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U.S. EPA – Region 4

BVSPC Project 048011/048301

Capitol City Plume Site  
Work Assignment No. 011/301

February 10, 2011

Ralph O. Howard, Jr.  
Site Evaluation Coordinator, Remedial Project Manager  
U.S. Environmental Protection Agency, Region 4  
Superfund Division, Superfund Remedial and Site Evaluation Branch  
61 Forsyth Street, 11<sup>th</sup> Floor  
Atlanta, GA 30303

Subject: Field Log Book Records for  
Capitol City Plume Site  
Montgomery, Alabama

Dear Ralph:

I am enclosing a CD containing PDF files of original logbook documentation for the Capitol City Plume site in Montgomery, Alabama (Work Assignment Numbers #001-RICO-A4H7 and #301-RICO-A4H7). The logbook records that I have included are dated as follows:

March 2000; April 2000; May 2000; January 2001; February 2002.

We certify that these PDF files represent official records of documentation for this work assignment. The original logbooks are being stored in our inactive records files in the Kansas City, MO area.

If you have any questions or comments, please contact me at (770) 521-8118.

Sincerely,

Black & Veatch Special Projects Corp.

Karen Hopkins  
Regional Office Coordinator

Enclosure (1): CD



10801546





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2 Location \_\_\_\_\_ Date \_\_\_\_\_

Project / Client \_\_\_\_\_

Location Alpharetta, GA - Montgomery, AL Date 2/11/02 3

Project / Client Cap City

- All times recorded are Central Daylight Time (CDT)
- Black & Veatch (BUSPC -- B+V)
  - 0509 - Kris Latham (BUSPC) and Mark Elliott (BUSPC) leave Alpharetta, GA, en route to Montgomery, AL, in a Budget rental cargo van.
  - 0830 - Meet with Joe Slykerman (B+V) at Spring Hill Suites in Montgomery.
  - 0930 - Meet with David Prouty (B+V) and Tom Muntean (B+V) at the location of MW-125+I
  - 1000 - Latham, Elliott and Slykerman calibrate the Horiba-U10 meter.
  - 1010 - Leave to get rope and other supplies.
  - 1025 - Stop for lunch.
  - 1115 - Leave to get more supplies, back to MW-12 to get prescriptions from Prouty.
  - 1145 - Leave MW-12 for <sup>IW-01</sup> IW-02  
for <sup>IW-01</sup> IW-02 to MW-12. SA 115

Sunday at Trailways. Gerald Conway of City of Montgomery present.

1205 Started Pumping well IW-01 (Trailways).

- HORIBA U-10 used for below:

Time	Temp	ph	Cond	Turb	DO
12:09	11.5	<del>4.9</del> 5.20	0.069	2	2.97

12:16	11.7	5.33	0.059	3	5.17
-------	------	------	-------	---	------

12:23	11.6	5.42	0.058	2	9.53
-------	------	------	-------	---	------

12:31	11.6	5.37	0.058	2	2.96
-------	------	------	-------	---	------

12:40	11.7	5.37	0.057	2	3.00
-------	------	------	-------	---	------

12:48	11.6	5.39	0.057	2	2.98
-------	------	------	-------	---	------

1250 Began taking samples from IW-01.

1255 7.1 " " 1.4 1

measuring old well column that was dismantled and discarded nearby. Well depth of 53 feet.

1345 Left IW-06 for IW-02 (old Alabama Town) well location.

1400 Reach well location. There was not a suitable spigot to sample from, so sampling will be delayed until tomorrow.

1415 Went back to MW-12 to talk to Prouty and get 55-gal drum for well purge at MW-06.

1425 Arrived at MW-06, preparing to begin well purge.

1440 Took water level at MW-06:

70.48 feet.

Time	ph	Cond	Turb	DO	Temp
1500					
<del>1504</del>					

1504	4.79	2.36	234	4.30	21.8
------	------	------	-----	------	------

1509	4.87	2.34	80	4.20	22.9
------	------	------	----	------	------

Time	pH	Cond	Turb	DO	Temp
(cont.) purging Well MW-6					
1516	4.93	.235	4	4.74	23.3
1523	4.88	.233	1	4.47	23.2
1529	4.86	.232	1	4.60	24
1536	Fe(II) reading taken with HACH DR/890 colorimeter Fe(II) = 0.00 mg/L No color change observed or read by colorimeter.				
NOTE: ORP meter was not available, so ORP was not taken at this well.					
1610	Samples taken: Total metals, Dissolved metals, CN-, Cr+6 with baster.				
1645	Dissolved metals samples filtered with a 1µm and 0.45µm filter.				
1725	Leave MW-06 for Fed Ex.				

0710	Elliott, Latham, Slykeman (B+V) leave hotel lobby for decan. station.				
0725	Slykeman leaves for Granger to get tubing for Grandis pump.				
0725	Elliott, Latham decan. pump and water depth meter.				
0800	Arrive at site of MW-45 + MW-4I. Meet with Gerald Conway of City of Montgomery.				
0805	Latham takes <del>well</del> water depth at <del>the</del> MW-4I: 32.65 feet.				
0820	Slykeman arrived with tubing.				
0830	Begin purging MW-4I.				
0842	Elliott and Slykeman calibrated Horiba-U10 meter.				
0850	Horiba U-10 readings				
0850	pH	Cond	Turb	DO	Temp
0850	5.65	0.106	999	2.30	20.1
0906	6.37	.085	713	2.65	20.5
at 20 Gall Purgeal.					

(cont.)	Time	pH	Cond	Turb	DO	Temp
	16	6.40	0.08	490	2.65	20.7
	26	6.42	.078	334	2.66	20.8 / 34.4
	134	6.36	.075	656	2.49	21 / 36.1
	45	6.45	.075	215	3.22	20.9
	54	6.37	.073	165	3.1	21.0 / 54

05 Pulled pump and prepared to sample. Strykerman left for ATL.

025 Samples taken into 1 L poly bottles

37 Fe(II) measured with HACH colorimeter: 0.00 mg/L

30 Left MW-45 + 4I for MW-12 to get decon. tubs and Liquinox.

45 Went to lunch

230 Went to decon pump and lead.

300 Decon completed.

315 Returned to MW-45, Gerald Conroy present.

325 Water level taken: 31.3 feet.

Time	pH	Cond	Turb	DO	Temp
1335					
1340					
1340	6.06	342	1	2.10	22.3
1348	6.01	.344	1	3.00	22.2
354	5.85	.341	0	2.32	22.5
1406	5.91	.343	0	2.30	22.5
1410					
1420					
1425					
1500					
1510					
1520	6.74	0.164	311	2.61	14.5
1527	6.58	0.160	196	2.74	

1335 Purge started at MW-45

1340 Horiba U-10 Parameters

1340 6.06 342 1 2.10 22.3

1348 6.01 .344 1 3.00 22.2

354 5.85 .341 0 2.32 22.5

1406 5.91 .343 0 2.30 22.5

1410 Purging finished, preparing to sample.

1420 Fe(II) taken on HACH colorimeter: 0.00 mg/L

1425 Samples taken, preparing to filter dissolved metals and move to (Old Alabama Town) IW-02.

1500 Left for IW-02.

1510 Arrived at IW-02 and

prepared to sample

Horiba U-10 readings:

1520 pH Cond Turb DO Temp  
6.74 0.164 311 2.61 14.5

1527 6.58 0.160 196 2.74

(cont.) Horiba U-10 readings:

Time	pH	Cond	Turb	DO	Temp
1534	6.38	0.188	355	1.25	14.6

1540 Took samples.

1645 Completed paperwork and sample preparation. Left to get ice and pack coolers for Fed Ex.

1845 Mailed coolers from Fed Ex.

~~M. L. L. L.~~  
2/12/02

0800 Letran and Elliott met in hotel lobby and began calling labs and residents.

0830 Left for Walnut for coolers, rain gear, parlife.

0915 Decan. of pump, water level water.

1015 Arrived at site of Mkt-115.

1032 Water level at MW-115:  
105.75 feet.

Water is too deep for our 100 foot hose. Letran leaves site to get couplings to connect hoses.

1125 Letran returns to site with coupling and additional pumps.

1130 Elliott calibrated Horiba U-10.

1142 Begin pumping.

Horiba U-10 readings:

Time	pH	Cond	Turb	DO	Temp
1145	5.75	0.238	342	0.41	21.6
1150	5.69	0.238	48	1.74	21.8
1156	5.86	0.234	15	1.95	21.8



Horshe U-10 readings (cont.)

Time	pH	Cond	Turb	DO	Temp
1201	5.85	0.234	12	2.74	21.9

1206 5.91 0.233 10 (-0.56\*) 21.7

1210 5.94 0.233 7 (-0.56\*) 21.7

Apparent errors, see note at 1555 on 2/13/02

1213 Pulled pump out of well and prepared to sample.

1230 Took samples from MW-115.

1245 Took Fe(II) with HACH DR/890 colorimeter. Then calibrating: 1.00 mg (obvious orange color).

1311 Left MW-11 site for lunch, Secor, and MW-12.

1425 Found out that MW-12E will have to be developed. Went to TW-14+15 site to talk to Tom Mouton (B&U) and Dave Priddy (B&U) about our strategy. Talked to

Joe Slykeman and Hubert Wieland about our strategy for the rest of the week.

1520 Left TW-14 for MW-125

1530 Water depth MW-125 = 25.6 ft.

1545 Began purging well MW-125

Horshe U-10 Readings:

Time	pH	Cond	Turb	DO	Temp
1548	5.95	0.232	92	(-0.60)	<del>17.6</del> 20.4

1550 Recalibrate ←

1555 ⇒ Er 4 reading for DO ⇒ DO results not valid for this

Time	pH	Cond	Turb	DO	Temp
1556	5.05	.239	(-1)	(-0.64)	21.0

1601 5.14 .238 (-2) (-0.58) 21.1

1604 5.87 .236 (-2) (-0.57) 21.1

1620 Began taking samples at MW-115.

1655 Took Fe(II) sample with HACH colorimeter: 0.00 mg

1750 Paperwork prepared, ready to

Project / Client Cap City

1845 Finished at Fed Ex.

MW  
2/13/02

Project / Client Cap City

0740 Lathan and Elliott leave hotel for decon.

0820 Got barrels and go to MW-12I for development of well.

0830 Arrived at MW-12I.

0835 Water depth: 27.18 ft.

Well depth: 106.1 ft.

0850 Lowered pump into well. Had trouble getting pump started, the generator would kick off the breaker at the plug if we cranked it up too high (&gt;120 Hz) before it was flowing full.

0915 Lathan left to get gas can from drillers. Came back to fill generator. Calibrated flowmeter.

0920 Pump running smoothly, we've pumped 20+ gallons of development water. Surge and purge

Over

Time Horiba UK-10 readings  
cond temp

0923	8.39	0.377	283	2.98	20.2	
0934	8.59	0.291	61	3.45	20.4	50
0940	7.88	0.252	58	3.25	19.7	
0959	7.62	0.196	56	3.06	20.5	107
1005	7.68	0.184	21	2.76	20.6	12
1020	7.50	0.190	17	3.20	20.9	
1051	7.10	0.180	3	(-0.67*)	20.6	131

*M. H. Smith*

- ≈ 0930 Roughly 36 gallons pumped. Surge and purge.
- 0936 Roughly 58 gallons pumped. Surge and purge.
- 0944 Roughly 73 gallons pumped. Surge and purge.
- 0958 Roughly 105 gallons pumped. Surge and purge.
- 1008 Generator kicked breaker at outlet. Pump stopped. Turned back on within one minute.
- ~~1010~~ 1012 Generator kicked breaker again.
- 1016 Generator kicked off again. Was running at ≈ 1.1 gpm (150 Hz).
- 1020 Pump running again at 150 Hz.
- 1024 Roughly 134 gallons. Surge and purge.
- 1034 Roughly 144 gallons. Surge and purge.
- 1100 Begin taking samples.
- 1133 Fe(II) taken: 0.00 mg/L. W. TA HACH.
- 1155 Begin decan in field.
- 1245 Leave for lunch, TW-15.

1325 Went to Wm. Dixie and Sports Authority to get DI water, 2 boxes and a cooler.

1415 Back to TW-15.

1430 Began work on TW-15.

Water Depth: 31.0 feet

Well Depth: 40.0 feet

1435 Began pumping TW-15 to purge.

1437 Hanna U-10 Readings  
~~PH Cond Turb DO Temp~~  
 5.53 0.130 999 (-0.59) 20.8

1442 5.37 0.128 434 (-0.59) 20.8

1447 5.20 0.127 193 3.60 20.9

1452 5.07 0.127 108 3.71 21.3

1456 5.14 0.131 78 3.72 21.1

1507 Sample well.

1604 Fe(II) could not be read, sample too turbid.

1606 Across the street to TW-14.

1620 Began purging TW-14.

1621 Hanna U-10 readings  
~~PH Cond Turb DO Temp~~  
 5.83 0.173 999 7.23 17.9

1627 5.47 0.169 744 7.57 17.7

1632 5.52 0.164 262 7.48 17.6

1637 5.57 0.165 191 7.57 17.7

1644 Prepare to sample.

1655 Take samples.

1702 Fe(II) = 0.00 mg/L

1740 Prepare to leave for TW-16 to get FedEx package from Priority and Mountain, get ice and go to FedEx.

Cap City

1845 Leave for FedEx  
 1915 Leave FedEx for dinner

Mark Elliott  
 2/14/02

Cap City  
Mark Elliott

- 0645 Leave hotel for ice, coolers etc.
- 0735 Latham and Elliott reach TW-16 site. Manteen and Prouty already present.
- 0800 Hubert Wickland (Project Manager, B+V) called to let us know that we will not be able to sample TW-16 today. Latham and Elliott will instead go to all the previously sampled wells and take readings with the Horiba U-22 meter.
- 0825 Latham and Elliott left TW-16 site for TW-15 and other wells. Taking Horiba U-22 readings at all wells with water depth  $\leq 10$  meters (the length of the probe lead). MW-15 and MW-65 are too deep for the probe and will need to be bailed.

Water Depth	Location	Project / Client	Well	ORP (mV)	Temp	DO	Conduct	pH	Hardness	Temperature
31.1 ft			TW-15	125	20.3	2.41	0.155	5.40	360	
26.5 ft			TW-14	205	19.1	7.60	0.215	5.45	5	
25.6 ft			MW-125	218	20.2	6.40	0.256	5.28	125	
25.5 ft			MW-12-I	101	20.3	4.90	0.360	8.60	62	
33.4 ft			MW-4I	190	21.2	3.49	0.297	6.74	334	
31.7 ft			MW-45	192	21.2	4.55	0.354	5.68	67	
105.2 ft			MW-115	129	20.0	5.37	0.205	5.78	27	
70.8 ft			MW-65	184	22.3	7.60	0.254	5.33	120	

Location \_\_\_\_\_ Date 2/15/02 23  
 Project / Client Cap City

1112 Left MW-65 for MW12 to get extra drums and letter them to Prouty and Munton.  
 1300 Finished lunch and prepared to leave for Atlanta. Gave field book to David Prouty.

MW 12  
 2/15/02  
 MW 12

0700 Picked up generator from  
Thompson Rentals

0730 On site at CCTW16.

~~0950~~ sun sun

0805 Begin purging CCTW16 of  
water introduced during drilling.

0950 Collecting samples w/ bailer

Peninsular

FIELD BOOK

FS 502

Capitol City Plume

02/04/02 -



①

L/4/02

10 hrs

11:00 Met drillers at  
water works in Montgomery

11:52 Met with Mike Grant.

He offered key to front  
gate and meter for potable  
water access.

12:20 Staging set up

16:10 Began decon of Anger  
flights, and rods, and split  
spoons.

18:45 Completed Decon. Ended  
day

~~David J. [unclear]~~

②

~~[unclear]~~

(3) 2/5/02 Tuesday Partly Cloudy <sup>10 m/s</sup>

Cold approx 40°F

0630 Met drillers at Montgomery waterworks.

0639 Con Site Safety meeting conducted by D. Frouty and T. Muntean.

0718 Set up drill rig over CC-MW-12I.

~~0640~~

0640 FID and OVA meter calibrated by J. Jenkins and Thomas Muntean

0749 Encountered wood, possibly old railroad tie, and brick fragments.

Note: O<sub>2</sub>/LEL was calibrated to ambient air. OVA meter tested with sharpie

0815 Advanced boring w 9 1/4 ID. HSA Began at 4 BLS.

0901 Water level measured @ 25.58 BLS.

1048 USEPA R4 on site.

1050 USEPA R4 off site.

1109 Drillers purchasing new 6' Surface casing. Trailer inadequate to transport to Deconpad. Will pressure wash on site.

(4)

AIR MONITORING: Breathing Zone

	<u>FID</u>	<u>O<sub>2</sub>/LEL</u>	
0800	0.0	20.9	0
0830	0.0	20.7	0
0900	0.0	20.7	0
0930	0.0	20.7	0
1000	0.0	20.7	0
1030	0.0	20.7	0
1100	0.0	20.7	0

~~Tom Muntean~~

(5)	DRUM LOG-	Solids	Date
Drum #	Location	contents	Filter / etc
1	CC-MWIZI	Auger cuttings	Solids 2/15/02 / etc

Drum Log in Drum Log  
Book

Drillers Supplies  
Portland Cement, Type 1, Type 6A

(6)

⑦

1215 Returned from 1hr Lunch.

Drillers preparing casing  
for insertion.

Note: Confirmed I.D. of casing to  
be 6". O.D. of lead auger to  
ream previous hole is 10".

21.11' 21.0' 21.0'

Above are the lengths of  
each outer casing pipe  
segments.

Boring w/ 4 1/4"  
I.D. HSA terminated @ 61' BLS.

Boring w/ 6 1/4" I.D. HSA  
Terminated @ 63' BLS. Both

initial grout batches for outer casing  
1512 measured 15.5 lbs/gal.

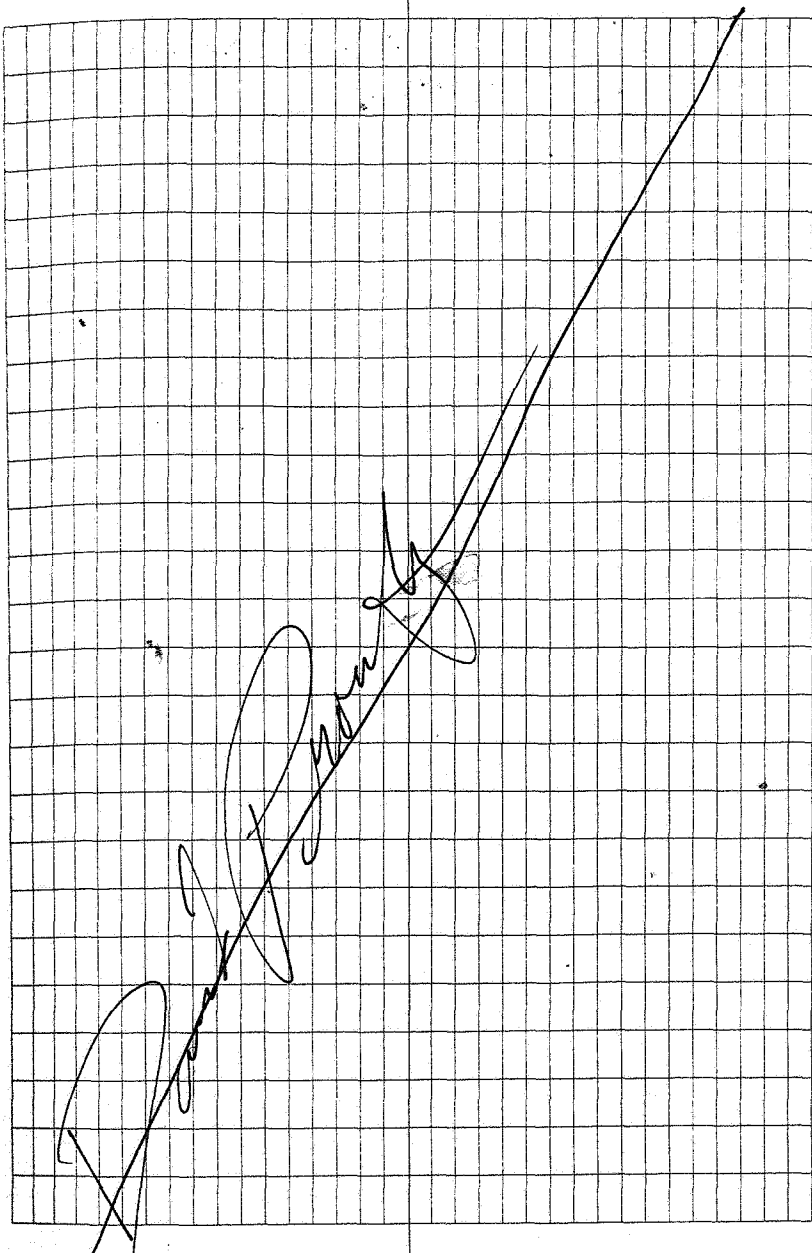
1512 Drillers pumping grout into  
hole for outer casing setup  
using tremie method.

1703 Cavin preventing casing  
from advancing to the  
predetermined 60'.

1815

1820 After several attempts to  
advance casing, current  
depth of roughly 42.5' BLS.

8

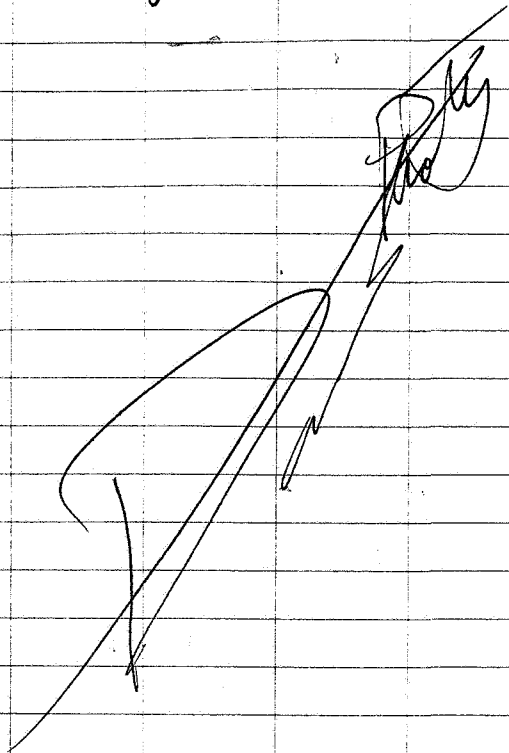


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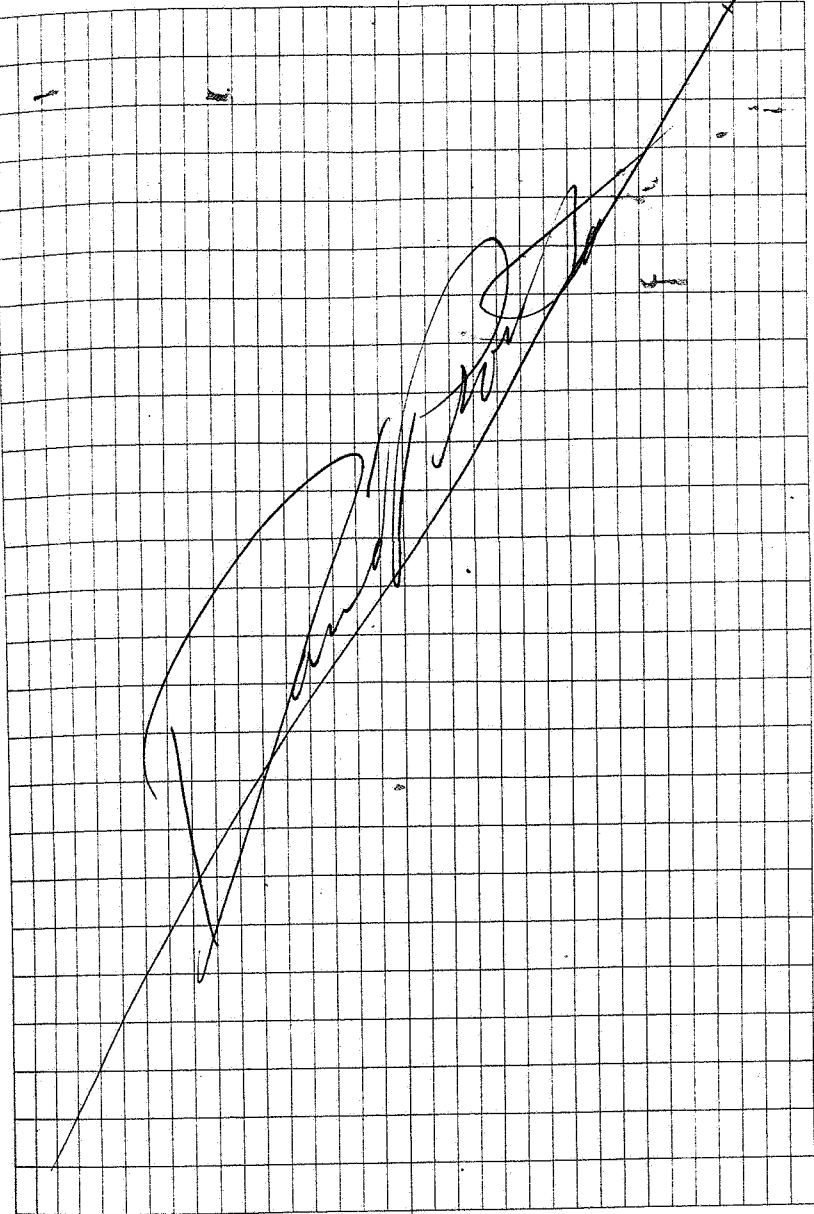
1845 Grouting annular space  
around casing. Batches 15.5 + 16.2

1922 Purging grout tank. Securing  
site. Leaving for waterworks.

2130 Left following grout removal from  
6 1/4 augers.



10



⑩ 2/6/02 Wednesday 13 hrs

Weather: Cold, 45°F, Overcast,  
raining.

0630 Day began at waterworks, Decon  
equipment, augers, well casing.  
Waiting for Joe Slykerman.

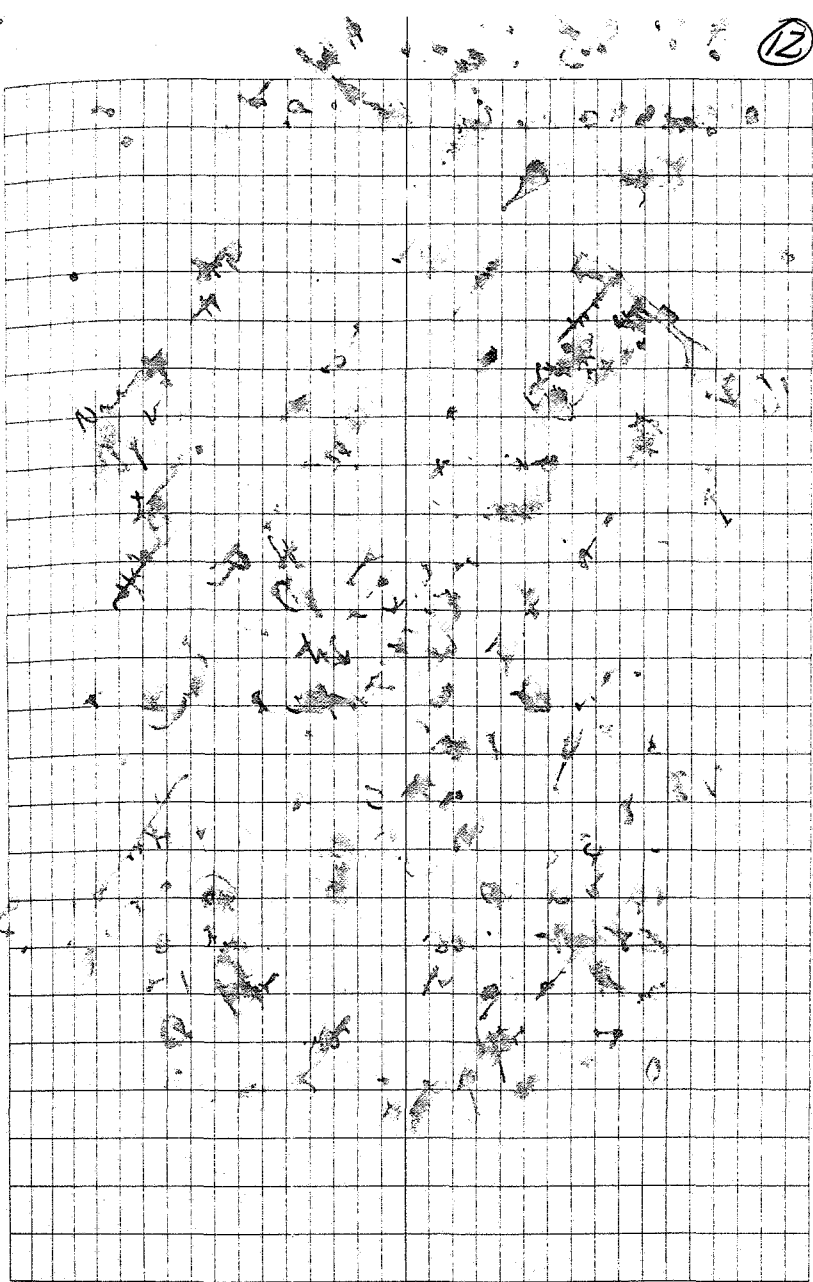
1026 Completed decon. Moving  
to boring site CC-MW-12.

Note: Measured lengths of  
stainless steel well casing  
is 10.10, 10.00, 10.05, 9.95,  
1.55 for CC-MW-12S.

1056 Drillers cutting outer casing  
stickup of CC-MW-12I.

1209 At location of CC-MW-12S  
a standing pool of water  
leads to car batteries and  
other machinery and equipment  
common to welding supply shops.  
Water will be drained from  
location by digging a trench.

1410 Humberto Guzman stopped  
by CC-MW-12 to remind David  
Prouty to call



(13)

1603 Field decision made to use a wood plug at the end of the 6 1/4" HSA. The unreliability of the drillers' stainless steel plug, and its potential to cause damage to the hot well, was the reason this decision was made. The drillers' plug would not remain in place.

1645 Proceeded with well installation.

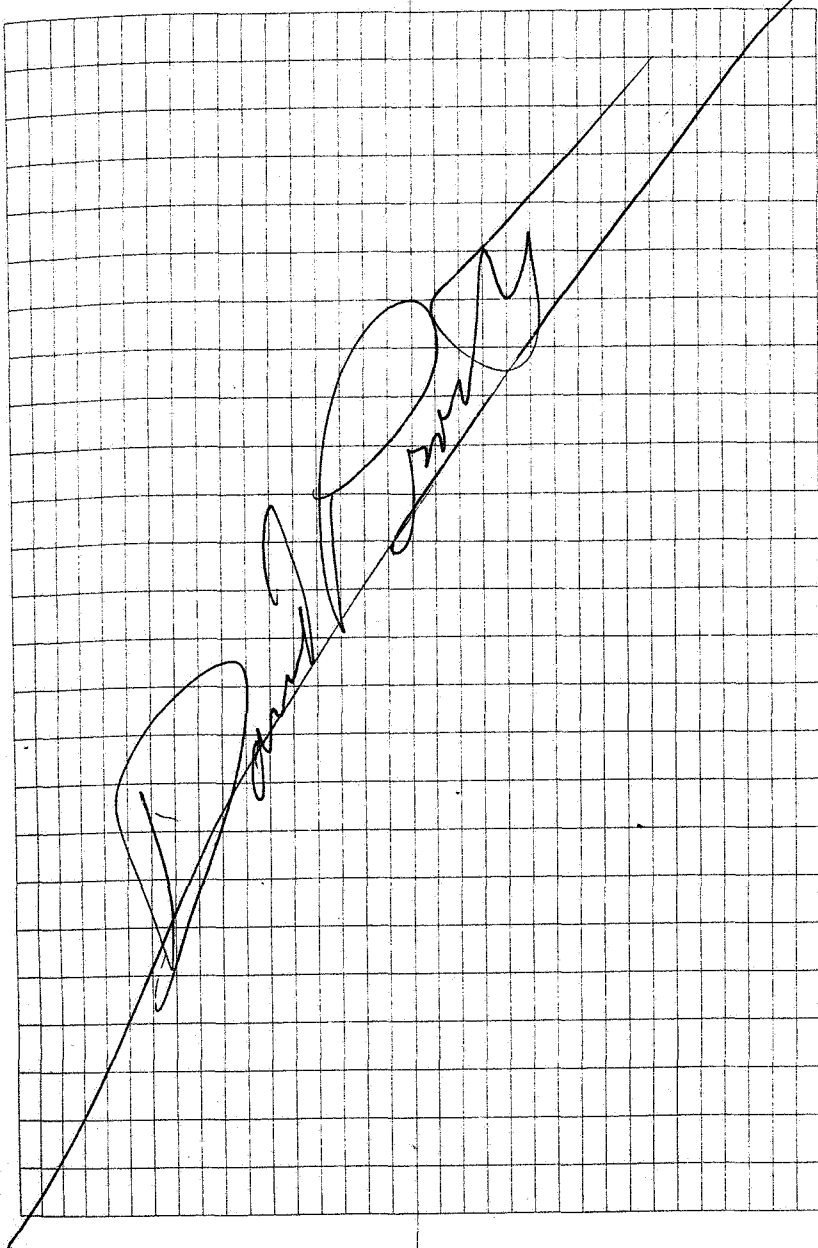
1719 Heaving sands encountered. Progress slowed.

2009 Well set. Filter pack + bentonite hydrating. Drillers left for decon pad to remove grout from augers.

2215 Drillers finished removing grout from augers.

*[Handwritten signature]*

(14)



(15) Thursday 2/7/02

0630 Cloudy, wet, 45°; Rain 20%  
chance.

0630 Arrived at decon pad.  
Drillers proceeding with  
decon of augers, rods,  
spoons, mud tub.

1040 Pulling augers. Setting up  
treme lines to infuse  
grout.

1130 Lunch

1230 Begin grouting hole. First  
batch weighed 10.2 lbs/gal.

1315 Finishes shallow well w/ 5 bags  
cement. Moved over to  
intermediate casing.  
First batch 15.4 lb/gal.

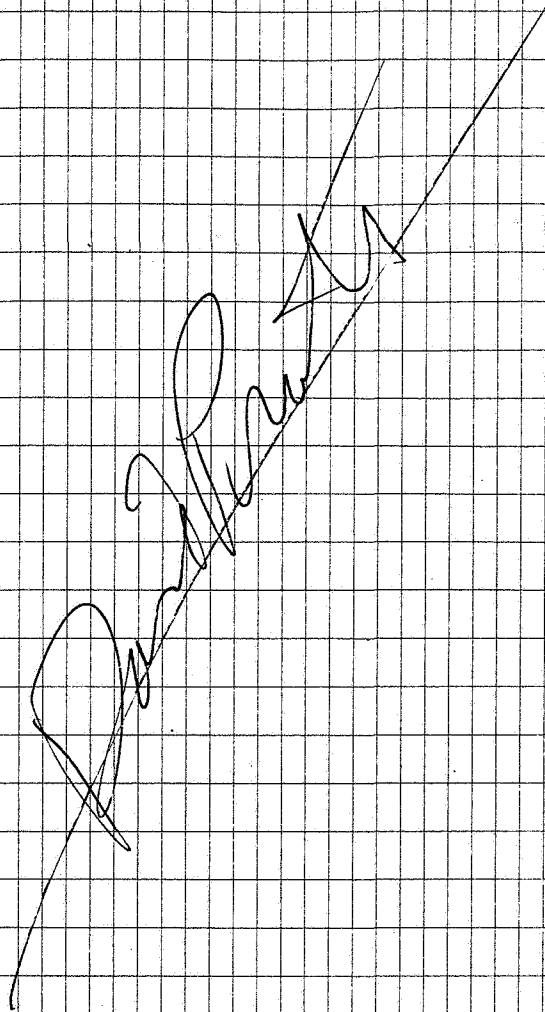
1330 Second bath 15.9 lbs/gal

1345 Finished grouting outer casing  
12 bags of cement in addition  
to 15 bags on tuesday. 27 total

1432 Finished clearing the site.  
Headed to decon. Deconed  
the mud rotary equipment to  
complete cc-mw-121.

1930 Stopped decon for night.

(16)



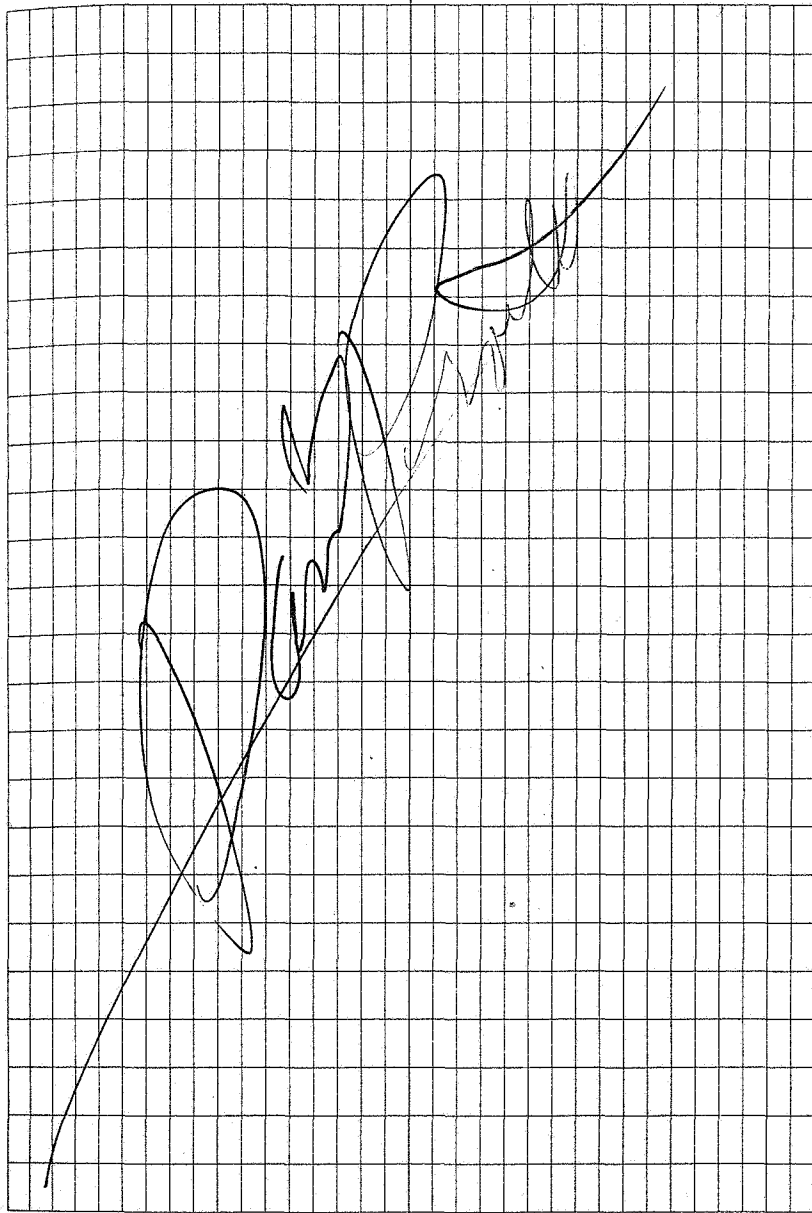


(17) Friday 2/8/02

- 0630 Completing decon of all equipment, including the well casings for MW-12I, TW-14, TW-15.
- 1045 Tom & David Decon their equipment for surge & purge.
- 1200 Lunch
- 1300 Preparing for pump & surge of CC-MW12S.
- 1320 Began purging. Drillers' responsibility dropped. They assisted Tom Muntean & David Prouty while they performed surge and Purge.
- 1530 Drillers began installing well pad for MW-12S.
- 1630 Preparing site for departure to decon.
- 1645 Left for decon site.
- 1745 Drillers left decon for home.

*[Handwritten signature]*

(18)



(19) Monday 2/14/02

Partly cloudy cool 40's.

0800 Drillers began decon of mud tub. LeL + OVA meters calibrated with Methane.

0915 Arrived at cc-mw-12. Drillers proceeding to cut off stickup on outer casing.

1031 Trouble with blow torch delayed setting up over hole. Finally set up at 1032.

1100 Drillers mixing drill mud. 2 bags of mud so far.

1129 Lunch.

1209 Mud rotary bits going in outer casing.

1222 Drilling continued on cc-MW-12I.

1249 Called Hester's Auto for permission to collect water from the well MW-65.

1450 Collected first ~~sp~~ 14th split-spoon sample of boring. First on the day.

1500 Called City of Montgomery and spoke with Kitty Chamberlain on access to wells MW-45 + I. She said not a problem.

(20)

### AIR MONITORING

<u>TIME</u>	<u>FID</u>	<u>O<sub>2</sub></u>	<u>LEL</u>
1030	NA	20.9	0
1100	0	21.0	0
1200	0	21.1	0
1300	0	21.1	0
1400	0	21.1	0
1500	0	21.1	0
1600	0	21.1	0
1700	0	21.1	0

~~Tom Minter~~

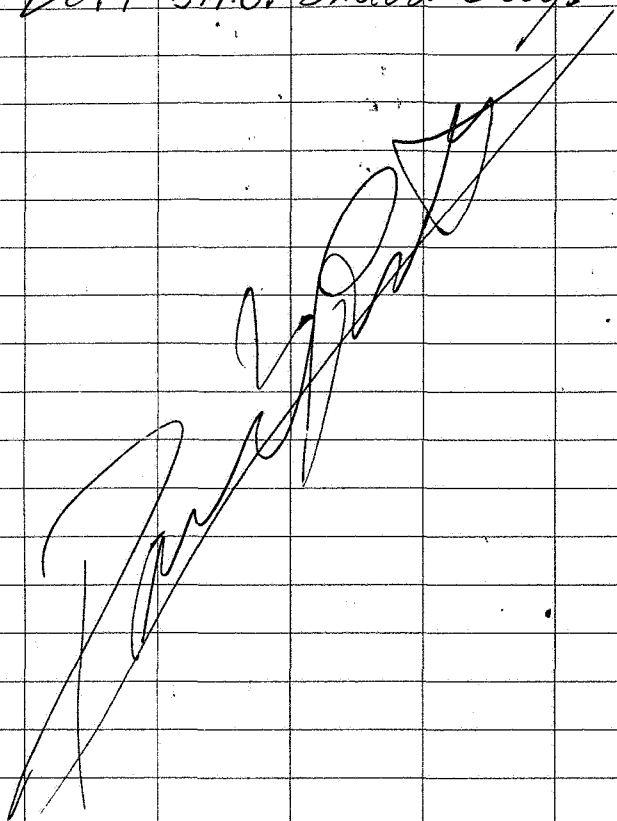
(21)

1520 Collected secon split spoon  
sample of the day.

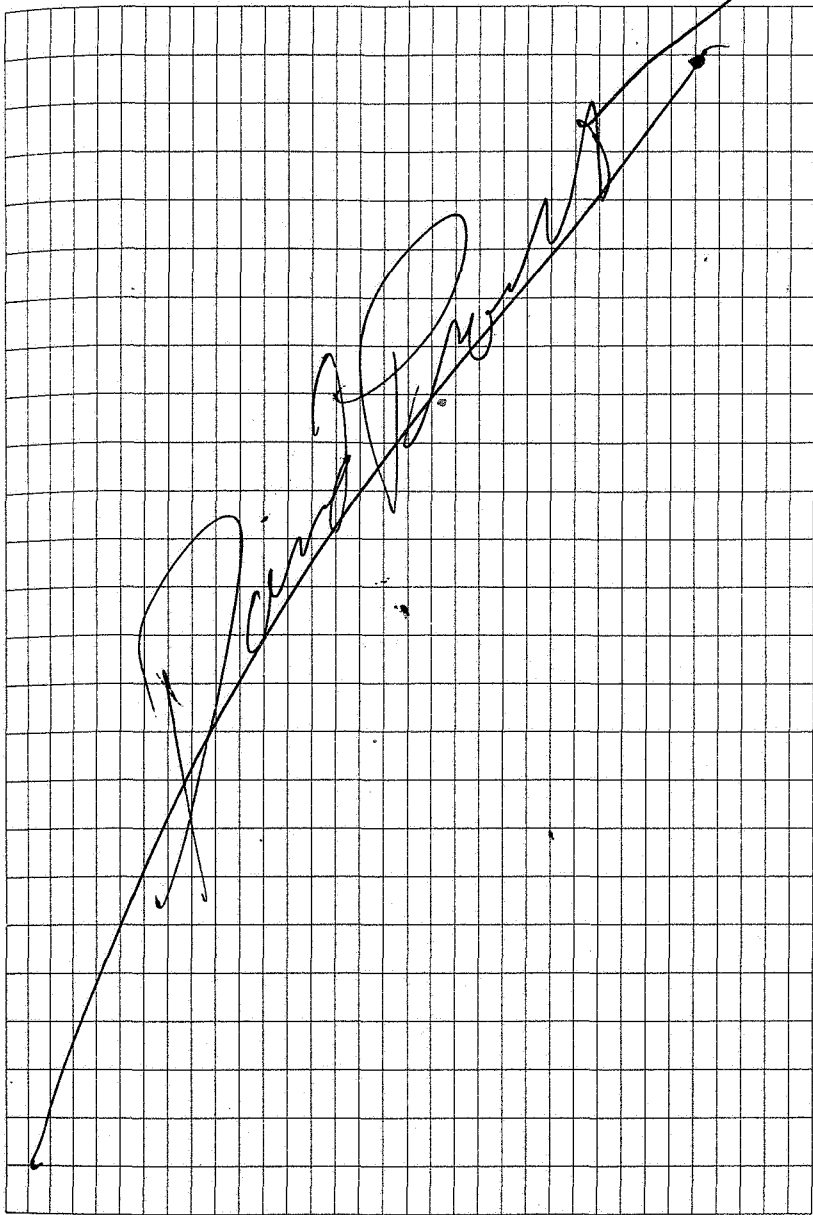
1745 Stop drilling due to darkness.  
total depth at 1745 = 100' bgs.

Begin securing site.

1820 Left site. Ended day.



(22)



(23) Tuesday 2/12/02

Clear, cold, 35°F

0800 Arrived at site CC-MW-12I

0700 to complete boring.

0830 Completed drilling mud prep.

Now continuing with drilling.

0859 Suspected clay layer encountered @ 102' BLS.

1030 Total depth reached @ 110' BLS.

Last spoon retrieved between 108 + 110 contains silty clay. Drilling ended.

Note: No geotechnical sample taken due to the expectation that the clay layer would be reached @ ~15' BLS. Previous spoon taken was @ 99' to 101' BLS and was discarded the night before. The clay was encountered 1 foot below the previous spoon.

1105 Well casing sectioned together and put down hole. Sand tremed in.

1230 Lunch

0820 Tremed grout in CC-MW-12I

1320 Completed grouting of well.

1500 Preparing to leave for decon.

(24)

### AIR MONITORING:

<u>TIME</u>	<u>FID</u>	<u>O<sub>2</sub></u>	<u>LEL</u>
0830	0	20.8	0
0930	0	20.9	0

Batch weight  
① 10.2 lbs/gal  
② 10.3 lbs/gal  
③ Not measured due to resolving project issues.

(25)

1515 Talked with Marie at R+H Electric for access to site cc-TW-15 on Wednesday 2/13/02 at 7:00AM. Request granted.

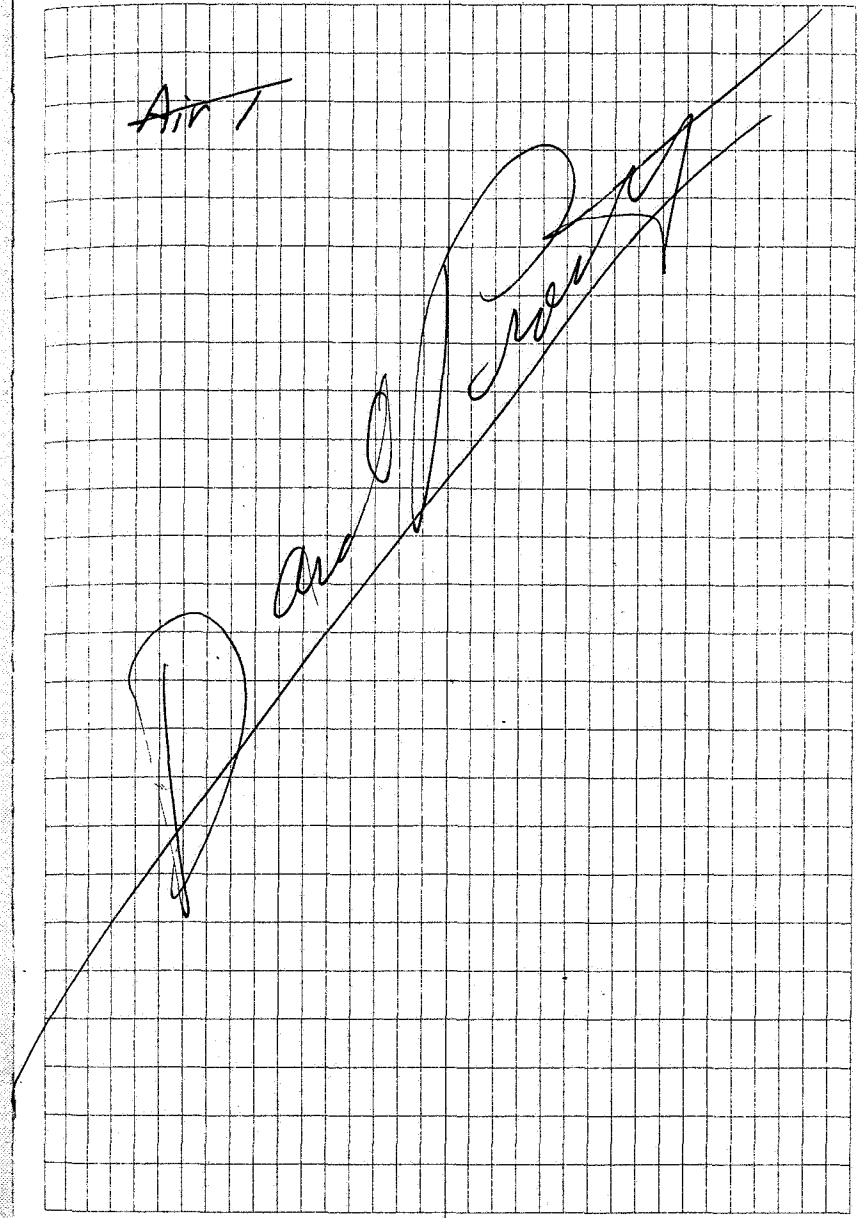
1530 Talked with John Morgan for access to site cc-MW-14. He granted request and asked me to inform R. B. Hins of the time we want to start drilling. Morgan suggested I give him 1 hrs notice.

1811 Left ~~cc-72~~ cc-MW-12 for decon station.

1945 Completed decon. Left for the day.

*[Handwritten signature]*

ART



(27) Wednesday 2/16/02

Clear, 50°

0700 Met with Marty Hughes, showed him where the well would be set.

0720 Drillers punching through the 8" cement slab.

0745 After post hole digging boring, water detected @ 4.3' BLS.

0815 Water believed to be perched and supplied by storm water drains nearby. Drains cased in brick.

Note: Possible source of contamination located up slope from drain  $\approx$  20' North. Drill rig setup in line & opposite drain @ 7.5' South.

0850 Drilling began.

0945 First 3" split spoon sample taken. Will hold sample until it is determined whether it is close enough to ground water.

1010 Second 3" split spoon sample taken. Still no indication of groundwater.

1050 Third 3" split spoon taken. No sample collected for chemical analysis

DMG

(28)

### Air Monitoring:

Time	FID	O <sub>2</sub>	LEL
" 0915	<5	NA	NA

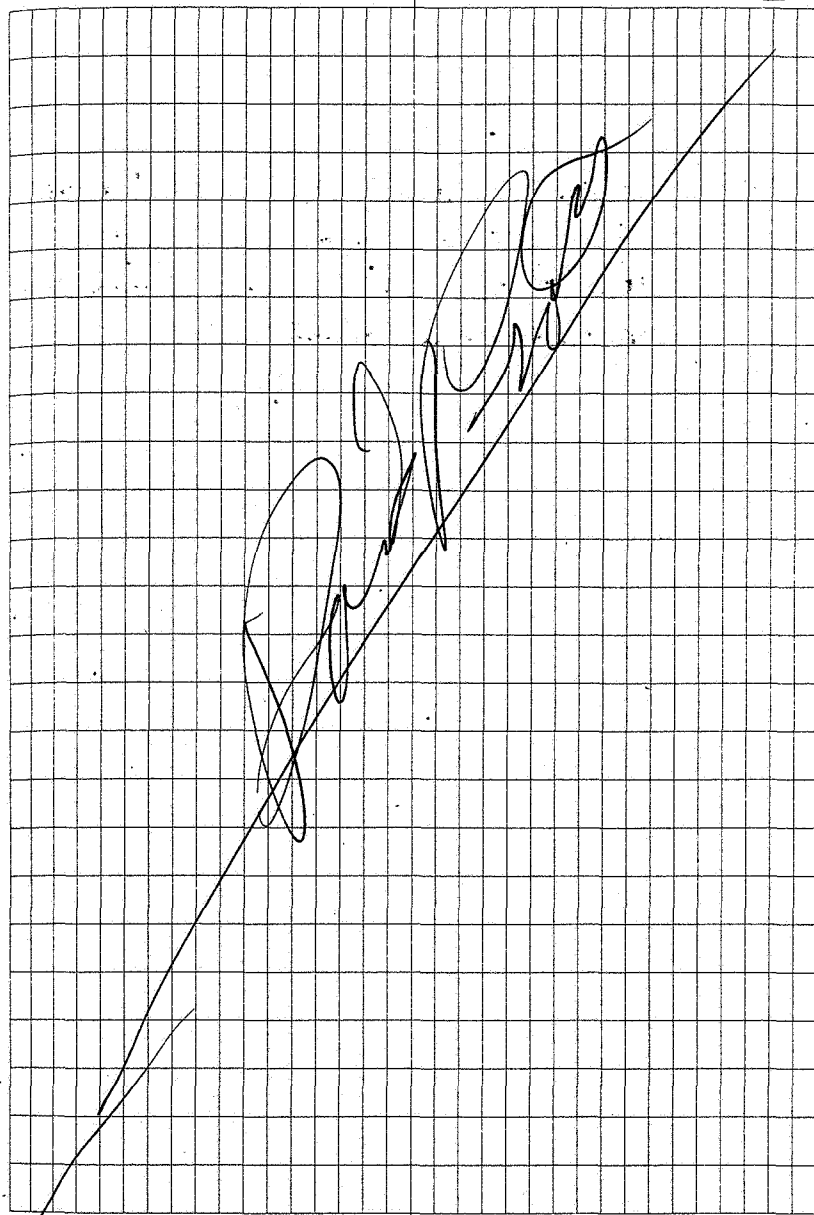
Muntean off site during drilling - was searching for water sampling team - Prouty conducting Air monitoring. No unsafe or unhealthy breathing zone conditions encountered.

~~Down Muntean~~

(29)

- 1115 Fourth<sup>3</sup>" Split Spoon taken. Sample collected for chemical analysis.
- ~~Boring~~ Boring terminated @ 41' BLS.
- 1145 Installing well casing for ~~to TW-12~~ CC-TW-15.
- 1230 Well casing stuck in 4 1/4" I.D. HSA, Sand & Gravel the likely cause.
- ~~1300~~ Lunch.
- 1330 Drillers attempting to remove well casing from augers.
- 1350 Drillers redrilling well-boring due to collapse when augers were pulled.
- 1410 Drillers making second attempt at installing TW-15.
- 1115 Sample taken for chemical analysis from 32.5' to 33.5' BLS.
- 1439 Well ~~set~~ CC-TW-15 set @ 39.75' BLS. Set filter pack to 19.25' BLS and then placed a bentonite plug from surface to 1' BLS.
- 1609 After cleanin, Left for decon.
- 1909 Finished deconing augers & rods. Shipped sample. Called Dobbie Colquhoun.

(30)



(31) Thursday 2/14/02

Clear, Cool 50°

0709 Drillers break concrete drive to posthole next 4 feet.

0915 Drillers to total depth w/ 4 1/4" augers at 41' bgs. Soil analytical sample collected at 23'-24' bgs. Groundwater encountered at ~25.5' bgs.

0940 Total depth reached. Last spoon taken @ 39'-41' BLS. Drillers pulling 4 1/4" HSA & then will ream hole with 6 1/4" HSA for well installation.

1114 Well set @ 41.47' BLS. Sand @ 27.2' BLS. One foot of cave in. Bentonite between 26.0 + 24.3' BLS.

1130 Proceeding with cleanup. Loading drums on trailer, cleaning up mud on drive.

1200 Lunch

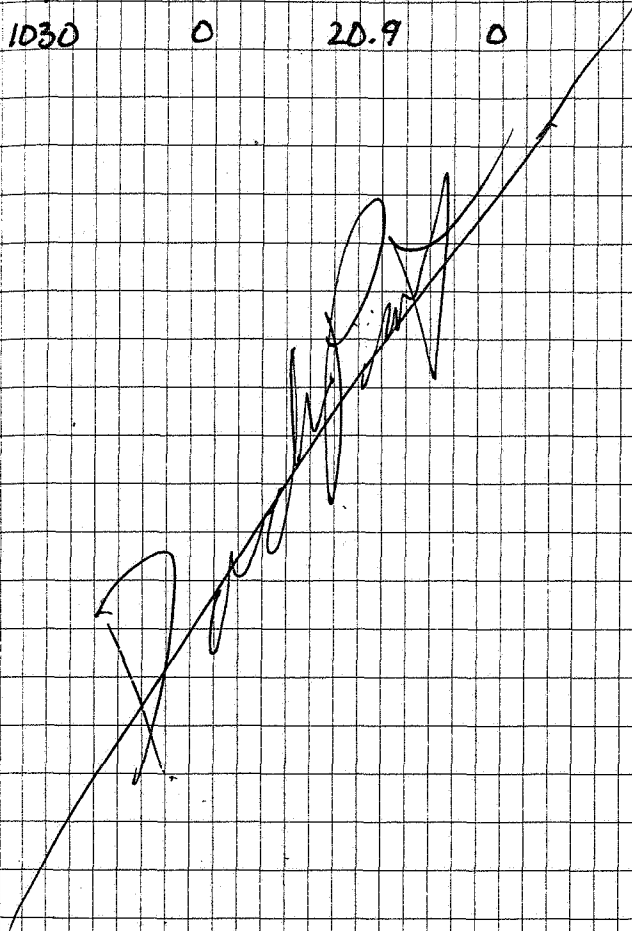
1300 After receiving the OK for access to CSX property, Drillers decommed.

1330 David Prouty drove Curtis Lee to Conway trucking service to pick up a well screen w/ the correct threading.

(32)

### Air Monitoring

	FID	O <sub>2</sub>	LEL
0730	0	20.9	0
0900	0	20.7	0
1030	0	20.9	0

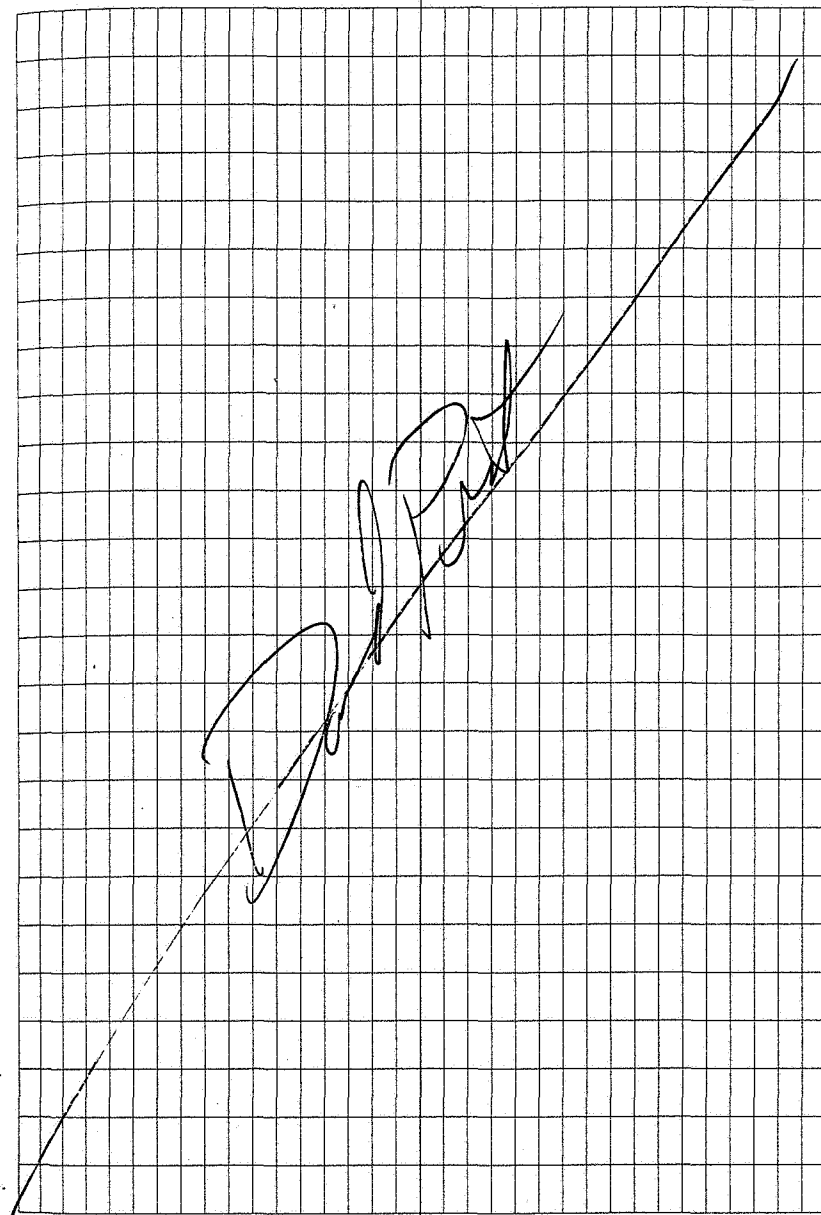




(23)

- 1530 Finished with decon. Drillers and BV Geologists leaving for CC-TW-16 on CSX Property.
- 1600 Drillers began posthole digging TW-16. Material removed suggested artificial fill - slag.
- 1640 A representative from World COM stopped by TW-16 and asked for documentation of utility clearance. BV field representatives contacted FM for the requested documents. It turned out that B+V's Montgomery contact for utilities clearance did not inform World COM. The World Com rep cleared us on the spot. He flagged the line. The drill rig was roughly 49 feet from the World Com fiber optic line.
- 1645 Analytical sample taken from 3" Split Spoon between 24'-26' BLS. Hit ground water @ 28.5' BLS.
- 1730 Concluded augering w/ 4 1/4" HSA. Drillers leaving for night.
- 1930 Samples iced, documented, sealed, and delivered to FedEx.

(34)



(35) Friday 2/15/02

Clear, cool 50s-highs 70s

0630 Drillers on site cc-TW-16 to  
ream boring w/ 6 1/4" HSA.

0810 Drillers setting well w/ pouring +  
tagging method.

09 → Well set. Completion came too  
1025 late in the day to take a water  
sample + have it delivered to  
SSD. Sample will be taken  
Monday 2/18/02.

1045 Leaving site for decon. Drillers  
deconing augers + filling tanks,  
collecting materials for well abandon-  
ing.

1230 Lunch

1310 Finished decon + then left for  
cc-TW-15 for well abandonment.  
Casing was removed intact. Grouting  
hole w/ tremie method.

1411 Completed grouting of cc-TW-15.  
Will pour concrete and smooth it to  
repair the pad Monday 2/18/02.

1420 Began abandoning cc-TW-14. Well  
casing removed entirely. Grouting boring

(36)

## Well Abandonment

cc-TW-15

Bentonite Grout PG	-IIII	bags	4
Portland Cement	1	bags	1

cc-TW-14

Bentonite Grout PG	-IIII	bags	7
Portland Cement	1	bags	1
Quickrete	1	bag	1

cc-TW-16

Bentonite Grout	IIIIII		8
Quickrete	1		1

~~W. J. [Signature]~~

(37) Saturday 2/16/02

Clear, Cool, 50's

0630 Drillers + Tom Muntean

collecting Drums from wells  
sampled

0840 Drillers deconing all  
equipment, breaking down  
decon area. All drums  
moved to staging area  
and logged.

1200 Drillers left.

1210 Lunch

0400 Slug tests of cc-MW-12s + I  
1300 performed.

1515 Ended day.

Water levels 2/15-16 (88)

	Depth BTOC	Time	Date
MW-1s	38.28	0801	2/16
MW-1I	39.58	0749	2/16
MW-2s	40.78	1659	2/15
MW-3s	56.50	1728	2/15
MW-4s	31.70	1015	2/15
MW-4I	33.40	1010	2/15
MW-5I	58.50	1800	2/15
MW-6s	70.80	1105	2/15
MW-7s	35.00	1633	2/15
MW-7I	35.00	1649	2/15
MW-8s	36.26	1558	2/15
MW-8I	36.27	1549	2/15
MW-9s	54.24	1815	2/15
MW-10s	56.34	1846	2/15
MW-11I	105.48	1924	2/15
MW-12s	25.60	0857	2/15
MW-12I	25.50	0858	2/15
TW-14	26.50	0850	2/15
TW-15	31.10	0837	2/15
TW-16	31.32	0815	2/16
pH 6.11 ORP -15			
Cond. 545 Temp 18.67°C			
Turb 999			
DO 8.17			

(39) Monday 2/18/02 15 hrs

Clear, Cool, V60's

0700 Picked up generator.

0730 Began purging cc-TW-16.

0900 Drillers showed up. They left to patch the concrete pad @ R+H Electrical.

0950 Water Sample collected.

1100 Drillers went to lunch after picking up rental truck for drum transport.

1200 Drillers began abandoning cc-TW-16.

1240 Tom Muntean left for airport.

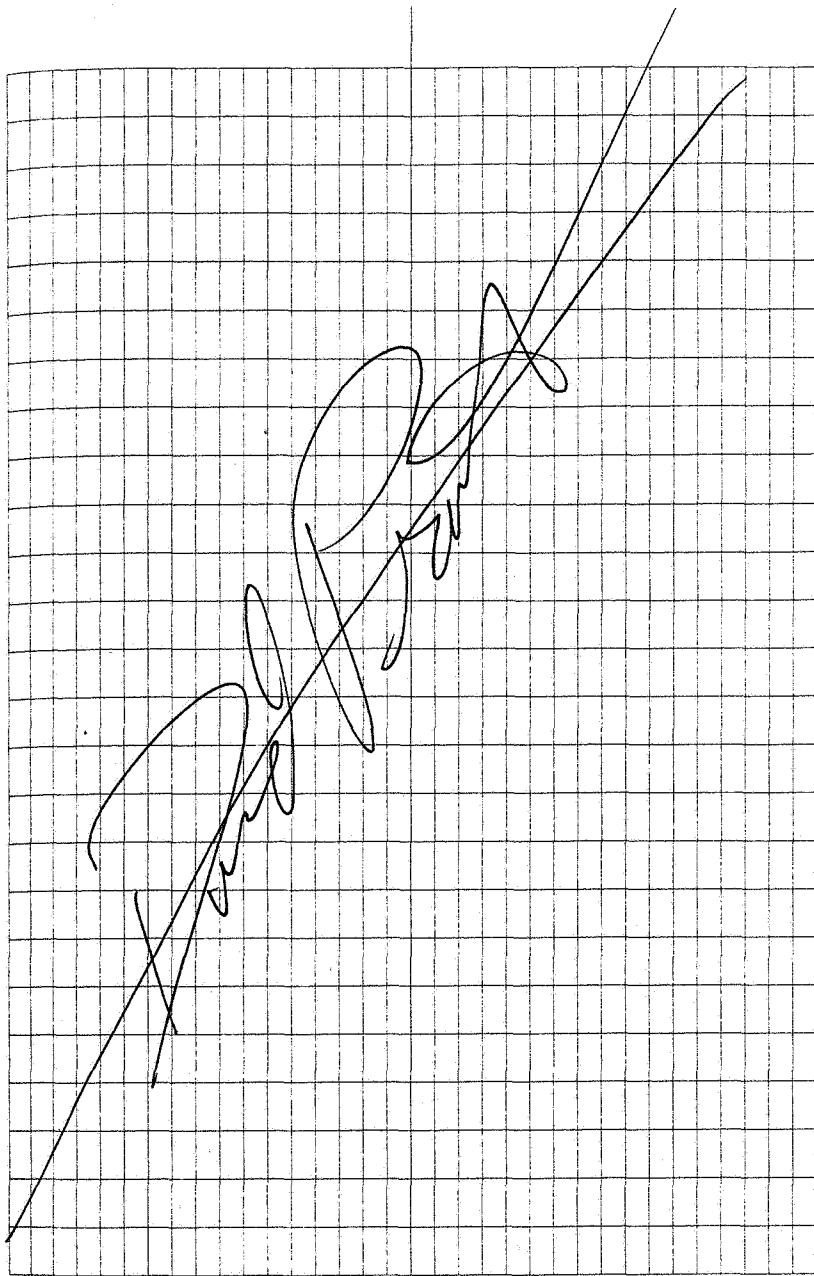
1400 David Prouty met with Surveyor to show him the locations to be surveyed.

1430 Drillers finished grouting TW-16. 8 bags of Puregold grout was used + 1 bag of Quickrete.

1734 All samples were shipped using fedex.

2045 Completed decon of all equipment + left for Atlanta.

2340 Arrived @ home.



LOG BOOK  
CASTLE CITY PLUME

Peninsular

FIELD BOOK

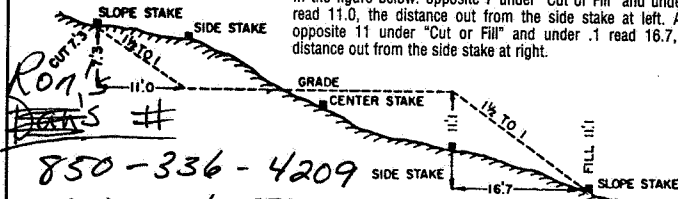
FB 802

7 565-3840

**DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING**

**Roadway of any Width. Side Slopes 1½ to 1.**

In the figure below: opposite 7 under "Cut or Fill" and under .3 read 11.0, the distance out from the side stake at left. Also, opposite 11 under "Cut or Fill" and under .1 read 16.7, the distance out from the side stake at right.



Cut or Fill	Distance out from Side or Shoulder Stake										Cut or Fill
	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	0.0	0.2	0.3	0.5	0.6	0.8	0.9	1.1	1.2	1.4	0
1	1.5	1.7	1.8	2.0	2.1	2.3	2.4	2.6	2.7	2.9	1
2	3.0	3.2	3.3	3.5	3.6	3.8	3.9	4.1	4.2	4.4	2
3	4.5	4.7	4.8	5.0	5.1	5.3	5.4	5.6	5.7	5.9	3
4	6.0	6.2	6.3	6.5	6.6	6.8	6.9	7.1	7.2	7.4	4
5	7.5	7.7	7.8	8.0	8.1	8.3	8.4	8.6	8.7	8.9	5
6	9.0	9.2	9.3	9.5	9.6	9.8	9.9	10.1	10.2	10.4	6
7	10.5	10.7	10.8	11.0	11.1	11.3	11.4	11.6	11.7	11.9	7
8	12.0	12.2	12.3	12.5	12.6	12.8	12.9	13.1	13.2	13.4	8
9	13.5	13.7	13.8	14.0	14.1	14.3	14.4	14.6	14.7	14.9	9
10	15.0	15.2	15.3	15.5	15.6	15.8	15.9	16.1	16.2	16.4	10
11	16.5	16.7	16.8	17.0	17.1	17.3	17.4	17.6	17.7	17.9	11
12	18.0	18.2	18.3	18.5	18.6	18.8	18.9	19.1	19.2	19.4	12
13	19.5	19.7	19.8	20.0	20.1	20.3	20.4	20.6	20.7	20.9	13
14	21.0	21.2	21.3	21.5	21.6	21.8	21.9	22.1	22.2	22.4	14
15	22.5	22.7	22.8	23.0	23.1	23.3	23.4	23.6	23.7	23.9	15
16	24.0	24.2	24.3	24.5	24.6	24.8	24.9	25.1	25.2	25.4	16
17	25.5	25.7	25.8	26.0	26.1	26.3	26.4	26.6	26.7	26.9	17
18	27.0	27.2	27.3	27.5	27.6	27.8	27.9	28.1	28.2	28.4	18
19	28.5	28.7	28.8	29.0	29.1	29.3	29.4	29.6	29.7	29.9	19
20	30.0	30.2	30.3	30.5	30.6	30.8	30.9	31.1	31.2	31.4	20
21	31.5	31.7	31.8	32.0	32.1	32.3	32.4	32.6	32.7	32.9	21
22	33.0	33.2	33.3	33.5	33.6	33.8	33.9	34.1	34.2	34.4	22
23	34.5	34.7	34.8	35.0	35.1	35.3	35.4	35.6	35.7	35.9	23
24	36.0	36.2	36.3	36.5	36.6	36.8	36.9	37.1	37.2	37.4	24
25	37.5	37.7	37.8	38.0	38.1	38.3	38.4	38.6	38.7	38.9	25
26	39.0	39.2	39.3	39.5	39.6	39.8	39.9	40.1	40.2	40.4	26
27	40.5	40.7	40.8	41.0	41.1	41.3	41.4	41.6	41.7	41.9	27
28	42.0	42.2	42.3	42.5	42.6	42.8	42.9	43.1	43.2	43.4	28
29	43.5	43.7	43.8	44.0	44.1	44.3	44.4	44.6	44.7	44.9	29
30	45.0	45.2	45.3	45.5	45.6	45.8	45.9	46.1	46.2	46.4	30
31	46.5	46.7	46.8	47.0	47.1	47.3	47.4	47.6	47.7	47.9	31
32	48.0	48.2	48.3	48.5	48.6	48.8	48.9	49.1	49.2	49.4	32
33	49.5	49.7	49.8	50.0	50.1	50.3	50.4	50.6	50.7	50.9	33
34	51.0	51.2	51.3	51.5	51.6	51.8	51.9	52.1	52.2	52.4	34
35	52.5	52.7	52.8	53.0	53.1	53.3	53.4	53.6	53.7	53.9	35
36	54.0	54.2	54.3	54.5	54.6	54.8	54.9	55.1	55.2	55.4	36
37	55.5	55.7	55.8	56.0	56.1	56.3	56.4	56.6	56.7	56.9	37
38	57.0	57.2	57.3	57.5	57.6	57.8	57.9	58.1	58.2	58.4	38
39	58.5	58.7	58.8	59.0	59.1	59.3	59.4	59.6	59.7	59.9	39
40	60.0	60.2	60.3	60.5	60.6	60.8	60.9	61.1	61.2	61.4	40

Hubert - 770-521-8127

John - 770-521-8119

Bob - 770-521-8111

Charles Till (706) 355-8619

1-800-350-6590 B+V

Gerald Conway (334) 398-1387 collector  
(334) 240-1664 officer

Nardina Turner - EPA  
404-562-8650

Debbie Colquitt SEED

706-355-8804

Carolyn Macle (703) 264-9323

SEED Address

Science + Ecosystems Support Div.

980 College Station Rd.

Athens, GA 30605

~~CALPHONE - 334-201-8073~~

The paper in this book is made of 50% high grade rag stock with a WATER RESISTING surface sizing.

Christopher Lund - once shipped

703-264-8633

(if shipping on Fri. → call by 1:00 pm on Thurs.)

ATHENA CLARK

DAVID PARKES  
850-3973  
240-1649  
Athens, GA 30605

06 Mar. 00

Karen King  
Andrew Grimake  
John Jenkins ①

CONTENTS		
PAGE NO.	REFERENCE	DATE
	- Bill Manasco	
	CITY ENGINEER	
	404 562 8942	
	Hambuto	
	Guzman	

1145 Arrived in Mont., Ala. / wait for Hubert Wieland @ 1215

---

1215 Hubert Wieland arrived, all personnel leave for decon area to meet w/ drillers.

---

1230 BV personnel arrive @ ~~staging~~ <sup>KSK</sup> area (KSK) staging area

Drillers present include:

- Ron Bassett, Rodney Parr,
- Josh Sigler, James Bryan,
- Harold Blackman.

---

1245 BV personnel show drillers, decon area, drum staging area & storage unit

1300 BV personnel conduct HSP meeting w/ drillers. Drillers sign HSP.

---

1330 Inventory of drilling materials: Standard Sand & Silica Co. (20-30 sand); 8" diameter oversize casing; Cetco Volclay PureGold 1/4 Bentonite tablets; Cetco Pure Gold grout; Sonic Rig USDOT 313396

---

\*NOTE\* above is in EST & subsequent is in CST.

---

1425 Drillers continue offloading equipment & setting up decon pad

Karen S. King 3/6/00

06 MAR 00

(2)

1700 Completed building decon pad, unloading support truck

1715 Drillers begin decon on equipment

~~1800 Drillers complete decon~~

1800 After Grimble & King check equipment 2 times, drillers agree to decon again in the morning.

King S. King  
3/6/00

~~King S.~~

07 MAR 00

K. King

(3)

Weather - sunny and warm, no clouds

0700 - Arrive @ decon site w/ drillers to continue decon on equipment.

0800 - Hubert, John, & Andrew set planned well installation sequence. This sequence is:

Rotation 1

Tuesday - MW11S

Wednesday - MW11I

Thursday - MW6S

Friday - MW5I

Saturday - MW4S

Sunday - MW4I

Monday - MW7S

Tuesday - MW7I

Wednesday - OPEN

Rotation 2

Monday - MW8S

Tuesday - MW8I

Wednesday - MW9S

Thursday - OPEN

Friday - OPEN

Saturday - ~~MW~~ KSK MW1S

Sunday - ~~MW~~ KSK MW1I

Monday - MW10S

Tuesday - OPEN

*[Signature]*

3/7/00



07 MAR 00 K. King (4)  
1000 Drillers are finishing decon + removing  
water from pad to drum. Drillers  
are waiting for pipe dope to arrive  
to begin drilling - was left off truck.  
K. King & Andrew Grimke finish decon on  
sampling equip.

1130 Pipe dope has still not arrived.  
According to Ron Bassett, Rodney Parr  
was on a ladder to enter back of  
support truck and slipped & fell  
@ approx. 9 AM. Edge of support truck  
bed hit him in front of ribcage.  
Drillers fear he is hurt worse than  
he says. BV personnel advises he be  
seen by a physician.

1300 BV personnel + drillers arrive on  
site @ MW11S and MW11I.

1500 After bringing drill rig and  
setting up, drillers left for drill  
lubricant.

K. S. King

08 MAR 00 K. King (5)  
0700 BV personnel arrive @ drill site.  
Checked calibration on OVA meter with  
100 ppm Methane calibration gas, OVA  
checks out okay.

0730 Drillers arrive on site. Ron Bassett  
informs us that Rodney Parr refused to  
seek medical attention and arrived to  
work.

0815 Drillers begin work on MW-11S.  
Lithologic descriptions will be recorded on  
the core log.

1100 John Jenkins leaves to obtain 2<sup>nd</sup> battery  
for OVA meter which is not working properly.  
1130 J. Jenkins returns w/ 2<sup>nd</sup> battery which  
does not work. Will use microguard instead.

for Health + Safety only. The deep well  
adjacent to this well (MW11S) will be  
monitored accordingly when installed.

OVA meter reading has stopped @ 37 feet.

Pure Gold pipe thread lubricant arrived and  
was used beginning at 57 BCS. - Microguard  
was left at breathing zone on rig  
for continuous monitoring.

1320 Engine + turbo charger too hot  
shut down to cool off.

Karen S. King

(6)

K. King

08 MAR 00

1330 - Resumed drilling  
1730 - Stopped drilling, water table has not been encountered. Drummed up drill cuttings + moved drill rig away from street.

~~James S. King~~

09 MAR 00

K. King

(7)

0700 BN arrived on site. Drillers have set up drill rig + are beginning to finish drilling on MW-11S.

0750 Drillers have shut down due to engine overheat and override casing is stuck. They will go to decon site + retrieve larger casings and wait for engine to cool.

0900 Drillers return w/ override casing, try to start drill rig and engine has problems. Drilling has stopped for the day, waiting for mechanic to see if they have blown a head gasket.

1430 Grimuke + King return to Atlanta due to mechanic being in Birmingham + drill rig down for several days.

~~James S. King~~

15 MAR 00

K. King

(8)

0700 Arrive onsite. Hubert Wieland calls & informs King & Grimmke the drill rig is not arriving onsite until 1200 (noon).

1200 Arrive @ decon, driller Joshua Sigler is waiting in truck. Drill rig has not arrived. Grimmke calls office to inform Hubert Wieland. Josh informs us he still has some mechanical work to perform on drill rig.

1300 Drill rig still has not arrived, Josh informs us the mechanic will not release the rig until he receives check from Gulf Atlantic via Fed Ex.

1330 Grimmke receives phone call from Dan Palmer with Gulf Atlantic stating the drill rig is leaving shop outside of Birmingham and is en route.

1500 Drillers arrive @ decon w/ drill rig and begin working on motor by installing hydraulic drive motor.

1615 Drillers Move Rig to location CC-MW-11 TO RE-ATTACH <sup>ASG</sup> LEAD CASING CENTER COLUMN WHICH WAS REMOVED AFTER RIG MOTOR FAILED.

*[Signature]*

15 MAR 00

(9)

1630 Driller attempts to climb drill mast to use sledge hammer to lose drill casing from center column. Grimmke instructs him to don chest harness before ascending for his safety. 1700 Drillers lose casing from center column. Drillers & BV personnel all depart site for the day & agree to meet @ 7am onsite to complete drilling well CC-MW-115.

*[Signature]*

Cloudy/Rainy

(10)

K King

16 MAR 00

0700 BV personnel arrive onsite, drillers are set up and ready to drill. They attempt to begin w/ 6" casing, which does not work, and change to 8" casing on CC-MW-115.

NOTE: 6" DRILL STEM REMAINS LOCKED IN HOLE.

BECAUSE 6" DOES NOT TURN, EVEN WITH NEW RIG MOTOR, DRILLERS WILL BE FORCED TO OVERRIDE WITH 8" CASING TO DEPTH.

1045 Drilled to 127'. Water table @ approx.

127'. Soil samples for geotechnical analyses are taken @ 121'-123'.

1100 Grimmke & King measure well material & drillers begin to set the well.

1220 WELL SANDED TO 114' BLS.

1310 DRILLERS MIX PREBOLD GROUT.

~~1530~~ 1510 DRILLERS COMPLETE GROUTING WELL.

1520 DRILLERS PULL 8" CASING FROM BOREHOLE.

1600 DRILLERS ~~BEGIN~~ <sup>BEG</sup> BEGIN CLEANING UP AT CC-MW-115 LOCATION.

17 MAR 00

K. King & John R.

(11)

0700 BV personnel arrive onsite.

0830 All personnel arrive onsite @ CC-MW-65 to prepare for drilling.

Grimmke spoke w/ Hubert Wieland on the concept of calling Dan Palmer w/ Gulf Atlantic to obtain a fourth person from their company to assist the other drillers onsite.

1045 Grimmke obtained analytical samples from core - CCMW65 (25'-27').

NOTE: AT 1000 HUBERTO GUZMAN AND BOB STOWART OF EPA ON SITE.

1130 SAMPLE FROM 47'-57' BLS CONTAINS A COMPETENT CLAY/SILT LAYER FROM 47'-56' BLS. SAND ENCOUNTERED FROM 56'-57'.

GRIMMKE INSTRUCTS DRILLERS TO SEAL BOREHOLE WITH LENTONITE PELLETS AND THEN INSTALL 8" OUTER TEMP CASING TO APPROX. 50' BLS. DRILLERS DEPART FOR PELLETS AND 8" CASING.

1330 DRILLERS REMOVING 7" CASING AND PREPARING TO INSTALL 8" OUTER CASING.

(12)

partly cloudy; warm

17 MARCH

NOTE: AT 1200 DRILLERS INSTALLED BENTONITE PELLET SEAL FROM 53'-57' BLS. PELLETS WERE HYDRATED AND ALLOWED TO SIT FOR APPROX. 90 MIN. —

1450  
1600 8" CASING TESTED FOR SEAL BY CHARGING WITH POTABLE WATER. —

1600 CASING SEAL HAS TESTED GOOD. DRILLERS EVACUATE 75 GAL OF WATER AND PREPARE TO CONTINUE ADVANCING HOLE. DRILL SPERM HAS BEEN DECONTAMINATED.

1620 DRILLING RESUMES. —

1700 Sample collected @ 65'-67'. —

1800 Drilled to 77', drillers set a 2" screen for overrite (@ bottom of well) to determine the location of water table. BV personnel plan to check w/ water level indicator to determine location of well screen CC-MW-6S. Depart site for the day. —

*James S. King*

cold + windy; sunny

18 MARCH

K. King

(13)

0615 BV personnel arrive onsite. Drillers are setting up to begin drilling. Grimmke measures w/ water level indicator @ 75.3 below top of riser. Top of casing measures @ 9' above land surface. Grimmke instructs drillers to drill 4' more + install well screen @ 68'-78' bls. —

0800 Samples taken from 77'-78' for geo-technical analyses. Drilled to 81' and begin to install well. —

0815 BV personnel leave to flag area for next well - CC-MW-4S across from City Hall. —

1045 Drillers are drumming drilling mud and loading equipment for next well. —

1115 Drillers leave site to go to decon area to decon drill + equipment. —

1330 Arrive @ CC-MW-4S site to set up drill rig and equipment. —

1400 Begin drilling on well CC-MW-4S. —

1600 Grimmke obtained geotechnical samples @ depth of 33'-35'. Instruct drillers to set well screen @ 27'-37' bls. —

1700 Sand pack installed @ 25' + bentonite @ 23' + hydrated w/ potable H<sub>2</sub>O from rig. —

(14)

K. King

19 MAR 00

0630 BV personnel arrive @ site. —  
Drillers have gone to get support  
truck, will finish grouting MW-45. —

1800 GROUTING COMPLETE AT MW-45.  
DRILLERS PLAN TO MOVE DRUMS FROM  
MW-11, MW-6, AND MW-4 LOCATIONS

0810 RAINING HARD

0930 BV personnel and drillers plan  
to depart site. CC-MW-45 has been  
grouted & completed. Due to the  
weather being inclement, drillers  
plan on removing drums from all  
sites and transporting to decon area.  
BV personnel depart to catch up paper-  
work.

K. King

(15)

20 MAR 00

K. King

0630 BV personnel arrive onsite, await  
drillers. According to Ron Bassett, they  
~~moved approximately~~ KSK

0715 Drillers arrive, Grimmke speaks  
w/ Ron Bassett and is informed the drillers  
moved approx. 12 drums from site CC-MW-115  
to decon area yesterday.

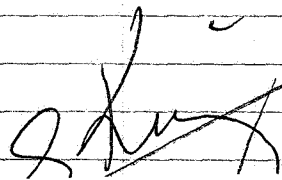
0930 Drillers begin drilling well CC-MW-41.

JAMES BRYAN TRIMS A BRANCH FROM THE  
OAK TREE LOCATED IMMEDIATELY WEST NORTH  
OF THE MW-24 LOCATION. THIS WAS NOT  
DISCUSSED W/ BLAKE & VEATCH PERSONNEL AND  
WAS DONE WITHOUT PERMISSION FROM THE CITY.

0830 DAN VALASQUEZ OF MONTGOMERY PARKS  
AND RECREATION <sup>NO 6</sup> ON SITE. INQUIRES AS TO  
ACTIVITIES. GRIMMKE PROVIDES HUMBERTO GUSMAN'S  
NAME AND LETS VALASQUEZ KNOW WE HAVE PERMISSION  
FROM CITY ENGINEERING OFFICE.

0920 - Rig water used to advance CC-MW-41  
appears to be emanating from CC-MW-45  
around the riser. The bentonite seal  
may be compromised. Grimmke speaks to Jenkins  
@ BV, Jenkins recommends drillers use as  
little water as possible to advance beyond  
the screened interval of MW-45. (per

K. King 20 MAR 00  
Grimmke)  
Samples were taken @ 0900, Sample  
04F 25'-26'.  
Encounter broken bolts on  
crown + drilling is halted until  
bought and replaced. Well CC-MW-4E  
drilled to 97'. Grimmke + King  
ready for shipment.  
Grimmke measured CC-MW-4E w/  
level indicator for total depth  
well @ 39' bbls. Grimmke de-  
cides to take samples to Fed Ex.  
Grimmke returns. Drillers are  
going to fix drill.  
Personnel depart site for



20 MAR 00 K. King (17)  
0800 BV personnel went to site + drillers  
were not present, then proceeded to de-  
con area + decommed all sampling  
equipment. Drillers are supposed to be  
obtaining the rest of the necessary  
hardware to complete fixing the  
drill + finish CC-MW-4E today.  
0815 BV personnel finish all decon  
of sampling equipment and re-  
turn to CC-MW-4E site.  
0830 Arrive onsite, drillers are  
setting up their equipment.  
0945 Drill casing has broken, drillers  
are going to decon to pick up 8" casing  
~~in place of the 7" casing (BSP)~~  
1015 Drillers return w/ 8" casing and begin  
to replace the broken and resume drilling.  
1030 Drillers unload casing and begin to  
remove 60' of 8" casing, removed the  
10' of 8" casing that was broken. + reworked

(18)

are trying to remove & replace.

1545 Grimme obtains geotech sample @ 115' - 116' and places in container.

1600 Drillers leave site w/ spindle & take to local machine shop to replace the bearings.

1630 Drillers return w/ spindle & replace in the drill rig.

1730 Drillers have completed the work on drill rig and are attempting to resume drilling to see if it works.

1800 Spindle & center column is still not working efficiently - Josh Sigler informs us that he has to remove the parts & take them to Marietta, Ohio to be repaired. All personnel depart the site for the evening.

*Handwritten signature: K. King*

(19)

22 MAR

K King

0700 BV personnel arrive onsite and await drillers.

0730 Drillers arrive and inform BV pers - they bought material for drill pads. They remove parts from drill rig to be repaired and attempt to clean up site as clean as possible.

1000 Josh Sigler leaves with parts for Marietta, Ohio. Other drillers help move drill rig & support truck to decon area.

1100 Drillers are constructing well pad @ CC-MW-115.

1145 Drillers construct well pad @ CC-MW-65.

1230 Drillers construct well pad @ CC-MW-43.

1315 Drillers take support truck to decon to remove water tank and proceed to remove drums and store @ decon.

1500 Grimme & King pack geotech samples in cooler for shipping & fill out paperwork.

1545 Samples are taken to FedEx and shipped to Kiber for analyses.

*Handwritten signature: K. King*



(20)

23 MAR 00

- 0700 BV personnel on site. Await drillers @ CC-MW-115. —
- 0720 Drillers arrive onsite. Do not have generator, James Bryan goes to decen to pick it up. Grimke + Bassett travel to Lowe's for hose clamps & tubing. —
- 0830 Begin purging well w/ peristaltic pump. —
- 0900 Attempt to surge well & an obstruction is encountered @ 53' b/s. James Bryan states the threads had been bent on one section of casing when well was installed. —
- 1030 Finish purging & measuring parameters on well CC-MW-115. —
- 1045 Arrive onsite @ well CC-MW-65 & set up to purge. —
- 1215 Finish purging well CC-MW-65. —
- 1230 Setup to purge well CC-MW-45. —
- 1400 Finish purging well CC-MW-45. —
- 1415 Clean up and head to hotel to pack & depart for Atlanta. —

Karen S. King

J. Jenkins; K. King

(21)

22 MAR 00

- 0915 BV personnel, John Jenkins & Karen King arrive onsite @ CC-MW-41. Drillers are not on site @ this time. —
- K. King called Gerald Conway to inform him of our arrival & drilling plans. —
- 0945 Drillers on site @ CC-MW-45. —
- 1020 Drillers are removing 6" casing & having difficulties w/ the sonic drive head. —
1045. Drive head appears broken - we are switching drill rigs. —
- 1120 J. Jenkins is holding Health & Safety mtg. w/ new drillers: (as follows) —
- John Richardson; Gerald Sealey; and Walter Lambert; all signed Health & Safety Plan. —
- 1130 - 2<sup>nd</sup> rig is set-up and hole sample containers met cyan lot # 347055  
VOC Lot # 115112
- 1425 - The 6" casing is stuck - the drillers requested to use bentonite Quartz Gel for advance on 8" casing over the 6" casing - since there is no valid alternative I agreed to it

22

3/27/00

allow the advancement of the 8" casing - no deeper than 100' BLS - this way there will be 17' + a bentonite seal separating the screwed interval of the bottom of the 8" casing

1500 I called Debbie Colgitt to get this week's case # for CLP samples - Debbie said to try & call back around 4:15 est.

1531 - heavy rain thunder & lightning - stopped work

1730 - After pulling the 117'-127' core, (no clay was encountered) the rig was having difficulty advancing casing - I shut down drilling for the day - because I am afraid the formation will seize the casing more the deeper ~~the~~ we set casing - there is only approximately 40 minutes of daylight remaining - end of play

*John*  
3/27/00

23

3/28/00

0615 Karen & John arrive at site + obtain traffic cones to block off MW7 locations to traffic

0630 returned to site - some drillers are here - waiting for head driller of new rig.

0700 - all drillers are on site - Bob Baker arrives - checked OVA w/100 ppm methane - ok

0930 - the 6" & 8" are stuck - we will attempt to free the 4" w/127'-137' core and sample

0950 - core barrel was empty

1000 - I called Bob & gave him my recommendation to wait for the big rig repair (tomorrow am) if the smaller rig cannot free the 6" & 8" casing and if the big rig is still having difficulties - obtain a different technology - HSA or mud rotary to complete the job - Bob transferred me to Hubert - he concurred - after speaking w/Hubert we discovered a few belts <sup>on</sup> the small rig needed replacing

(24)

3-28-00

1130 - still repairing fuel belt on small rig - Bob Baker stopped by & said they found more damage to the big rig & it will be Friday before it will be operable - Drillers left to get a bearing

1500 - Drillers returned

1537 - the small rig is repaired

1542 - Began trying to remove the 8" casing - currently the 8" casing is at ~108' bls and the 6" casing is at ~130'

I believe section on the casing is part of the reason the casing is stuck

1600 - measured 4" of foamal sand inside 8" casing

1615 - the 6" casing is free

1625 - roined threads on 8" section removed - 60' stuck bls inside 8" casing

*[Handwritten signature]*

21-1

3-28-00

(25)

1630 - the 6" casing is off plumb inside the 8" casing - Alliance has some 10" casing arriving tomorrow to override the 8" - this hole will be abandoned if we cannot remove the 8" w/o jeopardizing the integrity of the 45 well (adjacent) the 10" override casing <sup>that</sup> will be used tomorrow AM to try to free up the should be here tonight - we will meet drillers @ dawn at 6:30 AM - Drillers are securing area  
1700 left site

3/28/00

(26)  
3-29-00

- 0630 Arrived at decol - drillers are waiting for 10" casing
- 0745 drillers arrived w/ 10" casing began decol
- 0820 Decol complete - drillers are unloading 10" casing at MW4I - I called Charlie Till 6 ESD & described the problems we were encountering - he thinks we have a similar scenario as they recently had in south Florida - "lack of driller experience" - he said Mike out of Ocala & Mark out of Ohio straightened out the problems - he said IF we determine Rotasonic will not work here, HSA - 4 1/4 for sampler (w/c head of water) then plugged 6 1/4" for setting the well will work, but we need a rig that has a lot of 1.5 ft & to set the well quickly in the flowing sands

(27)

- 0845 began installing the 10" casing
- 1000 - the water seal on the drive head is leaking badly - I requested the seal be replaced
- 1015 drillers stopped @ 60' to replace water seal
- 1100 resumed drilling w/ 10" casing
- 1120 @ 70' small leak against water seal
- 1130 with the 10" casing @ 70' bls they began trying to remove the 8" casing
- 1140 advancing 10" casing
- 1230 @ 100' w 10" casing - drillers went for more 10"
- 1330 resumed - trying to remove 8" casing
- 1345 - 8" casing is free
- 1350 - advancing 8" casing to try & retrieve 60' of 6" casing in concrete
- 1500 - Drillers have connected w/ lost 6" casing
- 1605 - Drillers are now making "new" hole - drums used to retrieve lost pipe are #'s 83-112

(28)

Container inventory 3/29/00  
 soil VOC - 20 - all lot # 153112  
 250ML soil - by lot #  
 lot # : 34705 - 158 } 194  
 lot # 325297 - 36 }  
 lot # 186813 - 6 } TOC - 18  
 lot # 306401 - 12 }  
 Tall soil VOCs:  
 lot # 189419 - 12 } 48  
 197977 - 24 }  
 196413 - 12 }

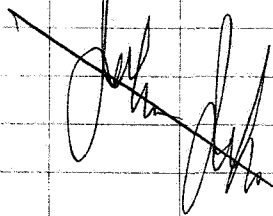
*[Handwritten signature]*

(29)

1410 - checked OVA calibrations w/  
 100 ppm methine - OK  
 1700 collected cc-mw-4E 137-139  
 - container lot #'s on page 21 of  
 this logbook - drillers are securing  
 the site. - The 127-137 sample was  
 not retrieved in the cone barrel  
 upon retrieving from bore hole - based  
 on the likelihood of the clay being  
 retained in the sampler we will  
 set the screen in the 127-137  
 interval to monitor just above  
 the clay unit  
 1730 - left site

(30)  
3/30/00

- 0630 - Arrived at WWTP - Drillers  
are loading well material
- 0645 Drillers are at decov - decoring  
well material
- 0920 While trying to adjust  
well height, Driller  
Gerald smacked his finger  
- he appears (and says he)  
is ok, but will lose  
finger, no. 7 -
- 1000 - having difficulty placing well  
w/o it dropping screen into  
clay - I had drillers just  
wash to release the casing  
from sand & raise to proper  
level
- 1110 - Drillers need to remove 6"  
casing and set well screen  
then 8" casing



3/30/00

3/30/00 (31)

- 1300 - Drillers break for lunch - I  
call Carol King who informs me  
to call Carolyn Mae & request  
Saturday delivery (Proj # 00-0217)
- 1330 - Arrive back at site after  
having copies made - waiting  
on driller Josh to return &  
take over for Gerald - Gerald's  
finger is bothering him.
- 1340 - I called Carolyn Mae  
& informed her of Saturday  
delivery - returned & discovered  
Bob Baker took Gerald to the  
doctor
- 1407 - Josh returns - began pulling  
6" casing
- 1410 Bob Baker returned - he did not  
take Gerald to the doctor - he  
took him to the hotel
- 1520 - After pulling the 6" casing - the  
rig motor is out of fuel
- 1545 - Rig is working (fueled)
- 1630 - sand pack is installed
- 1645 - bentonite seal installed
- 1800 - began pumping grout

(32) K. King, J. Jenkins

3/30/00

1845 - 2, 55 gal/wk batches of gravel  
were pumped ( $> 10.2 \text{ lbs/sec}$ ) into

8" casings - removing 8" casing

1920 completed removing 8" casing

+ loading on forklift - with  
download to trailer

1930 left site

~~John King~~

~~3/30/00~~

3/31/00

Karen King, John Jenkins (33)

0700 Arrived at site - drillers arrived  
& will remove 10" casing while  
grouting borehole

1025 - completed grouting borehole &  
removing 10" casing - began site  
cleanup & load 10" casing on trailer  
for clean

1130 - drillers are going to clean  
equipment & ready for the next  
well (MD-75) - Karen & John  
go for more Meas sticks & to  
package up samples (organic) for  
shipment

1400 BV personnel arrive on site @  
CC-MW-75. Drillers are set up &  
getting ready to drill. OVA monitor is  
calibrated.

1600 OVA monitor is not operating  
properly @ x100 scale, but is  
functioning @ x1 and x10 scales.

1730 CC-MW-75 has been drilled to 47'  
and the water table is at approximately  
41'. BV personnel & drillers depart  
from site for the evening & will  
resume drilling in the morning.

(9)

K. King, J. Jenkins

04/01/00

0630 BV personnel arrive on site. Drillers are getting ready to drill. A new driller has arrived to over see the work being done; Ron Ball. K. King gives H & S briefing, asks him to read & sign.

0830 Samples for geotech analysis are obtained @ 85'-87'.

0930 Well material has been measured & well is being set. The screened interval will be from 85 ft. to 95 ft. due to the fact that the percentage of saturation is higher than above. The H<sub>2</sub>O content is difficult to determine because when 6" casing is advanced a column of water is inside 6" casing above 4" casing as it is advanced, cores to approx. 75' are damp but not sufficiently saturated.

1200 completed pulling out 8" casing & grouting borehole annulus

1230 Well & area secured & locked. Drillers will decon & eat lunch then meet back @ site @ 1330.

1330 BV personnel arrive on site. Drillers are setting up to begin drilling CC-MW-7I.

NOTE: New OVA was shipped to Town Place

04/01/00

K. King, J. Jenkins

(35)

Suites. J. Jenkins calibrated w/ 100 ppm methane & OVA measured @ 100 ppm.

1430 Noticed CC-MW-7S has H<sub>2</sub>O welling up while drilling CC-MW-7I; appears to be washing out beneath pavement between the two wells which are 8' apart. Drillers will advance 7" casing @ CC-MW-7I to mitigate wash out. CC-MW-7S will be top grouted & the void created will be back-filled w/ cement bentonite grout.

1500 - Drillers return w/ 7" casing to override Cox 4 system on MW 7I bore hole - advanced  $\approx$  6" of 7" casing - it appears to be working

1600 - MW 7S began washing out again - will advance more 7" casing at the top of ~~7I~~ 7I bore hole - this prep was deemed & laid on ground - I will allow use in top of boring  $\approx$  20' will set at 17' EIS

1630 - top grouted 7S with portland to fill void

1700 - end of day



(36) 4/2/00

- 0630 Arrived at site - heavy rain is expected today - currently cool & cloudy  
measured water level in 75 at  
~35' BLS - we will collect  
"upper" analytical from 71 at  
55-57' - with the difficulty in  
determining WL w/ Rotasonic  
we used the water level in  
65 (21 block away) 69' below  
a basis -
- 0635 - Drillers aren't here containers  
to be used for sampling will  
be:  
Lot 347015 for non VOC  
Lot 155112 for VOC  
Lot 180813 for TOC
- 0720 Drillers arrived - 1 hr late
- 0735 checked OVA calibration  
w/ 100 ppm methanol - reading  
100 ppm - Began sampling
- 0800 J. Jenkins obtains samples from  
core @ 53'-55' - MSDS
- 1030 - still advancing boring for MW 71 -  
Drilling Rig appears to be working  
properly - on the remaining paired

4/2/00

(37)

Shallow & Intermediate wells, we will  
install the deep well - obtain only  
the "deeper" (screened interval) soil  
sample and obtain a water level  
before installation of the shallow  
well - we will collect the  
vadose zone analytical sample from  
the shallow well boring - with  
all the mechanical difficulties  
to date, I did not want to  
test the repaired rig on a deep  
boring - therefore, 75 was installed  
before 71. The 75 well was  
installed deeper than our targeted  
depth (near the water table) based  
on a nearby well (65) & observation  
of lithology in 75 - with the 4"  
casing going thru the water filled  
6" casing before advancing - it is  
extremely difficult to determine water  
levels based on lithology

1245 Well CC-MW-71 has been drilled to  
137'; clay layer is @ approx. 128' and to  
137'. Drillers have left for lunch &  
will return between 1330 and 1400.

(38)

4/2/00

NOTE: Samples were obtained above clay layer @ approx. 127'-128'.

Sample from CC-SB-7E 127-128

1250 - Drillers are breaking for lunch & getting well material - it begins to rain

1415 - Drillers returned w/decanted well rise/screen

1545 installed 3" bentonite pellet seal w/ MW 7I

1615 began installing Pure Gold Grant w/ MW 7I

1720 completed pulling 6" & 7" casing from 7I borehole - pipe totals

4" casing to 137' b/s

6" casing to 137' b/s

7" casing to 17' b/s

1745 - left site

4-3-00

(39)

0610 - Kanu & I purchased ice and went to decor for coolers - drillers circuit here - went to 7I location - no drillers

0635 - Drillers arrive at decor - Kanu & I pack samples - weather is cloudy & humid - rain expected

0930 BV personnel arrive @ site for well CC-MW-5I. Drillers are set up and have left to get drums.

J. Jenkins & K. King are setting up sampling material and calibrating OVA monitor. All sample jars are from Lot# 347015.

NOTE: Weather is overcast and very breezy, storms are predicted.

1100 J. Jenkins obtains samples from 8-10' of 7-17' core sample. OVA is being monitored closely.

1130 Samples obtained @ 24'-26' -

1200 Samples obtained @ 28'-30' -

1315 Samples obtained @ 45'-47' -

1330 Samples obtained @ 55'-57' -

also, duplicate samples here

(47) 4:30 K. King, J. Jenkins

1405 I am having drillers case off to 35' b/s w/8" to mitigate any source (potential) from migrating vertically into subjacent formations

1433. 8" surface casing set to 37' b/s

1500 Samples taken @ 59'-61' b/s. —

1520 Samples taken @ 74'-76' b/s. —

1600 BV personnel are leaving the site; tornadoes are in the area. Total depth currently @ 77' b/s. Will decon all sampling material + ship samples. The drillers are securing site. Left site.

NOTE: BV personnel did all paperwork + got samples ready to ship, until <sup>KK</sup> 1800 —

~~Handwritten signature~~

4:40 K. King, J. Jenkins

COOL and raining.

0630 BV personnel + drillers arrive onsite, @ CC-MW-SI. —

0730 OVA has possible 20% error due to the humidity; has been calibrated

0745 Samples obtained @ 78'-80' b/s.

0815 Samples obtained @ 95'-97' b/s. —

0900 Samples obtained @ 105'-107' b/s. —

NOTE: Drillers are using drilling mud to advance 6" casing to prevent it from becoming stuck. —

0945 Samples obtained @ 109'-111' b/s. —

1020 Samples obtained @ 125'-127' b/s. —

1130 Samples obtained @ 129'-131' b/s. —

1230 Samples obtained @ 142'-144' b/s. —

Drillers leave for lunch.

1330 Drillers Return

1400 - while advancing the 147-157 run a water seal blew on the drive head - it is leaked, only when pumping mud. we will run a less viscous batch of mud + try to complete the hole - the seal is a common repair in 2 hrs. - Also, after 15:30 since the OVA battery is out - will sample last 2 feet of remaining core runs - The O<sub>2</sub> LEU

(42)

will remain on the drill deck for H&S monitoring; however, no OVA hits have been recorded in the breathing zone over the borehole

1515 Samples taken @ 160'-162' bls. —

1600 CC-MW-5I has been drilled to 167' bls, clay layer observed @ approx. 162' bls. —

1630 Drillers begin to set well.

1830 Seal is finished @ 1830.

1900 Begin to grout well. —

2030 Well is finished and all personnel leave site —

*K. King*

4/5/00 J. Jenkins; K. King (43)

0620 BV personnel assemble samples to ship via Fed Ex.

0730 BV personnel arrive @ site CC-MW-5I, drillers are top grouting well.

0900 Drillers are @ decon site, decomming equipment and material. BV personnel are working on sample tags and inventory drums and drum log. —

1100 Drillers complete moving drums from well sites CC-MW-75, CC-MW-4I, and CC-MW-5I.

1130 Drillers begin cutting asphalt for well pads @ CC-MW-75 & 4I, & CC-MW-4I. Also, rebuilding well pad @ CC-MW-45 (was cracked during installation of CC-MW-4I) —

BV personnel continue checking drum log vs. drum inventory. Drillers agree to set well pad on Sunday, April 9th after grout has set @ CC-MW-5I.

1400 Drillers have secured CC-MW-5I from pedestrian & vehicular traffic —

K. King drops J. Jenkins @ hotel to complete sample tags & paperwork to ship samples. —

(44)  
K. King stays w/ drillers to monitor  
well pad construction and shift  
demobilization from site. All BV  
sampling equipment is deconned. —  
1600 BV personnel demobilize  
from Montgomery to Atlanta —

D. CARTER + A. GRIMMKE

DC  
EASTERN

4-10-00

(45)

(0600) DOUG CARTER AND ANDREW  
GRIMMKE LEAVE ATLANTA FOR  
MONTGOMERY —  
(0900 CENTRAL) WE ARRIVE @  
DECON/STAGING AREA AND MET  
WITH DRILLERS —  
DC  
(0905) DRILLERS REPAIRING WATER SEAL —  
GRIMMKE + CARTER TRAVEL TO  
STAKE OUT NEW DRILLING LOCATION —  
0920 GRIMMKE + CARTER USED CONES TO  
MARK OFF LOCATION OF MW 105 —  
0935 GRIMMKE + CARTER BACK AT DECON/  
STAGING AREA TO CHECK ON DRILLER'S  
PROGRESS ON REPAIRS —  
1015 GRIMMKE + CARTER RETURN TO  
DECON/STAGING AREA. DRILLERS ARE  
DONE WITH REPAIRS —  
1030 WE ALL LEAVE TO GO TO  
SITE (MW 105) —  
1035 GRIMMKE + CARTER ARRIVE @ MW 105  
SITE —  
1045 DRILLERS ARRIVE ON SITE AND BEGIN  
SETTING UP. —  
1120 DRILLERS DRILLED THROUGH ASPHALT LAYER  
AND BEGAN PORE HOLEING FOR UTILITY CLEARANCE —

D. CARTER + A. GRIMMICKS

4-10-00

OBSTRUCTION ENCOUNTERED. UNABLE TO  
Determine WHAT IT IS. HOLE MOVED  
WEST. ASPHALT LAYER CHISELED THROUGH.  
OBSTRUCTION ENCOUNTERED AGAIN. DRILLERS  
PULLED DIRT BACK IN HOLE  
SUPERVISOR CALLED OFFICE TO TALK TO  
MARBURY ABOUT PROBLEM ENCOUNTERED  
FIELD. HE THEN SPOKE TO JOHN JENKINS.  
DECISION WAS MADE TO OFFSET AGAIN.  
DRILLERS BEGIN DISMANTLING OVER HOLE  
MOVE TO NEW LOCATION  
DRILLERS SET UP AT NEW LOCATION ~2'  
WEST OF ORIGINAL LOCATION. BEGIN  
DRILLING THROUGH ASPHALT LAYER  
UTILITY CLEARANCE COMPLETED W/ NO  
PROBLEMS  
DRILLERS BEGIN SETTING EQUIPMENT  
AT NEW LOCATION  
DRILLERS SEALED MUD TUB OVER BORING

D. CARTER + A. GRIMMICKS

4-10-00

(47)

1355 DRILLING DELAYED DUE TO WATER BEING  
DISPLACED THROUGH PREVIOUS TEST HOLES AND  
CRACKS IN ASPHALT.  
1400 OPERATIONS PROCEED. DRILLERS BEGIN  
PULLING OUT NEXT CORE SAMPLE  
1410 CORE TAKEN FROM 17-27'  
1445 CORE TAKEN FROM 27-37'  
1510 CORE TAKEN FROM 37-47'  
1520 CORE TAKEN FROM 47-57'  
1545 CORE TAKEN FROM 57-67'  
1600 SAMPLES TAKEN (VOA, GEOTECH + ANALYTICAL)  
1615 CORE TAKEN FROM 67-77'  
1620 DECISION WAS MADE TO TERMINATE  
BORING @ 77.0'.  
1630 SCREEN AND RISER WAS PUT IN BOREHOLE  
1645 BEGAN POURING IN SAND  
1715 FINISHED POURING IN SAND  
1725 GROUT PREMIXED IN  
1730 PIPE PULLED OUT OF BOREHOLE

(48)

D. CARTER + A. GRIMMKE  
4-11-00

0655 CARTER AND GRIMMKE ARRIVE AT  
DECON/STAGING AREA. DRILLERS ARE  
DECONING AND GETTING SUPPLIES  
TOGETHER

0715 CARTER + GRIMMKE ARRIVE AT  
MW-10S LOCATION TO CHECK WATER  
LEVEL. WATER @ 55.34'

0750 CARTER, GRIMMKE, + DRILLERS ARRIVE AT  
MW-08I LOCATION

0800 DRILLERS BEGIN SETTING UP AT  
MW-08I

0805 DRILLING BEGINS. DRILLED THROUGH  
CONCRETE LAYER

0808 POST HOLED FOR UTILITY CLEARANCE

0815 DELAY DUE TO UNEXPECTED OBSTRUCTION ~ 1.5'  
BELOW SURFACE

0830 STORM DRAINAGE SEWER IS CAUSE FOR DELAY. PONS  
DIRECTLY BENEATH LOCATION OF MW-08I

0833 GRIMMKE MADE CALL TO H. WIELAND TO  
DISCUSS PROBLEM

0845 DAVID BARNES FROM MONTGOMERY UTILITY SERVICES  
CALLED AND SAID HE WAS SENDING OUT  
A CITY WATER PERSON

0900 GRIMMKE CALLED H. WIELAND TO DISCUSS  
LATEST DEVELOPMENTS

D. CARTER +  
A. GRIMMKE

4-11-00

(49)

0905 DRILLERS BEGIN TEARING DOWN  
EQUIPMENT TO MOVE TO A NEW LOCATION

0915 DRILLERS LEAVE MW-08I LOCATION

0930 CARTER, GRIMMKE, + DRILLERS ARRIVE TO  
MW-11E LOCATION

0937 DRILLERS SET RIG UP AT MW-~~08I~~<sup>11E</sup>  
LOCATION

0940 POST HOLED FOR UTILITY CLEARANCE BEGINS

0945 DRILLERS (RON + JAMES) LEAVE SITE TO  
PICK UP RISER AND OTHER TRUCK

0958 DRILLING BEGINS

1030 CORE TAKEN @ 7-17'

1050 CORE TAKEN @ 17-27'

1117 CORE TAKEN @ 27-37'

1140 CORE TAKEN @ 37-47'

1215 CORE TAKEN @ 47-57'

1225 BREAK FOR LUNCH

1315 BACK FROM LUNCH

1320 RESUMED DRILLING

1340 CORE TAKEN @ 57-67'

1425 CORE TAKEN @ 67-77'

1430 ANALYTICAL SAMPLES TAKEN @ 75'

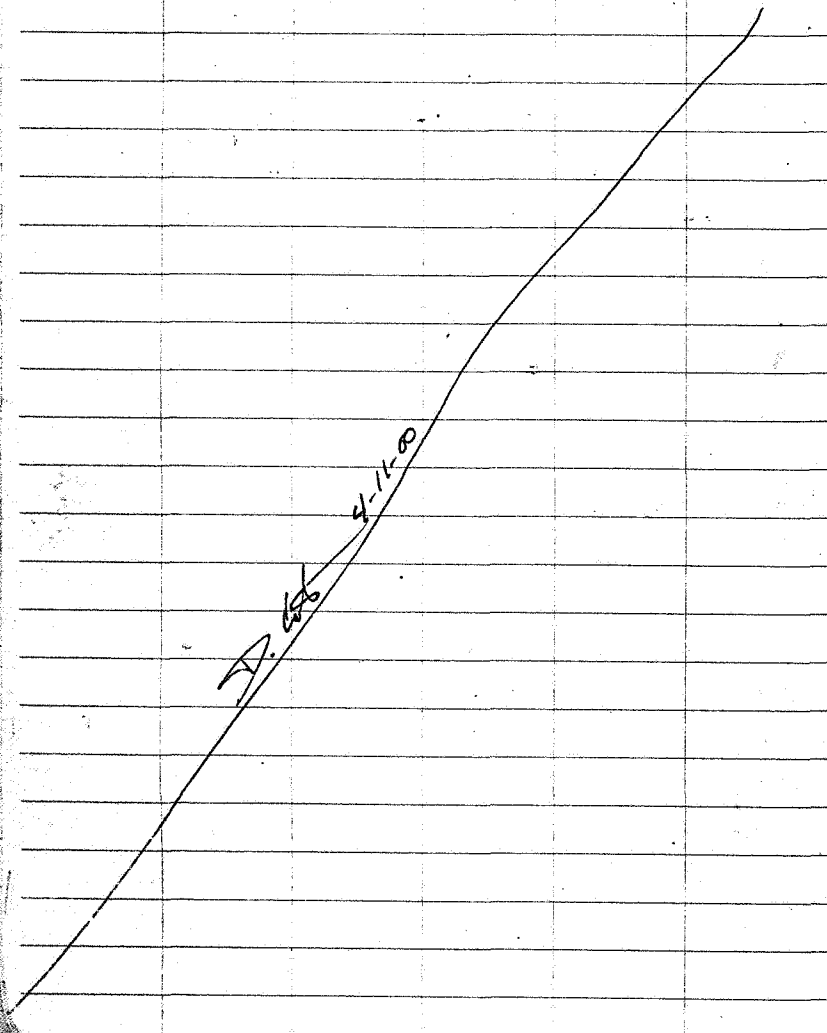
1505 CORE TAKEN @ 77-87'

1535 CORE TAKEN @ 87-97'

1615 CORE TAKEN @ 97-107'

(50) D. CARTER + A. GRIMMKE  
4-11-00

1645 CORE TAKEN @ 107-117' —————  
1720 CORE TAKEN @ 117-127' —————  
1730 DRILLING CEASED FOR THE DAY —————  
1740 CARTER + GRIMMKE LEAVE SITE —————



D. CARTER + A. GRIMMKE

(51)

4-12-00

0645 CARTER + GRIMMKE ARRIVE ON SITE —————  
0710 DRILLERS ARRIVE ON SITE AND BEGIN  
SETTING UP —————  
0730 DRILLING BEGINS —————  
0840 CORE TAKEN @ 127-137' —————  
0850 GRIMMKE WENT BACK TO HOTEL TO GET REFILL HOSE  
FOR OVA —————  
0910 GRIMMKE RETURNS TO SITE —————  
0945 CORE TAKEN @ 137-147'. HIGH OVA;  
SAMPLES TAKEN —————  
1052 CORE TAKEN @ 147-157' —————  
1130 CORE TAKEN @ 157-167' —————  
1155 BREAK FOR LUNCH —————  
1225 BACK FROM LUNCH —————  
1230 CORE TAKEN @ 167-177' —————  
1400 CORE TAKEN @ 177-187' —————  
1405 SAMPLES TAKEN @ 180-181' —————  
1500 CORE TAKEN @ 187-197' —————  
1620 CORE TAKEN @ 197-207' —————  
1710 CORE TAKEN @ 207-217' —————  
1730 CARTER + GRIMMKE LEAVE SITE —————

D. CARTER  
4-12-00



(52)

D. CARTER + A. GRIMMKE

4-13-00

0650 CARTER + GRIMMKE ARRIVE ON SITE

0705 DRILLERS ARRIVE ON SITE

0830 CORE TAKEN @ 217 - 227'

0930 CORE TAKEN @ 227 - 237'

1055 CORE TAKEN @ 237 - 247'

1100 BORING TERMINATED @ 247'

1140 GEOTECH SAMPLE TAKEN @ 236 - 237'

ANALYTICAL SAMPLE TAKEN @ 237 - 238'

1200 BREAK FOR LUNCH

1240 RETURN FROM LUNCH

1255 BEGIN SETTING WELL

1500 DEWAYNE THOMPSON OF KMC TELECOM

STOPPED BY TO TAKE PICTURES OF FIBER

OPTICS CABLE BOX AT CORNER OF SITE. IT

IS HIS ASSERTION THAT DRILL RIG HAS

RUN OVER IT AND CAUSED IT TO SUBSIDE.

GRIMMKE CALLED H. WIELAND TO EXPLAIN

SITUATION

1510 DEWAYNE THOMPSON LEFT SITE

1540 GRIMMKE TOOK PICTURES OF FIBER OPTICS BOX

1550 CARTER + GRIMMKE LEAVE SITE TO GET

ICE, VERMICULITE, + FED EX SAMPLES

4-13-00

D. CARTER + A. GRIMMKE

(53)

4-14-00

0700 ON SITE AT MU-09S LOCATION. IT IS RAINING

0715 JERALD CONWAY OF THE WATER WORKS + SANITARY SEWER BOARD ARRIVES

0730 DRILLERS ARRIVE ON SITE

0735 DRILLERS LEAVE SITE TO GET SUPPLIES

0830 DRILLERS RETURN AND SAY THEY CANNOT FIND JAMES. JAMES HAS THE WATER TRUCK.

0838 DRILLERS GO BACK TO HOTEL TO SEE IF JAMES IS THERE

0925 JAMES SHOWS UP. SAYS BATTERY WAS DEAD IN TRUCK AND HAS BEEN SITTING AT HOTEL. THERE IS NO WATER IN THE TANK ON JAMES' TRUCK

0941 DRILLERS RETURN

0950 RIG WON'T CRANK. DRILLER SAYS ALTERNATOR BELT IS BROKEN

1005 RON ARRIVES WITH DRUMS

1055 BEGIN CLEARANCE FOR UTILITIES

1120 UTILITY CLEARANCE FINISHED

1123 DRILLING BEGINS

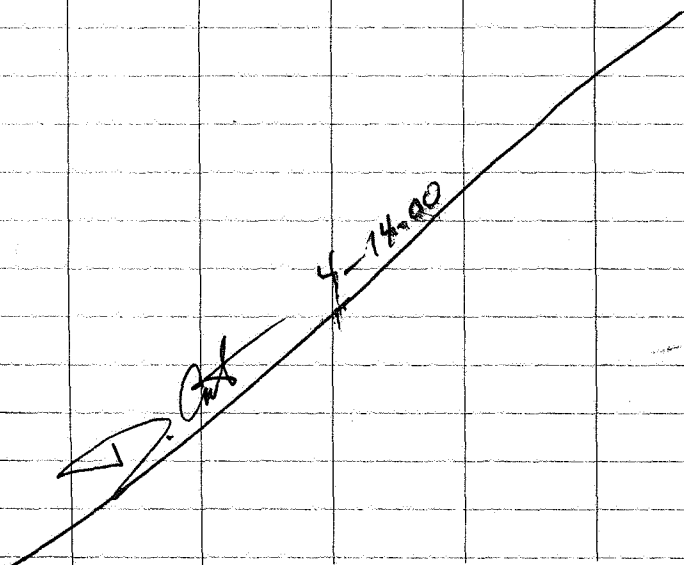
1140 BREAK FOR LUNCH

1225 BACK FROM LUNCH

(54)

D. CARTER  
+  
A. GRIMMKE  
4-14-00

1227 DRILLING AGAIN  
 1315 CORE TAKEN @ 7-17'  
 1340 CORE TAKEN @ 17-27'  
 1348 DRILLING DELAY DUE TO LACK OF  
 AIR PRESSURE  
 1415 CORE TAKEN @ 27-37'  
 1430 CORE TAKEN @ 37-47'  
 1455 CORE TAKEN @ 47-57'  
 1508 CORE TAKEN @ 57-67'  
 1535 CORE TAKEN @ 67-73'. BORING  
 TERMINATED @ 73'  
 1700 WELL INSTALLED  
 1730 GRIMMKE + CARTER LEAVE SITE



D. CARTER  
A. GRIMMKE

(55)

4-15-00

0700 CARTER + GRIMMKE ARRIVE AT DECON/  
 STAGING AREA AND DECON BOWLS AND  
 SPOONS. DRILLERS DECON EQUIPMENT AND  
 MAKE REPAIRS ON AIR COMPRESSOR  
 0820 LEAVE STAGING AREA AND HEAD TO  
 NEW MONITORING WELL LOCATION  
 0845 ARRIVE AT MW-DII LOCATION  
 0850 BEGIN UTILITY CLEARANCE (POST HOLED)  
 0900 UTILITY CLEARANCE FINISHED  
 0925 DRILLING BEGINS  
 1010 CORE TAKEN @ 7-17'  
 1030 CORE TAKEN @ 17-27'  
 1050 CORE TAKEN @ 27-37'  
 1110 CORE TAKEN @ 37-47'  
 1135 CORE TAKEN @ 47-57'  
 1140 DRILLERS BREAK FOR LUNCH  
 1150 CARTER + GRIMMKE BREAK FOR LUNCH  
 1245 GRIMMKE + CARTER BACK FROM LUNCH. JERALD  
 CONWAY ARRIVES  
 1300 DRILLERS BACK FROM LUNCH  
 1305 DRILLING RESUMES  
 1325 CORE TAKEN @ 57-67'  
 1350 CORE TAKEN @ 67-77'  
 1415 CORE TAKEN @ 77-87'  
 1455 CORE TAKEN @ 87-97'

(56)

D. CARTER  
+  
A. GRIMMKE

4-15-00

1530 CORE TAKEN @ 97-107'

1535 DRILLERS STOP DRILLING TO WORK

ON WATER SEAL

1630 DRILLING RESUMES

1700 CORE TAKEN @ 107-117'

1730 CORE TAKEN @ 117-127'

1800 CORE TAKEN @ 127-137'

1815 DRILLING ENDED

1830 GRIMMKE + CARTER LEAVE SITE

4-15-00

D. CARTER  
+  
A. GRIMMKE

4-16-00

(57)

0645 D. CARTER + A. GRIMMKE ARRIVE AT  
MW-011 LOCATION AND BEGIN TO DECON  
BOWLS + SPOONS

0700 RON + JAMES (DRILLERS ARRIVE)

0720 JOSH + WADE (DRILLERS ARRIVE)

0730 DRILLING BEGINS

0815 CORE TAKEN @ 137-147'

0817 BORING TERMINATED @ 147'

0900 BEGIN SETTING WELL

1000 BENTONITE SEAL INSTALLED

1120 WELL INSTALLATION COMPLETED

1150 DRILLERS POSITION RIG TO MW-015  
LOCATION

1155 BREAK FOR LUNCH

1200 BACK FROM LUNCH

1815 BEGIN POST HOLE FOR UTILITY CLEARANCE

1320 GERALD CONWAY ARRIVES

1325 POST HOLE CLEARANCE COMPLETE

1330 CHECKED WATER LEVEL IN MW-051 @ 57.34'

1400 CORE TAKEN @ 7-17' IN MW-015

1415 CORE TAKEN @ 17-27'

1430 CORE TAKEN @ 27-37'

1445 CORE TAKEN @ 37-47'

1505 CORE TAKEN @ 47-52'

1517 BEGIN SETTING WELL

(58)

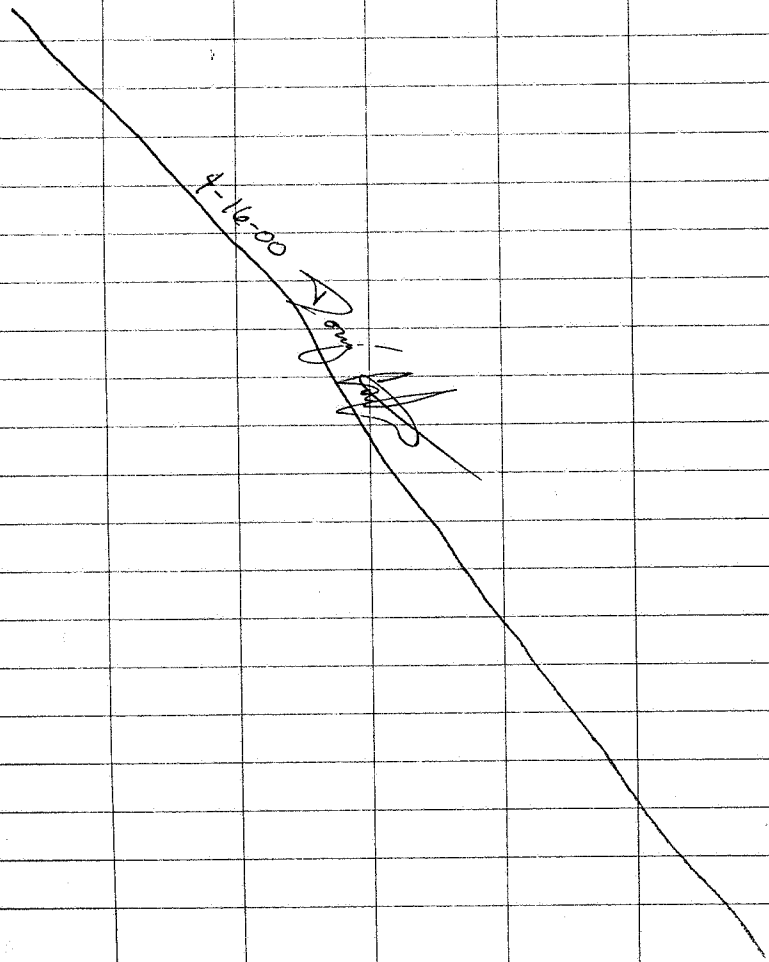
4-16-00

D. CARTER  
&  
A. GRIMMKE

1600 WELL INSTALLATION COMPLETE

1635 GRIMMKE + CARTER LEAVE MW-015  
LOCATION

1645 GRIMMKE + CARTER CHECK WATER LEVEL  
IN MW-095 @ 52.75'. BOTTOM OF SUMP  
@ 72.05'



D. CARTER + A. GRIMMKE

4-17-00

(59)

0640 CARTER + GRIMMKE GO BY MW-095 &  
SITE TO SEE IF DRUMS HAVE BEEN  
REMOVED FROM ALABAMA POWER PARKING  
LOT. THEY HAVE NOT BEEN MOVED YET

0655 CARTER + GRIMMKE ARRIVE AT NEW  
MW-08 SITE LOCATION ON CORNER OF  
N. LAWRENCE ST + COLUMBUS ST

0720 JERALD CONWAY ARRIVES ON SITE

0745 CARTER + GRIMMKE LEAVE SITE  
TO SEARCH FOR DRILLERS

0800 DRILLERS ON SITE UNLOADING DRUMS. DRILL RIG  
AT GAS STATION FILLING UP

0815 DRILL RIG ON SITE. POSITIONED OVER MW-08I  
LOCATION. NEW HELPER NAMED "BEAR" WITH  
CREW TODAY

0845 BEGIN POST HOLE DIGGING FOR UTILITIES

0855 POST HOLE DIGGING DELAYED DUE TO OBSTRUCTION AT  
~2.5'. DRILLER BELIEVES IT IS A PIPE.

0905 DRILL RIG MOVED 2' FROM FIRST HOLE. POST  
HOLE DIGGING BEGINS

0920 POST HOLE DIGGING COMPLETED. DRILLING BEGINS

0950 CORE TAKEN @ 7-17' IN MW-08I

1010 CORE TAKEN @ 17-27'

1035 CORE TAKEN @ 27-37'

1100 CORE TAKEN @ 37-47'

(60) 4-17-00 D. CARTER + A. GRIMMKE

1105 BREAK IN DRILLING TO REPAIR AIR  
COMPRESSOR

1115 BREAK FOR LUNCH

1205 CARTER + GRIMMKE MEASURE WATER LEVEL  
IN MW-01<sup>2</sup> @ 38.95'

1215 DRILLING AGAIN

1245 CORE TAKEN @ 47-57'

1320 CORE TAKEN @ 57-67'

1325 DRILLING STOPPED TO REPLACE WATER  
SEAL AND REPAIR AIR COMPRESSOR

1455 REPAIRS COMPLETE + DRILLING AGAIN

1510 CORE TAKEN @ 67-77'

1530 CORE TAKEN @ 77-87'

1555 CORE TAKEN @ 87-97'

1618 CORE TAKEN @ 97-107'

1640 CORE TAKEN @ 107-117'

1730 CORE TAKEN @ 117-127'

1735 BORING TERMINATED @ 127'

1810 CARTER + GRIMMKE LEAVE SITE

4-17-00

D. Carter

D. CARTER + A. GRIMMKE 4-18-00 (61)

0700 CARTER + GRIMMKE ON SITE AT  
MW-08 I + S LOCATION

0710 GERALD CONWAY ON SITE

0810 DRILLERS ON SITE

0820 BEGIN SETTING WELL

1035 MW-08 I WELL INSTALLATION COMPLETE

1100 BREAK FOR LUNCH

1145 BACK FROM LUNCH. DRILLERS POSITION RIG  
OVER MW-08 S LOCATION

1155 BEGIN POST HOLE DIGGING FOR UTILITIES, CLEARANCE

1215 POST HOLE DIGGING COMPLETED

1222 DRILLING BEGINS

1235 CORE TAKEN @ 7-17'

1250 CORE TAKEN @ 17-27'

1325 CORE TAKEN @ 27-37'

1340 CORE TAKEN @ 37-47'

1355 CORE TAKEN @ 47-53'

1400 BORING TERMINATED @ 53'

1445 BEGIN SETTING WELL

1550 FINISH SETTING WELL

1615 CARTER + GRIMMKE LEAVE SITE

4-18-00

D. Carter

(62) 4-19-00 A. GRIMMKE + D. CARTER

0700 CARTER + GRIMMKE FILL OUT PAPERWORK  
AND PREPARE SAMPLES FOR SHIPMENT

1115 BREAK FOR LUNCH

1145 BACK FROM LUNCH

1310 CHECK OUT OF HOTEL

1355 MEET WITH JERALD CONWAY TO GIVE  
HIM HIS TWO SAMPLES COLLECTED DAY BEFORE  
AND TO GIVE HIM OVA READINGS FROM  
MW-08S

1415 CARTER + GRIMMKE INSPECT MONITORING  
WELL SITES TO SEE IF CONCRETE PADS  
HAD BEEN CONSTRUCTED. NO PADS HAVE  
BEEN CONSTRUCTED

1445 CARTER + GRIMMKE GO BY DECON/STAGING  
AREA TO SEE IF DRILLERS ARE THERE.  
NO SIGN OF DRILLERS. GRIMMKE CALLED  
GULF-ATLANTIC DRILLING CO. TO SEE IF  
THEY KNEW ANYTHING ABOUT WHERE THE  
DRILLERS ARE. THEY SAID DRILLERS WERE  
AT OFFICE THAT MORNING

1520 CARTER + GRIMMKE PUT LOCKING WELL  
CAPS ON MW-08S, MW-11I, MW-09S, MW-01S,  
+ MW-10S

1540 TAKE SAMPLES TO FEDEX FOR SHIPMENT

1600 LEAVE MONTGOMERY

D. CARTER + A. GRIMMKE 4-19-00

(63)

1900 RETURN TO ALPHARETTA AND DROP OFF  
VAN AT OFFICE

4-19-00

~~D. CARTER~~

4/25/00 (104)

0845 Arrived at decal area - weather is cloudy, breezy & cool - rain likely - drillers are not here - they are suppose to meet me here at 9:00.

0905 - Ron Bassett arrived - No crew

1005 - Began survey well MW4I

1020 Began purging - calibrated instruments

1040 Began survey

1050 " Purging

1050 survey w/pump

1240 - completed 4I - checked

4S to insure well integrity

- reached 8.4 NTU's after purging

≈ 14 gallons 4S has already been developed; however, with

the problems encountered w/ 4I -

I wanted to check the well

1430 - After going to LOWES for

more tubing - set up on

CC-MW 7I

1435 - Began survey

1455 Began purging & survey

1420 completed dev of 7I

(105)

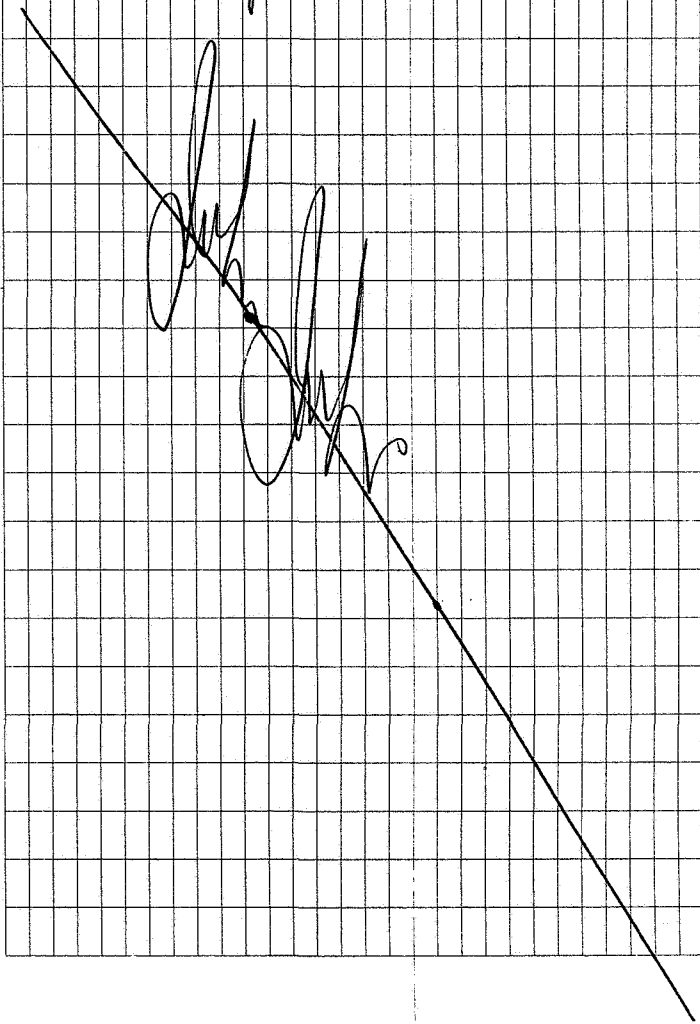
1440 - Began survey MD 7S

1455 - Began survey & purging 7S

1500 - completed development of 7S

1530 After cleaning up the

View - left site



(66) 4/26/00

- 0600 met Rod at Decal + dropped  
off drums
- 0625 arrived at CC-MW-95
- 0800 completed development of 95 - 9.1 NTUs
- 0830 Began surging 105 at Hill Street
- 0930 completed development of 105  
5.39 NTUs
- 1020 - Began surging CC-MW-11
- 1415 - NTU's are at 20.7 - NTU's  
were at 24.9 at 1315 -  
I called Hubert & he  
consented to move on  
to the next well
- 1545 Began surging 15
- 1620 completed development of 15  
NTUs = 10.65
- 1640 Began surging 85
- 1735 completed development of 85  
at 2.10 NTUs
- 1820 - left location 8 after packing  
up monitoring equipment for  
return Feat-ES
- 1900 Dropped off packages at Feat-G  
end of day

(67)

- Additional cut off piece log
- 85 - cutoff additional 0.43' for pad  
completion
- 81 - cutoff additional 0.55' for pad  
completion
- 15 0.32 MAX 0.29 min additional  
cutoff piece
- 11 0.71 max 0.67 min additional  
cutoff piece
- 51 0.24 max 0.17 min additional  
cutoff piece
- 105 0.28 max 0.28 min additional  
cutoff piece
- 111 0.51 - 0.56 min additional cutoff  
for pad



(68): 4/27/00

- 0600 arrived at decou to pick up empty drums - we will develop
- 0645 began purging SI -
- 0715 began purging, but generator is acting up
- 0730 - Row left to get the other generator
- 0810 After recharging a generator - Row returned - resumed purging
- 1220 Completed developing CC-MW-SI w/ 14.3 NTUs final reading
- 1530 - began purging 11I we began purging from  $\approx 160$  BCS - when evacuated - lowered to 190 - & evacuated - then began purge @ 1415 from TD
- 1430 - After purging from total depth well evacuated
- 1455 resumed purging - while developing CC-MW-11I, I noticed washout beneath the sidewalk around the fine hydrant. This is the metered hydrant the drillers were using. I asked Row

(69)

Bisset about & he said Jerald from the water department was aware of the leaky hydrant. He said Andrew was also aware from when they had drilled here. I photographed the damage & had Row tighten the hydrant valve. Josh had told Row that an auger drilling company Christian Environmental (local) was also using the hydrant. Row said he & his crew opened & closed the hydrant completely when using.

1800 - development complete 11I NTUs at 210 - cannot get NTUs down - lowest value after dropping to TD = 151 NTUs

1815 left site for decou

1900 - after logging inventory of problem drums - left site & tomorrow drillers will repair or replace problem drums. End of Day

(70)

4/28/00

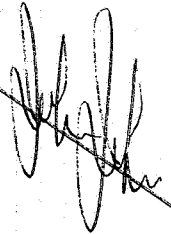
- 0620 Arrived @ decou - ROW is ready to go
- 0635 Boson Surveys CC-MW-8I
- 1155 Completed development of CC-MW-8I at 31 NTU's
- 1220 Left site & for decou. Decou Pad is broken down & other Gulf Atlantic Personnel are picking up equipment & vehicles. Created log of Total depths as measured after development for sampling crew
- 1255 left decou to visit each well location & make punch list (pp 72 & 73) of things drillers need to do.
- 1410 Completed punch list broke for lunch
- 1440 Returned to decou & called Hubert concerning the hydrant/sidevalve washout at site 11.
- 1450 called Gerald Conway & he referred me to David Barnes - Mr. Barnes is out

(71)

Depths as measured BTOC after well development  
 CC-MW- / water level BTOC (before development)

15	-	51.91	/	37.41
11	-	144.67	/	38.96
45	-	38.4*	/	30.15
41	-	134.92	/	31.70
51	-	162.82	/	56.99
65	-	79.35	/	68.84
75	-	98.21	/	33.76
71	-	123.80	/	33.90
85	-	52.53	/	35.70
81	-	222.24	/	35.84
95	-	71.93	/	53.80
105	-	73.16	/	55.31
115	-	128.10*	/	103.31
111	-	245.23	/	103.41

\* before development



4/28/00

## 72 PUNCH LIST

- site 7 - remove portland cement under shelter - remove plastic & grout  
Grout inside protectors & file edges - remove lower part of handlevel grout
- site 4 - remove wooden pad frames & tamp dirt around pad - re-cut riser on shallow well & give cutoff piece to B&V - file both riser edges - get Morrison cap & common keyed lock for shallow well - re seed around pad areas
- site 5 Grout & file
- site 10 Remove wood pad frame - grout file & common keyed lock
- site 9 Grout & file
- site 11 remove wooden frame for shallow - cut, file, grout & add Morrison cap - tamp dirt around pads, for deep (intermediate) file & grout - sidewalk erosion pending

73

- site 1. remove wooden pad frames, tamp soil around pad - file & grout
- site 6 - Grout, file & add common keyed lock
- site 8 - file & grout

~~4/28/00~~

(74)

when I call, I will contact  
him Monday + determine the  
status of the damaged electrical  
box the drilling rig ran over  
at site 11.

1515 left site -

~~Shelley  
Shelley~~

~~4/28/00~~

01 May 00

nick v. van  
Joe Slykerman  
Karen King

☀️ sunny (75)

- 0730 Begin to unload van and  
inventory contents. Reload van. —
- 0900 Proceed to United Rentals  
to obtain generators. —
- 0900: Proceed to Rental Co. for  
Generators. Purchasing set up  
Account w/ UR Rentals of Montgomery.  
Rental Co. didn't have generator  
needed (5000k) but said 3600  
would work, if not, to RTN.
- 10:30: At hotel to pickup fuel  
inventoried and loaded into  
van.
- 1100: To store for water + ice,  
house clamps for Grounding.
- 1230: Arrive at Water Comm. to obtain  
55 Gal. Drums. —
- Proceed to CC-MW-95 —
- 1300: At MW-95 Green for Controller  
had 4 prong plug. Generator only  
3 prong socket. Supt. Karen to  
Rental for New Gen./Adapter.
- 1450: Karen Ren. Adapter Not  
Available. Will RTN Generator  
from New Rental Co. —

(26) 5/2/00

1530 At CAT Rental Co. They  
have 5000 watt generator  
with 4 prong outlet. No  
commercial accounts, must  
set up. Called Jenna in  
purchasing. She will set up by  
tomorrow AM. RTN to hotel  
to prepare sample tags.  
left drums @ MW-95 marked.

1700 finished preparation of  
TAGS.

~~JS~~

5/2/00

(27) 5/2/00

0700: Proceed to CAT Rental to  
pick up generator

0730: Arrive at Rental, account  
has been processed by K.C.  
Do paperwork to obtain account.

0830: Arrive at CC-MW-95 Prepare  
for Purge

0840: Static Depth - 52.92

Total Depth - 71.94

Water column - 19.02 (3.10 gls)

x 3 purge 9.3 gls

See Endnote Sample collection  
Rund.

0850: Started Purge CC-MW-95.

0922 Obtained 1<sup>st</sup> readings of purge  
H<sub>2</sub>O.

1010 Obtained samples from CC-MW-95.

1045 Finish CC-MW-95

Proceed to decon area to decon  
sampling equipment.

1140 Arrive on site @ CC-MW-105.

1345 Finish CC-MW-105 purging and  
sampling.

1415 Leave site to go to decon  
& decon equipment.

✓ ✓ K.C.

5/2/00  
1600 Arrive @ CC-MW-65.  
1610 Begin purging CC-MW-65.  
1640 Finish purging & sampling.  
1655 Samples are made ready for shipping to labs.  
1805 K. King leaves site to take samples to FedEx & Joe S. & Alex W. leave to obtain supplies.  
1900 End of day

Rain

Hot & sunny  
5/3/00

(79)  
0700 Proceed to decon area to obtain EDW drums.  
0740 Arrive @ wells CC-MW-81 and CC-MW-85. Set up equipment.  
0800 Begin purging CC-MW-81.  
0930 Obtained samples from CC-MW-81.  
1000 J.S. & A.W. went to decon equip.  
1045 Begin purging CC-MW-85.  
1130 Obtained samples from CC-MW-85.  
1205 J.S. & A.W. go to decon equipment.  
1300 Begin loading equip. and proceed to wells CC-MW-75 and CC-MW-77.  
1330 Begin purging CC-MW-77.  
1500 Begin sampling CC-MW-77.  
1545 Begin purging CC-MW-75 after decontaminating equipment.  
1700 obtained samples from CC-MW-75.  
Notes: Hubert Weiland had informed K. King to put "Nitrate" only on sample tags. Tags had already been filled out w/ Chloride/Nitrate/Nitrite/Sulfate. J. Slykerman informed K. King to leave tags as they were & it wouldn't be a problem. Tags were left as they were.  
1800 - TRIP blanks are obtained.

80

3 MAY 00

1900 After all samples are packed for shipment, K. King leaves for FedEx and J. Strykowski + A. Wood leave for decon.

1930 End of day

K. King

07 MAY 00

81

0700 BU personnel depart for site and decon area

0830 Begin to purge CC-MW-5I

1000 Sampled well CC-MW-5I

1050 Set up to purge CC-MW-3S

1135 Sampling began on CC-MW-3S

1225 Set up to purge CC-MW-2S

1230 Surveyors arrive @ site and K. King goes w/ them to show them each well site so they can flag them.

1330 K. King arrives back @ CC-MW-2S

NOTE: Samples @ CC-MW-2S were obtained @ 1315.

1500 Begin purging CC-MW-1E

1615 Obtained samples @ CC-MW-1E

1745 Begin getting all samples ready for shipment to labs by FedEx

1900 End of day

K. King

82 05 May 00

0645 Begin loading van for departure.

0720 Leave hotel to go to site

CC-MW-15.

0755 Begin purging CC-MW-15.

0825 Begin sampling CC-MW-15.

1040 Get all samples ready to ship.

1100 Depart for SEST lab in Athens, GA.

1500 End of day

05 MAY 00

83

0700 Arrive @ CC-MW-11I

Note: HKW survey company on site to survey wells, (Jeff Russell).

0920 Spoke w/ John J. of B&V about three wells (CC-MW-115, 11I, 45) still needing risers cut off - will speak w/ Fran Bassett of Alliance + call back. Meanwhile, surveyors will save these wells for last.

1040 Begin purging well CC-MW-11I.

1200 Obtained 4 preserved spike CC-MW-12 and preservative blanks CC-PB-02, and CC-PB-03.

1255 Samples were obtained from well CC-MW-11I

1320 Began purging CC-MW-115

1545 Obtained samples @ CC-MW-15

1800 Prepare samples for shipment to FedEx.

1830 Deliver samples to Fed Ex.

NOTE: H. Wickland asked that CC-MW-115 + 1I were marked correctly. J. Strykerman said he had taken care of that.

1900 End of day

LS [Signature]



(84)

5/9/00

0700 left hotel for site MW-4.  
 Called Water Treatment  
 (334-240-1658) & see  
 where we could sample  
 if many wells. Melvin  
 will call to set up time.  
 Proceeded to Decora for Decora  
 at MW-4.

0800 Arrived @ MW-4 (SRI) set up  
 to sample. Surber  
 arrives call PM. PM states  
 Surber on hold until  
 drilling finishes with well  
 Tried to call Miller @  
 850-336-4209 but  
 cell not available will  
 call later.

1830 MW-4I - static level  
 31.93 Total depth 131.86  
 See Grid Collection Record  
 for parameters

0835 Started Pump of MW-4I  
 1000 Started collecting CC-MW-4I  
 1030 finished collecting MW-4I  
 purged 55 Gallons

(85)

5/9/00

1030: Alex to decora pump &  
 W. level. Joe stopping at location  
 with equipment.  
 1035: Melvin w/ water dept set  
 appointment to sample  
 public wells @ 1400 today.  
 1130: Started Pump of MW-45  
 See Grid Collection Record for  
 parameters.  
 1212 Collecting Sample CC-MW-45  
 1300: Finished collecting MW-45  
 To hotel to obtain fuel ex  
 then to well field.  
 1345: met with Melvin Hartley  
 from Water Works. He stated that  
 9E was not functioning due  
 to burned out pump. We would  
 not be able to sample.  
 1355: Started Pump of 9W  
 See Grid Collection Record.  
 1415: Collected Sample CC-MW-9W  
 1425: Started pump of CC-MW-08 see  
 Grid Collect. Record for parameters  
 1440 Collected Sample CC-MW-8

5/9/00

- 1) Started Purge of CC-MW-05. Get final collection record for parameters
- 2) Collected sample CC-MW-05. Proceed to process samples for shipment. TAKE SEED samples to FedEx

A

~~Handwritten signature~~

WPK

5/10/00

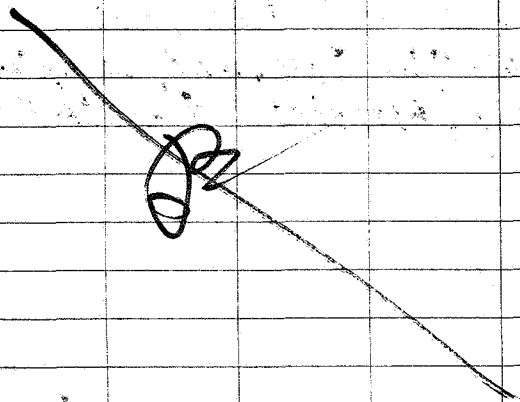
(57)

- 0700: Proceed to Loop Newark and meet Suvayaris
- 0715: Organic → T.D.P. Paul  
INORG - Chemtech N.J.  
P.O.: 00-0219  
CNSL 28044 Rec'd from  
Dubbic Colquitt SEED
- 0800: Meet w/ Suvayaris at MW-87  
will follow thru opening  
wells
- 0920: CC-MW-65 cut well casing in vault.
- 0930: CC-MW-45 cut well casing in vault.
- 1130: CC-MW-115 well casing cut off in vault.
- 1300: Met with Alex/Bradford @ MW-7E. Prepared samples to ship. Assisted also to them.

98

5/11/00

- 0700 left hotel for MW-11I
- 0720 at MW-11I, static level 103.74'. Preparing to slug Test.
- 0759 started Test at CC-MW-11I
- 1100 at MW-25 preparing to purge (Bail) 7 Gls in order to sample for Nitrate.
- 1120 Purged 7 gallons, sampled CC-MW-25 for Chloride, Nitrate, Sulfate.
- 1140 Continue to DataLog wells
- 1900 TAKE samples to feed Ec then hold



5/12/00

59

0630: left msg for Hubert, re: water levels. He stated to take heads today only and come home. Checked out of hotel. Plus wood will remain at hotel to download DataLog. See log book DataLog for particulars.

0740 arrived @ MW 11I to obtain water heads.

Well	Static Water Level
MW-11 I	103.79'
MW-11 S	103.69'
MW-9S	52.99'
MW-10S	55.02'
MW-6S	68.79'
MW-5I	57.19'
MW-3S (House)	54.98'
MW-2S (Freestone)	39.24'
MW-1S	37.25'
MW-1I	38.44'
MW-4S	30.13'
MW-4I	31.58'
MW-79	34.12'
MW-7I	34.01'

5/12/00  
Well

BTOL  
Water Level

W-85

36.19

W-81

36.09'

At CC-MW-35 (Firestone Spu)  
Drum # 351 Not taken  
to Duron Area by deilke.  
Fed Exes. Data logger +  
WLI to appropriate  
companies.  
left site for Atlanta.

1/8/01 Sampling effort Temp Wells.

R. Waters + Prosonic Drilling Co.  
A. Wood

1505 Prosonic arrives on site  
and begins to download empty drums  
at the staging area. Tom with Prosonic  
informs BV that they did not bring  
a pencil boiler stated in scope. They  
plan on using tubing plus a check  
valve or peristaltic pump. Hubert  
Wieland informs them they must  
have teflon tubing for each well location.  
1545 Drillers begin constructing  
decon pad.  
1640 Finished with decon of Rigard  
downhole equipment. BV + Prosonic  
leave site.

1/9/01

BUSPC

Hubert Wieland

R. Waters

A. Wood

Prosonic Drilling Co.

Thomas Peterson

Walter Lambert

Scotti Garrett

Rig: Geoprobe

6600: S1058

Wood

1/9/01

700 WATERS, WOOD, WIELAND ARRIVE

DECON AREA

715 PROSONIC, GUSMAN, GERRARD, WOOD, WATERS

WIELAND MEET @ TWO1 OR DRAWING

1145 Drilled to a total depth of 55.0'  
and sampled TWO1.

Pictures through # 25 TWO1

1220 Drillers are granting TWO1

1415 TEAM ARRIVES AT DECON AREA DECON

OF DPT AND ALL TOOLS AND

ACCESSORIES USED AT WELL LOCATION

TWO1

~~1540 TEAM ARRIVES AT LOCATION TWO2~~

1540 TEAM ARRIVES AT LOCATION TWO2

1555 DPT IS MOVED BECAUSE OF DEBRIS

TEAM MOVES APPROXIMATELY 8 INCHES

NORTH OF ORIGINAL LOCATION

1700 LEAVE DPT ON SITE OVERNIGHT AND PACK  
UP TOOLS. WRAP A 'CAUTION' TAPE AROUND  
AREA.

DRW

WOOD

1/10/01

0700 WATER WOOD ARRIVES ON SITE AT  
LOCATION TWOZ

0710 DRILLERS LOOK FOR A WAY TO TRAW IGNITION  
ON DPT.

0815 DPT IS STARTED AND DRILLING CONTINUES

0939 T.D. of boring to 55.0' b/s. hit  
water table. will sample soil from  
51.0' to 53.0' and take geotech sample  
from 54.0' to 55.0' b/s. Followed  
by the water sampling.

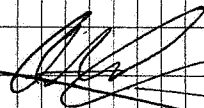
1132 Water recovered approx 3.0 gal.  
well will not produce. will wait to  
see if there is any recharge.

1230 TEAM CONTINUES TO ATTEMPT COMPLETION  
OF GROUNDWATER SAMPLES

1300 DRILLERS RACK UP REST OF EQUIPMENT  
AND GO TO DECON AREA

1500 ARRIVE AT TWO3 AND BEGIN DPT

1745 Finish taking samples and  
drillers begin removing rod &  
grouting hole.



1/11/01 Thurs. Overcast cold.

0700 arrive at decon. Drillers  
are finishing decon of equipment.

0800 Arrive at site of TW-04  
begin to set on hole.

0820 BEGIN DPT ON TW04

0850 sleeting take a break and the  
drillers need to weld a vice for  
breaking pipe.

0958 Back on TW04 to resume  
drilling.

1115 sampled well TW04. Drillers

beginning to pull tools and prepare grout.

1145 TEAM COMPLETES CLEAN-UP ON WELL

TW04 AND WILL RE-GROUP AT TW05

1330 set up on TW05.

1600 COMPLETE WELL TW05 AND PREGRD

1/12/01 Wood

Clonoy Cove

0700 ARRIVE AT DELON GROUND AND  
MOVE TO TW06 BEGIN SETUP

0915 TAKE SOIL SAMPLE AT TW06

1045 TAKE WATER SAMPLE AT TW06

1115 MEET DRILLERS AT DELON AND THEY  
BREAK FOR LUNCH

1300 ARRIVE @ TW07 Drilled to approx.  
35.6'ls

1545 Drillers patching asphalt.

1600 Drillers arrive at decont to get  
ready for tomorrow.



1/13/01

P. CLAWSON M110

WOOD

0700 MEET AT DECON AT WAVE TO TWOB

0920 TAKE SOIL SAMPLES FROM TWOB

T.D. of boring to 40.0' b/s.

0925 Drillers put screed down hole  
to begin purging.

1000 Pull water samples.

1023 done sampling TWOB Drillers  
are removing tools and mixing  
grout.

1130 Drillers begin decon for drilling  
at TWO9.

1230 Drillers complete decon. break  
for lunch. BU & PC works on  
samples getting ice and processing  
paperwork.

1335 Drillers back from lunch.

Set up on TWO9.

1400 Begin drilling @ TWO9.

Sampled soil @ 1500 from approx. 36' b/s.

1600 pulling water sample. Hole was  
drilled to a total depth of 40.0' b/s.

1630 Driller begin decon for  
next day.

1720 BU & Drillers leave decon.

1/14/01 Partly Cloudy Cool.

0715 BVSPC scouts site for TW10

0730 meet drillers at decon.

0800 Drillers set up on TW10.

1000 TW10 soil samples taken @  
48' b/s. Geotech sample taken  
@ 30' b/s.

1050 water samples collected.

1100 Drillers grant hole and move to  
decon.

1200 Drillers finish with decon. Move  
rig to next well. Take lunch. B+V  
goes to stake wells for surveying.

1310 Set up on TW11.

1430 Soil sample taken @ 38' b/s  
Geotech taken @ 40' b/s

1515 Water samples taken from  
approx. 40.0 b/s. Strong petroleum  
type odor coming from the  
purge water.

1530 Drillers begin granting the hole.

1600 Drillers arrive and begin to  
decon equipment.

1700 Finished with decon BVSPC +  
Pozonic leave decon.

↑ MW

4/15/01 overcast cool.

0700 arrive at decon and meet  
drillers. They head to set up on  
TW12.

0800 calibrate Horiba and  
turbiditymeter. and prepare  
bottles to take ms/msd at the  
location.

0910 sample soil from 30' to 34'  
b/s. for ms/msd. Gettech from 35' b/s.

0915 start purging water.

0945 collect water samples.

1045 Drillers have grouted hole  
and are cleaning up location.

1115 BUSPC was informed that the  
amber jug containing TW05 sample  
was broken upon arrival @ the lab.  
Hubert Wieland instructed the field  
personnel to resample the TW05  
location.

1120 Drillers begin to drill @ TW05.

1150 R. Waters talked with Billy Dennis  
about access @ TW13 location.

Mr. Dennis gave permission to  
drill and take the samples.

1404 finish taking sample @ TW05

1/15/01 continued

1445 arrive at location of TW13

1505 setting up on TW13. Location will be taken as a duplicate.

1525 Begin drilling on TW13 1600 Soil samples

1645 water samples collected.

1750 Arrive @ Decon to decon and break down decon pad & stage drums

1835 Drillers done with decon. Asked how many drums to leave. 41 drums were used in the field effort. They brought a total of 34 drums. BVSPC estimates they will need 23 drums for purge water and decon with some extra for over flow so the drillers will take back 7 drums. Their total delivery included 27 drums after the demob.

1911 Stage drums and Drillers load 7 extra drums to take with them.

1920 Drillers Leave site.

1/16/01

Shipping Data

Proj Code 01-0207  
Case# 28914

CL-TB-03 - Soil Trip Blank  
Voa 36460

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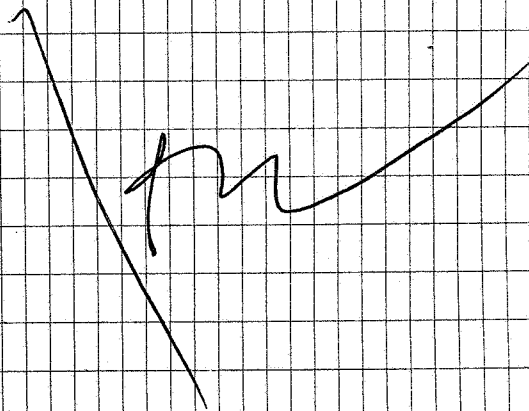
CL-TB-02 water trip Blank  
Voa 36458, 36459

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CC-FB-02 Field Blank  
Voa, BNA, Pest. PCBs TAL/TCL  
36450, 54, 55, 51, 52

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CC-PB-02 Preservative Blank  
metals Cyanide 36456, 57

A handwritten signature or set of initials, possibly 'JW', written in black ink on the grid paper. The signature is slanted and consists of a large initial 'J' followed by a smaller 'W'.

K. King

11/17/01

Cloudy, Raining, Cold

①

0700 K. King, Ryan Waters & Alex Wood  
get all equipment and paperwork  
organized for 2nd stage of  
sampling effort. Ryan Waters will  
leave for Atlanta today & K. King &  
A. Wood will sample Monitoring Wells.  
1030 K. King & A. Wood begin taking  
1<sup>st</sup> round of H<sub>2</sub>O levels.

65 - 70.46

71 - 35.55

75 - ~~34.93~~ KK 35.43

81 - 37.15

85 - 37.25

41 - 32.76

45 - 31.65

11 - 39.81

15 - 38.96

51 - 58.59

25 - 41.02 ✓

35 - 56.75 ✓

111 - 105.29

115 - 105.22

95 - 54.12

105 - 56.18

USIC

1345 Set up on well 35 to  
begin purging.  
1405 Begin purging CC-MW-35.  
1530 Begin sampling CC-MW-35. Parameters  
were taken by hand-bailer due  
to the well evacuating by Gruntos  
pump.  
1600 Finish sampling MW-35.  
1640 Finish removing pump &  
equipment from site  
1645 Leave for hotel to organize  
sample shipment  
NOTE: Split samples taken for  
Gerald Conway & Beth Parker

SK

1/18/01

K. King, H. Wood

(2)

0700 Organize sample containers  
for Van.  
0745 Set up @ CC-MW-25 in  
vacant lot beside Firestone.  
0920 Begin purging CC-MW-25.  
0950 Begin sampling CC-MW-25.  
Split samples taken for Gerald Conway.  
1030 Finished @ well CC-MW-25.  
1045 Set up @ CC-MW-45.  
1100 Begin purging MW-45.  
1130 Sampled MW-45 and took  
split samples for Gerald Conway  
& Beth Parker.  
1200 Finished CC-MW-45 & will  
begin CC-MW-4I.  
1220 Begin purging CC-MW-4I.  
1400 Begin sampling MW-4I. Split  
samples w/ Gerald Conway & Beth.  
1420 Finish sampling & cleaning up @  
MW-4I. Move to corner of N. Lawrence  
& Columbus to MW-85.  
1430 Set up @ CC-MW-85.  
1445 Begin purging MW-85.  
1525 Sample MW-85 & split  
samples are taken for Gerald

Conway & Beth Parker. —  
1555 Leave MW 85 for hotel —  
to pack & ship samples. —

25K

1/19/01

K. King / H. Wood

(3)

Heavy Rain

0700 Left hotel to obtain supplies  
for shipping samples. —

0830 Due to severe thunderstorms  
& tornado warnings BV personnel  
are restricted to the hotel until  
weather subsides. —

1030 Rain has let up & A. Wood &  
K. King are set up & beginning to  
purge CC-MW-8I. Called Carolyn  
Mack to let her know we are  
shipping samples for Saturday delivery.

1035 Begin purging MW-8I —

1145 Sample MW-8I & split samples  
w/ Beth Parker and Gerald Conway. —

1200 Left MW-8I site. —

1205 Arrive @ CC-MW-65 to set up. —

1215 Begin purging MW-65. —

1305 Begin sampling CC-MW-65  
& split samples w/ Beth Parker &  
Gerald Conway. —

1330 Leave site to return to hotel —

& get samples ready to ship. —

1630 Leave for Fed Ex. —

KSK



1/20/01

H. Wood/K. King  
Cold, Cloudy

0745 Set up @ CCMW 7I, called  
G. Conway to inform him of our  
location.

0800 Begin purging MW 7I

0845 Begin sampling MW 7I, split  
samples w/ Gerald Conway.

0900 Begin purging MW-7S

1015 Sample CC-MW 7S, also took a  
duplicate sample & split w/ Gerald  
Conway.

1030 Finish MW 7S. Left for decon  
to get more drums & more decon  
water.

1115 Arrive @ CC-MW 1I & 1S.

1130 Begin purging CC-MW 1S.

1215 Sample MW 1S & split w/ Gerald  
Conway.

1225 Begin purging CC-MW 1I.

1345 Sample MW-1I & split  
w/ Gerald Conway.

1400 Leave site for well MW 5I @  
N. Decatur.

1405 Arrive @ CCMW 5I & set up.

1445 Begin purging CC-MW-5I.

1500 Begin sampling MW-5I & split

(4)

samples w/ Gerald Conway.  
1700 finish MW-5I and leave for  
hotel.

VSP

1-21-01

K. King, A. Ward

Call - Sunny

0800 Arrive @ decon to obtain drums.  
0845 Set up @ MW 95.  
0900 Begin purging CC-MW-95.  
1005 Begin sampling MW-95 & split  
samples w/ Gerald Conway.  
1020 Leave site. Move to next  
well.

1030 Arrive & set up @ well CC-MW-105.  
1045 Begin purging MW 105.  
1125 Begin sampling MW 105 & split  
samples w/ Gerald Conway.  
1145 Complete well MW 105 & go to  
decon to obtain more drums.

1215 Set up @ CC-MW-11I.  
1240 Begin purging MW 11I. KSK  
Measured to water table @ 105',  
tubing is approx. 5' short, so K. King  
goes to Home Depot to buy more  
tubing to pump the well.

1345 Arrive back @ site with tubing to  
finish well MW-11I.

1410 Begin purging CC-MW-11I.

1530 Have been purging 11I slowly  
& taking parameters, but turbidity  
keeps going up instead of down.

(5)

So K. King decides to purge for approx.  
another 15 minutes to full purge  
volume of sample.

1545 Sampled MW 11I & split  
samples with Gerald Conway.

1615 Finish well & clean up site.

K. King

1-22-01 Cold Sunny

K. King  
A. Wood

0730 Leave for Lebanon to pick up drums.

0810 Arrive @ CC-MW-115 & set up to purge well.

0830 Begin purging CC-MW-115.

0910 Sample MW-115 & split samples w/ Gerald Conway.

1000 Finish @ MW-115 & call G.

Conway calls to have someone meet us to sample city wells.

1015 Arrive on site & no one has shown up yet.

1045 Begin purging well 9 west for sampling.

1115 Complete parameter readings and sample 9 west split w/ G. Conway & Bristol.

1125 Move to 8 well location for parameters.

1140 Sample 8 city well.

1150 Arrive at city well 5 for parameter check.

1205 Sample city well 5 - no splits.

NOTE: city well 8 split w/ G. Conway & B. Parker.

1/22/01

CLEAR, WIND

Wood

1300 BEGIN ROUND OF WATER LEVELS FOR ALL PERMANENT WELLS FOR GROUND WATER LEVELS

1S = 39.00'

1I = 39.90'

2S = 40.98'

3S = 56.75'

4I = 37.62'

4S = 31.64'

5I = 58.55'

6S = 70.41'

7S = 35.39'

7I = 35.45'

8S = 36.90'

8I = 36.79'

9S = 54.19'

10S = ~~54.19'~~ 56.21'

11S = 105.24'

11I = 105.31'

1530 Wood completed full round of ground water level checks.

1600 A. Wood arrives @ hotel & begins  
to help with samples.

1830 A. Wood leaves for Fed Ex &  
K. King continues w/ samples.

VSL

1-23-00

0800 K. King reads samples for  
shipment, goes to nursery to buy  
delimitate - hard to find anywhere.

0930 Meets w/ Alex w. @ MW-7I  
to resample for MS-MSD.

1000 - Set up @ CC-MW-7I

1015 - Begin to purge MW-7I