

**APPENDIX D**

**GROUNDWATER AND SURFACE WATER SAMPLING LOGS**

**FINAL REPORT  
GROUNDWATER INVESTIGATION  
RAMSDELL QUARRY LANDFILL  
RAVENNA ARMY AMMUNITION PLANT**

**APPENDIX D1**  
**GROUNDWATER SAMPLING LOGS**

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

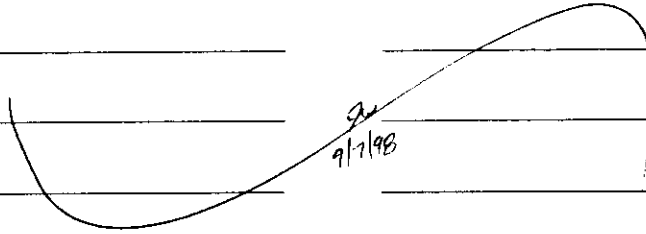
Date (mm/dd/yy): 09/07/98

Su (M) Tu W Th F Sa

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Task Team Members:

Joe Wilson

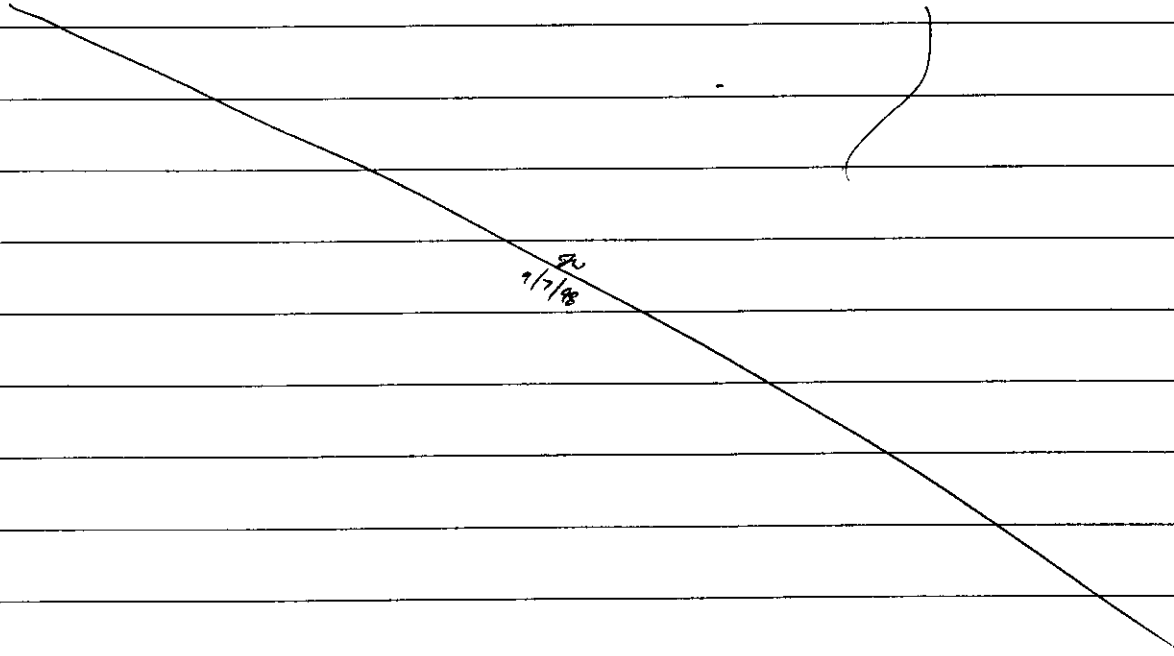


Narrative (include time and location):

1300 - Arrive @ RUAAP. Go to RQL to download pressure transducers and get water levels w/ meter.

1314 - At RQL, light drizzle, staff gauge o.k. but pond water very low. Begin w/ work. Staff gauge reads 1.9 ft

1445 - leave RQL. All went well. See related pages for data.



Daily Weather Conditions: A.M. NA

P.M. light rain, 80's

Recorded By Joe Wilson

QA Checked By [Signature]

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

Date (mm/dd/yy): 9/18/98  
Task Team Members:

Su M Tu W Th (F) Sa

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Joe Wilson

Heather Smith

9/18/98

Narrative (include time and location):

1715- At RA. Get W.L. @ MW-08. download and stop transducer. Same as SEPT1808 bin. Pull transducer and set GET Bladder pump.

1726- DO same as above @ MW-09. Same file as SEPT1809 bin.

1732- Continue w/ full round of water levels. Staff gauge Read 1.25 ft. <sup>gw</sup>

9/18/98

Daily Weather Conditions: A.M. NA

P.M.

Recorded By

Joseph J. White

QA Checked By

[Signature]

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

Date (mm/dd/yy): 09/19/98

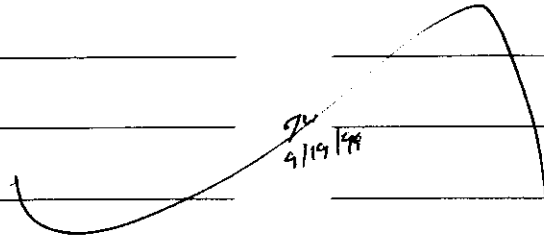
Su M Tu W Th F (Sa)

PAGE 1 OF 2

Task Team Members:

Joe Wilcz

Heather Smith



Narrative (include time and location):

0900 - Set up QED Microperge equipment, flow cell # 10410 and controller # 16276 @ RQL MW-09 (RQLmw-009). Event 1: sampling - Dry Season Hydrologic Event. Initial w.l. = 7.98 ft BTOC. PID = 0 ppm above TOC

0900 - begin pumping. Using Trip blank # RQ00084. Running @ ~1000 ml/min. ~~9/19/98~~

0930 - begin collection of sample # RQ00070 w/ MS/MSD volume. Using field coc # F009.

1125 - Complete collection of sample. Final w.l. = 8.04 ft BTOC. Took so long because of MS/MSD. Begin tearing down equipment to move to RQLmw-008. Reconn pump and ATE kit, reset transducer, and start ~~9/19/98~~

1205 - deep decontaminated pump in RQLmw-010 after stopping and downloading and pulling transducer. Site test as SEP1910.bm.

1236 - set up QED Microperge equipment @ RQLmw-008. Initial w.l. = 8.89 ft BTOC. PID = 0 ppm above TOC.

1301 - begin microperging. Running @ ~1200 ml/min

1325 - Parameters stable: begin collection of sample # RQ00069. Effervescing when contact HCl.

Daily Weather Conditions: A.M. Sunny, ~70°F

P.M. Sunny, ~80°F

Recorded By Joe Wilcz QA Checked By [Signature]

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

Date (mm/dd/yy): 9/19/98

Su M Tu W Th F Sa

PAGE 2 OF 2

Task Team Members:

Joe Wilson

Heather Smith

9/19/98  
ju

Narrative (include time and location):

1419- Finish collecting sample. Water level = 9.00 ft BTOC. Tear down equipment. Reset transducer.

Approx. 1 gallon of purge water produced.

1432- leave location to deion pump.

1504- set up QED micropurge equipment @ RQLow-010. Initial water level = 27.60 ft BTOC 9/19/98

1515- begin micropurging PID = 0 ppm @ Tex. Recharging @ 80-85 ml/min.

1533- stable and ready to sample.

1535- Begin collecting sample # RQ0071.

1645- leave location.

1656- set up QED micropurge @ RQLow-011. Initial W.L. = 23.65 ft BTOC

1701- begin micropurging. Recharging @ about 75 ml/min.

1730- begin collecting sample # RQ0072.

1830 Final waterlevel 23.84' BTOC. End collecting. Place deion pump from RQLow-010 into RQLow-007. Save transducer data as RQLow SEP1907. bin.

1845- Begin packing up all equipment.

1914- leave RQL. All samples on ice, secure, in my custody.

Daily Weather Conditions: A.M. NA

P.M. sunny, ~80, breeze w/compH W → E

Recorded By [Signature]

QA Checked By [Signature]

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

Date (mm/dd/yy): 09/20/98

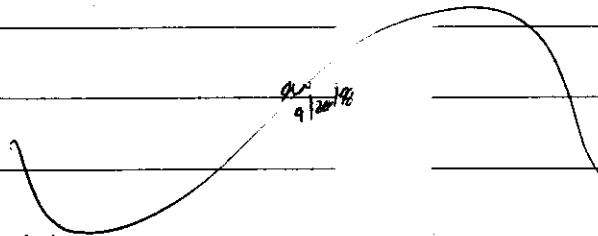
Su M Tu W Th F Sa

PAGE 1 OF 2

Task Team Members:

Joe Wilbur

Heather Smith



Narrative (include time and location):

0900 - Arrive @ RQL. Set up QED Micropump equipment @ RQRMW-007. Initial W.L. below top of pump. Pump hung midscreen - 13 @ pump intake, ~ 9.5-10 ft BDEC @ top of pump. Will try to micropump. Run back to Bldg 1030. Carboi has battery low. W.L. on 9/18/98 was 8.67 ft BDEC  $\approx$  top of bladder pump.

0955 - Start micropump. Water very turbid but clearing quickly. Having a little trouble setting recharge rate because of no W.L. readings. We are trying to set it @ 100 ml/min.

1019 - Parameters stable. Flow rate steady @ 120 ml/min.

1020 - begin collection of sample # RQ00068 w/ QC dup # RQ00074 and QA Split # RQ00078

1241 - Complete collection of above sample.

1258 - leave location.

1305 - set up @ RQRMW-006. Initial W.L. = 35.49 ft BDEC.

1315 - begin micropumping.

1334 - Establish a recharge rate of ~ 50 ml/min.

Daily Weather Conditions: A.M. Sunny, 70's

P.M. \_\_\_\_\_

Recorded By Joe Wilbur QA Checked By [Signature]

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

Date (mm/dd/yy): 09/20/98

(Su) M Tu W Th F Sa

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Task Team Members:

Joe Wilbur

Heather Smith

9/20/98

Narrative (include time and location):

1400- Begin collection of sample # RQ0067

1532- Complete collection of sample. Final water level = 36.89 FT BTCC. Began cleaning up. All purge (in bottles - from 6 wells) contained in drum RQ-MP-010.

1605- leave location. Going to prep. to put selenite around samplers.

1700- Have selenited samplers and packed all up.

1740- Have gone to each of the six transducers and set them to start recording w.l.'s every 2 hours beginning @ 2000<sup>HRS</sup> today.

1745- leave location.

9/20/98

Daily Weather Conditions: A.M. NA

P.M. Sunny, ~ 85°F

Recorded By Heather Smith

QA Checked By [Signature]



TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

Date (mm/dd/yy): 10/19/98

Su M Tu W Th F Sa

PAGE 1 OF 2

Task Team Members:

JOE Wilson

MATT ROOT

0735 - Get full round of water levels (see p. 53)  
Narrative (include time and location):

1125 - arrive @ MW-10 and set up QED micropump.

- unable to obtain a water level due to pump being above water level.

1136 - begin taking water ~~and~~ parameter readings every 5 minutes.

1205 - Parameters stable. Collect sample # RQ0100. On FCC # F010.  
w/ QC trip blank # RQ00086

1240 - Done collecting sample. Decan and move equipment.

1306 - Water level after removing pump = 28.15 ft BTCC.

1314 - Leave location

1325 - set up @ RQ0101-011. Same as above. Initial W.L. = 24.44 ft BTCC

1335 - begin pumping. Water very turbid, iron color - orange.

1345 - begin collecting water samples # RQ0101.

1422 - Done collecting sample. Decan and ~~find~~ <sup>10/19/98</sup> tear down equipment.

Final W.L. = 24.55 ft BTCC.

1432 - Leave location.

1500 - set up same as above @ RQ0101-002. Initial W.L. = 36.08 ft BTCC

Daily Weather Conditions: A.M. cloudy + overcast 50°F

P.M. sunny 60°F

Recorded By

Joe Wilson

QA Checked By

[Signature]

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

Date (mm/dd/yy): 10/19/98

Su (M) Tu W Th F Sa

PAGE 2 OF 2

Task Team Members:

Joe Wilson

MATT ROOT

10/19/98

Narrative (include time and location):

1504 - Begin micropiezing

1530 - Begin sampling # RQD96

1710 - Complete collection of above sample. Decon and set pumps for tomorrow. Collect surface water (See Surface Water logbook).

1740 - leave RQD.

10/19/98

Daily Weather Conditions: A.M. NA

P.M. Sunny ~ 60°F

Recorded By Joseph J. Wilson

QA Checked By

Matt Root

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

Date (mm/dd/yy): 10/20/98

Su M Tu W Th F Sa

PAGE 1 OF 2

Task Team Members:

Joe Wilson

MATT ROSE

10/19/98

Narrative (include time and location):

0805 - Arrive @ RQL. Prepare to sample.

0915 - Set up @ RQLmw-007. Using QED Micropurge Equipment as described earlier. Initial water = NR, below top of bladder pump. Note: orange and black deposits on trolls and troll cables that were hung in all wells along bottom RQLmw-007, -008, -009.

0926 - Begin micropurging.

0950 - Begin sampling RQLMW-007 Sample # RQ0097. on Field COC \* FO10. QC trip blank # RQ0086.

1030 - Finish collecting sample. Tear down supplies and decom pump and filter apparatus.

1055 - leave location to phone lab.

1225 - set up @ RQLmw-008. Same as above. Unable to get water level, below top of pump.

1227 - begin micropurging.

Daily Weather Conditions: A.M. Sunny, ~50°F

P.M. mostly sunny, ~55°F

Recorded By Joe Wilson

QA Checked By Matt Rose

10

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

Date (mm/dd/yy): 10/20/98

Su M TU W Th F Sa

PAGE 2 OF 2

Task Team Members:

Joe Wilson

MATT ROOT

Joe  
10/20/98

Narrative (include time and location):

1245 - begin collection of sample # RQ0098.

1340 - Complete collection of above sample. Tear down supplies and clean as needed.

1400 - Arrive @ RQLmw-009. set up same as above. Will collect sample w/ MS/MST volume.

1405 - begin micropurging

1425 - begin collecting of sample # RQ0099 w/ MS/MST volume.

1550 - Complete collecting above sample. Tear down equipment and clean all supplies

1625 - leave RQL.

Joe  
10/21/98

Daily Weather Conditions: A.M. PA

P.M. Sunny, ~55°F

Recorded By

*Joseph J. Wilson*

QA Checked By

*Matt Root*

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

Date (mm/dd/yy): 10/21/98  
Task Team Members:

Su M Tu W Th F Sa

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JOE WILSON

MATT ROOT

10/21/98

Narrative (include time and location):

0930 - Arrive @ RQL to restart transducers. Set them all for scheduled start beginning @ 1200 hrs today.

1030 - Failed to connect w/ 3 of the 7 data loggers. Consult K. Dominick and will try to troubleshoot.

1115 - Now unable to communicate w/ any data logger. Determine problem to be with the RS232 cable.

1245 - leave RQL. Will order replacement cable. Communicated w/ first 2 and last 2 transducers this a.m. Then swapped cables among transducers that responded and those that didn't. At this point was unable to communicate with any. Tried repeatedly to communicate w/ those we had success with earlier but had no response. Ran port check on laptop - o.k. Disassembled RS232 cable housing & pin head. Wires frayed severely and twisted. Determine this to be problem.

Daily Weather Conditions: A.M. Mostly sunny, ~45°F

P.M. NA

Recorded By Joseph J. Wil QA Checked By [Signature]

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

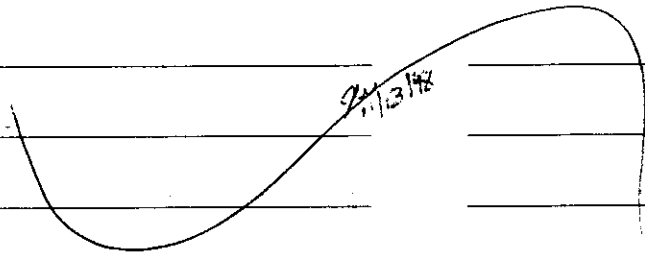
Date (mm/dd/yy): 11/13/98

Su M Tu W Th (F) Sa

PAGE 1 OF 1

Task Team Members:

JE Wilson



Narrative (include time and location):

1331 - Arrive @ RQL to download dataloggers and get full record of water levels.

See p. 54 for water levels. Downloaded data saved on my laptop as NEW13##.bin

where ## = mw number or sea for staff gauge. Everything looks great.

Only water in pond is the very little bit at the staff gauge.

1426 - leave RQL.

11/13/98

Daily Weather Conditions: A.M. NA

P.M. mostly sunny, ~~clear~~ calm, 45.5°F

Recorded By Joseph J. Wilson QA Checked By [Signature]

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

Date (mm/dd/yy): 12/11/98

Su M Tu W Th (F) Sa

PAGE 1 OF 1

Task Team Members:

Joe Wilbur

12/11/98

Narrative (include time and location):

1135 - Arrive @ RQL. Begin to collect water levels and download data loggers.

1248 - Have completed above and pulled transducer from staff-gauge.

1250 - leave RQL.

12/11/98

Daily Weather Conditions: A.M. bright sun, ~45°F

P.M. NA

Recorded By [Signature] QA Checked By [Signature]

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

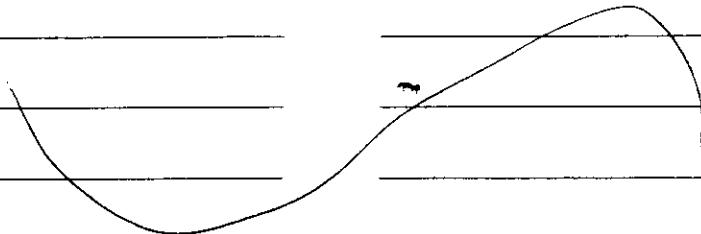
Date (mm/dd/yy): 1/22/99

Su M Tu W Th F Sa

PAGE 1 OF 1

Task Team Members:

Joe Wilson



Narrative (include time and location):

0855 - Arrive @ RQL. Roads hard. Unable to drive off of paved/plowed

Ramsdell Road. ca. 6" snow w/ ice covering on ground

Will begin downloading and collecting water levels.

0932 - Complete downloading of data. All looks good. Snow is hard to walk

through. Begin dip meter measurements

1013 - Complete dip meter measurements. Note: All previously installed (old) wells were

unlocked and since still have ca. 30 gal of water. Drive to RQL 05-04.

Will report this to K Dominic or B. Seckman immediately.

1017 - Leave RQL.

Joe Wilson  
1/22/99

Daily Weather Conditions: A.M. cloudy, drizzle, 45°F

P.M. N/A

Recorded By

*Joe Wilson*

QA Checked By

*Matthew [Signature]*



14

# TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

Date (mm/dd/yy): 2/12/99

Su M Tu W Th F Sa

PAGE 1 OF 1

Task Team Members:

Joe Winsow

MATT ROOF

900  
2/12/99

Narrative (include time and location):

1530 - Arrive @ RQL to get full round of water levels and re-see area  
we got stuck (see site log). Also collect surface water sample  
(see logbook 5)

1655 - leave RQL.

900  
2/12/99

Daily Weather Conditions: A.M. rain turn to snow, 30's

P.M. snow, windy, ~ 30°F

Recorded By Joseph G. Winsow

QA Checked By Matt Roof

**TASK TEAM ACTIVITY LOG SHEET**

**PROJECT NAME: Ramsdell Quarry Landfill GW Investigation**

**DELIVERY ORDER NO: 003**

Date (mm/dd/yy): 2/15/99

Su M Tu W Th F Sa

PAGE 1 OF 2

Task Team Members:

Joe Wilson

Matt Root

*Handwritten note:*  
 gw  
 2/13/99

Narrative (include time and location):

0840 Arrive @ RQL to sample. Set up at RQLmw-010. Controller box error.  
 Working on solution.

0915 - Begin pumping. Initial W.L. = 26.60 ft BTOC. Controller box error again. Phone QED again. Only solution is replace batteries, however, these are new batteries (installed last event) running @ 86%. QED says 86% is more than enough but will leave to get batteries.

1208 - Return, set up @ RQLmw-011. Controller working. Start pumping.

1300 - Collect sample # RQ0108 from sta. # RQLmw-011.

NOTE: About 1/2 way through sampling water became very turbid w/ iron like rust particles. Cleared after 3-4 L.

1420  
~~1405~~ Complete collection of sample. Secure, decom and leave site.

1435 - Set up @ RQLmw-006. Initial water level = 36.42 ft BTOC

QED Flow cell not powering up. Replace batteries, still not powering up. Use Harbor U-10 as a flow cell.

1445 - begin multipumping.

Daily Weather Conditions: A.M. hard snow fall, strong wind, ~ 18°F

P.M. SAA

Recorded By Joseph A. Wilson

QA Checked By Matt Root

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

Date (mm/dd/yy): 2/13/99

Su M Tu W Th F Sa

PAGE 2 OF 2

Task Team Members:

Joe Wilson

MATT ROSE

Joe  
2/13/99

Narrative (include time and location):

1455- begin collection of sample # RQ0103 from sta. # RQ1-mw-006.

1623- still collecting @ a rate of ~ 45 ml/min.

1700- Complete collection of sample. Clean-up and secure site. Leave for bldg 1030.

Joe  
2/13/99

Daily Weather Conditions: A.M. NA

P.M. heavy snow, strong wind, ~ 18°F

Recorded By Joe A Wilson

QA Checked By Matt Rose

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

Date (mm/dd/yy): 2/14/99

☉ M Tu W Th F Sa

PAGE 1 OF 2

Task Team Members:

JOE Wilson

MATT Root

gw 2/14/99

Narrative (include time and location):

0715 - Arrive @ ROL. Set up @ ROLmw-009. Will collect sample + MS/MSD volume from here. Initial W.L. = 5.50 Ft BTOC. Have to carry all supplies to these wells due to weather conditions. Today much nicer than yesterday.

0745 - begin micropurging Recharge @ 400 ml/min. Water level = 5.70 Ft BTOC.

0810 - begin collecting of gw sample # RQ0106 + MS/MSD volume.

0930 - Water level still steady @ 5.90 Ft BTOC.

0955 - complete collection. Move equipment to ROLmw-008.

1010 - set up @ ROLmw-008. Initial W.L. = 7.13 Ft BTOC.

1013 - begin micropurging Recharge @ a rate of ~400 ml/min. Water holding steady at 7.42 Ft BTOC after initial drop.

1035 - complete collection of gw sample RQ0105.

1112 - complete collection of abuse sample. Move to sta. ROLmw-007.

1120 - Leave ROL to dump 5 gallons of purge water in dnr ROLAS-002 at bldg 1036.

1207 - Return to ROL. Start micropurging @ ROLmw-007 initial W.L. = 7.01 Ft BTOC.

Daily Weather Conditions: A.M. partly sunny, calm, ~ 30° F

P.M. mostly sunny, light breeze, ~ 30° F

Recorded By [Signature]

QA Checked By [Signature]

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TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

Date (mm/dd/yy): 7/14/99

(Su M Tu W Th F Sa)

PAGE 2 OF 2

Task Team Members:

Joe Weber

Matt Root

MJR 06/17/99

Narrative (include time and location):

1112 - ~~pumping~~ well recharging at 400 ml/min.

1230 - parameters stable. begin collection of gw sample # RQ0104.

1305 - Complete collection of above. Move supplies to next location.

1320 - set up @ RQ0101 - 010. Initial water level = 26.67.

1330 - begin micro-purging.

1335 - Establish recharge rate of 200 ml/min

1345 - parameters stable.

1355 - begin collection of gw sample RQ0107. Joe goes to each well and sets dataloggers to start recording @ 1600 hrs today, 2-hr intervals.

1505 - Complete collection of above sample. Begin packing up supplies.

1520 - Leave RQ to bldg boss for clean & sample management.

06/21/99

Daily Weather Conditions: A.M. NA

P.M. mostly sunny, ~30°F, light wind

Recorded By Joseph J. Weber

QA Checked By Matt Root

# TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

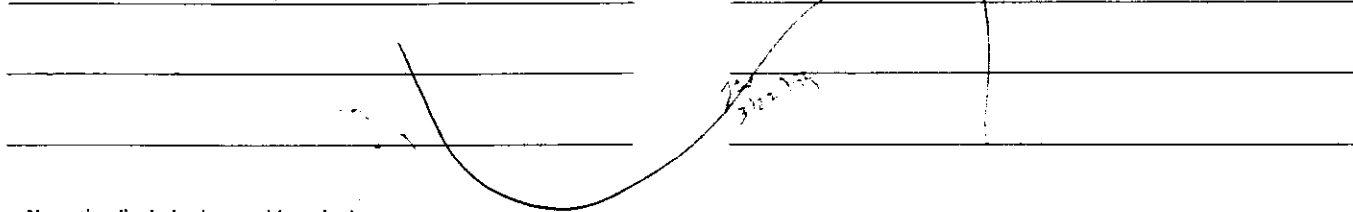
Date (mm/dd/yy): 3/22/99

Su (M) Tu W Th F Sa

PAGE 1 OF 1

Task Team Members:

Joe Wilson



Narrative (include time and location):

1200- Arrive @ RQL to get water levels and download data loggers. All goes well.

2 gauges in pond. Probably could have re-set pond transducer but

don't want to take HIS risk going on boat alone. Will install during

April sampling event.

1305- Leave RQL.

Joe  
3/22/99

Daily Weather Conditions: A.M. -NA

P.M. overcast, ~30F, Flurries, strong wind

Recorded By Joe Wilson

QA Checked By [Signature]

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TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

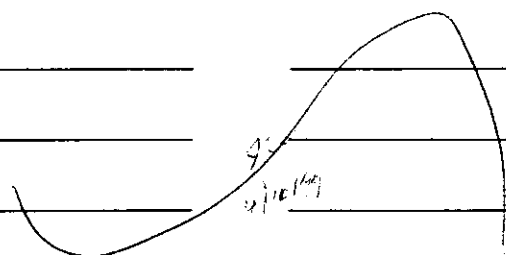
Date (mm/dd/yy): 4/16/14

Su M Tu W Th F Sa

PAGE 1 OF 2

Task Team Members:

Joe Nelson  
Jesse Alvarado



Narrative (include time and location):

Quarterly Sampling

0800 - Arrive @ Ram. Download and stop dataloggers set pumps in RGLms-010 and RGLms-011. Take RV read of water levels

1030 - Set up OGT sampling equipment at RGLms-010. Initial water level = 26.25 ft MSGL

1050 - begin purging using SEP flow cell # 200276R and Hb-ha 11-10 # 709027 (turbidity) with gas, methanol, blue bases in pad.

1100 - begin collection of RQ0117 from RGLms-010 on FCC # 012.

1230 - complete collection of above Deson pump and equipment. All samples in use but pump (decommission) in RGLms-006. 1.5 gallons purge water

1305 - leave location.

1335 - Set up at RGLms-011. Initial water level = 22.31 ft MSGL

1350 - begin purging 100 ft bore.

1400 - begin collection of sample # RQ0115 from RGLms-011.

1500 - leave location. 1.5 gallons purge water.

1605 - Set up at RGLms-006. Initial water level = 30.00 ft MSGL

Daily Weather Conditions: A.M. bright sun, ~55°F

P.M. bright sun, ~60°F

Recorded By Jesse Alvarado QA Checked By Joe Nelson

### TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

Date (mm/dd/yy): 4/10/09

Su M Tu W Th F Sa

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Task Team Members:

Joe Wilson

Jun - Alvarez

Joe  
4/10/09

Narrative (include time and location):

1512 - begin monitoring. Recharging at slightly 250 ml/min

1545 - begin collecting sample. RQ0110 from RQLine-006

1746 - Complete collection of above. Will not have time to clean pump tonight and make Blue her gate. Will clean on our secure site.

1752 - leave location

Joe  
4/10/09

Daily Weather Conditions: A.M. N/A

P.M. Bright sun, ~ 60 F

Recorded By Joe Wilson

QA Checked By [Signature]



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TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

Date (mm/dd/yy): 04/11/99

(Su) M Tu W Th F Sa

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Task Team Members:

Joe Wilson \_\_\_\_\_

Juan Alvarez \_\_\_\_\_

\_\_\_\_\_ 4/11/99 \_\_\_\_\_

Narrative (include time and location):

0910 - Arrive at RQL will have to carry all supplies to hole - because it is very wet.

1000 - Set up on RQLmw-009. Initial WL = 5.03 FT BTCL

1007 - begin microsparging

1035 - begin collection of sample # RQL0113 w/ MS/MSD from sta # RQLmw-009. Also DC duplicate # RQL0075 w/ GA split # RQL0071.

1335 - Complete collection of above samples. Carry equipment to RQLmw-008

1351 - Set up at RQLmw-008. Initial WL = 6.20 FT BTCL

1354 - begin microsparging. Recharging at 500 ml/min.

1415 - begin collection of sample # RQL0112 from sta. RQLmw-008

1457 - Complete collection of above. Move to RQLmw-007

1516 - begin microsparging. Weather looking bad. Well recharging around 500 ml/min

1545 - Collect sample # RQL0111 from Sta. # RQLmw-007

1710 - Complete collection of above. Storming.

1725 - Leave RQL for bldg 1036.

Daily Weather Conditions: A.M. cloudy, windy, -50 F

P.M. partly sunny, -55 F, some rain

Recorded By [Signature] QA Checked By [Signature]

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

Date (mm/dd/yy): 4/12/99

Su  M Tu W Th F Sa

PAGE 1 OF 1

Task Team Members:

Joe Wilson

Juan Alvarado

Handwritten signature and date 4/12/99

Narrative (include time and location):

0905 - Arrive at RQL to re-start pressure transducers including the one in the pond. Pond water depth = 2.90 ft. Tralls set to start recording today at 1000 hrs, every two hours. Load up boat to take back to bldg 1036.

1010 - Leave RQL.

Large handwritten signature and date 4/12/99

Daily Weather Conditions: A.M. overcast, windy, ~ 45°F

P.M. ND

Recorded By [Signature]

QA Checked By [Signature]

26

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

Date (mm/dd/yy): 05-25-99

Su M Tu W Th F Sa

PAGE 1 OF 1

Task Team Members:

~~Joe White~~

KATHY DOMINIC

MATT ROOT

~~MSR 06/07/99~~

Narrative (include time and location):

1430 ARRIVE AT RVAAP TO PREPARE FOR FINAL RQL GW SAMPLING

1500 COLLECT EQUIPMENT RINSATE@ BLDG 1636.

1600 ARRIVE AT RQL. COLLECT PRE-SAMPLING WATER LEVELS.

RTRIS STAN LEVINGER REPORTS ~ 1" OF RAINFALL OVER LAST

48 HRS. WATER LEVELS MEASURED BTDC AS FOLLOWS -

RQLmw006 35.14' @ 1643

RQLmw011 22.05' @ 1649

RQLmw010 25.81' @ 1653

RQLmw007 7.31' @ 1659

RQLmw008 7.19' @ 1709

RQLmw009 5.93' @ 1715

~~K.L. Dominic 5.25.99~~

Daily Weather Conditions: A.M. Overcast, breezy, 60°F

P.M. Same

Recorded By K.L. Dominic

QA Checked By ~~Matt Root~~

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

Date (mm/dd/yy): 05.26.99

Su M Tu W Th F Sa

PAGE 1 OF

Task Team Members:

KATHY DOMINIC

MATT ROOT

~~MJR 6/6/99~~

Narrative (include time and location):

0730 ARRIVE RQL TO PREPARE FOR SAMPLING.

0845 ALL DATA LOGGERS SHUT OFF, INCLUDING POND.

0953 Set up on RQLmw-006 Horiba U-10 serial#12742 calibrated in field.

Initial W.L. <sup>35.17' KD</sup> ~~36.26~~ BTCL. Flow cell #16276. The unit is not charged.

LV site to buy batteries @ 1012.

1100 Return to RQLmw006. Controller has failed. 12182 Attn:

MISS Jackson Rd. 48103. Go to RQL pond to collect SW sample.

see SW sampling log.

1220 LV RQL for Bldg. 1036. Prep. split sample for shipment to MED.

coordinate courier pickups with laboratory. Quanterra will pick up tomorrow

1630 Fedex pick up MRD's split sample + QED controller

1800 LV SITE.

~~KLDominic 5.26.99~~

Daily Weather Conditions: A.M. Overcast, 50°F, intermittent drizzle

P.M. Overcast, 62°F, intermittent drizzle

Recorded By KLDominic

QA Checked By ~~Matt Root~~

98

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

Date (mm/dd/yy): 05.27.99

Su M Tu W Th F Sa

PAGE 1 OF 1

Task Team Members:

K. DOMINIC

M. ROOT

06/07/99

Narrative (include time and location):

0755 Arrive at RVAAP. Awaiting flow controller replacement from OED.

0830 Arrive at RQL to take a new set of WL measurements. (see p. 61).

0900 Set up for sampling @ RQLmw-006. Horiba U-10 #12742 checked for calibration.

0953 Start pump generator. New flow controller #15501. Initial WL = 35.92'

1049 Complete purging + collect sample RQ0117.

1240 Complete sampling. Move to RQLmw-011. Initial WL = 22.17'

1322 Set up @ RQLmw-011; purged ~ 1.5 gal

1405 Begin collecting sample (RQ0122) Decon pump and equipment

1600 LV. RQLmw-011; Set up on mw-010. Initial WL = 25.79'

1624 Start purging w/unit #15501.

1700 ~~KB~~ Collect sample RQ0121. Decon pump and equipment.

NOTE: QUANTERRA picked up samples RQ0118, RQ0176, and RQ0123 this a.m.

@ 0913. COC # L027. All on FCOC #12.

1817 Sampling completed. LV RQL for Bldg 1036.

2000 After filtering + prepping today's samples, LV. RVAAP.

Daily Weather Conditions: A.M. Sunny, clear, 60°, light breezes from SW

P.M. sunny, 75°F, breezy < 10mph.

Recorded By K. Dominic

QA Checked By M. Root

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

Date (mm/dd/yy): 5.28.99

Su M Tu W Th F Sa

PAGE 1 OF

Task Team Members:

K. Dominic

M. Root

~~MJR 06/07/99~~

Narrative (include time and location):

0700 Set up @ RQLmw-009. Initial WL = 6.08'. Horiba U-10 cal checked.

0712 Begin micropurging w/unit #15501

0730 Complete micropurging (approx. 3gal).

0731 Collect sample RQ0120.

Complete sampling @ RQLmw-009. Move to RQLmw-008.

0825 Set up @ RQLmw-008. Call to QED re: holding carrier until 2:00pm.

0828 Begin micropurging. Initial WL = 7.44'

0849 Complete micropurging. Approx. 3gal purged.

0855 Collect sample RQ0119. Last samples will have to be transported to Quartermaster by SAIC - carrier not available in afternoon. Following completion of this sample, KD goes to Bldg 1036 to retrieve groundwater filters arriving via FedEx.

MR sets up @ RQLmw-007.

0918 Complete sampling at RQLmw-008. Move to RQLmw-007. Recor pumps and package samples

1055 begin purging @ MW-7 - initial WL = 7.53'

Daily Weather Conditions: A.M. Clear, 53°F - 65°F, No wind.

P.M.

Recorded By K. L. Dominic

QA Checked By [Signature]

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

Date (mm/dd/yy): 05.28.99

Su M Tu W Th F Sa

PAGE 2 OF 2

Task Team Members:

Narrative (include time and location):

1130 Complete purging ~ 5gal purged

1132 Collect sample RQD118.

1200 Complete sampling. LV RQL for B KD. Prepare for activating data loggers at monitoring wells.

1233 Activate logger @ RQLmw-007. WL = 7.62' BTDC. Could not program "reference point" (WL) in WinSchw, but test will begin @ 1400 today.

1253 RQLmw-008. WL = 8.53' BTDC.

1258 RQLmw-009 WL = 6.12' BTDC.

1304 RQLmw-006 WL = 35.56' BTDC

1312 RQLmw-010 WL = 26.04 BTDC

1316 RQLmw-011 WL = 22.33 BTDC

1320 LV RQL for Bldg 1036.

- Cathy Dominic to drop today's samples @ Quanterra and send CD to Matt Root

Daily Weather Conditions: A.M.

P.M. Clear, 78°F, light S breeze

Recorded By

KL Dominic

QA Checked By

Matt Root

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

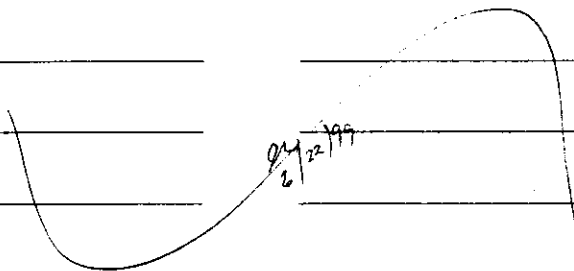
Date (mm/dd/yy): 06/22/99

Su M Tu W Th F Sa

PAGE 1 OF 1

Task Team Members:

Joe Wilson



Narrative (include time and location):

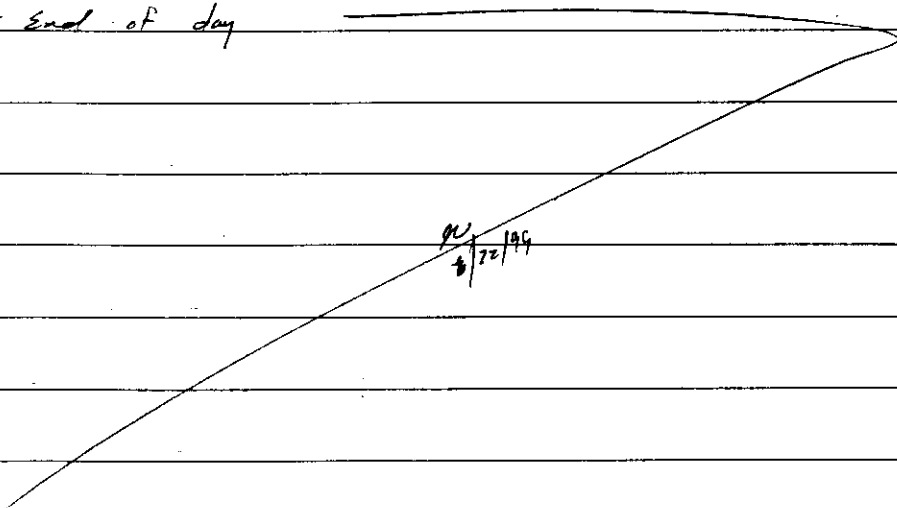
1610 - Arrive @ RQC. Will get a full round of water levels and will then download pressure transducers.

1650 - Complete round of water levels. Begin to download

1655 - Notice that Trolls were set to collect every minute instead of every 2 hours. They have been collecting this way since last visit (5/28/99).

Data is okay but files huge. Stopped and extracted all tests then re-set dataloggers to begin recording at 1800 hrs this evening and every 2 hours thereafter.

1800 - End of day



Daily Weather Conditions: A.M. NA

P.M. Bright Sun, ~82°F

Recorded By Joe Wilson

QA Checked By



# TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

Date (mm/dd/yy): 07/15/99

Su M Tu W Th F Sa

PAGE 1 OF 1

Task Team Members:

Joe Wilson

Jimmy Groban

9W  
7/15/99

**Narrative (include time and location):**

1545 - Arrive @ RQL to download transducers and get a full round of water levels.

This is last event of sampling/monitoring by SATC on this task. All transducers will be pulled and decontaminated after downloading. See page 63 for waterlevels. Pond completely dry, substrate baked to a hard, walk-on-able crust.

1600 - Wasp nets under protective casings of wells w/ transducers.

1750 - End of day. Will begin tomorrow.

9W  
7/15/99

Daily Weather Conditions: A.M. NA

P.M. very hot, bright sun, ~90°F

Recorded By Jimmy Groban QA Checked By \_\_\_\_\_

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

Date (mm/dd/yy): 7/16/99

Su M Tu W Th F Sa

PAGE 1 OF 1

Task Team Members:

Joe Wilson

924  
7/16/99

Narrative (include time and location):

0830 - Arrive at RVAAP. Go to Bldg 1036. Decon all supplies from BQL long term groundwater monitoring. This includes transducers and cables. Clean and organize Bldg 1036 supplies. Send email to K. Dominic to ask about the 1 IDW drum.

1015 - Leave RVAAP, End of Long Term Monitoring.

924  
7/16/99

Daily Weather Conditions: A.M. bright sun, 85° F, humid

P.M. NA

Recorded By

Joseph A. Wilson

QA Checked By

**APPENDIX D2**  
**SURFACE WATER SAMPLING LOGS**

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

Date (mm/dd/yy): 07/20/98

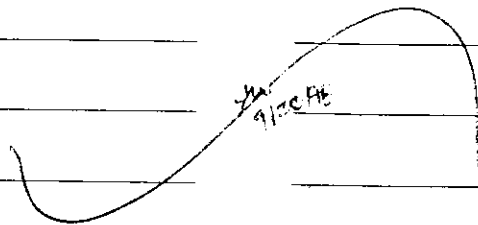
Su M Tu W Th F Sa

PAGE 1 OF 1

Task Team Members:

Joe Wilson

Heather Smith

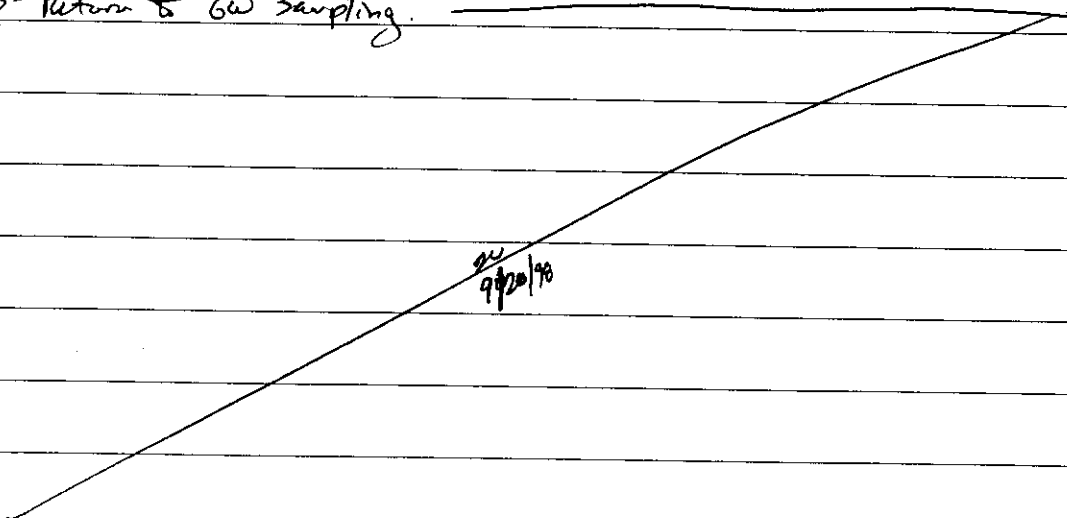


Narrative (include time and location):

1435 - Prepare to collect dry season surface water sample. Only sampling point that now has water is R615a-015. Site R615a-013 was preferred site but is completely dry.

1455 - Collect sample # R615a-015. Using Horiba U-10: pH = 7.50, Cond = 0.425, Turbidity = 444 NTU, DO = 4.32 mg/L, Temp. = 30.9°C. On Field CCR # F0009. For more daily activities see book # 8. Pond low: staff gauge read 1.20 ft. Many, hundreds of green frogs.

1520 - Return to GW sampling.



Daily Weather Conditions: A.M. NA

P.M. Sunny, 85°F

Recorded By

Joe Wilson

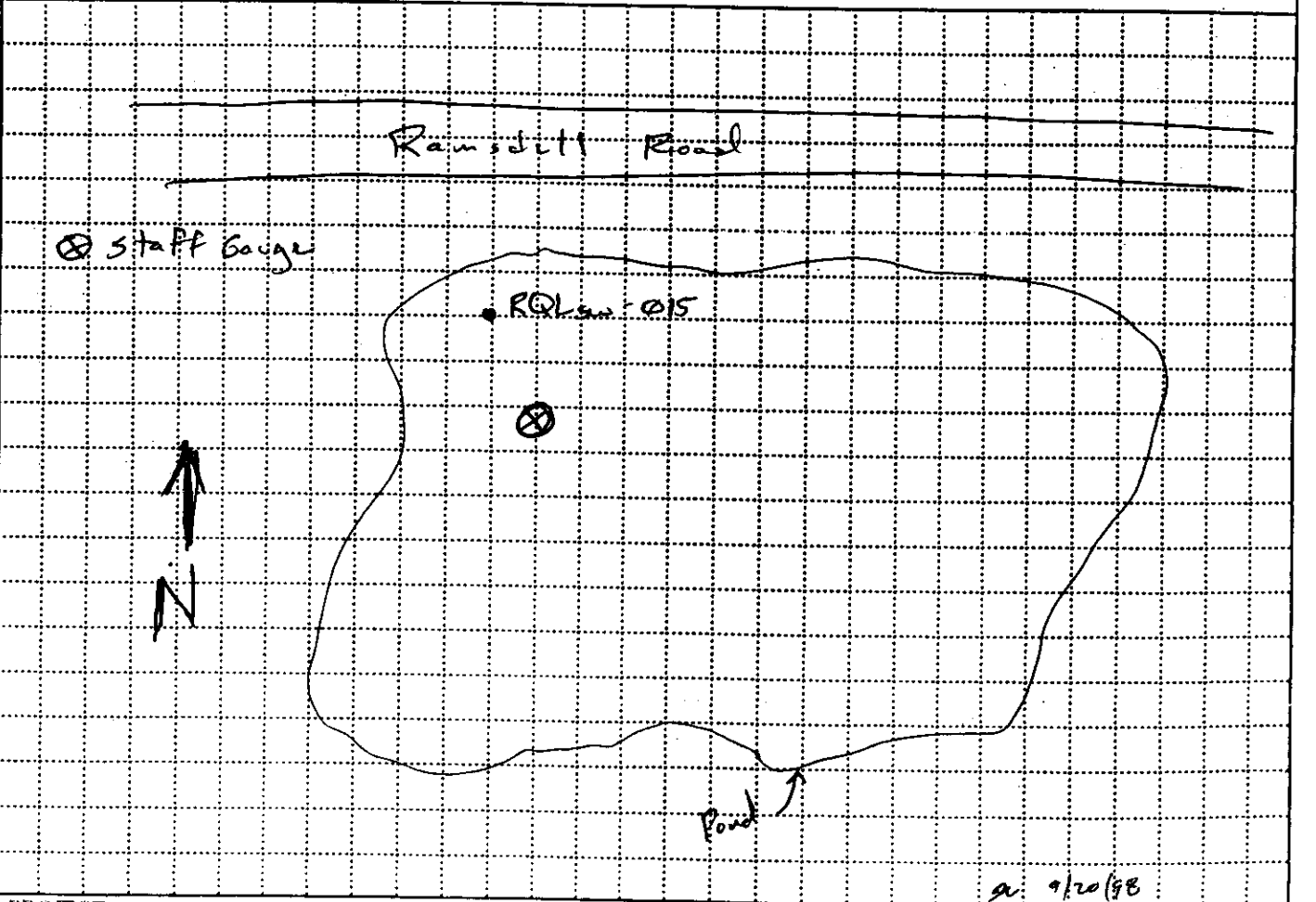
QA Checked By

Heather Smith

Sta. RQLsw-015

<b>HTRW DRILLING LOG</b>		DISTRICT <i>Louisville</i>		HOLE NUMBER <i>NA</i>	
1. COMPANY NAME <i>SAIC</i>		2. DRILL SUBCONTRACTOR <i>NA</i>		SHEET SHEETS <i>1 of 1</i>	
3. PROJECT <i>RQL GW Investigation</i>			4. LOCATION <i>RQL - RVAAP</i>		
5. NAME OF DRILLER <i>NA</i>			6. MANUFACTURERS DESIGNATION OF DRILL <i>NA</i>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>NA</i>		8. HOLE LOCATION <i>NA</i>		9. SURFACE ELEVATION <i>NA</i>	
12. OVERBURDEN THICKNESS <i>NA</i>		10. DATE STARTED <i>NA</i>		11. DATE COMPLETED <i>NA</i>	
13. DEPTH DRILLED INTO ROCK <i>NA</i>		15. DEPTH GROUNDWATER ENCOUNTERED <i>NA</i>		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>NA</i>	
14. TOTAL DEPTH OF HOLE <i>NA</i>		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>NA</i>			
18. GEOTECHNICAL SAMPLES <i>NA</i>		DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)
22. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY %
			23. SIGNATURE OF INSPECTOR <i>[Signature]</i>		

LOCATION SKETCH/COMMENTS *Surface Water Location* SCALE:



PROJECT	DATE: <i>9/20/98</i>
	HOLE NO. Sta. <i>RQLsw-015</i>

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

Date (mm/dd/yy): 10/19/99

Su (M) Tu W Th F Sa

PAGE 1 OF 1

Task Team Members:

MATT ROOT

JOE WILSON

9/10/19/98

Narrative (include time and location):

1700-prepare to sample RQLSW-15

1710-collect samples + parameters

pH = 6.96

DO = 3.57 mg/L

turbidity = 999

spec. cond. = 0.94 mS/cm

temp = 18.2°C

sample # RQ0102

1729-leave location.

9/10/19/98

Daily Weather Conditions: A.M. NA

P.M. ↓ Sunny, 60°F

Recorded By MSR

QA Checked By Joseph J. Wilk

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

Date (mm/dd/yy): 2/2/99

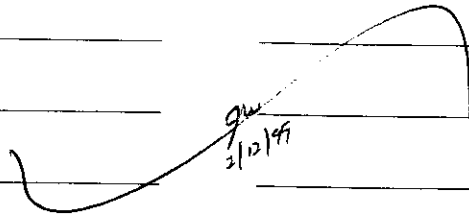
Su M Tu W Th (F) Sa

PAGE 1 OF 2

Task Team Members:

Joe Wilson

MATTHEW ROOF



Narrative (include time and location):

1530 - Arrive @ RQL. Will get full round of water levels then collect 3<sup>rd</sup> <sup>surface</sup> Event 1 water

Sample.

Loc.	W.L. (Ft btoe)	Time
RQLmw-009	5.20	1537
-008	6.66	1540
-007	36.69	1550
-006	36.35	1543
-005	22.63	1600
-004	33.44	1547
-003	19.12	1605
-002	25.31	1608
-001	29.31	1552
STAFF Gauge	3.15 Ft H <sub>2</sub> O	1549
RQLmw-010	26.42	1558
-011	22.73	1602

1615 - prep to collect SW Sample # RQ0109 From RQLsw-015

Daily Weather Conditions: A.M. NA

P.M. partly sunny, windy ~30°F

Recorded By Joseph J. Wilson

QA Checked By

Matthew Roof

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

Date (mm/dd/yy): 4/10/99

Su M Tu W Th F Sa

PAGE 1 OF 1

Task Team Members:

Joe Wilson

Juan Alvarado

sw  
9/10/99

Narrative (include time and location):

1145 - Water quality at RQLow-015: pH = 6.49 s.u.

(Horiba U-10)

Temp = 13.3 °C

Cond. = 585  $\mu S/cm$

DO = 9.08  $mg/L$

Turb. = 13 NTU

1150 - Collect sw sample # RQ0116. Water depth 2.75 ft.

1700 - Re-install staff gauge pressure transducer. Will turn on when I turn on all of the others. Pond is full of vertebrate life.

Observed: red-spotted newts, green frogs, short-head garter snakes, painted turtles, mallard ducks, geese, blue herons, red-wing blackbirds (in Phragmites) and probably much more. Will look again tomorrow.

0901 - 4/12/99 total length of riser 8.5 ft (staff gauge)

Daily Weather Conditions: A.M. bright sun, ~60°F

P.M. nr

Recorded By [Signature]

QA Checked By [Signature]



32

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Landfill GW Investigation

DELIVERY ORDER NO: 003

Date (mm/dd/yy): 05-26-99

Su M Tu W Th F Sa

PAGE 1 OF 1

Task Team Members:

KATHY DOMINIC

MATT ROOT

Narrative (include time and location):

1130 Arrive at RQLSW-015 to collect sample. A duplicate and split sample will also be collected at this location. Collected from RQLSW-015.

1140 Water quality readings w/ Horiba U-10:

pH=6.24 cond. 0.705 <sub>MS/cm</sub> D.O. 9.60 mg/L

Temp. 13.8°C Turb. 133 NTU

Staff gauge reading: 3.7ft Collect samples

1219 LV RQL. Raining

~~K. Dominic  
5.26.99~~

Daily Weather Conditions: A.M. Overcast, 50°F, intermittent drizzle

P.M. Overcast, 62°F, intermittent drizzle.

Recorded By K. Dominic

QA Checked By Matt Root