

ABRÉVIATIONS ET SYMBOLES

△	Station de triangulation.	C.	Centre.
○	Station de polygonale.	⌂	Axe ou ligne de centre
□	Station de stadia.	Cl.	Clou.
B.P.	Borne de pierre.	Bord.	Bordure.
M	Monument.	Puis.	Puisard.
T.F.	Tige de fer.	Reg.	Regard d'égout.
P	Piquet.	Tel.	Poteau de téléphone
P.F.	Point foré.	V.AV.	Visée avant.
R.N.	Repère de nivellement.	V.AR.	Visée arrière.
C.G.	Croix gravée.	P.T.	Point tournant.
---	Clôture.	H.I.	Hauteur d'instrument.
-x-x-x-	Clôture de grillage.		
└	Contours d'immeubles.		

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Date Aug 28/2012 Page.....

Tier II → Soil Sampling

Samplers: Brandon + Dwayne

Weather: 10°C, cloudy
No wind.

Sampling location: MU-08

ID: CS-12 - MU-08 - A (10cm)
CS-12 - MU-08 - B (45cm)

Soil: 0-45cm → Sand + Gravel
Time: 19:37

Pic 428: open test Pit
429: closed
430: Sample location
from well → W

GPS: 250

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location: MW-07

IP: C5-12-MW-3-A (10cm)

$\therefore B = 45 \text{ cm}$

+ ESG Sample (A)

+ Duplicate Interlab. (B)

Soil: Sand some Gravel

moist @ 5 cm

Time: 19:43

Pic 431-open

432 - SW. from well.

433 - closed

GPS 251

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Location: MW-06

ID: CS-12-MW-06-A (10cm)

11 - B (45)

Soil - sand + cobble, some organic material in first 5cm

Time: 19:57

Pic 434 - open

436 - closed

433 - $\rightarrow$ W from well

GPS: 252

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location: MW-05

10: CS-12-MW-05-A (10cm)
" -A-D
" -B (45cm)

Soil : Sand + Organics at (10cm)

Time : 20:16

Pics 436 - From well A S
437 - open
438 - closed

Monitoring Well data
entered directly into
Computer

No. Tier II Inspection
Date Aug 29/2012 Page.

Inspection by : Brandon
Weather: 0-2°C
- Partly cloudy
- No Wind

Picture + Feature log

Panorama: SW corner

Pics : 441-443 (10:13)

orientation: NW → NE

local: 5m west of MW-8

GPS: 256

Note: Iron staining visible

Feature B:

- staining/seepage on Type I layer
- 4 m x 2.5 m
- Iron staining suspected to be from Burrow source
* validate to

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Pic 445 → SE ID 15
- taken 2 m up SE slope GPS: 258
Pic 446 → S ID 16
- 5m from crest of landfill
GPS 259 MW-8 in pic

Pic 444 ID 14
GPS 257
- SE slope from access road

MW8
GPS: 261
Pic 447 ID 17
- Taken 5m E of well

Pano: W slope ID: 18
- MW-7 in pic

Pics: 448-449 N → E
GPS: 262
taken 10m from MW-7

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MW-7
GPS: 263
Pic 450 → W ID 19
- view SW of well

MU-6 GPS: 265
Pic: 451 → W ID: 20
- 5m E of MU-7

Pano: NW corner ID 21
Pics: 452-454 NE → SE
GPS: 267
- 10 m from Base

Pano: N side slope ID 22
Pics 455/56 GPS 268
- Iron stem

MW-5
Pic 457 → N ID 23
GPS ~~268~~ 269
- 3m south of well

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Pic Pano: North Corner ID: 24

- Pic: 458 - 460 SE $\rightarrow$ SSU

P: GPS: 270 Taken From MW-5

Pano: E side slope ID: 25

- iron

P Pres 461 - 464

GPS: 272 20m from top

Feature A: Small Depressions

location: NE corner

- 2 depressions previously recorded

- 2 New OBS

1) 0.30 m x 0.20 m x 0.05 m

6m SW of NE corner

Pic 465 GPS 273 ID 26

P close-up

G 2) 0.55 m x 0.30 m x 0.05 m

5m "

Pic 466 GPS 265 ID 27

close-up

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Pic 469 GPS 274 ID: 28

View SW of Depressions 1 + 2

3 + 4)

6m SW of NE corner

equal in size

Pic 470 GPS 275 close-up ID: 29

Pic 471 GPS 274 from NE corner ID: 30

view SW of N crest

Pic: 472 - top of ~~N crest~~ ID 31: 473 - view SE of ~~N crest~~ ID 32

: 474 - view N of NE corner

ID 34

- All pics taken from NE corner

GPS 274

Pano: Two 11 cap SE - SW

- from NE corner

Pics 475 - 479

GPS 274

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Pi Note on Feature A
 - All depressions associated with
 P cobble → compaction

Pano: Tier II cap ID 35
 - NE crest middle, 6M NE of UT-3
 Pics: 481-487 SE - NW

- Pic: 488 → NW of E crest (36)
 489 → E of SE corner (37)
 490 → SW of S crest (38)

Pano: SW - NW of landfill surface
 Pics 491-493

Pics 488-493 → all taken
 from SE corner GPS = 276

f Pano: SE corner SW → NW from toe
 C Pics: 494-496 ID: 40
 + GPS 277

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Pano: from mid S slope NW - NE
 Pics 497-502 ID 41
 GPS 278

Pano: Tier II surface from SW corner
 - NW - NE
 Pics 503-506 ID: 42
 GPS 279

~~Pano~~

Pic 507 ID 43
 - example of linear depression
 - run length of Tier II
 - caused by compactor not
 erosion

Feature C - Hydrocarbon stain
 Pic 508 ID 44
 - close-up GPS 281
 Pic 509 GPS 283 ID 45
 - view NW of stain

Dimensions 0.45 m x 0.30 m

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Pi - 15 m SW of UT-02

Pano: NE-SE of landfill surface
taken from UT-01

Pics 510-515 ID 46

Following pics all from NW
corner GPS: 285

- Pic: 516 → NE - N crest ID 47

: 517 → W of NW corner ID 48

: 518 → SE of W crest ID 49

Pano: 519-522 NE-SE of surface ID 50

~~Pano: at surface ~~at NW~~ from~~
~~mid point~~

Pano: W crest + side slope ID 51

(Pic: View SW of N side slope ID 52

- taken from between Tier 11
and NHWL

No. NHWL - Visual Inspection
Date Aug 29 Page.....

Brandon

Weather: 7-8°C

- clear, sunny

- no wind

Pic 529 GPS: 286 ID 5
- SW of E slope

Pano: ~~to~~ SW-NW ID 2

- taken from E of NHWL

Pics 534-536 GPS: 287

Pano: WSW-NW of SE corner ID 3
- taken from MW-12

Pics 534-536 GPS: 288

Pano: WSW-NW of landfill surface ID 4
from SE corner

Pics: 537-541

Pic 542 GPS 289 ID 5
- view SE of SE corner

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Pi Feature F: Hydrocarbon stain
(0.6 m x 0.20 m)

P - 15 m S of NE corner

Pic 543 GPS 290 ID 6

- close-up of stain

Pic 544 GPS " ID 7

- view N of stain

Pano: landfill cap SE-WSW ID 8

- from NE corner

Pics 545-549 GPS: 291

Pic: 550 - GPS 291 ID 9

- view NNE of NE corner

Pano: SE-WSW of sideslope ID 10

- 3m from toe

Pics 551-553 GPS 292

Pic: 554 GPS: 293 ID: 11

SE of reshaped area

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Pic 555 GPS 295 ID 12

- close-up

- evidence of erosion/deposition in channel

Pic 556 GPS 293 ID 13

- view WNW of reshaped

- soil is damp in reshaped area flows N

Pic 557 GPS: 297 ID 14

- view ESE of reshaped

- taken from Pic NW end.

Feature B

- Minor erosion - ~~2~~ channels

(10 m x 0.1 x 0.04)

- deposition at toe

Pic 559 GPS: 298 ID: 15 Top

Pic 560 : 299 ID 16 Bottom

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P Feature C - Tension crack
- Discontinuity

length - 3/4 of side
located - 1-2m from toe
- 0.01 m wide

Pic 561 - closeup ID 17
GPS 300

Pano: SE-SW of north slope ID 18
- taken from MW-07

Pics 562-566 GPS 301

Pano: ENE-SE of NW corner ID 19

Pics 567-568 GPS 302

- taken 7m from toe

Pic 569 GPS 303 ID: 20

WSW of regrade
- Deposition visible

Pic 570 GPS: " ID 21

SE of regrade and W slope.

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Pic 571 GPS 304 ID 22

- close-up of deposition/erosion
in drainage channel

: 572 " ID 23

→ SE of deposition/erosion

Deposition & erosion

Pano: ENE-SE of surface ID 24
from NW corner

Pics: 574-577 GPS 305

Feature D - surface wetty
- 30% of surface

Pano: of wetty NE-SE

Pics 578-580 GPS 307 ID 25

Feature G: linear depression

- 1.25 m x 0.15 m x 0.05 m

Pic 581 close-up GPS 308 ID 26

582- " " ID 27

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P Pic 588 GPS 308 10 28

→ NW of W side slope

1

Pano: view NE-ESE of surface 1029
from SW corner

Pics: 583-587 GPS 310

Pic 588 - side slope 1030

* Tension crack on S slope from
Baseline no longer visible

Pano: ENE-NW of SW corner 1031

- taken from access road

Pics 589-591 GPS 312

Feature J - erosion along landfill
toe in regrade area, where
ponded water is draining into
regrade

11 m x 1 m x 0.01 - 0.05 m

- water is infiltrating sand

- Pool + riffle sequence

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Pic 592 → SW of J GPS 314 10 32

Pic 603 → NE of Pool + riffle " 43

604 → SE Feature J/E " 44

Pano 606-608 of Pool + riffle " 45

GPS 323-326

Feature I - minor erosion
on south slope next to armor
(10 m x 0.75 m - 0.01 - 0.05 m)
- self armoring

Pic 593 - Bottom GPS 315 10 33

Pic 594 - top GPS 316 10 34

Feature H - Minor erosion New 0135
2 channel converging into 1 large
channel - self armoring

(10 m x 0.75 - 4 m x 0.05 - 1.0 m)

Pic 595 ~~595~~ Top (1) GPS 317 10 35596 ~~596~~ Top (2) 318 36597 ~~597~~ Bottom 319 37- channels 2m apart before
converging

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Feature A - minor erosion
(10m x 0.20m x 0.05-0.10m)
- self armory previously observed

Pic 598 GPS 320 Top ID 38

Pic 599 " 321 Bottom ID 39

Feature I - ponded water

Pic 600 → SW GPS 322 ID 40

Pic 601 → SW of reshaped ID 40

from MW-12

Pic 602 → NW " ID 41

No. Asbestos / USA F landfill
Date. Aug 29 / 2012 Page.

Visual Inspection - Branch

Weather - 7-8°C no wind.
Sun

Pano: W-N of cap from SW corner ID 1
Pics: 609-611 GPS 327

Pano: N-E SW corner ID 2
Pics: 612-614 GPS 328

Feature F - Brand marker

3m NE of erect sign

Pic 615 GPS 358 ID 3

Pic 628 view SE of PND sign ID 5

Feature D - Survey stake ID 4
2m NW of erect sign

Pano: Asbestos cap NE-SE from ID 6
NW corner of Asb landfill

Pics 618-621 GPS 360

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Feature E - Truck/Heavy Equipment
Tracks

Pic 622 → NW of tracks ID 7

Feature A - New OBS linear Depression
2m x 0.6 x 0.2
15 m N of SE corner

Pic 623 GPS 363 ID 8
taken from Access

Feature E - Truck Tires
(3 m x 0.20 x 0.1 - 0.15)

Pic 624 → NW 363 ID 9
625 → NW 364 ID 10

Feature B: Hydrocarbon stain New OBS
- midway

Pic 627 GPS 368 ID 12

Pano: NW-NB of USAF ID 13
from SW corner

Pics 629-631 GPS 368 1

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Pic 632 → SW of W toe ID 14

Pic 633 → NW of W toe ID 15

Feature C: New OBS
3 x Depressions

20m from NW side
and 5 from W

0.1, 1, 2 x 0.20 x 0.10

Pic 634 GPS 374 close-up small ID 16

635 375 close-up ID 17

636 375 View NW ID 18

Pano: ENE-SE of USAF cap ID 19

Pics: 637-640 GPS 376

Feature E:

Pic 641 → SW of "E" along toe ID 20

6m x 0.2 x 0.2 GPS 378

Pic 642 → SE " " ID 21

4m x 0.2 x 0.2 GPS 379

Pic 652 → NNE " " ID 22

GPS: 380

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Pano: SE - SW of N section. 1D23
of landf.11

Pics 660-664 3 GPS 381

Feature F - Pile of Fertilizer
1m x 1m x 0.20

Pic 664/665 close/SW GPS 406
1D: 24/25

landfill cap 100% damp
- last night's rain

Pano: NNE - NNW of mts
North of landfill

Pics 673-689 GPS 506 1D 26

No. Lower site landf.11 - South

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Visual inspection - Brandon

Weather: 6°C clear, sunny

Feature A: minor erosion between
toe and access New OBS

- Former culvert or french drain?

8m x 4m x 0.30m

Pic 654 → S GPS: 387 1D: 1

Feature B: Tension crack new obs

2m x 5-20 mm

Pic 655 close-up GPS 390 1D: 2

" 656 → N " 1D: 3

Pano: NW - E of NW section of cap

Pics 657-660 GPS 391 1D: 4

Feature C: 2x Pet holes

1) 0.4 x 0.2 x 0.1

2) 1 x 0.6 x 0.2

Pic 661 - close-up GPS 405 1D 5

662 → N 405 6

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approx 10m E of waypoint S10 on map

Feature D: linear Depression
6m x 0.15 - 0.40 - 0.20
view NW ID 7
" SW 8

Pano: NW-NE eastern cap ID 9
Pics: 668-670 GPS 408 506

Pano: S-N " " ID 10
Pics: 671-673 GPS 408

Feature E: Potholes x2 New obs
- 0.5 x 0.5 x 0.20 (Both)
- 2m from east crest
Pic 674 close GPS 409 ID 11
675 → S " 12

Pano 13 GPS 434 SE-SW of
Pics 676-678 North cap

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Feature J: New obs
Minor erosion 6m from E crest
10 x 0.20 - 0.75 x 0.10
Pic 692 - close GPS 435 ID 14
693 → N " 15

Pic 694 GPS 444 → SW of NW toe ID 16

Pano: of E side slope + Feature G
Feature G → Seepage + iron barbing
on east slope

Pics 696-700 GPS 445 ID 17
- taken 8m from toe

Feature F: Discontinuity tensile
cracking (50m x 0.02 x 0.01)
range from 1m from toe (S)
to 3m from toe (N)

Pic 701 → NE GPS 448 ID: 18
of Feature F + Pooled water

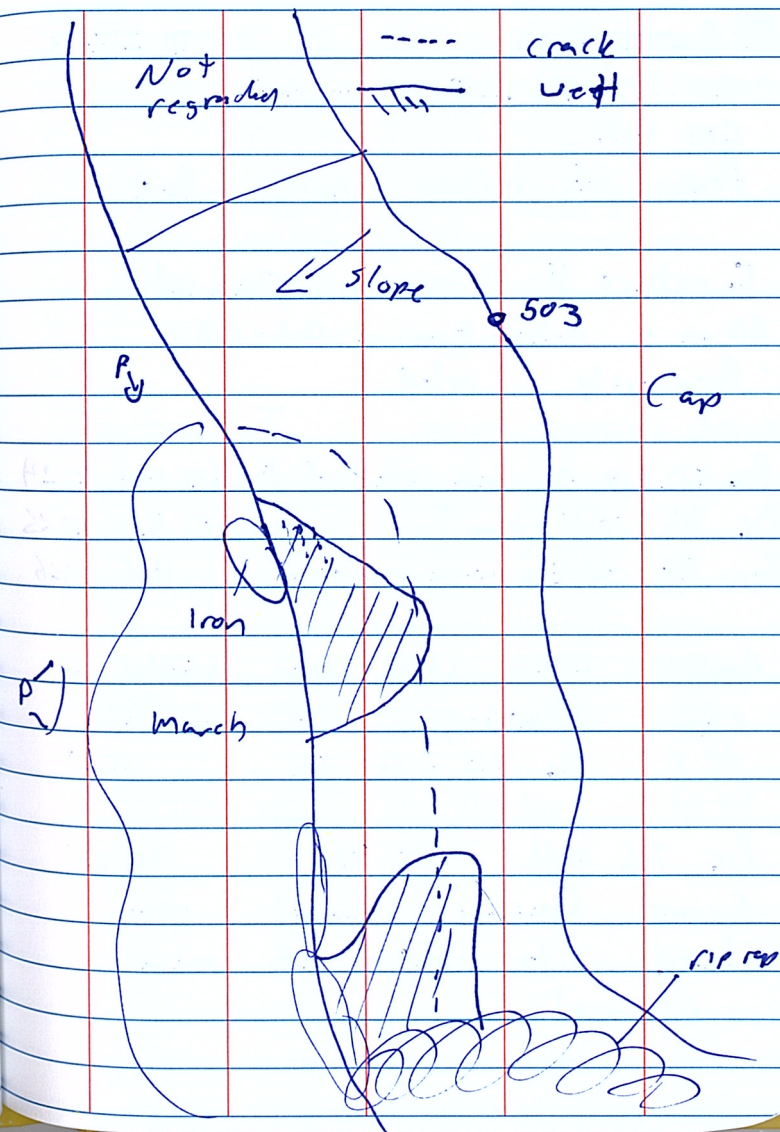
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Pic 703 GPS448 D " 1020

Feature G: Bacterial Shorn 10 2)
on ponded water at GPS 450
East for

Pic 705 $\rightarrow$ 5 of Feature F GPS 451 1022

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~~Pic 705 207-209~~

10 23A/13

Pic 706-711 (207-209 on map)

GPS 452

Pano of rip rap north toe

Feature H - erosion channel

50 m x 0.20 - 4 m x 0.1 - 0.3

- Previously noted

Pic 712 $\rightarrow$ N from start of H GPS 454 10 24

Pic 713 $\rightarrow$ N 10 m " GPS 455 10 25

Pic 714 $\rightarrow$ NE Greatest erosion 456 10 26

Approx 25 cm has been eroded in

cap. sloping into landfill

$\rightarrow$ E Pic 715 GPS 456 10 27

Pic 716 $\rightarrow$ N GPS 458 10 28

Second Drainage channel from

land to SW of main

channel

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Pic 717 from toe $\rightarrow$ S GPS 460 10 29

Pic 718/19 land west of landfill 10 30/31

- Sediment is being deposited
on ground

- no exposed debris

- self armoring

Feature I : minor erosion narrow
erosion 20 m E of Access on top
runs NE

4 m x 3 m x 0.05 - 0.10 m

Pic 721 Top $\rightarrow$ NW GPS 461 10 32

Pic 722 Bottom $\rightarrow$ SE " 462 33

Pic 723 $\rightarrow$ NE of NW toe 10 34

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August 30

2°C partly cloudy no wind

- Slumping caused by
vibrating plate?

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