS-135	[illegible]	COPC	65	
NECR-1-SS-137	[illegible]	COPC	66	
NECR-1-SS-101	~~[illegible]~~ HH 1200	COPC	67	
NECR1-SS-143	1415	COPC	68	MWH DUP
NECR1-SS-138	1425	COPC	69	
NECR1-SS-140	1430	COPC	70	
NECR1-SS-023	1450	COPC	71	

NECR 11-21-06

→ More COCs, shipping coolers: C-1701, C-1757, C-2098, blue iglou, great coleman (C-1520), and another blue iglou ~~to missing sample POND 3 SS 0-1~~ HH 11/21

→ 6 coolers to be shipped

QA/QC

NUCR1 → 33 samples w/ 2 dups

POND 5/3a → 15 samples, 059 marked as dup, but could not find

POND 12 → 19 w/ 2 dups, but surface samples at subsurface locations not counted

SEDPAD → 14 w/ 1 dup

? Is the dup for 022 07?

Getting ready for break, I'm the only one here, so didn't have anyone to conduct safety meeting with.

HH 11/21/06

702-682-3277

UNC NGCR 12/1/06

9:50 Head to boneyard w/ Ron + Bill

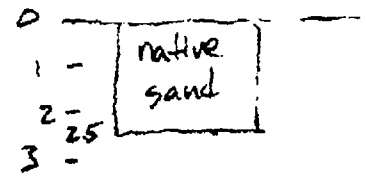
1000 YARD-TP-003 (0-0.5) COPC

1010 YARD-TP-003 (1.0-1.5) VOC

1010 YARD-TP-003 (1.0-1.5) SVOC+Moist

1010 YARD-TP-003 (1.0-1.5) COPC

1010 YARD-TP-003 (1.0-1.5) TCLP



1030 Move to YARD-TP-004 to try and dig deeper by going wider

1110 YARD-TP-004 (9.5-10) VOC

1110 YARD-TP-004 (9.5-10) SVOC+moist

1110 YARD-TP-004 (9.5-10) TCLP

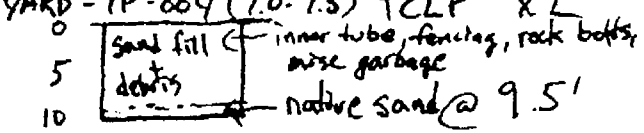
1110 YARD-TP-004 (9.5-10) COPC

1125 YARD-TP-004 (7.0-7.5) VOC x2

1125 YARD-TP-004 (7.0-7.5) SVOC + moisture x2

1125 YARD-TP-004 (7.0-7.5) COPC x2

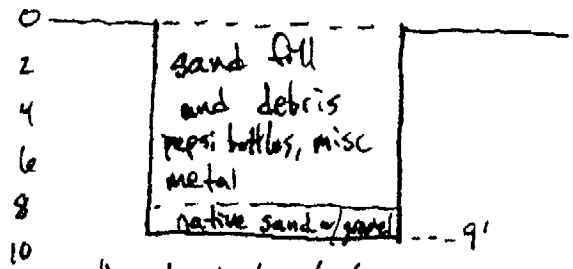
1125 YARD-TP-004 (7.0-7.5) TCLP x2



1150 move to YARD-TP-005 to go deeper

Date 12/1/06

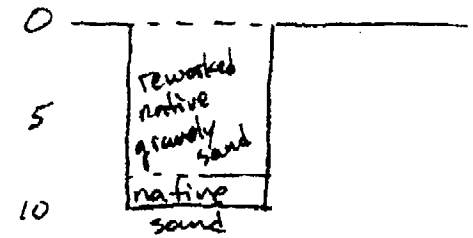
1205 YARD-TP-005 (4.5-5.0) VOC
1205 YARD-TP-005 (4.5-5.0) SVOC + moisture
1205 YARD-TP-005 (4.5-5.0) CPOC
1205 YARD-TP-005 (4.5-5.0) TCLP
1235 YARD-TP-005 (8.5-9.0) VOC
1235 YARD-TP-005 (8.5-9.0) SVOC + moisture
1235 YARD-TP-005 (8.5-9.0) CPOC
1235 YARD-TP-005 (8.5-9.0) TCLP



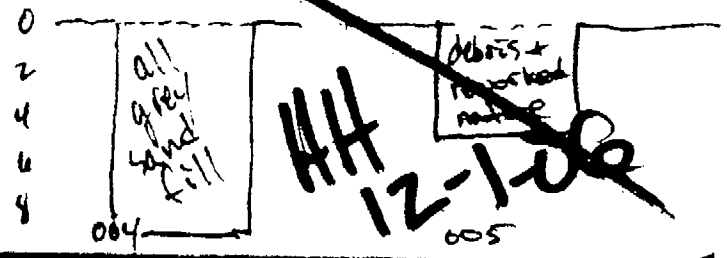
- native hard to distinguish, but did have more cobbles w/ no garbage

1255 Leave site for lunch, w/ backhoe @ Boneyard/NEMSA
1450 Arrive to Boneyard w/ Ron + Bill to sample YARD-TP-002
1510 YARD-TP-002 (9.5-10.0) VOC
1510 YARD-TP-002 (9.5-10.0) SVOC + moisture
1510 YARD-TP-002 (9.5-10.0) CPOC
1510 YARD-TP-002 (9.5-10.0) TCLP

12-1-06



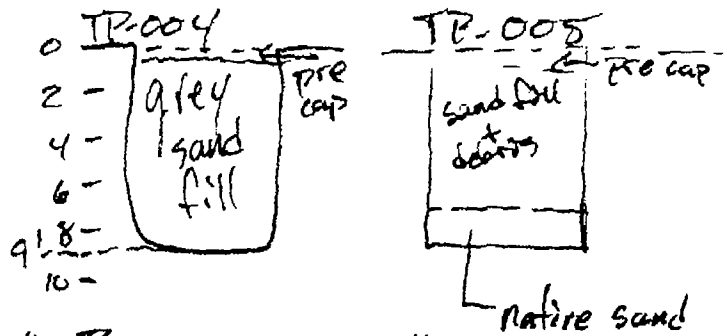
1535 Begin test pit @ NEMSA-TP-~~DL1~~ 004 12/1 HH
1545 NEMSA-TP-~~DL1~~ 004 (8.5-9.0) COPC ?
1550 Move to NEMSA-TP-DL2-005
→ NEED TO GPS both pits ASAP HH 12/1
- presently marked w/ glove + spoon
1605 Move NEMSA-TP-005 b/c too much debris
1620 NEMSA-TP-004 (0-0.5) COPC
→ Forgot to collect initially
1600 NEMSA-TP-005 (0-0.5) COPC
→ close to final TP
1625 NEMSA-TP-005 (4.0-4.5) COPC
~~Would~~ not advance further due to rock bolts and cables



HH 12-1-06

12-2-06

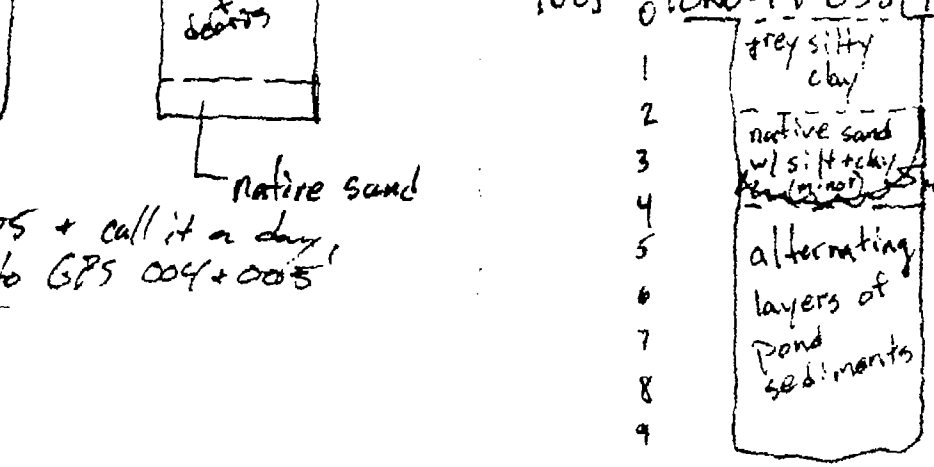
1635 NEMSA-TP-005(8.0-8.5) COPC
→ able to dig past rock bolts, cable, etc... w/ some extra effort



1640 Bury TP-005 + call it a day, still need to GPS 004 + 005 tomorrow

Head to POND1 w/ Carl, Bill, Leah, and Ron. Leah dons Tyvek, booties, + gloves due to elevated risk in the POND

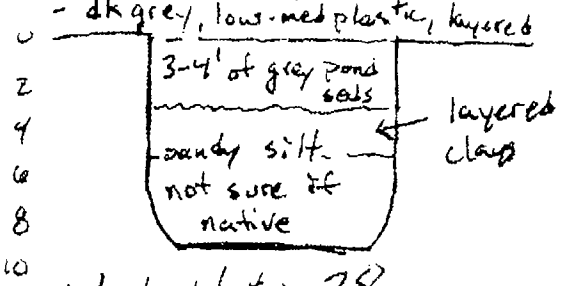
0940 POND-TP-035(1.0-1.5) COPC Photo #6
0943 POND-TP-035(2.0-2.5) COPC #7
1005 POND-TP-035(9.0-9.5) COPC



1015 Move to POND1-TP-058

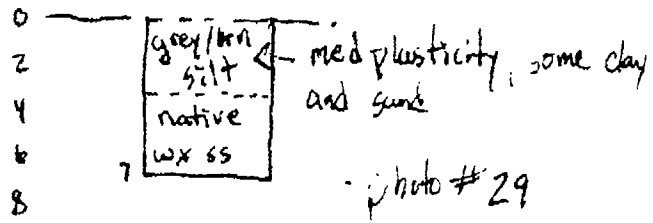
12/2

1040 POND1-TP-058 (8.5-9.0) COPC
1050 POND1-TP-058 (4.5-5.0) COPC
- dk grey, low-med plastic, layered



→ Last photo # is 28

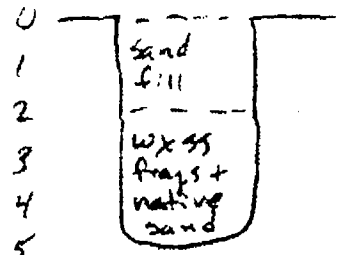
1120 Move to POND2, test entry w/ Jeep, and Ron thinks the backhoe will make it
1125 Start POND2-TP-030
~~1130~~ 1125 POND2-TP-030 (4.5-5.0) COPC
- purpleish grey platey pliable soft laminated sediments, weathered sandstone
1140 POND2-TP-030 (~~1.5~~ 2.0-3.0) COPC



- photo # 29

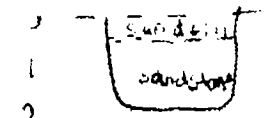
1200 Break for lunch, Carl leaves for home, Leah, Ron, ~~Carl~~ Russ, + Hans stay

1320 Head back to site, drive up backside SF1 w/ backhoe, decon buckets on backhoe b/c ponds 1+2 were very hot
1340 SAND1-TP-049 (1.0-1.5)
1350 SAND2-TP-049 (3.5-4.0) duplicate
- 0-2' sand fill
- 2-5 native weathered sandstone
  - 0.5" - >6" ss frags



Photos # 31, 32, 33

1400 Start TP-043 @ SAND1
1410 SAND1-TP-043 (1.0-1.5)
0-0.5' light brown sand till
1-1.5 gray + tan sandstone, crumbly platy, bedded, weathered to sandy soil



Photos # 54, 55, 56, 57

1415 Start TP-063 @ SAND1

NECR 12/02/06

con't SAND1-TP-063 testpit
1425 SAND1-TP-063 (0.5-1.0)
1427 SAND1-TP-063 (1.5-2.0)

0
1 gray sandfil
2 weathered sandstone
3
1-2 ft weathered tan/gray sandstone + soil sandy
0-1 ft gray sand fill, m-crs sand, moist
photo #38, 39, 40
1435 SAND1-TP-068
1438 SAND1-TP-068 (0.5-1.0)
1440 SAND1-TP-068 (1.5-2.0)
0-1 ft gray sand fill, m-crs
1-2 ft tan sandstone, weathered

0
1 gray sandy fill
2 weather tan sandstone

~~photo # 38, 39, 40~~ dwm 12/02/06
1450 Start TP-030
1455 SAND-TP-030 (3.5-4.0)
dig widen pit to confirm ~~sand~~ rock @ 4.0 ft
hit rock @ 4.0, fill as symmetrical
in pit 1505 SAND-TP-030 (1.0-1.5)

NECR 12/02/06

con't 030 test pit photo # 41, 42, 43, 44
looking NE look @ 1 ft on N side

0
1 brn sandy silt
2 gray sand
3 weathered sandstone
4 no recompetent, can't dig in, leave
teeth marks from hoe

1515 Finish all 5 testpits @ SAND1
Go eval access into Pond 3 with some
excavation work, think we can get in SE
corner
1555 NECR1-TP-138 - 6 sub location
for NECR-1
1600 NECR1-TP-138 (3.5-4.0 ft)

0
1 reworked native soil
2 no trash, no sandfill
3 @ 2.5 ~1" plastic pipe we broke
4 weathered sandstone + sand soil

photos 45, 46, 47, 48, 49, 50
1615 Head back to office bldg
1645 Scan out, Leah, Hans, Bill + Ronald
leave site

dwm 12/02/06

900 → Head to Pond 3 w/ Bill Sass + meet Ron there to ~~fix~~ build entrance road

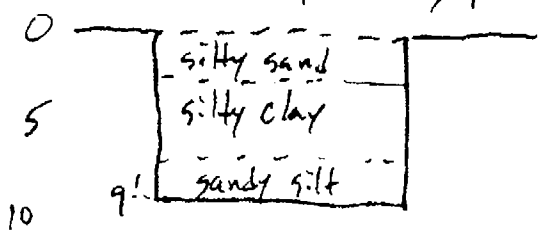
915 Start on POND3-014 but no sample b/c no supplies

920 Move to POND3-037 b/c ground is still frozen

930 POND3-TP-037 (0-0.5)
- brn silty sand

935 POND3-TP-037 (5-5.5)
- brn, silty clay, med-high plasticity

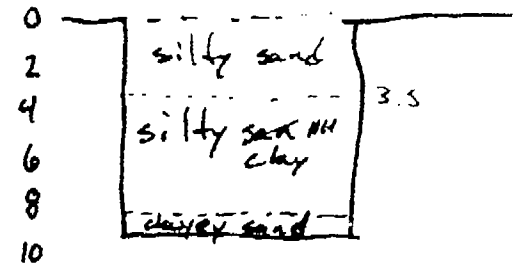
940 POND3-TP-037 (8.5-9.0)
- brn, moist, low plasticity, sandy silt



950 Move to POND3-TP-029

1000 POND3-TP-029 (6.0-6.5)
- gravely sand, brn, cobbles, low plasticity
? native

1015 POND3-TP-029 (9-9.5) clayey sand
- grey clayey chunks, oxidation, no cobbles



1025 POND3-TP-029 (3-3.5) (Photo #14)
- fine-med grained sand, <1" cobbles

→ Micro-r readings dropped w/ increased depth

1035 Poking around POND3-030, but not sampling, dug to 3.5' silty sand, no obvious indication of pond seds

1045 Back to POND3-TP-(014)

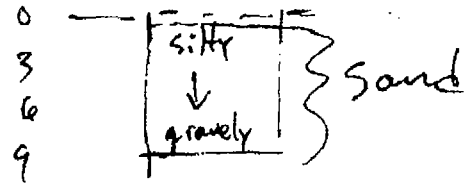
1050 POND3-TP-014 (6.5-7.0)
- brn silty sand, low plasticity
- some small cobbles

1105 POND3-TP-014 (8.5-9.0)
- gravely sand, light brn, cobbles, ss frags
- erosion channel shows gravel w/ 6" rock frags ~4' below bottom of TP-014

→ Very hard to distinguish native from pond seds

2-5-06

POND3-TP-014



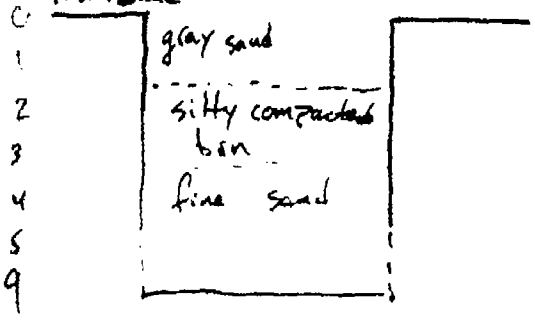
- 3" topsoil hard to determine, but definitely darker, harder (?frost?)

1135 MOVE to POND3-TP-007

1145 POND3-TP-007 (5-5.5)

1150 POND3-TP-007 (9-9.5)

- H brn f sand



1205 Move to NEMSA 004 to sample missed intervals

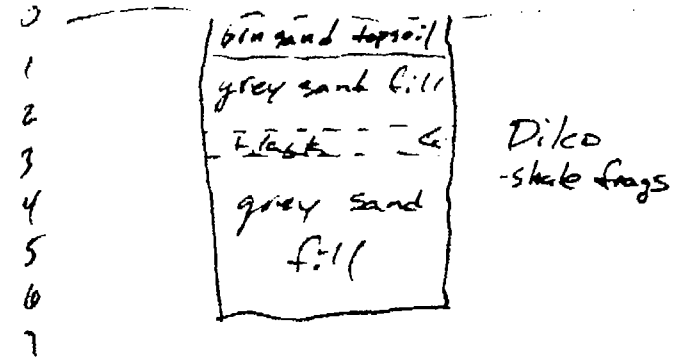
1207 NEMSA-TP-004 (1-1.5)

- pre-cap, grey sand fill

1215 NEMSA-TP-004 (6-6.5) Photo #26

- grey sand fill

12-5-06



1335: Dump extra samples in POND1

1400: Map cliff wall @ NECR2 + SANDFILL2

1420: Map arroyo just outside sedpad

1440: NECR1 to resample 028

1440: NECR1-SS-028

- collected for Ag analysis b/c Ag was not marked on previous COC

1300 on 11/15/06 - NECR Drilling
1300 - Tailgate safety meeting
1400 - Setting up @ NECR1-SB-90

Sample #1
NECR1-SB-090 (0-0.5)

090
X 130
131
46
16
} NECR SBs

1430 - Drilling begins @ SB-90
1455 - Drilled to 15'
Collected:
NECR1-SB-90 (0.5)
(10.0)
(15.0)
1030 - Drilled to 45'. Native material at ~30 bgs

1700 - Back to office to sort samples

[signature]

1/10/04 NECR Drilling

0800 - Meet at office. Do Scanning + HS meeting
0850 - Mob out to NECR-1
0900 - Setting up on 095. Collect surface sample: NECR1-SB-095 (0-0.5)
0915 - Drilling starts

0945 - Hit bedrock @ 15'
Collected 4 samples
0.5
5.0
10.0
15.0

1000 - Mobed over to SB-131
1010 - Drilling starts
1045 - In SB-131 we encountered black, petroleum smelling soil from ~17-19' bgs
1100 - Finished drilling
1230 - Drillers decontaminating augers
Break for lunch

1350 - Set up on NECRI-SB-046
1450 Finished drilling to 30'
Samples
0' 20'
5' 25'
10' 30'
15'
Native ground @ ~24'.

1510 - Moved over to NECRI-SB-061
1515 - Drilling begins
1600 - Drilled to 20'. Samples @ 0, 5, 10 + 20'.
1605 Moved over to 3/30-SB-01
1700 - Drilled to 25'. EOH.
1730 - Bore to office, packed Samples

R Sample

11-17-06
0800 - Arrived at office. Packed TPH/VOC sample from NECRI-SB-151 (24)
0830 - Attend tailgate safety meeting.
0900 Moved w/drillers to Pond 1/2 SB-82
0907 - Drilling begins.
1000 - TD @ 22' in bedrock
Samples @ 0, 5, 10, 15 + 20

1030 - Moved over to 1/2-SB 71
1035 - Drilling begins
1115 - Drilled to 20', hit bedrock @ ~15.5'. Samples at 0, 5, 10 + 15'.
1300 - Toby leaving site. HydroGeophys will finish on their own.

RS

- Arrived @ NECR offices
at w/ Chris Baldyga of
HydroGeophysics. Checked
w/ Rick of UNC; got key
- Drove to NECR w/ Chris
- Field checked each of
the areas to be surveyed
- Setting up EM/MAG
equipment and documents to
NEMSA.
- Set up mag base stations
- Survey of NEMSA begins.
Completed survey of
NEMSA + Boneyard.
Completed breakdown.
Done for day

2/18/07 - Day 2 of Geophys Survey

0800 - Still in town, waiting
for HydroGeophys. HG is
trouble-shooting some
software problems
1000 - Now @ Mine Office
waiting for HG's arrival.
1045 - HydroGeophysics arrived
1100 - Arrived @ NECR &
setting up equipment.
1210 - Set up complete Commenc.
Survey of Magazine Area.

FIELD CHANGE REQUEST FORMS

FIELD CHANGE REQUEST FORM
UNC Northeast Churchrock Mine Removal Site Evaluation

Task Name: Arroyo Characterization	**FCR No:** FCR#001
Requested By: Leah Wolf Martin –MWH	**Date:** 11/16/06

Task or activity description:
The sediments in the unamed arroyo will be evaluated by collection of sediments in the top one foot of ground. Ten transects will be evenly spaced between the the former NPDES discharge point and the confluence with the next unnamed arroyo. Along each transect, three grab samples from 0 to 1 foot bgs will be collected for laboratory analysis of Ra-226 and metals. The three samples will be evenly spaced across the bottom of the arroyo. A scanning gamma radiation survey will also be performed longitudanally along the axis of the channel.

Affected Plan or Procedures:
Final Removal Site Evaluation Work Plan (MWH, August 2006) Section 3.7.2 and Section 5.1.2

Requested Variation:
The sediments in the unnamed arroyo will be evaluated by collection of sediments in the top three feet of ground. Ten transects will be evenly spaced between the the former NPDES discharge point and the confluence with the next unnamed arroyo. Along each transect, one grab samples from the middle of the channel from 0 to 1 foot bgs, 1 to 2 feet bgs, and 2 to 3 feet bgs will be collected for laboratory analysis of Ra-226 and metals. The samples will be collected with a hand auger. A scanning gamma radiation survey will also be performed longitudinally along each bank of the channel.

Justification:
The results of the correlation samples collected in the unnamed arroyo on August 17th 2006 and summarized in the Background and Correlation Technical Memorandum (MWH, October 2006) show that the surface soil sediments are above the field screening level of 2.2 pCi/g. The range of Ra-226 concentrations along the length of the arroyo from NECR-1 north to the confluence with the next unnamed arroyo ranged from 9.7 to 27.6 pCi/g. Additional surface soil samples and a centerline scan will provide redundant information. A more useful data collection strategy would include samples with depth and a scan of the bank of each channel to determine the vertical and lateral distribution of potential contamination.

Comments:

Approved by: _____ **Date:** _____
MWH Project Manager

Authorized by: _____ **Date:** _____
UNC Project Manager

Approval/Concurrence: _____ **Date:** _____
EPA Project Manager

FIELD CHANGE REQUEST FORM
UNC Northeast Churchrock Mine Removal Site Evaluation

Task Name: Judgmental Scan of Boneyard and NEMSA **Requested By:** Leah Wolf Martin –MWH	**FCR No:** FCR#002 **Date:** 11/16/06

Task or activity description:
A scan will be performed over a maximum of 20 percent of the Boneyard and NEMSA.

Affected Plan or Procedures:
Final Removal Site Evaluation Work Plan (MWH, August 2006) Section 3.7.4

Requested Variation:
Do not perform a radiological scanning at the Boneyard and NEMSA.

Justification:
The Boneyard and NEMSA were reclaimed in 1994 with approximately one foot of toposiol/cover material. Material beneath the cover in the Boneyard and NEMSA are emitting gamma radiation that is not completely shielded by the one foot over cover material. Therefore, the 2"x2" NaI detector measurement is above the field screening level of 4,600 cpm (2.2 pCi/g) throughout the the Boneyard and NEMSA. The judgemental surface and subsurface soil samples will confirm that the topsoil/cover material is below the field screening level and the subsurface locations will provide information as to the depth of buried materials in these survey areas.

Comments:

Approved by: _____ **Date:** _____
MWH Project Manager

Authorized by: _____ **Date:** _____
UNC Project Manager

Approval/Concurrence: _____ **Date:** _____
EPA Project Manager

FIELD CHANGE REQUEST FORM
UNC Northeast Churchrock Mine Removal Site Evaluation

Task Name: NECR-1 Step Out Areas	**FCR No:** FCR#003
Requested By: Leah Wolf Martin –MWH	**Date:** 11/16/06

Task or activity description:
Static surveys will be performed at specified grid nodes within survey areas or other locations, such as correlation sampling points as needed in the field. The grid nodes were determined using VSP on a 80-foot triangular grid cast on a random origin. The 80-foot triangular grid will be extended beyond the initial survey area boundary to assist with the boundary delineation evaluation.

Affected Plan or Procedures:
Final Removal Site Evaluation Work Plan (MWH, August 2006) Section 5.3.3.2

Requested Variation:
Collect soil samples at step-out locations in NECR-1 near the field screening level to confirm that those locations are elevated over screening level due to shine from pile. A total of 13 surface soil samples will be collected from the areas north east of NECR-1 in the NECR-1 step-out areas. Some of the samples will be biased at the low end, the rest will provide a range in the step-out area. In addition soil samples will be collected at equally spaced transects along the drainage running from east side to fenceline/water pond road.

Justification:
Static gamma measurements due to step-outs for NECR-1 show readings above the action level that require additional characterization.

Comments:

Approved by: _____ **Date:** _____
MWH Project Manager

Authorized by: _____ **Date:** _____
UNC Project Manager

Approval/Concurrence: _____ **Date:** _____
EPA Project Manager

FIELD CHANGE REQUEST FORM
UNC Northeast Churchrock Mine Removal Site Evaluation

Task Name: Additional Survey Areas	**FCR No:** FCR#004
Requested By: Leah Wolf Martin –MWH	**Date:** 11/27/06

Task or activity description:
Vent Hole 8 and the former Trailer Park area will be added as site screening survey areas. Radiological scans will be performed at each of these areas using the same scanning methods as the home sites. Areas elevated above the field screening level will be marked with flagging and the points/areas will be located by GPS.

Affected Plan or Procedures:
Final Removal Site Evaluation Work Plan (MWH, August 2006) Section 3.7.4 and 5.3.3.2

Requested Variation:
These two survey areas were not identified in the Final Removal Site Evaluation Work Plan (MWH, August 2006).

Justification:
During site walks conducted by the EPA during the week of August 15, 2006 and November 13, 2006 areas in the Trailer Park and Vent Hole 8 areas reported elevated measurements using a Ludlum micro-r-meter. The EPA guided MWH and AVM to the elevated areas in each of the two survey areas. A judgmental scan was selected to characterize each of these areas.

Comments:

Approved by: _____ **Date:** _____
MWH Project Manager

Authorized by: _____ **Date:** _____
UNC Project Manager

Approval/Concurrence: _____ **Date:** _____
EPA Project Manager

FIELD CHANGE REQUEST FORM

UNC Northeast Churchrock Mine Removal Site Evaluation

Task Name: GPR of Survey Areas	**FCR No:** FCR#005
Requested By: Leah Wolf Martin –MWH	**Date:** 11/21/06

Task or activity description:
Use ground penetrating radar (GPR) to identify buried materials in the subsurface and to identify the vertical and lateral extent of buried materials in the Boneyard and XXX. GPR will be performed along X foot transects in each area.

Affected Plan or Procedures:
Final Removal Site Evaluation Work Plan (MWH, August 2006) Section 3.7.4

Requested Variation:
Use GPR as a field investigation tool to identify the presence of buried materials as well as define the vertical and later extent of buried materials in the Boneyard and XXX. The Final Removal Site Evaluation Work Plan (MWH, August 2006) did specify the use of GPR as an investigation tool for the Boneyard. In addition, the other areas were not identified in the Work Plan as area requiring any investigation.

Justification:

Comments:

Approved by: _____ **Date:** _____
MWH Project Manager

Authorized by: _____ **Date:** _____
UNC Project Manager

Approval/Concurrence: _____ **Date:** _____
EPA Project Manager

BORING LOGS

PIEZOMETER NUMBER: **POND1/2-SB-71** SHEET 1 of 2

LOCATION COORDINATES: N: 3948695.7 E: 725413.9 LOGGED BY: T. Leeson

GROUND ELEVATION (FAMSL): TOC ELEVATION (FAMSL): NECR DRILLING COMPANY: WDC DRILL RIG:

DRILLING START DATE/TIME: 11/17/2006 DATE/TIME FINISHED: 11/17/2006

DEPTH TO WATER DURING DRILLING (ft bgs): DATE/TIME of WATER DEPTH (ft TOC):

TOTAL DEPTH: 20.0

ELEV. ELEVATION (FT)	SOIL PROFILE: SOIL DESCRIPTION	SAMPLES: USCS CLASS	SAMPLES: SPLIT SPOON NO.	SAMPLES: Blow Count/6"	SAMPLES: DEPTH (Feet)	GRAPHIC LOG	WELL SCHEMATIC
	silty SAND, angular frags of sandstone, yellowish-brn	*SM*	*2*	*7/12/14*	6, 8		
	same as above	*SM*	*3*	*10/8/20*	10, 12, 14		
	silty SAND, yellowish brn, ROCK at 15.5', able to drill beyond	*SM*	*4*	*50*	16, 18		

Continued Next Page

Project No.:	Design By:	Scale:
1004896	H. Hoffman	24:1
File:	Drawn By:	Date:
NECR Borelogs	H. Hoffman	4/7/2007

MONTGOMERY WATSON

NECR

UNC

PIEZOMETER NUMBER:	**POND1/2-SB-71**	SHEET 2 of 2
LOCATION COORDINATES: N: 3948695.7 E: 725413.9	LOGGED BY: F. Lawson	
GROUND ELEVATION (FAMSL): TOC ELEVATION (FAMSL): NECR	DRILLING COMPANY: WDC	DRILL RIG:
DRILLING START DATE/TIME: 11/17/2006	DATE/TIME FINISHED: 11/17/2006	
DEPTH TO WATER DURING DRILLING (ft bgs):	DATE/TIME of WATER DEPTH (ft TOC):	
TOTAL DEPTH: 20.0		

ELEV. ELEVATION (FT)	SOIL PROFILE: SOIL DESCRIPTION	SAMPLES: USCS CLASS	SPLIT SPOON NO.	Blow Count/6"	DEPTH (Feet)	GRAPHIC LOG	WELL SCHEMATIC
	sandstone bedrock, TD=20.0'	ROCK		50	20		
					22		
					24		
					26		
					28		
					30		
					32		

Project No.:	Design By:	Scale:
1004896	H. Hoffman	24:1
File:	Drawn By:	Date:
NECR Borelogs	H. Hoffman	4/7/2007

MONTGOMERY WATSON

NECR

UNC

PIEZOMETER NUMBER: **POND1/2-SB-82** SHEET 1 of 2

LOCATION COORDINATES: N: 3948738.2 E: 725389.9 LOGGED BY: T. Leeson

GROUND ELEVATION (FAMSL): TOC ELEVATION (FAMSL): NECR DRILLING COMPANY: WDC DRILL RIG:

DRILLING START DATE/TIME: 11/17/2006 DATE/TIME FINISHED: 11/17/2006

DEPTH TO WATER DURING DRILLING (ft bgs): 19.0 DATE/TIME of WATER DEPTH (ft TOC):

TOTAL DEPTH: 22.0

ELEV. ELEVATION (FT)	SOIL PROFILE: SOIL DESCRIPTION	SAMPLES: USCS CLASS	SPLIT SPOON NO.	Blow Count/6"	DEPTH (Feet)	GRAPHIC LOG	WELL SCHEMATIC
	silty SAND, brown. low plasticity, moist, fine, wood	*SM*	*1*	*5/10/12*	6		
					8		
	same as above, with wood	*SM*	*2*	*6/9/8*	10		
					12		
					14		
	wx SANDSTONE, yellowish brown, silty fine sand	*ROCK*	*3*	*13/28/50*	16		
					18		

Continued Next Page

Project No.:	Design By:	Scale:
1004896	H. Hoffman	24:1
File:	Drawn By:	Date:
NECR Borelogs	H. Hoffman	4/7/2007

MONTGOMERY WATSON

NECR

UNC

PIEZOMETER NUMBER: **POND1/2-SB-82** SHEET 2 of 2

LOCATION COORDINATES: N: 3948738.2 E: 725389.9 LOGGED BY: T. Loeson

GROUND ELEVATION (FAMSL): TOC ELEVATION (FAMSL): NECR DRILLING COMPANY: WDC DRILL RIG:

DRILLING START DATE/TIME: 11/17/2006 DATE/TIME FINISHED: 11/17/2006

DEPTH TO WATER DURING DRILLING (ft bgs): 19.0 DATE/TIME of WATER DEPTH (ft TOC):

TOTAL DEPTH: 22.0

ELEV. ELEVATION (FT)	SOIL PROFILE: SOIL DESCRIPTION	SAMPLES: USCS CLASS	SPLIT SPOON NO.	Blow Count/6"	DEPTH (Feet)	GRAPHIC LOG	WELL SCHEMATIC
	wx SANDSTONE, brown silty sand, drilling in bedrock	ROCK	4	25/50	20		
	TD=22.0'	ROCK			22		
					24		
					26		
					28		
					30		
					32		

Project No.:	Design By:	Scale:
1004896	H. Hoffman	24:1
File: NECR Borelogs	Drawn By: H. Hoffman	Date: 4/7/2007

MONTGOMERY WATSON

NECR

UNC

PIEZOMETER NUMBER: **NECR1-SB-131** SHEET 1 of 2

LOCATION COORDINATES: N: 3949056.6 E: 725570.2 LOGGED BY: H. Hoffman/T. Leeson

GROUND ELEVATION (FAMSL): TOC ELEVATION (FAMSL): NECR DRILLING COMPANY: WDC DRILL RIG:

DRILLING START DATE/TIME: 11/16/2006 10:10 DATE/TIME FINISHED: 11/16/2006 11:00

DEPTH TO WATER DURING DRILLING (ft bgs): DATE/TIME of WATER DEPTH (ft TOC):

TOTAL DEPTH: 23.0

ELEV. ELEVATION (FT)	SOIL PROFILE: SOIL DESCRIPTION	SAMPLES: USCS CLASS	SPLIT SPOON NO.	Blow Count/6"	DEPTH (Feet)	GRAPHIC LOG	WELL SCHEMATIC
	SAND, reddish grey, low plasticity, moist	SP	1	3/2/4	6, 8		
	SAND, clayey silt, brown, mod plasticity, moist to wet	SP	2	4/5/10	10, 12, 14		
	clayey SILT, crumbled sandstone, brown, moist, mod to high plasticity	CL-ML	3	16/8/6	16, 18		

Continued Next Page

Project No.:	Design By:	Scale:
1004896	H. Hoffman	24:1
File:	Drawn By:	Date:
NECR Borelogs	H. Hoffman	4/7/2007

MONTGOMERY WATSON

NECR

UNC

PIEZOMETER NUMBER: **NECR1-SB-131** SHEET 2 of 2

LOCATION COORDINATES: N: 3949056.6 E: 725570.2 LOGGED BY: H. Hoffman/T. Leeson

GROUND ELEVATION (FAMSL): TOC ELEVATION (FAMSL): NECR DRILLING COMPANY: WDC DRILL RIG:

DRILLING START DATE/TIME: 11/16/2006 10:10 DATE/TIME FINISHED: 11/16/2006 11:00

DEPTH TO WATER DURING DRILLING (ft bgs): DATE/TIME of WATER DEPTH (ft TOC):

TOTAL DEPTH: 23.0

ELEV. ELEVATION (FT)	SOIL PROFILE: SOIL DESCRIPTION	SAMPLES: USCS CLASS	SPLIT SPOON NO.	Blow Count/6"	DEPTH (Feet)	GRAPHIC LOG	WELL SCHEMATIC
	clayey SILT, black, mod plasticity, wx mancos, sampled mancos separate, petroleum smell	CL-ML	4	22/25/26	20		
	SILT, black to brown, med plasticity, moist, mancos at top of sample, petroleum smell, bedrock at 22', TD=23.0'	ML	5	50/48/R	22		
					24		
					26		
					28		
					30		
					32		

Project No.:	Design By:	Scale:
1004896	H. Hoffman	24:1
File:	Drawn By:	Date:
NECR Borelogs	H. Hoffman	4/7/2007

MONTGOMERY WATSON

NECR

UNC

PIEZOMETER NUMBER: **NECR1-SB-90** SHEET 1 of 3

LOCATION COORDINATES: N: 3949015.1 E: 725434.4 LOGGED BY: T. Leeson

GROUND ELEVATION (FAMSL): TOC ELEVATION (FAMSL): NECR DRILLING COMPANY: WDC DRILL RIG:

DRILLING START DATE/TIME: 11/15/06 14:30 DATE/TIME FINISHED: 11/15/06 16:30

DEPTH TO WATER DURING DRILLING (ft bgs): DATE/TIME of WATER DEPTH (ft TOC):

TOTAL DEPTH: 45.0

ELEV. ELEVATION (FT)	SOIL PROFILE: SOIL DESCRIPTION	SAMPLES: USCS CLASS	SPLIT SPOON NO.	Blow Count/6"	DEPTH (Feet)	GRAPHIC LOG	WELL SCHEMATIC
	gravely SAND, brown, moist, some pieces of rock, minor silt	*SP*	*1*	*11/13/17*	6, 8		
	silty SAND, fine grained, moist, yellowish brown	*SM*	*2*	*15/14/19*	10, 12, 14		
	silty SAND, grey, fine graineds, moist, well sorted	*SM*	*3*	*9/12/12*	16, 18		

Continued Next Page

Project No.:	Design By:	Scale:
1004896	H. Hoffman	24:1
File:	Drawn By:	Date:
NECR Borelogs	H. Hoffman	4/7/2007

MONTGOMERY WATSON

NECR

UNC

PIEZOMETER NUMBER: **NECR1-SB-90** SHEET 2 of 3

LOCATION COORDINATES: N: 3949015.1 E: 725434.4 LOGGED BY: T. Leeson

GROUND ELEVATION (FAMSL): TOC ELEVATION (FAMSL): NECR DRILLING COMPANY: WDC DRILL RIG:

DRILLING START DATE/TIME: 11/15/06 14:30 DATE/TIME FINISHED: 11/15/06 16:00

DEPTH TO WATER DURING DRILLING (ft bgs): DATE/TIME of WATER DEPTH (ft TOC):

TOTAL DEPTH: 45.0

ELEV. ELEVATION (FT)	SOIL PROFILE: SOIL DESCRIPTION	SAMPLES: USCS CLASS	SPLIT SPOON NO.	Blow Count/6"	DEPTH (Feet)	GRAPHIC LOG	WELL SCHEMATIC
	same as above, with some angular pieces of red brick	SM	4	5/8/24	20		
					22		
					24		
	same as above	SM	5	4/6/8	26		
					28		
	silty SAND, yellowish brown, v fine grained, moist, piece of wire	SM	6	4/9/8	30		
					32		

Continued Next Page

Project No.: 1004896	Design By: H. Hoffman	Scale: 24:1
File: NECR Borelogs	Drawn By: H. Hoffman	Date: 4/7/2007

MONTGOMERY WATSON

NECR

UNC

PIEZOMETER NUMBER: **NECR1-SB-90** SHEET 3 of 3

LOCATION COORDINATES: N: 3949015.1 E: 725434.4 LOGGED BY: T Lueson

GROUND ELEVATION (FAMSL): TOC ELEVATION (FAMSL): NECR DRILLING COMPANY: WDC DRILL RIG:

DRILLING START DATE/TIME: 11/15/06 14:30 DATE/TIME FINISHED: 11/15/06 16:30

DEPTH TO WATER DURING DRILLING (ft bgs): DATE/TIME of WATER DEPTH (ft TOC):

TOTAL DEPTH: 45.0

ELEV. ELEVATION (FT)	SOIL PROFILE: SOIL DESCRIPTION	SAMPLES: USCS CLASS	SPLIT SPOON NO.	Blow Count/6"	DEPTH (Feet)	GRAPHIC LOG	WELL SCHEMATIC
					34		
	same as above	SM	7	4/5/8	36		
					38		
	same as above	SM	8	4/5/8	40		
					42		
					44		
	same as above, increasing clay TD=45.0'	SM	9	3/3/6	46		

Project No.:	Design By:	Scale:
1004896	H. Hoffman	24:1
File:	Drawn By:	Date:
NECR Borelogs	H. Hoffman	4/7/2007

MONTGOMERY WATSON

NECR

UNC

PIEZOMETER NUMBER: **NECR1-SB-046** SHEET 1 of 2

LOCATION COORDINATES: N: 4948933.0 E: 725424.0 LOGGED BY: H. Hoffman

GROUND ELEVATION (FAMSL): TOC ELEVATION (FAMSL): NECR DRILLING COMPANY: WDC DRILL RIG:

DRILLING START DATE/TIME: 11/16/2006 13:50 DATE/TIME FINISHED: 11/16/2006 14:50

DEPTH TO WATER DURING DRILLING (ft bgs): DATE/TIME of WATER DEPTH (ft TOC):

TOTAL DEPTH: 30.0

ELEV. ELEVATION (FT)	SOIL PROFILE: SOIL DESCRIPTION	SAMPLES: USCS CLASS	SPLIT SPOON NO.	Blow Count/6"	DEPTH (Feet)	GRAPHIC LOG	WELL SCHEMATIC
	SAND, grey-lt brn, low plasticity, moist	*SW*	*1*	*3/3/4*	6, 8		
	SAND, grey-lt brn, low plasticity, moist	*SW*	*2*	*8/10/6*	10, 12, 14		
	clayey SILT, with some sand, dk brn, mod plasticity, moist	*SC-SM*	*3*	*4/5/7*	16, 18		

Continued Next Page

Project No.: 1004896	Design By: H. Hoffman	Scale: 24:1	NECR
File: NECR Borelogs	Drawn By: H. Hoffman	Date: 4/7/2007	
MONTGOMERY WATSON			UNC

PIEZOMETER NUMBER: **NECR1-SB-046** SHEET 2 of 2

LOCATION COORDINATES: N: 3948933.0 E: 725424.0 LOGGED BY: H. Hoffman

GROUND ELEVATION (FAMSL): TOC ELEVATION (FAMSL): NECR DRILLING COMPANY: WDC DRILL RIG:

DRILLING START DATE/TIME: 11/16/2006 13:50 DATE/TIME FINISHED: 11/16/2006 14:50

DEPTH TO WATER DURING DRILLING (ft bgs): DATE/TIME of WATER DEPTH (ft TOC):

TOTAL DEPTH: 30.0

ELEV. ELEVATION (FT)	SOIL PROFILE: SOIL DESCRIPTION	SAMPLES: USCS CLASS	SPLIT SPOON NO.	Blow Count/6"	DEPTH (Feet)	GRAPHIC LOG	WELL SCHEMATIC
	SILT, brn, mod-low plasticity, moist, native at 24'	ML	4	6/11/12	20		
					22		
					24		
					26		
					28		
	SILT, brn, mod plasticity, moist, native, TD=30.0'	ML	5	4/11/11	30		
					32		

Project No.:	Design By:	Scale:
1004896	H. Hoffman	24:1
File:	Drawn By:	Date:
NECR Borelogs	H. Hoffman	4/7/2007

MONTGOMERY WATSON

NECR

UNC

PIEZOMETER NUMBER: **NECR1-SB-095** SHEET 1 of 1

LOCATION COORDINATES: N: 3949017.9 E: 725546.1 LOGGED BY: T. Leeson

GROUND ELEVATION (FAMSL): TOC ELEVATION (FAMSL): NECR DRILLING COMPANY: WDC DRILL RIG:

DRILLING START DATE/TIME: 11/16/2006 9:15 DATE/TIME FINISHED: 11/16/2006 9:45

DEPTH TO WATER DURING DRILLING (ft bgs): DATE/TIME of WATER DEPTH (ft TOC):

TOTAL DEPTH: 15.0

ELEV. ELEVATION (FT)	SOIL PROFILE: SOIL DESCRIPTION	SAMPLES: USCS CLASS	SPLIT SPOON NO.	Blow Count/6"	DEPTH (Feet)	GRAPHIC LOG	WELL SCHEMATIC
	poorly graded SAND, greyish brn, moist, low plasticity	SP	1	5/6/5	6, 8		
	sandy SILT, brn, moist, mod plasticity	SM	2	3/7/13	10, 12, 14		
	clayey SILT, lt brn. moist, mod-high plasticity, bedrock at 15', TD=15.0'	ML	3	13/R/R	16, 18		

Project No.:	Design By:	Scale:
1004896	H. Hoffman	24:1
File: NECR Borelogs	Drawn By: H. Hoffman	Date: 4/7/2007

MONTGOMERY WATSON

NECR

UNC

PIEZOMETER NUMBER: **POND3/3a-SB-061** SHEET 1 of 2

LOCATION COORDINATES: N: 3948850.4 E: 725323.6 LOGGED BY: H. Hoffman

GROUND ELEVATION (FAMSL): TOC ELEVATION (FAMSL): NECR DRILLING COMPANY: WDC DRILL RIG:

DRILLING START DATE/TIME: 11/16/2006 DATE/TIME FINISHED: 11/16/2006

DEPTH TO WATER DURING DRILLING (ft bgs): DATE/TIME of WATER DEPTH (ft TOC):

TOTAL DEPTH: 25.0

ELEV. ELEVATION (FT)	SOIL PROFILE: SOIL DESCRIPTION	SAMPLES: USCS CLASS	SPLIT SPOON NO	Blow Count/6"	DEPTH (Feet)	GRAPHIC LOG	WELL SCHEMATIC
	silty SAND, brown w/ some red streaks, moist, low plasticity	*SM*	*1*	*16/18/19*	6		
					8		
	silty SAND, brown, moist low plasticity	*SM*	*2*	*12/19/22*	10		
					12		
					14		
	same as above	*SM*	*3*	*15/17/18*	16		
					18		

Continued Next Page

Project No.:	Design By:	Scale:
1004896	H. Hoffman	24:1
File:	Drawn By:	Date:
NECR Borelogs	H. Hoffman	4/7/2007

MONTGOMERY WATSON

NECR

UNC

PIEZOMETER NUMBER: **POND3/3a-SB-061** SHEET 2 of 2

LOCATION COORDINATES: N: 3048850.4 E: 725323.6 LOGGED BY: H Hoffman

GROUND ELEVATION (FAMSL): TOC ELEVATION (FAMSL): NECR DRILLING COMPANY: WDC DRILL RIG:

DRILLING START DATE/TIME: 11/16/2006 DATE/TIME FINISHED: 11/16/2006

DEPTH TO WATER DURING DRILLING (ft bgs): DATE/TIME of WATER DEPTH (ft TOC):

TOTAL DEPTH: 25.0

ELEV. ELEVATION (FT)	SOIL PROFILE: SOIL DESCRIPTION	SAMPLES: USCS CLASS	SPLIT SPOON NO.	Blow Count/6"	DEPTH (Feet)	GRAPHIC LOG	WELL SCHEMATIC
	same as above	SM	4	17/18/16	20, 22, 24		
	same as above, TD=25.0	SM	5	9/13/18	26, 28, 30, 32		

Project No.:	Design By:	Scale:
1004896	H Hoffman	24:1
File:	Drawn By:	Date:
NECR Borelogs	H Hoffman	4/7/2007

MONTGOMERY WATSON

NECR

UNC

PIEZOMETER NUMBER: **NECR1-SB-016** SHEET 1 of 2

LOCATION COORDINATES: N: 3948869.8 E: 725366.1 LOGGED BY: H. Hoffman

GROUND ELEVATION (FAMSL): TOC ELEVATION (FAMSL): NECR DRILLING COMPANY: WDC DRILL RIG:

DRILLING START DATE/TIME: 11/16/2006 15:15 DATE/TIME FINISHED: 11/16/2006 16:00

DEPTH TO WATER DURING DRILLING (ft bgs): DATE/TIME of WATER DEPTH (ft TOC):

TOTAL DEPTH: 20.0

ELEV. ELEVATION (FT)	SOIL PROFILE: SOIL DESCRIPTION	SAMPLES: USCS CLASS	SPLIT SPOON NO.	Blow Count/6"	DEPTH (Feet)	GRAPHIC LOG	WELL SCHEMATIC
	SAND, rock frags, lt brn to grey, moist, low plasticity	SP	1	10/19/32	6		
					8		
	Same as above	SP	2	2/2/3	10		
					12		
					14		
	same as above	SP	3	3/4/8	16		
					18		

Continued Next Page

Project No.:	Design By:	Scale:
1004896	H. Hoffman	24:1
File:	Drawn By:	Date:
NECR Borelogs	H. Hoffman	4/7/2007

MONTGOMERY WATSON

NECR

UNC

PIEZOMETER NUMBER: **NECR1-SB-016** SHEET 2 of 2

LOCATION COORDINATES: N: 3946869.8 E: 725366.1 LOGGED BY: H. Hoffman

GROUND ELEVATION (FAMSL): TOC ELEVATION (FAMSL): NECR DRILLING COMPANY: WDC DRILL RIG:

DRILLING START DATE/TIME: 11/16/2006 15:15 DATE/TIME FINISHED: 11/16/2006 16:00

DEPTH TO WATER DURING DRILLING (ft bgs): DATE/TIME of WATER DEPTH (ft TOC):

TOTAL DEPTH: 20.0

ELEV. ELEVATION (FT)	SOIL PROFILE: SOIL DESCRIPTION	SAMPLES: USCS CLASS	SPLIT SPOON NO.	Blow Count/6"	DEPTH (Feet)	GRAPHIC LOG	WELL SCHEMATIC
	SILT, brn, low-mod plasticity, moist, native, TD=20.0'	ML	4	6/8/8	20		
					22		
					24		
					26		
					28		
					30		
					32		

Project No.:	Design By:	Scale:	NECR
1004896	H. Hoffman	24:1	
File:	Drawn By:	Date:	
NECR Borelogs	H. Hoffman	4/7/2007	
MONTGOMERY WATSON			UNC

KEY TO SYMBOLS

Symbol Description

Strata symbols

Silty sand

Basalt
(or generic rock)

Poorly graded sand

Silty low plasticity
clay

Silt

Well graded sand

Poorly graded clayey
silty sand

Misc. Symbols

Boring continues

Water table during
drilling

Notes:

1. These logs are subject to the limitations, conclusions, and recommendations in this report.

1. Results of tests conducted on samples recovered are reported on the logs.

TEST PIT LOGS

TEST PIT LOG
Test Pit No.: NECR1-TP-138

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 12/02/2006 15:55
LOCATION NECR		LOGGER L.W. Martin
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 4.0

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0				
			SP	SAND, reworked native soil
2				as above, 1" broken plastic pipe
			SP	SAND and weathered SANDSTONE
		1		as above, sample collected
4				SANSTONE, end of TP
6				
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	NECR1-TP-138		UNC

TEST PIT LOG
Test Pit No.: NECR2-TP-015

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 11/14/2006 16:35
LOCATION NECR		LOGGER L.W. Martin
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 1.5

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0				
			SM	silty SAND, native soil, >6" pieces of angular competent sandstone, 20% rock, 80% sand
		1		as above, sample collected
				SANDSTONE, end of TP
2				
4				
6				
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	NECR2-TP-015		UNC

TEST PIT LOG
Test Pit No.: NECR2-TP-020

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 11/14/2006 16:15
LOCATION NECR		LOGGER L.W. Martin
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 1.5

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0			FILL	SAND, white-lt grey, <5% cobbles, 95% f.-med grained sand, dry, loose, no strat, no cement
			SP	SAND, brn, dry, loose, 10% angular cobbles, native soil
		1		as above, sample collected
			SP	as above, end of TP
2				
4				
6				
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	NECR2-TP-020		UNC

TEST PIT LOG
Test Pit No.: NECR2-TP-035

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 11/14/2006 14:55
LOCATION NECR		LOGGER L.W. Martin
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 2.0

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0				
			SP	SAND, brn, dry, loose, 10% angular cobbles, native soil
		1		as above, sample collected
2				SANDSTONE, end of TP
4				
6				
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	NECR2-TP-035		UNC

TEST PIT LOG
Test Pit No.: NECR2-TP-039

PROJECT: NECR		PROJECT NO.: 1004896
CLIENT: UNC		DATE: 11/14/2006 16:20
LOCATION: NECR		LOGGER: L.W. Martin
EXCAVATION METHOD: backhoe	Test Pit Width (ft):	Total Depth (ft): 1.5

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0				
			SM	silty SAND, native, dry, loose, brn, no cement, no strat, 50% angular weathered sandstone, 1-4" angular fragments
		1		as above, sample collected
2				SANDSTONE, competent, end of TP
4				
6				
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	NECR2-TP-039		UNC

TEST PIT LOG
Test Pit No.: NECR2-TP-052

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 11/14/2006 na
LOCATION NECR		LOGGER L.W. Martin
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 5.0

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0			SM	silty SAND, reworked native
2		1		silty SAND, reworked native, cloth, popcan, Mancos fragments, plastic, sample collected
			SM	silty SAND, no debris, clean native
4		2		as above, sample collected
				as above, end of TP
6				
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	NECR2-TP-052		UNC

TEST PIT LOG
Test Pit No.: POND 1/2-TP-030

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 12/02/2006 11:25
LOCATION NECR		LOGGER H. Hoffman
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 7.0

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0			ML	SILT, grey/brn, med plasticity, some clay and sand
2		1		SILT, grey/brn, med plasticity, some clay and sand, sample collected
4				
		2		SANDSTONE, native, highly weathered, sample collected
6				
				SANDSTONE, native, highly weathered, end of TP
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	POND 1/2-TP-030		UNC

TEST PIT LOG
Test Pit No.: POND1/2-TP-035

PROJECT: NECR		PROJECT NO.: 1004896
CLIENT: UNC		DATE: 12/02/2006 9:40
LOCATION: NECR		LOGGER: H. Hoffman
EXCAVATION METHOD: backhoe	Test Pit Width (ft):	Total Depth (ft): 9.5

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0			CL-ML	silty CLAY, grey
		1		as above, sample collected
2		2	SP	SAND, minor silt and clay, fine sand layer, sample collected
4			FILL	alternating layers of pond sediments
6				
8				
		3		as above, sample collected
				end of TP

Project no: 1004896	Design By: H.	Scale: 2	NECR
	POND1/2-TP-035		UNC

TEST PIT LOG
Test Pit No.: POND1/2-TP-058

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 12/02/2006 10:15
LOCATION NECR		LOGGER H. Hoffman
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 9.0

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0			FILL	grey pond sediments
2				
4			VS	sandy SILT, some layered clays
		1		as above, sample collected
6				
8				
		2		as above, not sure if native, sample collected
			VS	end of TP

Project no: 1004896	Design By: H.	Scale: 2	NECR
	POND1/2-TP-058		UNC

TEST PIT LOG
Test Pit No.: POND3/3A-TP-007

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 12/05/2006 11:35
LOCATION NECR		LOGGER H. Hoffman
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 9.5

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0			SW	SAND, grey
2			SM	silty SAND, brown, dense
				SAND, fine
4				
		1		as above, sample collected
6				
8				
		2		as above, sample collected
			SW	end of TP

Project no: 1004896	Design By: H.	Scale: 2	NECR
	POND3/3A-TP-007		UNC

TEST PIT LOG
Test Pit No.: POND3/3A-TP-014

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 12/05/2006 10:45
LOCATION NECR		LOGGER H. Hoffman
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 9.0

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0			SM	silty SAND
2				
4				
6		1		silty SAND, brn, low plasticity, some small cobbles
8				
		2	GP-SP	gravely SAND, light brown, cobbles, ss fragments, very hard to distinguish native from pond sediments end of TP

Project no: 1004896	Design By: H.	Scale: 2	NECR
	POND3/3A-TP-014		UNC

TEST PIT LOG
Test Pit No.: POND3/3A-TP-029

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 12/05/2006 9:50
LOCATION NECR		LOGGER H. Hoffman
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 9.5

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0			SM	silty SAND
2				
		1		silty SAND, f.-med grained sand, <1" cobbles, micro-r readings dropped with increased depth, sample colelcted
4				
6		2	GP-SP	gravely SAND, brn, cobbles, low plasticity, ?native?, sample collected
8				
		3	SC	clayey SAND, grey clayey chunks, oxidation, no cobbles, sample collected
			SC	end of TP

Project no: 1004896	Design By: H.	Scale: 2	NECR
	POND3/3A-TP-029		UNC

TEST PIT LOG
Test Pit No.: POND3/3A-TP-037

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 12/05/2006 9:30
LOCATION NECR		LOGGER H. Hoffman
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 9.0

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0		1	SM	silty SAND, brown, sample collected
2			CH	silty CLAY, brn, med-high plasticity
4				
		2		as above, sample collected
6				
8				
		3	ML	sandy SILT, brn, moist, low plasticity
				as above, end of TP

Project no: 1004896	Design By: H.	Scale: 2	NECR
	POND3/3A-TP-037		UNC

TEST PIT LOG
Test Pit No.: SEDPAD-TP-006

PROJECT	NECR		PROJECT NO. 1004896
CLIENT	UNC		DATE 11/28/2006 16:02
LOCATION	NECR		LOGGER L.W. Martin
EXCAVATION METHOD	backhoe	Test Pit Width (ft):	Total Depth (ft): 4.0

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0			FILL	FILL, sandy, grey, buried pipes
		1		as above, sample collected
2				
		2	ML	clayey SILT, brn, low plasticity, moist, dense
4				as above, end of TP
6				
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	SEDPAD-TP-006		UNC

TEST PIT LOG
Test Pit No.: SEDPAD-TP-012

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 11/28/2006 15:42
LOCATION NECR		LOGGER L.W. Martin
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 2.5

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0				
			FILL	sand FILL, grey, moist
		1		as above, sample collected
		2	ML	SILT, native, brown, minor clay, sample collected
2				
				SANDSTONE AND SILT, end of TP
4				
6				
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	SEDPAD-TP-012		UNC

TEST PIT LOG
Test Pit No.: SEDPAD-TP-014

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 11/28/2006 15:20
LOCATION NECR		LOGGER L.W. Martin
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 2.0

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0			SP	SAND, gray, loose
		1		as above, sample collected
		2	ML	SILT, native, brn, no cobbles, minor clay, loose, low-med plasticity, sample collected
2				as above, end of TP
4				
6				
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	SEDPAD-TP-014		UNC

TEST PIT LOG
Test Pit No.: SEDPAD-TP-021

PROJECT	NECR		PROJECT NO. 1004896
CLIENT	UNC		DATE 11/28/2006 9:55
LOCATION	NECR		LOGGER L.W. Martin
EXCAVATION METHOD	backhoe	Test Pit Width (ft):	Total Depth (ft): 11.0

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0			FILL	sand FILL, 80% sand, 20% fines, grey/green, loose, slightly moist
2				
4				
		1		as above, sample collected
6				
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	SEDPAD-TP-021		UNC

TEST PIT LOG
Test Pit No.: SEDPAD-TP-021

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 11/28/2006 9:55
LOCATION NECR		LOGGER L.W. Martin
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 11.0

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
10		2	FILL	sand FILL, grey/green, unable to reach native soil due to limitations of backhoe
			FILL	as above, end of TP
12				
14				
16				
18				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	SEDPAD-TP-021		UNC

TEST PIT LOG
Test Pit No.: SEDPAD-TP-026

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 11/28/2006 16:20
LOCATION NECR		LOGGER H. Hoffman
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 3.0

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0			ML	clayey SILT, native
		1		as above, sample collected
2				
			ML	as above, end of TP
4				
6				
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	SEDPAD-TP-026		UNC

TEST PIT LOG
Test Pit No.: SAND1-TP-030

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 12/02/2006 14:50
LOCATION NECR		LOGGER L.W. Martin
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 4.0

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0			ML	sandy SILT, brn
		1	SW	SAND, grey, sample collected
2				SANDSTONE, weathered
		2		as above, sample collected
4				SANDSTONE, more competent, can't dig in, leave teethmarks from hoeend of TP
6				
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	SAND1-TP-030		UNC

TEST PIT LOG
Test Pit No.: SAND1-TP-043

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 12/02/2006 14:00
LOCATION NECR		LOGGER L.W. Martin
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 1.5

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0			FILL	sand FILL, lt brn
		1		SANDSTONE, grey and tan, crumbly, platy, bedded, weathered to sandy soil, sample collected
2				end of TP
4				
6				
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	SAND1-TP-043		UNC

TEST PIT LOG
Test Pit No.: SAND1-TP-049

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 12/02/2006 13:40
LOCATION NECR		LOGGER H. Hoffman
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 3.5

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0			FILL	sand FILL
		1		as above, sample collected
2				SANDSTONE, native, weathered, fragemented
		2		as above, sample collected
4				end of TP
6				
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	SAND1-TP-049		UNC

TEST PIT LOG
Test Pit No.: SAND1-TP-063

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 12/02/2006
LOCATION NECR		LOGGER L.W. Martin
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 2.0

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0				
			FILL	sand FILL, grey, med to crs, moist
		1		as above, sample collected
				SANDSTONE, weathered, tan gray, sandy soil
		2		as above, sample collected
2				as above, end of TP
4				
6				
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	SAND1-TP-063		UNC

TEST PIT LOG
Test Pit No.: SAND1-TP-068

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 12/02/2006 14:35
LOCATION NECR		LOGGER L.W. Martin
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 2.0

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0				
			FILL	sand FILL, gry, med-crs grained
		1		as above, sample collected
				SANDSTONE, weathered, tan
		2		as above, sample collected
2				as above, end of TP
4				
6				
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	SAND1-TP-068		UNC

TEST PIT LOG
Test Pit No.: SAND2-TP-008

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 11/14/2006 16:00
LOCATION NECR		LOGGER L.W. Martin
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 1.2

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0			SM	silty SAND mixed with SANDSTONE fragments, highly weathered, dry, loose, 1-3" angular frags
		1		as above, sample collected
				SANDSTONE, end of TP
2				
4				
6				
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	SAND2-TP-008		UNC

TEST PIT LOG
Test Pit No.: SAND2-TP-011

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 11/14/2006 14:00
LOCATION NECR		LOGGER L.W. Martin
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 1.5

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0				
			SM	silty SAND, 80% f. sand, low plasticity silt, 5% ang cobbles, dry, loose, brn
		1		as above, sample collected
				SANDSTONE, bedding, white to light grey, brittle, crumbly
2				as above, end of TP
4				
6				
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	SAND2-TP-011		UNC

TEST PIT LOG
Test Pit No.: SAND2-TP-012

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 11/14/2006 14:30
LOCATION NECR		LOGGER L.W. Martin
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 3.0

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0			SM	silty SAND, native soil, 80% f. sand, 20% silt, lt brn to brn, loose, roots, <5% ang cobbles
		1		as above, collect sample
2				
				SANDSTONE, end of TP
4				
6				
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	SAND2-TP-012		UNC

TEST PIT LOG
Test Pit No.: SAND2-TP-017

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 11/14/2006 14:45
LOCATION NECR		LOGGER L.W. Martin
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 2.0

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0			SM	silty SAND, native soil, 25% angular cobbles
		1		as above, sample collected
2				SANDSTONE, end of TP
4				
6				
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	SAND2-TP-017		UNC

TEST PIT LOG
Test Pit No.: SAND2-TP-019

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 11/14/2006 15:30
LOCATION NECR		LOGGER L.W. Martin
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 2.0

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0			SM	silty SAND, native, 10% lrg cobbles, 15% <6" cobbles
		1		silty SAND, native, 10% lrg cobbles, 15% <6" cobbles, sample collected
2				SANDSTONE, end of TP
4				
6				
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	SAND2-TP-019		UNC

TEST PIT LOG
Test Pit No.: SAND3-TP-005

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 11/30/2006 10:20
LOCATION NECR		LOGGER H. Hoffman
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 2.0

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0			FILL	sand FILL
		1		as above, sample collected
		2	ML	SILT, native, sample collected
2			ML	as above, end of TP
4				
6				
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	SAND3-TP-005		UNC

TEST PIT LOG
Test Pit No.: SAND3-TP-006

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 11/30/2006 10:10
LOCATION NECR		LOGGER H. Hoffman
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 1.0

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0			ML	SILT, native
		1		as above, sample collected
				as above, end of TP
2				
4				
6				
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	SAND3-TP-006		UNC

TEST PIT LOG
Test Pit No.: SAND3-TP-009

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 11/30/2006 10:05
LOCATION NECR		LOGGER H. Hoffman
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 2.0

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0			ML	SILT, native
		1		as above, sample collected
2			ML	as above, end of TP
4				
6				
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	SAND3-TP-009		UNC

TEST PIT LOG
Test Pit No.: SAND3-TP-014

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 11/30/2006 9:50
LOCATION NECR		LOGGER H. Hoffman
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 2.0

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0			FILL	sand FILL
		1		as above, sample collected
		2	ML	SILT, native, sample collected
2			ML	as above, end of TP
4				
6				
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	SAND3-TP-014		UNC

TEST PIT LOG
Test Pit No.: SAND3-TP-025

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 11/30/2006 9:40
LOCATION NECR		LOGGER H. Hoffman
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 1.5

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0			ML	SILT, native
		1		as above, sample collected
			ML	as above, end of TP
2				
4				
6				
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	SAND3-TP-025		UNC

TEST PIT LOG
Test Pit No.: NEMSA-TP-001

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 11/14/2006 10:50
LOCATION NECR		LOGGER L.W. Martin
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 6.0

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0		1	SM	silty SAND, light brown, low plasticity, dry soil cap/cover, sample collected
		2	FILL	gray coarse non economic material, sample collected
2				
4		3		as above, sample collected
		4	SW	native SAND, sample collected
6			SW	as above, end of TP
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	NEMSA-TP-001		UNC

TEST PIT LOG
Test Pit No.: NEMSA-TP-002

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 11/30/2006 10:40
LOCATION NECR		LOGGER H. Hoffman
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 7.5

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0		1	SM	soil cap/cover, sample collected
		2	FILL	gray coaarse, non economic material, sample collected
2				
4				
		3		as above, sample collected
6				
		4	SW	native SAND, minor silty clay, sample collected
8			SW	as above, end of TP

Project no: 1004896	Design By: H.	Scale: 2	NECR
	NEMSA-TP-002		UNC

TEST PIT LOG
Test Pit No.: NEMSA-TP-003

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 11/30/2006 11:20
LOCATION NECR		LOGGER H. Hoffman
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 4.5

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0		1	SM	soil cap/cover, sample collected
2		2	FILL	gray coarse non economic material, sample collected
			ML	native SILT
4		3		as above, sample collected
			ML	as above, end of TP
6				
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	NEMSA-TP-003		UNC

TEST PIT LOG
Test Pit No.: NEMSA-TP-004

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 12/01/2006 15:35
LOCATION NECR		LOGGER H. Hoffman
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 9.0

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0		1	SM	soil cap/cover, sample collected
		2	FILL	gray coarse, non economic material, sample collected
2				
4				
6		3		as above, sample collected
8		4		as above, sample collected
			FILL	native soil not reached, end of TP

missed pre-cap and mid-depth samples, re-excavated on 12/05/2206

Project no: *1004896*	Design By: H.	Scale: 2	NECR
	NEMSA-TP-004		UNC

TEST PIT LOG
Test Pit No.: NEMSA-TP-005

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 12/01/2006 16:00
LOCATION NECR		LOGGER H. Hoffman
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 8.5

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0		1	SM	silty SAND, sample collected
			FILL	sand FILL, and debris, rock bolts, cable
2				
4		2		as above, collected sample
6				
8		3	SW	native SAND, collected sample
			SW	as above, end of TP

Project no: 1004896	Design By: H.	Scale: 2	NECR
	NEMSA-TP-005		UNC

TEST PIT LOG
Test Pit No.: YARD-TP-001

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 11/30/2006 14:00
LOCATION NECR		LOGGER H. Hoffman
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 1.5

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0		1	SW	SAND, native, no visible cap/cover surface, sample collected
		2		as above, sample collected
2			SW	as above, end of TP
4				
6				
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	YARD-TP-001		UNC

TEST PIT LOG
Test Pit No.: YARD-TP-002

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 11/30/2006 14:30
LOCATION NECR		LOGGER H. Hoffman
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 10.0

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0		1	SP	SAND, reworked native, sample collected, no visible pre cap surface
		2		as above, refusal at rock at 2 ft
2				
4				
6				
8				
		3	SW	SAND, native, excavated past rock on second attempt (12/1/2006), sample

Project no: 1004896	Design By: H.	Scale: 2	NECR
	YARD-TP-002		UNC

TEST PIT LOG
Test Pit No.: YARD-TP-002

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 11/30/2006 14:30
LOCATION NECR		LOGGER H. Hoffman
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 10.0

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
10			SW	collected as above, end of TP
12				
14				
16				
18				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	YARD-TP-002		UNC

TEST PIT LOG
Test Pit No.: YARD-TP-003

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 12/1/2006 10:00
LOCATION NECR		LOGGER H. Hoffman
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 1.5

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0		1	SW	SAND, native, sample collected
		2		as above, sample collected
2			SW	as above, end of TP
4				
6				
8				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	YARD-TP-003		UNC

TEST PIT LOG
Test Pit No.: YARD-TP-004

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 12/1/2006 10:30
LOCATION NECR		LOGGER H. Hoffman
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 10.0

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0		1	SM	silty SAND, soil cap/cover, sample collected
		2	FILL	sand FILL and debris, buried cable, rubber, misc. metal, sample collected
2				
4				
		3		as above, collect sample
6				
		4		sand fill and debris, inner tube, fencing, rock bolts, misc garbage, sample collected
8				
		5	SW	native SAND, no debris, sample collected

Project no: 1004896	Design By: H.	Scale: 2	NECR
	YARD-TP-004		UNC

TEST PIT LOG
Test Pit No.: YARD-TP-004

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 12/1/2006 10:30
LOCATION NECR		LOGGER H. Hoffman
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 10.0

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
10			SW	native SAND, end of TP
12				
14				
16				
18				

Project no: 1004896	Design By: H.	Scale: 2	NECR
	YARD-TP-004		UNC

TEST PIT LOG
Test Pit No.: YARD-TP-005

PROJECT NECR		PROJECT NO. 1004896
CLIENT UNC		DATE 12/1/2006 11:50
LOCATION NECR		LOGGER H. Hoffman
EXCAVATION METHOD backhoe	Test Pit Width (ft):	Total Depth (ft): 9.0

DEPTH (FT)	GRAPHIC	Sample Number	USCS	DESCRIPTION
0		1	SM	silty SAND
2		2	FILL	sand FILL and debris, sample collected
4		3		as above, sample collected
6				
8		4	SW-SP	native SAND with gravel, sample collected
			SW-SP	as above, end of TP

Project no: 1004896	Design By: H.	Scale: 2	NECR
	YARD-TP-005		UNC

KEY TO SYMBOLS

Symbol Description

Strata symbols

Poorly graded sand

Sandstone

Silty sand

Fill

Silt

Silty low plasticity clay

Variable sand and silt mix

Well graded sand

Poorly graded gravel and sand

Clayey sand

High plasticity clay

Interlayered well/poorly graded sand

Misc. Symbols

Boring continues

Notes:

1. These logs are subject to the limitations, conclusions, and recommendations in this report.

1. Results of tests conducted on samples recovered are reported on the logs.