

DYNAMAC
CORPORATION

TES8

44301

Dynamac Corporation
Public Ledger Building
6th and Chestnut Streets
Suite 872
Philadelphia, PA 19106

Telephone: 215-440-7340
Fax: 215-440-7346

October 23, 1990

HAND DELIVERY

Mr. Randy Sturgeon
U.S. Environmental Protection Agency
841 Chestnut Building, 6th Floor
Philadelphia, PA 19107

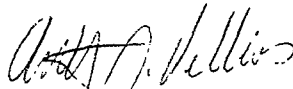
RE: Monthly Field Trip Report
DuPont-Newport
Contract No. 68-W9-005
Work Assignment No. C03034

Dear Mr. Sturgeon:

In partial fulfillment of Task 4 of the above mentioned Work Assignment, Dynamac is presenting this monthly Field Trip Report covering the period from July 15 to August 15, 1990.

If you have any questions concerning this matter, please contact me at (215) 440-7340.

Sincerely,



Anthony J. Vellios
Hydrogeologist

cc: Elaine Spiewak, EPA Project Officer
Ronald J. Chernik, Dynamac TES Program Manager
Bruce Beach, Dynamac Project Manager

AR306383

October 23, 1990

HAND DELIVERY

Mr. Randy Sturgeon
U.S. Environmental Protection Agency
841 Chestnut Building, 6th Floor
Philadelphia, PA 19107

RE: Monthly Field Trip Report
DuPont-Newport
Contract No. 68-W9-0005
Work Assignment No. C03034

Dear Mr. Sturgeon:

This Letter Report documents the field oversight provided by Dynamac during the dates of July 18,19,20,24,25,27,30 and August 6,8,10 and 14, 1990 at the DuPont-Newport Site (Site) in Newport, Delaware. The field investigation was performed by Woodward-Clyde Consultants for E.I. DuPont de Nemours and Co. Inc. Work conducted during the Site visits included soil sampling, well drilling and soil borings. Exclusion zones were established around all drilling equipment, however work within these zones only required level D protection with Tyvec.

Dynamac split soil samples with Woodward-Clyde at select areas of the Site. The objective of the sampling was to provide Quality Assurance oversight for the Environmental Protection Agency (EPA). Most visits provided oversight of investigative field work for EPA. The following sections briefly detail each Site visit by Dynamac personnel. Some major events and discoveries during drilling are also briefly recorded and may be helpful in arriving at conclusions concerning the Site. Enclosed are photocopies of the field notes.

July 18, 1990 Site Visit

Objectives:

To provide oversight for EPA by briefly inspecting the Site and reviewing present and upcoming events with the Site manager.

Personnel and Activities:

Listed below are individuals, with relevant information, recorded by Dynamac as being present during the Site investigation.

AR306384

<u>Personnel</u>	<u>Organization</u>	<u>Responsibility</u>
Anthony Vellios	Dynamac	Oversight for EPA
Jim Buczala	Woodward-Clyde	Site Manager

Site activities were discussed with Jim Buczala who decided to delay drilling boring B-15. A tentative drilling schedule and map was drafted and presented to Dynamac.

July 19, 1990 Site Visit

Objectives:

To provide oversight for EPA during the drilling of borings B-9 and B-10. The lithology was noted during drilling and split samples were taken by Dynamac. Drilling was performed by Empire Drillers under the guidance of Woodward-Clyde Consultants.

Personnel and Activities:

Listed below are individuals, with relevant information, recorded by Dynamac as being present during the Site investigation.

<u>Personnel</u>	<u>Organization</u>	<u>Responsibility</u>
Anthony Vellios	Dynamac	Oversight for EPA
Terrie Swanson	Dynamac	Oversight for EPA
Jeff Maddox	Woodward-Clyde	Field Investigator
Jack Hockwarter	Woodward-Clyde	Field Investigator
Jim Goebels	DuPont	DuPont Liason
Kim Balsis	DuPont	DuPont Oversight
Scott Breeds	Empire Drillers	Drilling Crew Leader
Jeff Jaworski	Empire Drillers	Drilling Crew Leader

Soil borings B-9 and B-10 were logged and sampled by Woodward-Clyde. Dynamac observed the investigation and obtained split samples of the soils in both holes at various depths. Of note was the black oily nature of the samples in Boring B-9 through most of its length and the tar-like samples at 8-10 feet.

July 20, 1990 Site Visit

Objectives:

To provide oversight for EPA during the drilling of borings B-7 and B-8. Drilling was performed by Empire Drillers under the guidance of Woodward-Clyde Consultants.

Personnel and Activities:

Listed below are individuals, with relevant information, recorded by Dynamac as being present during the Site investigation.

AR306385

<u>Personnel</u>	<u>Organization</u>	<u>Responsibility</u>
Anthony Vellios	Dynamac	Oversight for EPA
Jack Hockwarter	Woodward-Clyde	Field Investigation

Soil boring B-7 was drilled to the Potomac Formation at 27 feet but B-8 was canceled for that day, because the second rig was drilling one of the background wells.

July 24, 1990 Site Visit

Objectives:

To provide oversight for EPA during the drilling of Soil Boring B-8 and Monitoring Well MW-28. Drilling was performed by Empire Drillers under the guidance of Woodward-Clyde Consultants.

Personnel and Activities:

Listed below are individuals, with relevant information, recorded by Dynamac as being present during the Site investigation.

<u>Personnel</u>	<u>Organization</u>	<u>Responsibility</u>
Anthony Vellios	Dynamac	Oversight for EPA
Jim Buczala	Woodward-Clyde	Site Manager
Jack Hockwarter	Woodward-Clyde	Field Investigator
Dennis Dorn	Empire	Driller support
Scott Breeds	Empire	Drilling Crew Leader
Jeff Jaworski	Empire	Drilling Crew Leader

Soil Boring B-8 was drilled and sampled by Woodward-Clyde. A black oily layer was noticed at 2-4 feet, above a clay sediment, however there were no HNU indications of volatiles. Below this was a yellow, red, and white blotched sediment and black and orange layered sediments. MW-28 was drilled to 147 feet with rock reported at 137 feet (this "rock" could mean saprolite, as was stated on July 12 during the drilling of MW-32).

July 25, 1990 Site Visit

Objectives:

To provide oversight for EPA during the drilling of Soil Boring B-2, B-3, and B-17. Drilling was performed by Empire Drillers under the guidance of Woodward-Clyde Consultants.

Personnel and Activities:

Listed below are individuals, with relevant information, recorded by Dynamac as being present during the Site investigation.

AR306386

<u>Personnel</u>	<u>Organization</u>	<u>Responsibility</u>
Anthony Vellios	Dynamac	Oversight for EPA
Keith Michels	Dynamac	Oversight for EPA
Jeff Maddox	Woodward-Clyde	Field Investigator
Jim Goebels	DuPont	DuPont Liason
Jack Jaworski	Empire	Drilling Crew Leader
Scott Breeds	Empire	Drilling Crew Leader

Dynamac observed the drilling of B-17 from 20 feet to the top of the Potomac Formation at 34 feet. Dynamac sampled B-17 at 26-28 feet and 32 to 34 feet. We also observed the drilling of B-3 and sampled B-3 at the following three depths, 2-4 feet, 8-10 feet, and from 14-16 feet.

July 27, 1990 Site Visit

Objectives:

To provide oversight for EPA during the drilling of soil borings B-5 and B-6. Drilling was performed by Empire Drillers under the guidance of Woodward-Clyde Consultants.

Personnel and Activities:

Listed below are individuals, with relevant information, recorded by Dynamac as being present during the Site Investigation.

<u>Personnel</u>	<u>Organization</u>	<u>Responsibility</u>
Roger Gresh	Woodward-Clyde	Site Project Manager
Anthony Vellios	Dynamac	Oversight for EPA
Jack Hockwarter	Woodward-Clyde	Field Investigator
Kim Balsis	DuPont	DuPont Oversight
Debbie Labears	DuPont	DuPont Engineer
Jeff Jaworski	Empire Drillers	Drilling Crew Leader
Scott Breeds	Empire Drillers	Drilling Crew Leader

Dynamac observed the drilling of B-6. At depth 14 to 16 feet there was gravelly sand on a clay barrier. This zone contained a viscous black substance that emitted a highly chemical (pesticide) odor. Immediately underneath was a sandy unit without obvious signs of contamination. There was no obvious contamination of the next sampling interval from 20-22 feet. Another zone with a slight odor was noticed at 26 feet. Boring B-5 was stalled at 3.5 feet due to an obstruction, but was completed during the afternoon. Attached are relevant field notes.

July 30, 1990 Site Visit

Objectives:

To provide oversight for EPA during the drilling of borings B-16 and B-18. The lithology was noted during drilling and split samples were taken by Dynamac.

AR306387

Personnel and Activities:

Listed below are individuals, with relevant information, recorded by Dynamac as being present during the Site investigation.

<u>Personnel</u>	<u>Organization</u>	<u>Responsibility</u>
Anthony Vellios	Dynamac	Oversight for EPA
Bruce Beach	Dynamac	Oversight for EPA
Jim Buczala	Woodward-Clyde	Site Manager
Dave Friedman	Woodward-Clyde	Field Investigator
Jack Hockwarter	Woodward-Clyde	Field Investigator
Jim Goebels	DuPont	DuPont Liason
Jeff Jaworski	Empire	Drilling Crew Leader
Scott Breeds	Empire	Drilling Crew Leader

Soil Boring B-16 was drilled and split samples were taken by Dynamac to the water table at ten feet. Soil Boring B-18 was drilled and split samples were taken by Dynamac to the water table at eight feet. At a depth of 5.5 to 6 feet, Organic Vapor Analyzer (OVA) readings were 1.2 ppm. At a depth of 8 feet at B-18, OVA readings were greater than 10 units.

August 6, 1990 Site Visit

Objectives:

To provide oversight for EPA during the resampling of certain specific intervals of borings B-9, B-17 and TB-31; and the installation of MW-30F. Drilling was performed by Empire Drillers under the guidance of Woodward-Clyde Consultants.

Personnel and Activities:

Listed below are individuals, with relevant information, recorded by Dynamac as being present during the Site investigation.

<u>Personnel</u>	<u>Organization</u>	<u>Responsibility</u>
Anthony Vellios	Dynamac	Oversight for EPA
Jim Buczala	Woodward-Clyde	Site Manager
Tim Glazer	Woodward-Clyde	Field Investigator
Jack Hockwarter	Woodward-Clyde	Field Investigator
Jim Goebels	DuPont	DuPont Liason
Jeff Jaworski	Empire	Drilling Crew Leader
Scott Breeds	Empire	Drilling Crew Leader

One analytical sample was taken at B-9 at 11 feet. The soil was black, with a green tint to it. Monitoring well MW-30F was installed. OVA readings were as high as 50 units at 4 feet where a perched water table was located. Below this the soil was black, stained to a depth of 10 feet, but emitted no detectable fumes. One oversight analytical sample was taken at B-17 at 5-7 feet.

August 8, 1990 Site Visit

Objectives:

To provide oversight for EPA during the drilling of shallow wells MW-31A and MW-35A. Drilling was performed by Empire Drillers under the guidance of Woodward-Clyde Consultants.

Personnel and Activities:

Listed below are individuals, with relevant information, recorded by Dynamac as being present during the Site investigation.

<u>Personnel</u>	<u>Organization</u>	<u>Responsibility</u>
Anthony Vellios	Dynamac	Oversight for EPA
Jim Buczala	Woodward-Clyde	Site Manager
Tim Glazer	Woodward-Clyde	Field Investigator
Jack Hockwarter	Woodward-Clyde	Field Investigator
Kim Balsis	DuPont	DuPont Oversight
Jim Goebels	DuPont	DuPont Liason
Scott Breeds	Empire	Drilling Crew Leader
Jeff Jaworski	Empire	Drilling Crew Leader

Dynamac observed the drilling of MW-35A. The first 14 feet of the hole was made up of a black non-volatile mud. (Note, wetland sediments, which is the stated Woodward-Clyde description of these sediments, should give off methane.) Dynamac observed the well construction of MW-31A. The intake screen was placed from 32 to 37 feet instead of the planned 30 to 35 foot interval with permission from EPA. The covered asphalt around MW-31 was stained with blue pigment.

August 10, 1990 Site Visit

Objectives:

To provide oversight for EPA during the drilling of MW-26. Drilling was performed by Empire Drillers under the guidance of Woodward-Clyde Consultants.

Personnel and Activities:

Listed below are individuals, with relevant information, recorded by Dynamac as being present during the Site investigation.

<u>Personnel</u>	<u>Organization</u>	<u>Responsibility</u>
Anthony Vellios	Dynamac	Oversight for EPA
Jim Buczala	DuPont	DuPont Liason
Kim Balsis	DuPont	DuPont Oversight
Jeff Jaworski	Empire	Drilling Crew Leader

Dynamac observed the drilling of MW-26 at the Nicastro Junk Yard.

AR306389

August 14, 1990 Site Visit

Objectives:

Provide oversight for EPA during the drilling of MW-26A and MW-35. All drilling was performed by Empire Drillers under the guidance of Woodward-Clyde Consultants.

Personnel and Activities:

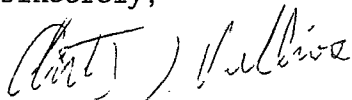
Listed below are individuals, with relevant information, recorded by Dynamac as being present during the Site Investigation.

<u>Personnel</u>	<u>Organization</u>	<u>Responsibility</u>
Anthony Vellios	Dynamac	Oversight for EPA
Jim Buczala	Woodward-Clyde	Site Manager
Jack Hockwarter	Woodward-Clyde	Field Investigator
Kim Balsis	DuPont	DuPont Oversight
Jeff Jaworski	Empire	Drilling Crew Leader
Scott Breeds	Empire	Drilling Crew Leader

Drilling could not be performed at MW-35 because drillers were repairing stabilizers. Monitoring Well 26A was completed and permanent casing was set for MW-26BS.

If you have any questions concerning these Site visits, please contact me at (215) 440-7340.

Sincerely,



Anthony J. Vellios
Hydrogeologist

AJV/id

cc: Elaine Spiewak, EPA Project Officer
Bruce Beach, Dynamac Project Manager
Ron Chernik, Dynamac TES Program Manager

AR306390

7/8/90

Tony Belliss

17

4:00

Report clear sunny

site visit 90°F

schedule re go clearance w/ Jim Buzzca's Woodward Clyde

may slip B-15 to be done later

JB gives me a schedule sheet showing the order of installation

5:30

leave site

~~AR306391~~

AR306391

123

7/14/90 Tony Collins Terry Swanson
Newport Repoint (Del.)

Arrive on-site sunny 75°F
Jeff Magdoo (W.C.) w/colours (lye)
Kurt Bakis - Repoint
Peter Jack ~~Magdoo~~ - W.C.
Hockwater
Tim Gabels

Wait for rig

objective - sample splts on borings
10 and 10' wait a 10'
for first boring

0-2
2-4

visual spoon sample

4:00 short Drilling

4:51

AR306392

Sample B-9

8-10 oily to lime sample

Sample B-10 8-10' sample
organics taken Q.C sample MS/MSD
metals

However W.C. did not take organics
due to slight water.

TRAFFIC LABEL LOT# SAMPLE LOCATION COMMENTS

3-1098410	X912903	MCDW58	DN-SS-10-1	8-9-(2-10)	8-10' Deep	metals
3-1098411	B00081043	CDE63	"	"	"	metals
3-1166819	"	CDE63	"	"	"	metals
3-1098412	X912903	MCDW58	"	"	"	metals
3-1166828	Q275023	CDE63	"	"	"	metals, PCB, Asst
3-1098413	X912903	MCDW63	DN-SS-09-02	8-9-(2-10)	8-10' Deep	metals
3-1098414	B0081043	CDE63	DN-SS-10-02	8-10(B-10)	8-10ft	VOAS
3-1098415	Q275023	CDE63	DN-SS-10-02	8-10(B-10)	8-10ft	VOAS
3-1098416	Q275023	CDE63	DN-SS-10-02	8-10(B-10)	8-10ft	VOAS
3-1098417	Q275023	CDE63	DN-SS-10-02	8-10(B-10)	8-10ft	VOAS
3-1098418	Q275023	CDE63	DN-SS-10-02	8-10(B-10)	8-10ft	VOAS
3-1098419	Q275023	CDE63	DN-SS-10-02	8-10(B-10)	8-10ft	VOAS
3-1098420	Q275023	CDE63	DN-SS-10-02	8-10(B-10)	8-10ft	VOAS
3-1098421	Q275023	CDE63	DN-SS-10-02	8-10(B-10)	8-10ft	VOAS
3-1098422	Q275023	CDE63	DN-SS-10-02	8-10(B-10)	8-10ft	VOAS
3-1098423	Q275023	CDE63	DN-SS-10-02	8-10(B-10)	8-10ft	VOAS
3-1098424	Q275023	CDE63	DN-SS-10-02	8-10(B-10)	8-10ft	VOAS

Metals + Cyanide

7/19/90

10:15 10B-9 14-16 Sample metals

note: oily w/ OVA reading up to 5 ppm
should have taken organics at this hole

B-10-20-22 Sample metals

10:50 B-10-26-28 sample

↳ hit potomac at 32'

present on-site
Jim Buczala
Jack
Tom Goebels
Kevin Garon

strike cyanide from sample analysis

11:45 prepare to leave site.

Metal-Cyano

Sample Location / Wooded Clyde R Corners
DN-SS-10-03 B-10 (14-16) 14-16 ft

TRG 12
Lot #
3-1098415 } X9129013 MED060
3-1098416

Metal-Cyano

DN-SS-10-04 B-10 (20-22) 20-22 ft

3-1098426 } X9129013 MED061
3-1098427

Metal-Cyano

DN-SS-09-03 B-10 (14-16) 14-16 ft

3-1098437 } X9129013 MED064
3-1098439

Metal-Cyano

DN-SS-10-05 B-10 (26-28) 26-28 ft

3-1098428 } X9129013 MED062
3-1098429

VOAS

DN-SS-10-06 W/A Trip Blank

3-1098430 } B0081023 CDE5
3-1098431

VOAS

DN-SS-10-07 W/A Equipment Kanstet

3-1098432 } B0081043 CDE6
3-1098433

24

1/20/60 Tony Vellos

10:45

Arrive on site B-8 cancelled
due to Backy's and boring.
Jack ~~Hockwarter~~ Hockwarter reviews data

B-7 all natural looking
hit potomac at 27'

Handwritten signature

AR306396

2490

12:05 Depart Newport
Arrive in side
Tony Bellis Dynamic Survey 8:00 PM

Jim Borzuta Woodward Clyde
Tide Mark wire

Sampling - logging boring 2

Depth 2-4 Black silty no thru readings

4-6 - Black sand w/ orange sed had varve like lamination - deposit
6-8 black w/ white + red - grey staining soil (yellow mustard color sed.)
(dumky text.)

24' 8-10' took organic analysis

none taken for 4-6' because it was too wet.

→ AAAA Kroggman

8-10' brown soil w/ some brown sediments

124

TB-34 beds approved - background
AW-28 being drilled, 147' rock at 137'

1:25 post lunch drilling
10-12 - brown sediment silty - clay
water at 15'

14-16 light brown soil - sand, coarse grained
inorganic analysis

SR-17 ~~same~~ no sample

~~SR-20~~ light brown silt sand
SR-22 light brown silt sand
metals

Sample Debris Down

28-30 - light brown very coarse sand, some gravel

Potential marked with log ranges from 6" to 2'

4:00 leave site

[Handwritten signature]

9/25/90 Dynamic TES VIII
 Arrive on site Dupont Newport
 personal Tom Veltos -
 Keith Michaels - U
 Jeff Maddux - ~~Woodward C~~
 B-2817
 20-22-Depth of sample upon arrival Gray gravel coarse sand
 weather - sunny - breezy - 75°F
 Drilling B-2 and B-2817
 (26-28) sample organics duplicate
 Jim Goebel's Report
 (32-34) feet top of Potomac
 lavender brown sand
 yellow streaks
 11:10 complete boring prepare for grouting
 12:15 Arrive on site after lunch
 set up at B-3 will acquire organic
 samples.
 15:40 set up for boring B-3
 16:00 drill B-3 sample 2-4 blurs sampled at 35
 17:00 Sample (8-10) organics + metals
 MS-MSD

INORGANIC SAMPLES

Log ID#	Lot #	Sample Location	Label	Comments
-1098450	0183013	DN-55-17-1	B-17 (26-28)	METALS/CYANIDE 1030
-1098408	0183013	DN-55-17-2	B-17 (26-28)	METALS/CN - DUPLICATE 1030
-1098438	0215023	DN-55-17-3	B-17 (39-37)	METALS/CN 1050
	0183013	DN-55-03-01	B-3 (2-4)	UVA 1615
	0183013	DN-55-03-01	B-3 (2-4)	UVA 1615
	0183013	DN-55-03-01	B-3 (2-4)	BTA Pest. 2030 MS
3-1098445	0183013	DN-55-03-01	B-3 (2-4)	metals spec. 1615
3-1098446	X0844013	DN-55-03-02	B-3	metals/cn
3-1098447	X0844013	DN-55-03-02	B-3	FIELD BLANK
3-1166812	DN-55-03-03	B-3 (8-10)	MCDW-85	FIELD BLANK
3-1166811	DN-55-03-03	B-3 (8-10)	MCDW-85	metals
-1166805	DN-55-03-04	B-3 (14-16)	MCDW-86	metals spec. MS/MSL
	DN-55-03	B-3	MCDW-86	metals/cn

CONTINUED ON 1.33 WMM 7/25/90

DELETE WMM 7/25/90

ORGANIC SAMPLES

FIG ID #	LOT #	SAMPLE #	LOCATION	TRAFFIC REPORT #	COMMENTS
10409	B0081043	DN-SS-17-04	B-17	CDE-82	TRIP BLANK
10418436	B0081043	DN-SS-17-504 <i>well 7/25/90</i>	B-17	CDE-82	TRIP BLANK
3-1098442	B0081043	DN-SS-03-01	B-3 (2-4)	CDE-84	VOA
3-1098443	B0081043	DN-SS-03-01	B-3 (2-4)	CDE-84	VOA
3-1098444	B0183013	DN-SS-03-01	B-3 (2-4)	CDE-84	EXTRACTABLES
3-1166813	B0183013	DN-SS-03-03	B-3 (8-10)	CDE-85	MS/MSD EXTRACTABLES
3-1166815	"	"	"	"	"
3-1166807	B0081043	DN-SS-03-03	B-3 (8-10)	CDE-85	VOAS MS/MSD
3-1166808	B0081043	DN-SS-03-03	B-3 (8-10)	CDE-85	VOAS MS/MSD
3-1166809	B0081043	DN-SS-03-03	B-3 (8-10)	CDE-85	VOAS MS/MSD
3-1166810	B0081043	DN-SS-03-03	B-3 (8-10)	CDE-85	VOAS MS/MSD
3-1098448	B0081043	DN-SS-03-02	B-3	CDE-83	FIELD BLANK VOA's
3-1098449	B0081043	DN-SS-03-02	B-3	CDE-83	FIELD BLANK VOA's
3-1166801	X9236013	DN-SS-03-02	B-3	CDE-83	FIELD BLANK EXTR.
3-1166802	X9236013	DN-SS-03-02	B-3	CDE-83	FIELD BLANK EXTR.
3-1166803	X9236013	DN-SS-03-02	B-3	CDE-83	FIELD BLANK EXTR.
3-1166804	X9236013	DN-SS-03-02	B-3	CDE-83	FIELD BLANK EXTR.
3-1166806	B0183013	DN-SS-03-01	B-3 (14-16)	CDE-86	EXTRACTABLES
<hr/>					
		DN-SS-03	B-3	CDE-86	EXTRACT
					DELETE MRL 7/25/90
		3-1166813	B0183013	DN-SS-03-01	

7/25/90 ⁷⁵⁰

1715 sample (14-16) BWA Res + PC
Metals

Voa not taken due to moisture in
the sample.

1815 fill wt labels leave site,

Handwritten signature

AR306398

7/27/46 T. Williams Aquanave

08:30

Arrive on-site cloudy 95°F

Level Duffner in exclusion zone
Empire Millers

Roger Gresh - Woodard Clyde
Jock ~~Hodgester~~ Hockwater

objective: to observe the drilling
and sampling of B-5 and B-6

Drilling B-6

at 20-22' interval analytical sample
no obvious cont. of soils,
silt gravel sand all brown, grey sand
except for gravelly sand silt
on a clay that was a barrier
to downward migration. organic sample
taken, contained a black substance.
that looked sticky/viscous small like
pebbles. Clear throughout drilling
area, sand underneath.

8:50 Able to hear from top out
Engineering Division

Open to Drill B-5 today

26-28' analytical sample

some the nesting + also

Ken Baker - Dupont Building B-1
drilled yesterday and had a bad
address

AR306399

32-34' analytical sample
not Potomac still Columbia,
but Potomac-like sand at 22'

10:20 38-40 lat Potomac/fends B-2

10:40 Prepare to start B-5

Millers go through wood and
plaster sheathing fold down to
isolate cuttings.

Obstacle hit at 3.5' - silt + lean above

0-2' still grey brown clay/sand + silt

Stop kill notice from Engineers,
Still stuck at 3.5'

11:30 Mick Pasquale examines spot says it's clear.
11:45 but the same obstacle is coming
11:55 at 42 feet Bill Farnish B-5 today
T.W. leaves site. W.C. will also

Sample zones containing high c
in relation to normal 1/2 in.

3/30/90 Tony Vellos' Dynamometer

9:38: Arrive on site

weather clear sunny, 95°F
objective sample + observe B-18
and B-16, will take mostly

organic samples
Bore Beach Dynamometer, turns slowly

Jim Boehl's Aug.

Jim Piccola W.C.

David Friedman W.C.

~~Richard~~ Hochwaster W.C.

Erinore Ankler's

10:00 set up B-16

2-4 analytical for W.C., silt + clay
dry + hand packed

4-6 no 1/2" bits

6-8 get sandier

10:30

8-10 speed pushy sand + silt moist
analytical VOA ext. for dynamometer

10-12 soaking wet

11:00 drill B-18

11:20 (2-4) VOA 1/2" silt brown
12:00 24 ppm (8-10) → 1st ppm OAR 10th ppm
(6-8) OAR hit 1.2 ppm VOA at (6-8)
(4-6) ← analysis

ORGANIC SAMPLES

Blank/Time

TAG	ID#	LOT#	SAMPLE #	LOCATION	TRAFU Report#	Comments
CDE-87	3-1107503	9275023	DN-55-16-01	B-16 8-10	CDE-87	BNA BEST PCB
CDE-87	3-1107502	B0081043	DN-55-16-01	B-16 8-10	CDE-87	VOA
CDE-87	3-1107501	B0081043	DN-55-16-01	B-16 8-10	CDE-87	VOA 10:30
	3-1107506	9275023	DN-55-18-04	B-18 8-10	CDE-88	BNA BEST PCB
	505	B0081047	DN-55-18-04	B-18 8-10	CDE-88	VOA 12:00
	507	B0081043	DN-55-18-04	B-18 8-10	CDE-88	VOA
	3-1107507	0183013	DN-55-18-01	B-18 (2-4)	CDE-89	BNA BEST PCB
	508	B0081047	DN-55-18-01	B-18 (2-4)	CDE-89	VOA 11:20
	509	B0081043	DN-55-18-01	B-18 (2-4)	CDE-89	VOA
	3-1107522	B0081043	DN-55-18-03	B-18 Trip Blank	CDE-90	VOA 08:00
	3-1107521	B0081043	DN-55-18-03	B-18 Trip Blank	CDE-90	AR 306400
	3-1107516	B0081043	DN-55-18-02	B-18 6-8	CDE-91	VOA 11:50
	3-1107519	B0081043	DN-55-18-02	B-18 6-8	CDE-91	VOA 11:50

2/30/90

2:00 Walk at 6' 11" below surface, gravel to combined, B-18 10-12', coarse brown sand

2:10 B-16 hits Proteroc at 27.5 feet height very clay

Lead spike in B-8 B-18 with Pb in after lunch = 2.5 ppm

10-12 for own coarse sand. water came in at 8'

12-14 shale silt + clay.

2:30 Inspect logs in office of W.C. Dupont

4:00 Leave site deliver samples to X

W.C. Dupont

8/6/90 TFS VIII
Tony Wells
Dupont + Marjorie Dupont
Aversight

9:00 Arrive on-site weather - cloudy 65°F both drillers decontaminating rigs

Resampling performed by Woodward Clyde

B-9 drilling completed B-32 (11-13)' 8/3/90

B-8 - (6-8)' 8/2/90

B-9 will be (11-13)' today
B-17 will sample from (5-8)

TB-31 (12-14')

All samples TFL organic TFL metals

Tim G. Lazer - Woodward-Clyde
Jack Hockwater
Empire Tech + Scott

Jim Buczala W.C.
Jim Goebels Dupont

According to J.G. work will proceed following reaming to include monitoring wells all this week.

DR306401

8/6/90 Dupont Newport

9:40 Driller Jeff Jaworski sets up at B-9

10:00 Drilling
0-5' brown silt loam
5' soil becomes darker

at 11' soil sample is taken
2' spoon 3" sample is taken

2' of sample black grey
Sand tight w/ silt no
Hnu readings

Soil has greenish appearance
UP close.

W.C. fall scan sampled.
Sampling complete

J.J. will break to decon and
then sampling B-17

With Scott's drill team at
well MW-30E

0-5' very oily black silty soil
30 to 50 ppm downhole none in
breathing area
stained soil continues to 10 feet
perched water at 4 feet

2:09

8/6/90 Dupont Newport

no OPA readings after the
perched water

soil is still black at 15 feet

will use 4 feet (9-13) screen.

water at 12'

4" pipe 10 slot screen

OO Jesse Marie sand

lunch break

return from lunch to wait at hole

B-17 should start following decon
and Jeff's rig will be used.

at MW-30

install well 4' screen
with 10' riser
intend to place sand 4 feet
above the screen with
two feet above-bentonite
then grout.

At B-17

note: north of area behind a fence
is a pile of tar and stones 7 feet high.

8/6/90 Dupont - New part

2:30 B-17

0-5 light brown loam

sample 5-7 feet 3" spoon

tight light grey silt,
dry some brown no H₂O
reading.

W.C. sample for TAL organics
and TEL metals

no obvious contamination.

At MW-30 placing bentonite
pellets down hole a little at a time.
will grout hole above
leave site

4:00

W.C. plans to put another
deep well at MW-30

The other team will probably
not sample TB-31 today.

R306403

8/8/90 Anthony Bellios
Dupont - Airport TES VIII oversight

8:50 Arrive on site - clear 78°F

meet Jim Goebels

Drillers did not drill MW-35 yesterday.

Jack Heckenwarter Kim Balsris

Jeff Jaworski - Empire all present

J.J.'s team at MW-31

they drilled MW-31 F yesterday

and screened at 20-25' instead

of 19-24'

Now drilling MW-31A

Angered to obstruction at 27'

now drilling with a rotary bit.

(level 0 + tyres in exclusion zone)

At MW-35 meet Jim Buczala

about to drill MW-35A

Tim Glazer of W.C. logging.

0-5' moist black brown silt and gravel
becoming a mud at depth

no ~~DK~~ OVA readings

to 10' still black

14' black mud water table

31A → 32 to 37 feet

at MW-31 put screen in at ~~30-35'~~

at MW-35 set screen at

14-22 feet pouring in sand

11:00

Plans for 31A was to be 30-35'

8/3/90
Adding well to MW-31A

Shifting down to get a better seal
on the clay above it but will sample
the sand zone,

Top of Pe's mac is at 42'

will do A wells the rest of the
day

lunch

return to site after lunch

at MW-31A

Flush mount already created for 31F

J.G. says that Woodward like will
do the "B" wells after today,

about to tremie a bentonite
slurry and then cement/grout
down D 31-A,

grouting MW-35A

will do MW-26A and MW-28A
following these
capping 35A wells.

grouting complete on MW-35A
and MW-31A.

3:00

2:30

1:30

12:00

MW-35B

8/3/90

blue in asphalt bits near MW-31A
entire area known to be stained
with blue in the past,

8" locking 5' cap placed on
MW-35A.

AR306404

fertilizer schedule

set casing
8-9

complete well
8-15

8-10
8-13

see attached sheet

MW-26 entered via junk yard

Winnie Nicotro's or through the
nearby construction firm.

~~W. C. Miller~~

Anthony Vellos Dupont

8/10

Arrive on site rainy 70°F
MW-33 complete 50' A

will possibly graft B well
Jeff go to 35B

All decision paid
All drums on palettes, tires bags

visit MW-26 at Junk yard.
Jeff, will set casing

also present
Jack Hackwater
Jim Buczala - office
Jim Goetsels
Kim Balsis
leave site

[Signature]

Anthony Vellos Dupont - Newport

8/14/90

Arrive on-site 70°F sunny

Kim Balsis
Jack Hackwater
Jim Buczala

AR306405

I inspect morning at MW-35, no drillers yet.
Probably doing the B well at 35

4:00

Drillers for MW-35 at decision
Station working on repairs of
a stabilizer will be a while
before they start on MW-35 again.

Other drill team is at MW-26
at MW-26 - complete A

All A & F wells onsite completed

MW-26 - setting permanent 10 inch
casing for BS today
will complete well Thursday morning
put in permanent casing
wednesday for 26 BD.
leave site.

9/15

Daily Summary

I arrived on site at 8:10 to find Kim Balsis and Jack Hochwarter who said that the drillers were at the decantation tank and instead of at the rig at location MW-35. Both drilling teams were repairing stabilizers, Jim Buczala states that MW-26A has been completed along with all A and F wells on-site. Killers will set permanent casing on MW-26BS today and MW-26BD tomorrow.

Anthony J. Vellos

8:16/20

Anthony J. Vellos Report/Respart

9:30

Arrive on-site no one at headquarters - weather heavy 80°F

at MW-30 set casing at B

A+F completed w/ flush mounts

at MW-26 putting in casing for BD

26BS casing set
350 casing set

with set casing at 33 tomorrow

10:15

at MW-30 putting in 12 inch temporary casing - so far they hit two obstr. chns.

Meet with Jim Buczala
Jim Goodels

what Scott's team work w/ Dave Erdemen w/c soil is black - resist above obstruction. bucala is at 3 feet black soil could not have been natural.

10:45

At MW-26 BD

Kim Balsis, Jim Glazer
checking mud rotary for perm, casing
for Dr. Halloran.

AR306406

Daily Summary

I arrived on site at 9:30 to find Scott's drill team at MW-30 drilling the casing hole for B. I met with J.H. Buczek and Jim Goebels. I noted black soil all the way the ~~the~~ surface even though the drillers went through a continuous obstruction.

I stopped by MW-26 to watch drillers install permanent casing in MW-26BD. First they set up a 14 inch casing and were preparing to install that followed by drilling with mud rotary.

[Handwritten signature]
[Handwritten signature]

8/30/90 Anthony Vellos Report
 for Dynamac

4:45

Arrive on site - sunny 80°F
 bypass main site and head to site 26 in the junk yard

AR306407

meet Tade Hodelwarter and he describes the drilling of MW-26BS which went down to 60 feet. They used drill and wash technique. Cased with 10 I.D. and larger locking cap, the well looked large. On-site were several (20) drums full of water from the casings of the hole they were half full of silt according to Jack H.

W.L. will continue on ~~mon~~ Tuesday (or Monday?) to drill MW-26BD. However the casing is too thin for the rotary bit and the bit will be shaved according to J.H. leave site.

9/5/90 Anthony T. Vellos
Dupont Newport Pyramine

3:00 Arrive on-site
weather: hazy 80°F

no one at the office

Tour the site + find no one

return to the office to find
Jim Buczala just arrived

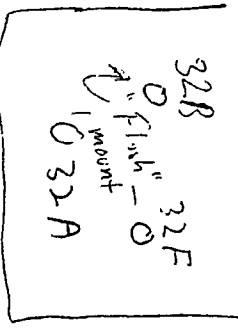
site: J.B. wants a phone call before I arrive at the plant, (9/1/90)
putting in 32B 26 BD

to be 90-100 ft.

Scott's team with K. Batis working
screen of 32B adding sand
51.9 to 61.9 feet

sand placed 3 feet above the
screen to account for compaction
as told by Dave Friedman W.L.

Plan view of site



looking
back

2200
1000
1000

9/5/90 Anthony Vellos

32B to be flush mount also.
8 inch casing.

will head to 26BD to water
drive and wash technique.

Keim Kowalski W.L.

8 inch setting now
at 92' at bottom of steel casing
will drive to 100', flush, and
set screen at 90 to 100

casing. 12' into the air, hit
with a 1000 lbs hammer
no water run down the hole
at this time, will use water
from rads to wash hole when
the pipe is no longer advanced.

6:00 Stop rig at 97 feet.

Daily Summary

Arrive to witness sand being poured
down MW-32B and casing driven
from 90 to 97 feet in MW-BN 26

AR306408

9/7/90 Anthony DeLillo
Report - Al Report TBS VIII

12:40 Arrive at Tank Yard, cloudy 80°F
acknowledge presence of worker
objective, observe installation of
MW-26BD and to confirm
report that the drillers are
using mud to screen level
during drilling drive + wash.
Vinnie Nicastro discusses yard. His
family owns the property
- 32 drums of MW-26BD Flush water
dated 9/6/90 - yesterday

(Wk.) Keith Kovacki said they were flushing
mud from the hole. Drill with mud before screens,
stopped mud rotary at 85 feet,

4-inch PVC with Stanbers steel
Screen in hole have said up to 90'
Screen is 10 feet long with some
blank areas of coupling. 9.27' of
open screen.

Jeff Jaworski Drilling,

1:30 Break - Drillers trying to
pump casing out at 96' now
8-inch casing stuck.

9/7/90 Report AN

1:35 commence pounding casing
up with a hammer. casing
rope burns and breaks.
drillers + W.C. break for lunch.

2:00 Tony Kurynowski for Empire
arrives with support truck,
2:40 Try to call office, Bruce Beach not in
3:00 Drillers arrive with a hydraulic
reverse (pneumatic) hammer to raise the
casing. Cutting casing with torches.

Talked with Vinnie N. He says
that fill in yard is comprised
of household and construction junk,
ie. boards, cinder block, stumps, etc.

His operation appears well organized.
Oil from cars is drained on a
concrete floor along with anti freeze,
and gasoline. No major pills are
apparent. The custodian of the property,
a woman who Nicastro knows, was
hired with Assoc. to investigate
the property.

Driller attempting to use reverse hammer
and winch truck to pull casing.

AR306409

4:00 now have about 8 or 9 feet out of the hole.

4:20 about to take 10 feet out of the hole,

4:30 Dullies pour on sand, to 87.2 feet

Sand & this put in a few more handballs.

Jim Buczala arrives
- Doing pilot holes 29 + 34 on Monday.

5:00 All bentonite downhole.

5:30 prepare to leave site

[Handwritten signature]

9/12/90 Anthony Bellios, Dupont Airport

1:00 Arrive on-site, hazy 85°F

meet at trailer
Jim Goebels:

Team came off of 34 this morning will log tomorrow afternoon, B-29 is at 40 feet.

They have been on it since Monday. Will start MW-33B this afternoon.

B-29 had some problems during drilling, split spoon ~~log~~ stuck.

Jim Buczala

4 offsite wells, next morning need EPA oversight + decision making.

MW-23 MW-24 MW-25 MW-27

All shallow type A.

J.B. set 5' below top of

wants → Columbia is his preference
55. down to the top of the Columbia
below grey clays and fill. ^{9/13}

9/12/90 Anthony Vellos

Casing set every where except
MM-31B, MW-29 and MW-34
Note: Tim Hill requests that I call him and
always have an escort.

At MW-29 Jelt Jaworski;

Kim Balis's
Keith Kowalski;

(215) 499-1026) Tim Hill
800-548-1964 + Dave Friedman of the other hole.

Drillers putting drilling mud into
drums > 30 set deep

32-34

Drillers have to wear goggles at MW-29
tests found traces of benzene toluene + xylene in
the mud and a high pH, due to

fermentation at 34 feet in B-29

according to Kim Balis's
31301 MW-33B

at 39'

4:06 Tim Goetels + I notice
a sunken line at MW-33B grounds,
Looks like it is related to the pipe
outfall near the river. The ground
sinks up to a foot below the
surface, located 6 feet north of

MW-33C. Pipe elbows at
a tree,

Miss Drillers clearing mud.

AR306411

9/14/10 Anthony Bellis

11:15 Arrive on site at
Aupont - Newport
Jeff Maddox 65°F raining
Jim Beetsels

TRB-29 Logged today, still drilling, at 140'
Installing ~~33B~~ today 30B
Lining is waiting Luffie gets

Finished logging 29 then they will
plug up the hole.

Two questions for Jim Buccala

What did they find in MW-29?
What is litho & pore?, Zirc sulfate, Boron sulfate.

At ~~MW~~: 03-29 at 145' ten feet
in side bedrock. Rock is Saprolite
according to Jeff Jaworski.

According to J.G. well is mostly
constructed of MW-~~33B~~ 30B

J.M. setting up logging truck at 8-29

12:10 Using natural gamma log now from
logging truck.

9/14/10

J.J. says that the hole had gravel
above the Potomac which forced
them to case the hole to 33 feet.
This is the same boring that had
reported contamination - Venough
warrant extra eye protection.

MW-30 completed except for
Flush mount, Stackup will be cut Monday
306412

At MW-33 earth crack was filled in
by the drillers with earth but is
still collapsed due to erosion.

Drill Water stored in roll of EGs to be
pumped with tank trucks, placed
in belly on side of site.

J.M. using ~~16A-64~~ mesh resistivity
probe at ~~03-29~~.

All drill holes use plastic lining
on the ground for all wells
and store plastic into double bags,
All keys are stored in double
bags.

Stop with J.B. 20B well set casing
at 31B. OFF site wells MW-25, on working
leave site.

1:30