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# Alliance Geotechnical

Engineering | Environmental | Testing

**Report Type:**  
**Supplementary Contamination Assessment**

**Project Name:**  
**Bankstown North Public-School  
Redevelopment**

**Project Address:**  
**322 Hume Highway, Bankstown, NSW 2200  
Lot 14 in DP1000689**

**Client Name:**  
**School Infrastructure NSW (c/- JDH Architects)**

**30 June 2020**  
**Report No: 9150-ER-1-1 Rev 1**

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## 1.1. Background

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### 1.3. Objectives

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## 1.4. Scope of Work

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### 2.3. Hydrogeology and Groundwater Use

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Table 2-3 Background Hydrogeological Information

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## 4. Data Integrity Assessment

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### Table 5-1 Summary of Source – Pathway – Receptor Linkages for the Site

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## 6.1. Data Quality Objectives

### Table 6-6-1 Data Quality Objectives

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][!b&çÁ^Á!^•^)!ç!âÁ^Table 6-6Á

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## 7. Data Quality Assessment

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<sup>6</sup> the ESLs in the NEPM are classified as low reliability, it is useful to consider whether there is additional and more recent information that allows higher reliability values to be estimated. Note that values derived in this way are intended to assist in informing an assessment of B(a)P following NEPM ecological risk assessment guidelines, but as they have not been developed through the NEPM review process, they should not be cited as NEPM ESLs.

[illegible]

**Table 8.3 High reliability ecological guideline for fresh B(a)P**

Land use	% protection	Derived ecological guideline (95% confidence limits) mg/kg	NEPM low reliability ESL mg/kg	Canadian SQGE
Open land	10	100	100	100
Urban	10	100	100	100
Industrial	10	100	100	100
Commercial	10	100	100	100
Transport	10	100	100	100
Recreation	10	100	100	100
Water	10	100	100	100
Wetland	10	100	100	100
Forest	10	100	100	100
Grassland	10	100	100	100
Barren land	10	100	100	100
Other	10	100	100	100

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## Management Limits and Aesthetics

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01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 10

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## 11. Statement of Limitations

V@Áá äð\*•Á!^•^}éá/Á Á@Á^[]|óæ^Áæ^áÁ}Á^äæÁ^æ&@•Á-Á^Çæ Æ[ç^!]{^}óæ ç|ææÁ  
áææææ^•Áæ á/æ^äð[æ/ ÷{|ææ}Á@Á^!^Á æ^Áæææ/Á~!ð\*Á@Á^!^Á-Á@Á ç^•ç ææ}ÆÁ  
V[Á@Á^•ó-Á^!Á][,|á^•Æ@•^Á à^!çææ}\*Á^!^•^}óæ^æ[]æ/Á ç|!^ææ}Á-Á@Á^!æÁ  
æ[]áææ}Á-Á@Á æ^Á@Á^Á-Á^!Á^[]|óæ[]|ç[]ÆÁ

V@Á^[]||óæ^Á^}Á!^}æ^áÁ[]|Á^!Á@Á^•Á-Á@Á/æ}ó Á @{Á/Áæá!^••^áæ}áÁ[Á@Á  
]æç Á^}æ/áÁ Á^!Á}Á-Áá äð\*•ÆÁ

Þ[Á æ|æ ç^•Á^Á æ^Áæ Á@Á ÷{|ææ}Á|çæ^á/Á@Á^[]|ÆÁ/æ}æ~ð}•Áæ áÁ  
!^æ[]{|^}áææ}\*Á æ^Á Á@Á^[]|óæ^Á-Á@Á[^••ð}æð]ðð}\*Á-Á^!•[]}|^/ç|ç^áÁ æ@ÁÁ  
[]|Þ&æ}áÁ æ^Á[]|æ&@æ ð\*Á-Á@Áææ^æ Á-Áæææ^Á^}Á}á&ç^Áæ&{•æ&^Á  
[~óæ^Á@Áæ}^Á-Á@Á^[]|ó!Á æ@Á^Á[ó æ^Á][,}Á Á^!•[]}|^/áá æ@Á æ/æ]æó!Á  
ó^•^Á]ðð}\*Á-Á[ó@Á^•[]|•ææ Á-Áææ &^Á@[é&@ æ^Áç ÁçæÁÚ@~|á/ ÷{|ææ}Á^æ[]^Á  
æææ/Á^Á\*æðð\*Á}áææ}\*Á@Á æ/æ}áá\*Á!^çá~|Á^![]|,}Á~!&^Á-Áæ[]æ ð ææ}ÆÁ  
!^•!ç^•Á@Áá @Á Á^çá, Á@Á^[]|ó Á@Á}éó!-Á@Áæáææ}æ/ ÷{|ææ}ÆÁ

V@Á^[]||ó~•ó^Á^çá, ^á/Á Á^}ç^ç Áæ á/Á æ[]ð}&ç}Á æ@Á Á àÞ&ç^•Ææ[]^Áæ áÁ^!{•Á  
æ[]|ææ/Á ÁçÁ}\*æ^({}ç^@Á^[]|ó~•ó[ó^Á^•áÁ^!Á^~![]|^Á@Á@Á Á@Á^![]|^Á  
•]^äæááæ@Á^Á^Áææ}\*æ^áÁ Á!^}æ^Á@Á^[]|çÁ

Š~•Æ~!^•Æ}áÁæ ð\*•Á^Á^!^æ^áÁ^!Á@Á^[]|óæ^Áæ^}Á áææ æ^ÁçÁ}\*~|æ ç  
ð ç|!^ææ}\*Á-Á[]|ð æ^Áæææ Á^!Á^Á à^!çææ}\*Á æ^Á@Á^Á^Á^Á æ[ç^!ð Á^!^Á  
æ[]{|^çáÆÁ

Öæææ æð/æ ÷{|ææ}Á!^•^}éá/Á Á@Á^[]|ó~•ó[ó^Á^!æ}Á/Á/æ æ~ð}Á/Á@Á^[]|óÆÁ  
[]|æ}Á/Á &{^}óÆÁ[Á@~|á@ææææ æð/æ ÷{|ææ}Á^Á^}ææ^Á[{}Á@Á^[]|óæ~Á æÆÁ

Ú@~|áÁæáææ}æ/ ÷{|ææ}Á@Á æ/æ]æó!Á@Á äð\*•Á-Á@Á^[]|ó^Á}æ~}é!^áÁ!Áæ^Á  
æ[]áææ}\*Á@Á^•!ç^•Á@Áá @Á Á^çá, Áæ áÁ^Á^Á@Á^[]|çÁ

## 12. References

Ö^[ Ò) çá[ Á[ ]•~|çæ & ÁÚ ÁÁÁ ÁÚ^|ä q æ^Á) çá[ ]{^}æ^Á•^••{^}ÁÚ^| [ |Á\•q, } Á  
P[ |çÁÚ^| äÁÚ&@ [ |ÉHGGP~{^Á@ @ æÁ\•q, } ÉÚY çÁ^ ÁÖFì FGJÉÉÇæ áÁÚ&q à^|ÁÉFì Á

ÔÜÔÁÖÜÒÁÉFì ÉRisk-based management and remediation guidance for benzo(a)pyreneÉÜÜÔÁ  
ÔÜÜÔÁ^&@ æÁÚ^| [ |çÁ[ ÉÚÉÜÜÔÁ[ |Á[ ]æ q æ}Á•^••{^}Áçæ áÁÚ^| ^áæ} Á Á@ Á  
Ò) çá[ ]{^}çÁ^, &æq^Á•çæ

Ò) Üä\•ÁÉFì ÉProposed Decision Tree for Prioritising Sites Potentially Contaminated with PFASsÉ  
áæ^áÁ Á^àì^ æ^ÁÉFì ÉÁ

Pæ} æÁ) çá[ ]{^}ÁÚ[ ç&q } Á[ ~] &ÁP ÒÚ ÁÉFhÉSchedule B(1) Guideline on Investigation  
Levels for Soil and GroundwaterÉPæ} æÁ) çá[ ]{^}ÁÚ[ ç&q } Á•^••{^}ÁçÁÚ^ Á  
Ô[ ]æ q æ} Á^æ~|^ÁP ÒÚ Áæ Áç ^} á^áÁ Á æ ÁÉFhÉ

Pæ} æÁ) çá[ ]{^}ÁÚ[ ç&q } Á[ ~] &ÁP ÒÚÁÉFhÉSchedule B(2) Guideline on Site  
CharacterisationÉPæ} æÁ) çá[ ]{^}ÁÚ[ ç&q } Á•^••{^}ÁçÁÚ^ Á[ ]æ q æ} Á^æ~|^Á  
P ÒÚ Áæ Áç ^} á^áÁ Á æ ÁÉFhÉ

PÚY ÁÚÉFJJí ÉContaminated Sites: Sampling Design GuidelinesÉ

PÚY ÁÚÉÉFì ÉContaminated Land Management: Guidelines for the NSW Site Auditor SchemeÉ

PÚY ÁÚÉÉÉÉÉConsultants reporting on contaminated landÉContaminated land guidelines

Y ÖÜP ÁÉÉÉÉGuidelines for the Assessment, Remediation and Management of Asbestos-  
Contaminated Sites in Western AustraliaÉæ^áÁ æ ÁÉÉÉÉ

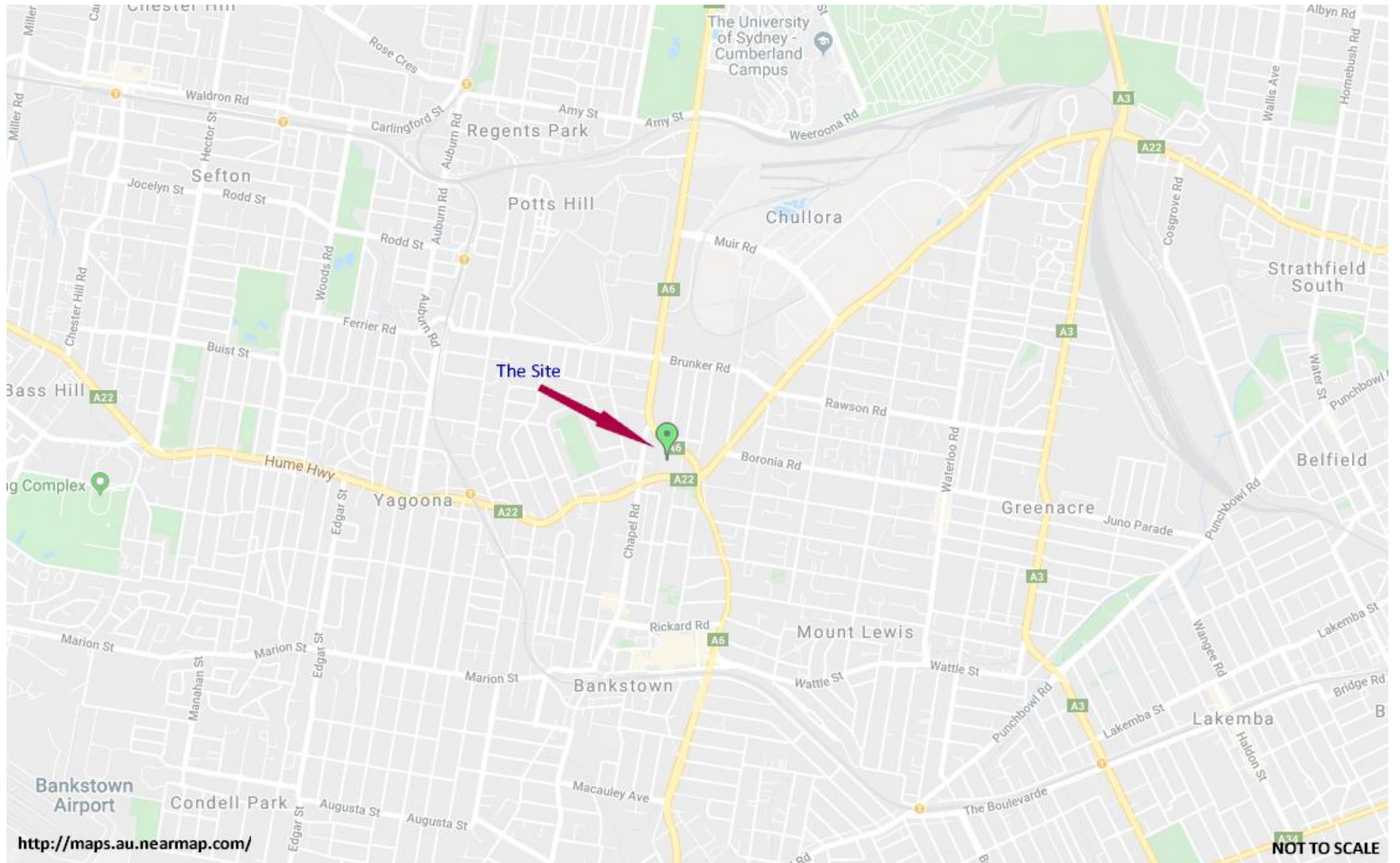
# 13. Abbreviations

ÓÓÁ	Œ àă } óœ̃ *! [ ˘ } áÁ[ ] &^} dæ̃ } Á
ÓŠÁ	Œâ^âÁ[ ] æ ă æ̃ } óŠ̃ ā
ÓŦ Á	Œ à^•q •Á[ ] æ̃ ă * Á æ̃!æ̃Á
ÓÔÁ	Œ^æ̃ Á Á[ ] çā[ ] { ^} æ̃Á[ ] &^} Á
ŒÁ	Œ à^•q •Áæ̃ ^•Á
ŒÚÁ	Œ •dæ̃æ̃ ÁÚæ̃ áæ̃áÁ
ŒÚÁ	Œæ̃Á˘  æ̃Á[ ă Á
ÓÇ ÚÁ	Ó^}: [ Ç Ŧ ^ ^} ^Á
ÓVÒÝPÁ	Ó^}: ^} ^É[  ˘^} ^É@ à^}: ^} ^É˘ ^} ^Éæ̃ @œ̃^} ^Á
ÔÔÁ	Ôæ̃ } Áœ̃&œ̃ *^Áœ̃ æ̃c̃ Á
ÔUÔÁ	Ôœ̃ Á Á˘ •q á^ Á
ÔUÔÁ	Ô[ ] æ̃ ă æ̃ } œ̃ ÁÚ[ œ̃ } æ̃Á[ ] &^} Á
ÔUT Á	Ô[ ] &^} c̃ æ̃Áæ̃ Á [ á^Á
ÔÜÔÁŒÜÁ	Ô[ ] ^ æ̃^Á^•^æ̃&œ̃^} d^Á[ Á[ ] æ̃ ă æ̃ } Á•••{ ^} œ̃ áÁ^  ^áæ̃ } Á -Á œ̃Á[ ] çā[ ] { ^} á
ÖŒÁ	Ö^ç^[ ] { ^} óœ̃  æ̃ } Á
ÖÔÚÁ	Ö^ç^[ ] { ^} óÔ[ ] d[  ÁÚæ̃ Á
ÖPŒŠÁ	Ö^} •^Á[ ] Éæ̃˘^  ˘ •Áœ̃^Š̃ā˘ āÁ
ÖUÁ	Öă•[  ç^áÁç˘ *^} Á
ÖÚÁ	Ö^  [ •æ̃ áÁÚæ̃ Á
ÖÜÁ	Öæ̃Á˘ æ̃c̃ Ááæ̃  •Á
ÖÜUÁ	Öæ̃Á˘ æ̃c̃ Áúàb&ç^•Á
ÖÜÁ	Ö^æ̃ áÁÚæ̃ Áç^•c̃ æ̃ } Á
ÒŠÁ	Ò&[   * æ̃Áç^•c̃ æ̃ } Š^ç^ Á
ÒŠÁ	Ò&[   * æ̃Á&^^} ă * Š^ç^ Á
ŒFÁ	VÜPÁŦ ÉFÁ
ŒGÁ	VÜPÁŦÉFÁ
ŒHÁ	VÜPÁŦÉH Á
Œ Á	VÜPÁŦÉ Á
ŒÁ	Œ æ̃ ^Áœ̃ à^•q •Á
PŠÁ	P^æ̃œ̃ç^•c̃ æ̃ } Š^ç^ •Á
PÜŠÁ	P^æ̃œ̃&^^} ă * Š^ç^ •Á
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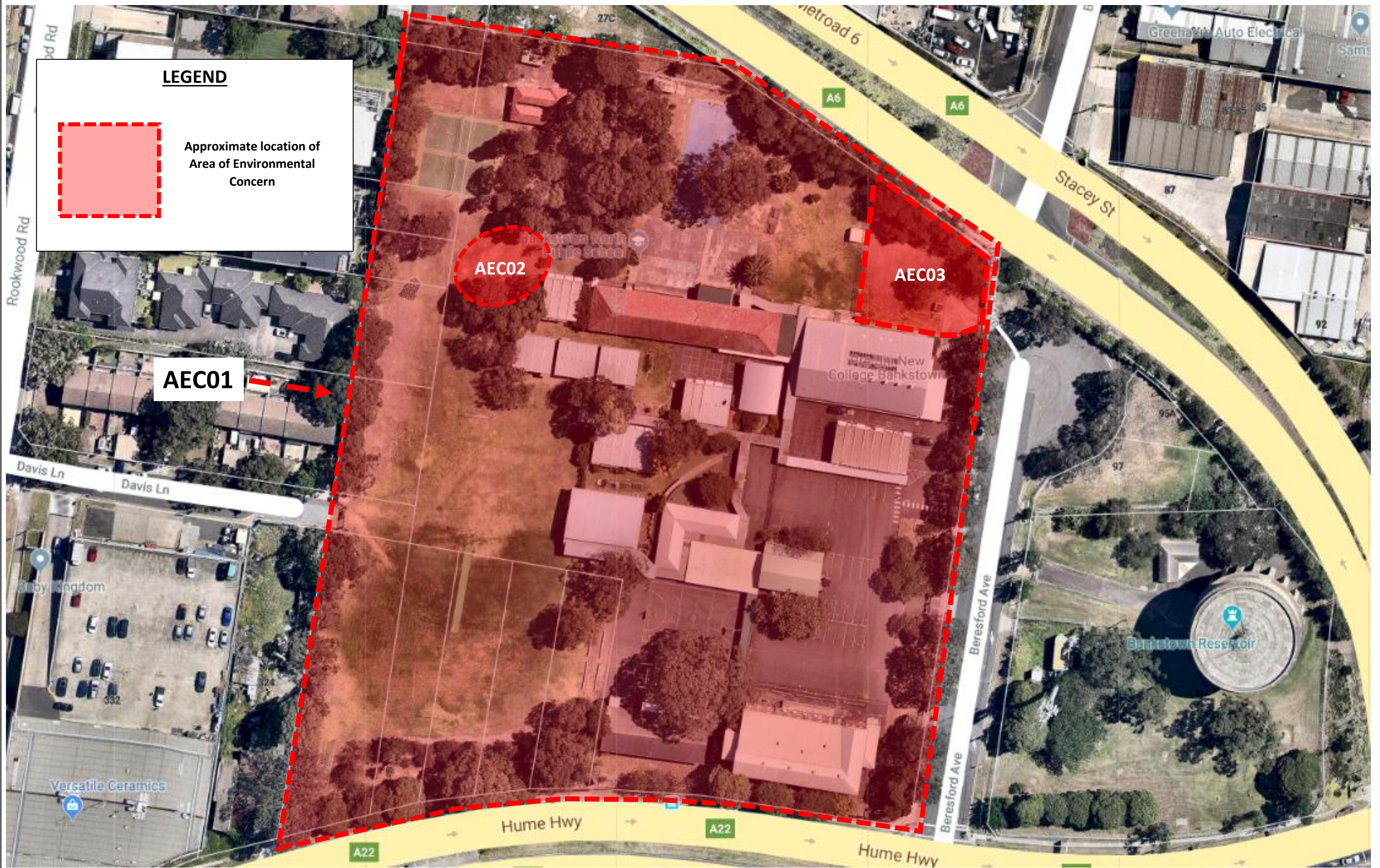














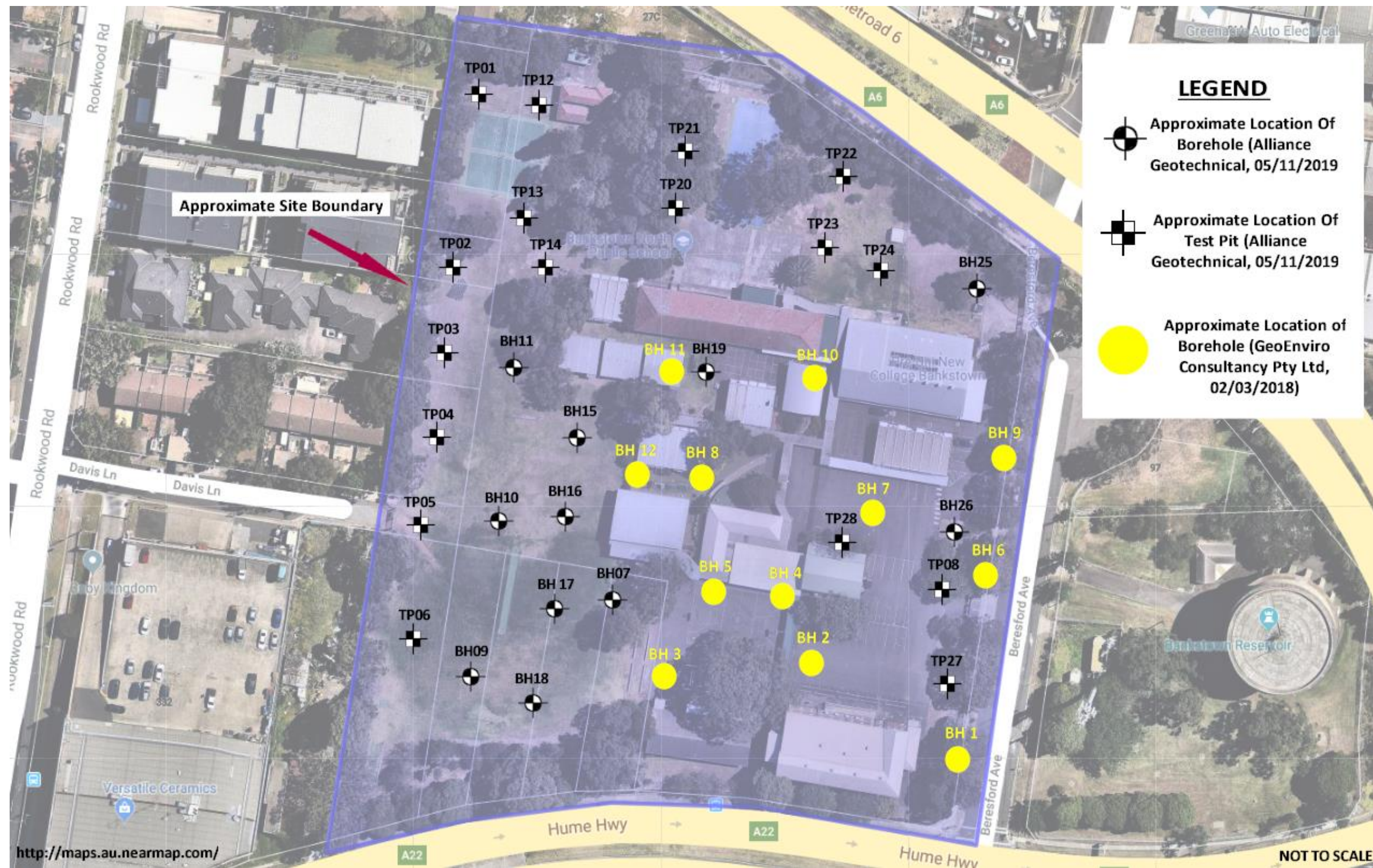






Table 1  
North Bankstown Public School, 322 Hume Highway, Bankstown NSW 2200  
Soil Results & Adopted Site Criteria  
9150-ER-1-1 Rev1

Group	Analyte	Units	PQL	Screening Levels for Direct Contact (mg/kg) - CRC Care 2011	Inhalation / Vapour Intrusion HSLs (mg/kg) - NEPC 2013 (CLAY)			Management Limits for TPH Fractions F1 - F4 in soil (mg/kg) - NEPC 2013	ESLs and EILs for Heavy Metals TPH Fractions F1 - F4, BTEX and Benzo(a)pyrene - NEPC 2013	ESL for CRC CARE 2017 (Table 10.1)	Health Investigation Levels for Soil Contaminants - NEPC 2013																					
					HSL A & HSL B - Low - High density Residential							Soil Saturation Concentration (Csat)	Residential, Parkland and Public Open Space	Urban Residential and Public Open Space	Urban Residential and Public Open Space	Residential A	Data Set Minimum	Data Set Maximum														
					HSL - A Residential (Low Density)														Fine Soil Texture	Fine Soil Texture	Canadian SQGE (95%)											
					0 m to <1 m    1 m to <2 m																											
Metals	Arsenic, As	mg/kg	2	-	-	-	-	-	100	-	100	3	23	13	8.8	9.5	9	12	15	18	11	9.4	13									
	Cadmium, Cd	mg/kg	0.4	-	-	-	-	-	-	20	<0.4	1.1	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	0.6	<0.4	<0.4	<0.4										
	Chromium, Cr	mg/kg	5.0	-	-	-	-	-	630	100	8	35	33	24	23	21	23	31	15	23	16	23										
	Copper, Cu	mg/kg	5.0	-	-	-	-	-	130	6,000	13	87	33	33	46	34	26	17	87	34	17	20										
	Lead, Pb	mg/kg	5	-	-	-	-	-	1100	300	11	290	59	170	24	130	18	44	290	21	54	16										
	Mercury (inorganic)	mg/kg	0.10	-	-	-	-	-	40	40	<0.1	0.4	<0.1	<0.1	<0.1	0.1	<0.1	0.4	<0.1	<0.1	<0.1	<0.1										
	Nickel, Ni	mg/kg	5.0	-	-	-	-	-	200	400	<5	26	10	9.5	11	11	9.9	13	16	22	8.3	< 5										
	Zinc, Zn	mg/kg	5.0	-	-	-	-	-	310	7,400	23	380	73	120	68	140	56	57	360	120	63	30										
PAH	Acenaphthene	mg/kg	0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5										
	Acenaphthylene	mg/kg	0.5	-	-	-	-	-	-	-	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5										
	Anthracene	mg/kg	0.5	-	-	-	-	-	-	-	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5										
	Benzo(a)anthracene	mg/kg	0.5	-	-	-	-	-	-	-	<0.5	1.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.4	<0.5	<0.5										
	Benzo(a)pyrene	mg/kg	0.5	-	-	-	-	-	Refer to CRC CARE ESL	20	<0.5	5.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	5.2	<0.5	<0.5										
	Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.5	-	-	-	-	-	-	3	<0.5	8.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	8.6	<0.5	<0.5										
	Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.5	-	-	-	-	-	-	-	0.6	8.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	8.6	0.6	0.6										
	Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.5	-	-	-	-	-	-	-	1.2	8.6	1.2	1.2	1.2	1.2	1.2	1.2	1.2	8.6	1.2	1.2										
	Benzo(b&j)fluoranthene	mg/kg	0.5	-	-	-	-	-	-	-	<0.5	6.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	6.6	<0.5	<0.5										
	Benzo(ghi)perylene	mg/kg	0.5	-	-	-	-	-	-	-	<0.5	6.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	6.7	<0.5	<0.5										
	Benzo(k)fluoranthene	mg/kg	0.5	-	-	-	-	-	-	-	<0.5	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2	<0.5	<0.5										
	Chrysene	mg/kg	0.5	-	-	-	-	-	-	-	<0.5	2.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.2	<0.5	<0.5										
	Dibenzo(ah)anthracene	mg/kg	0.5	-	-	-	-	-	-	-	<0.5	1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.5	<0.5	<0.5										
	Fluoranthene	mg/kg	0.5	-	-	-	-	-	-	-	<0.5	1.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.7	<0.5	<0.5										
	Fluorene	mg/kg	0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5										
	Indeno(1,2,3-cd)pyrene	mg/kg	0.5	-	-	-	-	-	-	-	<0.5	7.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	7.7	<0.5	<0.5										
	Naphthalene	mg/kg	0.5	1,400	5	NL	10	-	170	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5										
	Phenanthrene	mg/kg	0.5	-	-	-	-	-	-	-	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5										
	Pyrene	mg/kg	0.5	-	-	-	-	-	-	-	<0.5	2.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.1	<0.5	<0.5										
	Total PAH	mg/kg	0.5	-	-	-	-	-	-	300	<0.5	39	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	39	<0.5	<0.5										
TRH	TRH C10-C36 Total	mg/kg	50	-	-	-	-	-	-	-	<50	2200	168	166	<50	155	<50	<50	2200	<50	<50	<50										
	TRH C10-C14	mg/kg	20	-	-	-	-	-	-	-	<20	110	<20	<20	<20	<20	<20	<20	<200	<20	<20	<20										
	TRH C15-C28	mg/kg	50	-	-	-	-	-	-	-	<50	1100	74	77	<50	71	<50	<50	1100	<50	<50	<50										
	TRH C29-C36	mg/kg	50	-	-	-	-	-	-	-	<50	1100	94	89	<50	84	<50	<50	1100	<50	<50	<50										
	TRH C6-C9	mg/kg	20	-	-	-	-	-	-	-	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20										
	Naphthalene	mg/kg	0.5	1,400	5	NL	10	-	170	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5										
	TRH >C10-C16 (F2)	mg/kg	50	3,300	280	NL	560	1,000	120	-	<50	130	<50	<50	<50	<50	<50	<500	<50	<500	<50	<50										
	TRH >C10-C16 (F2) - Naphthalene	mg/kg	50	-	-	-	-	-	-	-	<50	130	<50	<50	<50	<50	<50	<50	<500	<50	<50	<50										
	TRH C10-C40 Total (F bands)	mg/kg	100	-	-	-	-	-	-	-	<100	1900	140	140	<100	130	<100	<100	1900	<100	<100	<100										
	TRH >C16-C34 (F3)	mg/kg	100	4,500	-	-	-	3,500	1,300	-	<100	1900	140	140	<100	130	<100	<100	1900	<100	<100	<100										
	TRH >C34-C40 (F4)	mg/kg	100	6,300	-	-	-	10,000	5,600	-	<100	300	<100	<100	<100	<100	<100	<1000	<100	<100	<100	<100										
	TRH C6-C10	mg/kg	20	4,400	-	-	-	800	180	-	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20										
TRH C6-C10 minus BTEX (F1)	mg/kg	20	-	50	90	850	-	-	-	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20											
BTEX	Benzene	mg/kg	0.1	100	0.7	1	430	-	65	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1										
	Ethylbenzene	mg/kg	0.1	4,500	NL	NL	68	-	125	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1										
	m/p-xylene	mg/kg	0.2	-	-	-	-	-	-	-	<0.2	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2										
	o-xylene	mg/kg	0.1	-	-	-	-	-	-	-	<0.1	0.3	<0.1	<0.1	<0.1	<0.1</																

Table 1  
North Bankstown Public School, 322 Hume Highway, Bankstown NSW 2200  
Soil Results & Adopted Site Criteria  
9150-ER-1-1 Rev1

Group	Analyte	Units	PQL	Screening Levels for Direct Contact (mg/kg) - CRC Care 2011	Inhalation / Vapour Intrusion HSLs (mg/kg) NEPC 2013 (CLAY)			Management Limits for TPH Fractions F1 - F4 in soil (mg/kg) - NEPC 2013	ESLs and EILs for Heavy Metals TPH Fractions F1 - F4, BTEX and Benzo(a)pyrene - NEPC 2013	ESL for CRC CARE 2017 (Table 10.1)	Health Investigation Levels for Soil Contaminants - NEPC 2013	Data Set Minimum														
				HSL - A Residential (Low Density)	HSL A & HSL B - Low - High density Residential		Soil Saturation Concentration (Csat)	Residential, Parkland and Public Open Space	Urban Residential and Public Open Space	Urban Residential and Public Open Space	Residential A															
					0 m to <1 m	1 m to <2 m																				
Metals	Arsenic, As	mg/kg	2	-	-	-	-	-	100	-	100	3	15	11	11	5.6	4.2	6.1	8	9.7	5	9	3	5		
	Cadmium, Cd	mg/kg	0.4	-	-	-	-	-	-	-	20	<0.4	<0.4	<0.4	1.1	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4		
	Chromium, Cr	mg/kg	5.0	-	-	-	-	-	630	-	100	8	19	20	17	13	12	11	24	19	21	13	19			
	Copper, Cu	mg/kg	5.0	-	-	-	-	-	130	-	6,000	13	43	40	38	21	13	44	36	37	23	33	16	15		
	Lead, Pb	mg/kg	5	-	-	-	-	-	1100	-	300	11	170	14	150	54	30	16	100	95	15	93	41	17		
	Mercury (inorganic)	mg/kg	0.10	-	-	-	-	-	-	-	40	<0.1	0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
	Nickel, Ni	mg/kg	5.0	-	-	-	-	-	200	-	400	<5	16	13	12	6.3	10	6.6	9.7	8.5	9.1	<5	7.1			
	Zinc, Zn	mg/kg	5.0	-	-	-	-	-	310	-	7,400	23	380	98	270	82	59	47	140	130	40	120	84	25		
PAH	Acenaphthene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Acenaphthylene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Anthracene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Benzo(a)anthracene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Benzo(a)pyrene	mg/kg	0.5	-	-	-	-	-	Refer to CRC CARE ESL	20	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.5	-	-	-	-	-	-	-	3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.5	-	-	-	-	-	-	-	-	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	
	Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.5	-	-	-	-	-	-	-	-	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	
	Benzo(b&j)fluoranthene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Benzo(ghi)perylene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Benzo(k)fluoranthene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Chrysene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Dibenzo(ah)anthracene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Fluoranthene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Fluorene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Indeno(1,2,3-cd)pyrene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Naphthalene	mg/kg	0.5	1,400	5	NL	10	-	170	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Phenanthrene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Pyrene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		
Total PAH	mg/kg	0.5	-	-	-	-	-	-	-	-	300	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
TRH	TRH C10-C36 Total	mg/kg	50	-	-	-	-	-	-	-	-	<50	231	<50	773	430	231	<50	289	206	<50	281	82	<50		
	TRH C10-C14	mg/kg	20	-	-	-	-	-	-	-	-	<20	21	<20	83	40	21	<20	39	35	<20	35	24	<20		
	TRH C15-C28	mg/kg	50	-	-	-	-	-	-	-	-	<50	110	<50	420	160	80	<50	110	78	<50	96	<50	<50		
	TRH C29-C36	mg/kg	50	-	-	-	-	-	-	-	-	<50	100	<50	270	230	130	<50	140	93	<50	150	58	<50		
	TRH C6-C9	mg/kg	20	-	-	-	-	-	-	-	-	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20		
	Naphthalene	mg/kg	0.5	1,400	5	NL	10	-	170	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	TRH >C10-C16 (F2)	mg/kg	50	3,300	280	NL	560	1,000	120	-	-	<50	<50	<50	87	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	
	TRH >C10-C16 (F2) - Naphthalene	mg/kg	50	-	-	-	-	-	-	-	-	<50	<50	<50	87	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	
	TRH C10-C40 Total (F bands)	mg/kg	100	-	-	-	-	-	-	-	-	-	<100	180	<100	857	500	170	210	140	<100	300	<100	<100	<100	
	TRH >C16-C34 (F3)	mg/kg	100	4,500	-	-	-	3,500	1,300	-	-	<100	180	<100	560	330	170	<100	210	140	<100	200	<100	<100	<100	
	TRH >C34-C40 (F4)	mg/kg	100	6,300	-	-	-	10,000	5,600	-	-	<100	<100	<100	210	170	<100	<100	<100	<100	<100	100	<100	<100	<100	
	TRH C6-C10	mg/kg	20	4,400	-	-	-	800	180	-	-	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	
TRH C6-C10 minus BTEX (F1)	mg/kg	20	-	50	90	850	-	-	-	-	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20		
BTEX	Benzene	mg/kg	0.1	100	0.7	1	430	-	65	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
	Ethylbenzene	mg/kg	0.1	4,500	NL	NL	68	-	125	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
	m/p-xylene	mg/kg	0.2	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
	o-xylene	mg/kg	0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
	Toluene	mg/kg	0.1	14,000	480	NL	630	-	105	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
OCP	Total Xylenes	mg/kg	0.3	12,000	110	310	330	-	45	-	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	
	4,4 - DDD	mg/kg	0.05	-	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-	
	4,4 - DDE	mg/kg	0.05	-	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-	
	4,4 - DDT	mg/kg	0.05	-	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-	
	a - BHC	mg/kg	0.05	-	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-	
	Aldrin	mg/kg	0.05	-	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-	
	Aldrin + Dieldrin (total)	mg/kg	0.05	-	-	-	-	-	-	-	6	<0.05	<0.05	-	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-	
	b - BHC	mg/kg	0.05	-	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-	
	Chlordanes (total)	mg/kg	0.05	-	-	-	-	-	-	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	-	<0.1	<0.1	-	-	
	d - BHC	mg/kg	0.05	-	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-	
	DDT + DDE + DDD (total)	mg/kg	0.05	-	-	-	-	-	-	-	240	<0.05	<0.05	-	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-	
	Dieldrin	mg/kg	0.05	-	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-	
	Endosulfan 1	mg/kg	0.05	-	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-	
	Endosulfan 2	mg/kg	0.0																							

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9150-ER-1-1 Rev1

Group	Analyte	Units	PQL	Screening Levels for Direct Contact (mg/kg) - CRC Care 2011	Inhalation / Vapour Intrusion HSLs (mg/kg) - NEPC 2013 (CLAY)			Management Limits for TPH Fractions F1 - F4 in soil (mg/kg) - NEPC 2013	ESLs and EILs for Heavy Metals TPH Fractions F1 - F4, BTEX and Benzo(a)pyrene - NEPC 2013	ESL for CRC CARE 2017 (Table 10.1)	Health Investigation Levels for Soil Contaminants - NEPC 2013																																																															
					HSL A & HSL B - Low - High density Residential		Soil Saturation Concentration (Csat)																					Residential, Parkland and Public Open Space	Urban Residential and Public Open Space	Urban Residential and Public Open Space	Residential A	Data Set Minimum																																										
																																																			Fine Soil Texture	Fine Soil Texture	Canadian SQGE (95%)																					
					0 m to <1 m	1 m to <2 m																																																																				
Metals	Arsenic, As	mg/kg	2	-	-	-	-	-	100	-	100	3	9	7	8.9	4.8	16	12	4	5.8	8.5	7.4	8.6	19	9.7																																																	
	Cadmium, Cd	mg/kg	0.4	-	-	-	-	-	-	-	20	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4																																																
	Chromium, Cr	mg/kg	5.0	-	-	-	-	-	630	-	100	8	14	12	14	10	28	27	8.1	18	21	15	22	35	18																																																	
	Copper, Cu	mg/kg	5.0	-	-	-	-	-	130	-	6,000	13	28	26	30	25	22	22	29	25	24	24	28	24	26																																																	
	Lead, Pb	mg/kg	5	-	-	-	-	-	1100	-	300	11	100	90	15	96	98	47	11	47	15	51	20	58	56																																																	
	Mercury (inorganic)	mg/kg	0.10	-	-	-	-	-	-	-	-	40	<0.1	<0.1	<0.1	<0.1	0.2	0.4	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1																																																	
	Nickel, Ni	mg/kg	5.0	-	-	-	-	-	200	-	400	<5	12	9.6	9.8	7.4	9.6	26	<5	9.9	9	8.2	12	11	11																																																	
	Zinc, Zn	mg/kg	5.0	-	-	-	-	-	310	-	7,400	23	160	140	59	150	120	170	29	68	41	73	55	86	100																																																	
PAH	Acenaphthene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5																																																
	Acenaphthylene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5																																																
	Anthracene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5																																																
	Benzo(a)anthracene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5																																																
	Benzo(a)pyrene	mg/kg	0.5	-	-	-	-	-	-	Refer to CRC CARE ESL	20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5																																																
	Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.5	-	-	-	-	-	-	-	3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5																																																
	Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.5	-	-	-	-	-	-	-	-	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6																																																
	Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.5	-	-	-	-	-	-	-	-	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2																																																
	Benzo(b&j)fluoranthene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5																																																
	Benzo(ghi)perylene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5																																																
	Benzo(k)fluoranthene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5																																																
	Chrysene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5																																																
	Dibenzo(ah)anthracene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5																																																
	Fluoranthene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5																																																
	Fluorene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5																																																
	Indeno(1,2,3-cd)pyrene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5																																																
	Naphthalene	mg/kg	0.5	1,400	5	NL	10	-	170	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5																																																
	Phenanthrene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5																																																
	Pyrene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5																																																
	Total PAH	mg/kg	0.5	-	-	-	-	-	-	-	-	300	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5																																															
TRH	TRH C10-C36 Total	mg/kg	50	-	-	-	-	-	-	-	-	<50	372	361	<50	336	120	157	<50	398	114	59	<50	322	231																																																	
	TRH C10-C14	mg/kg	20	-	-	-	-	-	-	-	-	<20	42	41	<20	36	<20	<20	<20	48	<20	<20	<20	42	27																																																	
	TRH C15-C28	mg/kg	50	-	-	-	-	-	-	-	-	<50	150	140	<50	140	53	65	<50	170	54	<50	<50	150	110																																																	
	TRH C29-C36	mg/kg	50	-	-	-	-	-	-	-	-	<50	180	180	<50	160	67	92	<50	180	60	59	<50	130	94																																																	
	TRH C6-C9	mg/kg	20	-	-	-	-	-	-	-	-	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20																																																
	Naphthalene	mg/kg	0.5	1,400	5	NL	10	-	170	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5																																																
	TRH >C10-C16 (F2)	mg/kg	50	3,300	280	NL	360	1,000	120	-	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50																																																
	TRH >C10-C16 (F2) - Naphthalene	mg/kg	50	-	-	-	-	-	-	-	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50																																																
	TRH C10-C40 Total (F bands)	mg/kg	100	-	-	-	-	-	-	-	-	<100	390	380	<100	360	<100	130	<100	410	<100	<100	<100	230	160																																																	
	TRH >C16-C34 (F3)	mg/kg	100	4,500	-	-	-	3,500	1																																																																	



Table 1  
North Bankstown Public School, 322 Hume Highway, Bankstown NSW 2200  
Soil Results & Adopted Site Criteria  
9150-ER-1-1 Rev1

Group	Analyte	Units	PQL	Screening Levels for Direct Contact (mg/kg) - CRC Care 2011	Inhalation / Vapour Intrusion HSLs (mg/kg) NEPC 2013 (CLAY)			Management Limits for TPH Fractions F1 - F4 in soil (mg/kg) - NEPC 2013	ESLs and EILs for Heavy Metals TPH Fractions F1 - F4, BTEX and Benzo(a)pyrene - NEPC 2013	ESL for CRC CARE 2017 (Table 10.1)	Health Investigation Levels for Soil Contaminants - NEPC 2013																																
					HSL A & HSL B - Low - High density Residential																					Soil Saturation Concentration (Csat)	Residential, Parkland and Public Open Space	Urban Residential and Public Open Space	Urban Residential and Public Open Space	Residential A	Data Set Minimum												
					0 m to <1 m	1 m to <2 m																																					
Metals	Arsenic, As	mg/kg	2	-	-	-	-	-	100	-	100	3	13	10	8.5	12	23	4.9	5.6	6.9	8.8	-	-	-	-																		
	Cadmium, Cd	mg/kg	0.4	-	-	-	-	-	-	-	20	<0.4	<0.4	<0.4	0.7	<0.4	<0.4	<0.4	<0.4	<0.4	-	-	-	-																			
	Chromium, Cr	mg/kg	5.0	-	-	-	-	-	630	-	100	8	18	20	15	18	23	8.7	14	22	15	-	-	-																			
	Copper, Cu	mg/kg	5.0	-	-	-	-	-	130	-	6,000	13	15	21	24	19	20	31	21	24	13	-	-	-																			
	Lead, Pb	mg/kg	5	-	-	-	-	-	1100	-	300	11	28	20	81	83	14	68	57	41	34	-	-	-																			
	Mercury (inorganic)	mg/kg	0.10	-	-	-	-	-	-	-	40	<0.1	<0.1	<0.1	0.4	0.1	<0.1	0.1	0.2	<0.1	<0.1	-	-	-																			
	Nickel, Ni	mg/kg	5.0	-	-	-	-	-	200	-	400	<5	10	7.2	13	12	5.9	6.4	5.5	8.4	7.2	-	-	-																			
	Zinc, Zn	mg/kg	5.0	-	-	-	-	-	310	-	7,400	23	47	36	200	85	23	110	160	55	41	-	-	-																			
PAH	Acenaphthene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-																			
	Acenaphthylene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-																			
	Anthracene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-																			
	Benzo(a)anthracene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-																			
	Benzo(a)pyrene	mg/kg	0.5	-	-	-	-	-	-	Refer to CRC CARE ESL	20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	-	-	-	-	-																			
	Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.5	-	-	-	-	-	-	-	3	<0.5	<0.5	<0.5	1.1	<0.5	<0.5	0.7	<0.5	-	-	-	-	-																			
	Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.5	-	-	-	-	-	-	-	-	0.6	0.6	0.6	1.4	0.6	0.6	1	0.6	-	-	-	-	-																			
	Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.5	-	-	-	-	-	-	-	-	1.2	1.2	1.2	1.7	1.2	1.2	1.3	1.2	-	-	-	-	-																			
	Benzo(b&j)fluoranthene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	0.9	<0.5	<0.5	0.7	<0.5	-	-	-	-	-																			
	Benzo(ghi)perylene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	0.7	<0.5	-	-	-	-	-																			
	Benzo(k)fluoranthene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-																			
	Chrysene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-																			
	Dibenzo(ah)anthracene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-																			
	Fluoranthene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	1.4	<0.5	<0.5	0.6	<0.5	-	-	-	-	-																			
	Fluorene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-																			
	Indeno(1,2,3-cd)pyrene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	0.5	<0.5	-	-	-	-	-																			
	Naphthalene	mg/kg	0.5	1,400	5	NL	10	-	170	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-																			
	Phenanthrene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-																			
	Pyrene	mg/kg	0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	1.4	<0.5	<0.5	0.7	<0.5	-	-	-	-	-																			
	Total PAH	mg/kg	0.5	-	-	-	-	-	-	-	300	<0.5	<0.5	<0.5	7.9	<0.5	<0.5	3.8	<0.5	-	-	-	-	-																			
TRH	TRH C10-C36 Total	mg/kg	50	-	-	-	-	-	-	-	-	<50	80	<50	383	634	<50	432	910	-	-	-	-	-																			
	TRH C10-C14	mg/kg	20	-	-	-	-	-	-	-	-	<20	<20	<20	43	54	<20	32	110	-	-	-	-	-																			
	TRH C15-C28	mg/kg	50	-	-	-	-	-	-	-	-	<50	<50	<50	170	310	<50	180	370	-	-	-	-	-																			
	TRH C29-C36	mg/kg	50	-	-	-	-	-	-	-	-	<50	80	<50	170	270	<50	220	430	-	-	-	-	-																			
	TRH C6-C9	mg/kg	20	-	-	-	-	-	-	-	-	<20	<20	<20	<20	<20	<20	<20	<20	-	-	-	-	-																			
	Naphthalene	mg/kg	0.5	1,400	5	NL	10	-	170	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-																			
	TRH >C10-C16 (F2)	mg/kg	50	3,300	280	NL	560	1,000	120	-	-	<50	<50	<50	<50	110	<50	<50	130	-	-	-	-	-																			
	TRH >C10-C16 (F2) - Naphthalene	mg/kg	50	-	-	-	-	-	-	-	-	<50	<50	<50	<50	110	<50	<50	130	-	-	-	-	-																			
	TRH C10-C40 Total (F bands)	mg/kg	100	-	-	-	-	-	-	-	-	<100	100	<100	390	730	<100	500	1070	-	-	-	-	-																			
	TRH >C16-C34 (F3)	mg/kg	100	4,500	-	-	-	3,500	1,300	-	-	<100	100	<100	270	460	<100	330	640	-	-	-	-	-																			
	TRH >C34-C40 (F4)	mg/kg	100	6,300	-	-	-	10,000	5,600	-	-	<100	<100	<100	120	160	<100	170	300	-	-	-	-	-																			
	TRH C6-C10	mg/kg	20	4,400	-	-	-	800	180	-	-	<20	<20	<20	<20	<20	<20	<20	<20	-	-	-	-	-																			
TRH C6-C10 minus BTEX (F1)	mg/kg	20	-	50	90	850	-	-	-	-	<20	<20	<20	<20	<20	<20	<20	<20	-	-	-	-	-																				
BTEX	Benzene	mg/kg	0.1	100	0.7	1	430	-	65	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	97	<0.001																			
	Ethylbenzene	mg/kg	0.1	4,500	NL	NL	68	-	125	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	97	<0.001																			
	m/p-xylene	mg/kg	0.2	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	0.5	<0.2	<0.2	<0.2	<0.2	-	-	-	130	<0.002																			
	o-xylene	mg/kg	0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	0.3	<0.1	<0.1	<0.1	<0.1	-	-	-	97	<0.001																			
	Toluene	mg/kg	0.1	14,000	480	NL	630	-	105	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	97	<0.001																			
OCP	Total Xylenes	mg/kg	0.3	12,000	110	310	330	-	45	-	-	<0.3	<0.3	<0.3	0.8	<0.3	<0.3	<0.3	<0.3	-	-	-	95	<0.003																			
	4,4 - DDD	mg/kg	0.05	-	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-	-	-	-																			
	4,4 - DDE	mg/kg	0.05	-	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-	-	-	-																			
	4,4 - DDT	mg/kg	0.05	-	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	&																								

Table LAR2  
North Bankstown Public School, 322 Hume Highway, Bankstown, 2200, NSW.  
RPD Table  
9150-ER-1-1 Rev 1

			Sample ID	TP01-0.0-0.1	DUP-01		TP01-0.0-0.1	DUP-1A		TP06-0.0-0.2	DUP-02		TP06-0.0-0.2	DUP-2A	
			Reference	S19-No06605	S19-No06647		S19-No06605	ES1936614-001		S19-No06613	S19-No06648		S19-No06613	ES1936614-002	
			Date Sampled	5/11/2019	5/11/2019		5/11/2019	5/11/2019		5/11/2019	5/11/2019		5/11/2019	5/11/2019	
			Matrix	Soil	Soil		Soil	Soil		Soil	Soil		Soil	Soil	
Group	Analyte	Units	LOR			RPD (%)			RPD (%)			RPD (%)			RPD (%)
Metals	Arsenic	mg/kg	2	13	6.9	61	13	6	74	9.4	8.8	7	9.4	9	4
	Cadmium	mg/kg	0.4	< 0.4	< 0.4	#VALUE!	< 0.4	<1	#VALUE!	< 0.4	< 0.4	#VALUE!	< 0.4	<1	#VALUE!
	Chromium	mg/kg	5.0	33	22	40	33	18.0	59	16	15	6	16	16	0
	Copper	mg/kg	5.0	33	24	32	33	27	20	17	13	27	17	11	43
	Lead	mg/kg	5	59	41	36	59	54	9	54	34	45	54	39	32
	Mercury	mg/kg	0.1	< 0.1	< 0.1	#VALUE!	< 0.1	<0.1	#VALUE!	< 0.1	< 0.1	#VALUE!	< 0.1	<0.1	#VALUE!
	Nickel	mg/kg	5	10	8.4	17	10	8.0	22	8.3	7.2	14	8.3	5	50
	Zinc	mg/kg	5	73	55	28	73	59	21	63	41	42	63	35	57

RPD exceeding criteria

# VALUEPrimary, Duplicate or Triplicate less than LOR and/or not analysed

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## APPENDIX A

### SITE PHOTOGRAPHS

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**Image 3 Suspected ACM Fragment collected from within AEC03 at sampling point BH25**



**Image 4 Depiction of the mounding within AEC02 and establishment of sampling point TP14**





## Borehole Log

<b>Client:</b> JDH Architects						<b>Started:</b> 5/11/19			
<b>Project:</b> Supplementary Contamination Assessment						<b>Finished:</b> 5/11/19			
<b>Location:</b> North Bankstown Public School				<b>Hole Location:</b> North Bankstown Public School		<b>Borehole Size</b> mm			
<b>Rig Type:</b>		<b>Hole Coordinates</b> , m		<b>Driller:</b>		<b>Logged:</b> AW			
<b>RL Surface:</b> m		<b>Contractor:</b> Alliance Geotechnical		<b>Bearing:</b> ---		<b>Checked:</b>			
Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Tests Remarks	Moisture Condition Consistency/ Density Index	Additional Observations
HA			0.0		FILL	FILL: Silty CLAY, brown, moist, soft.	BH07 - 0.0-0.2	M	No ACM, staining or hydrocarbon odours present.
					CL	CLAY, bright orange with grey mottling, moist, stiff.	BH07 - 0.2-0.4	M	
			0.5						
			1.0						
			1.5						
Borehole BH07 terminated at 1.1m									

## Borehole Log

<b>Client:</b> JDH Architects						<b>Started:</b> 5/11/19		
<b>Project:</b> Supplementary Contamination Assessment						<b>Finished:</b> 5/11/19		
<b>Location:</b> North Bankstown Public School				<b>Hole Location:</b> North Bankstown Public School			<b>Borehole Size</b> mm	
<b>Rig Type:</b>		<b>Hole Coordinates</b> , m			<b>Driller:</b>		<b>Logged:</b> AW	
<b>RL Surface:</b> m		<b>Contractor:</b> Alliance Geotechnical			<b>Bearing:</b> ---		<b>Checked:</b>	

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Tests Remarks	Moisture Condition	Consistency/Density Index	Additional Observations
HA					FILL	FILL: Silty CLAY, brown, moist, soft.	BH08 - 0.0-0.2	M		No ACM, staining or hydrocarbon odours present.
<div style="position: relative; height: 100%;"> <div style="position: absolute; left: 100px; top: 450px;">0.5</div> <div style="position: absolute; left: 100px; top: 650px;">1.0</div> <div style="position: absolute; left: 100px; top: 850px;">1.5</div> </div> <div style="position: absolute; left: 250px; top: 350px;">Borehole BH08 terminated at 0.2m</div>										





## Borehole Log

<b>Client:</b> JDH Architects						<b>Started:</b> 5/11/19				
<b>Project:</b> Supplementary Contamination Assessment						<b>Finished:</b> 5/11/19				
<b>Location:</b> North Bankstown Public School						<b>Hole Location:</b> North Bankstown Public School		<b>Borehole Size:</b> mm		
<b>Rig Type:</b>		<b>Hole Coordinates</b> , m		<b>Driller:</b>		<b>Logged:</b> AW				
<b>RL Surface:</b> m		<b>Contractor:</b> Alliance Geotechnical		<b>Bearing:</b> ---		<b>Checked:</b>				
Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Tests Remarks	Moisture Condition	Consistency/Density Index	Additional Observations
HA					FILL	FILL: Silty CLAY, light brown, dry, soft. Trace gravels.		D		No ACM, staining or hydrocarbon odours present.
							BH09 - 0.1-0.3			
					CL	CLAY, orange/grey with red mottling, moist, very stiff.		M		
							BH09 - 0.3-0.5			
			0.5							
			1.0							
						Borehole BH09 terminated at 1.1m				
			1.5							



## Borehole Log

<b>Client:</b> JDH Architects						<b>Started:</b> 5/11/19				
<b>Project:</b> Supplementary Contamination Assessment						<b>Finished:</b> 5/11/19				
<b>Location:</b> North Bankstown Public School						<b>Hole Location:</b> North Bankstown Public School		<b>Borehole Size:</b> mm		
<b>Rig Type:</b>		<b>Hole Coordinates</b> , m				<b>Driller:</b>		<b>Logged:</b> AW		
<b>RL Surface:</b> m		<b>Contractor:</b> Alliance Geotechnical				<b>Bearing:</b> ---		<b>Checked:</b>		
Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Tests Remarks	Moisture Condition	Consistency/Density Index	Additional Observations
HA					FILL	FILL: Silty CLAY, light brown, dry, soft, Trace gravels.	BH10 - 0.0-0.2	D		No ACM, staining or hydrocarbon odours present.
					CL	CLAY, orange/grey with red mottling, moist, very stiff.	BH10 - 0.2-0.4	M		
			0.5							
			1.0							
			1.5			Borehole BH10 terminated at 1.1m				



## Borehole Log

<b>Client:</b> JDH Architects						<b>Started:</b> 5/11/19				
<b>Project:</b> Supplementary Contamination Assessment						<b>Finished:</b> 5/11/19				
<b>Location:</b> North Bankstown Public School						<b>Hole Location:</b> North Bankstown Public School		<b>Borehole Size:</b> mm		
<b>Rig Type:</b>		<b>Hole Coordinates</b> , m				<b>Driller:</b>		<b>Logged:</b> AW		
<b>RL Surface:</b> m		<b>Contractor:</b> Alliance Geotechnical				<b>Bearing:</b> ---		<b>Checked:</b>		
Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Tests Remarks	Moisture Condition	Consistency/Density Index	Additional Observations
HA			0.5		FILL	FILL: Silty CLAY, brown, dry, firm.	BH11 - 0.0-0.1	D		No ACM, staining or hydrocarbon odours present.
					CL	CLAY, orangegrey moist, stiff.	BH11 - 0.1-0.3	M		
			1.0							
			1.5			Borehole BH11 terminated at 1.1m				



## Borehole Log

<b>Client:</b> JDH Architects						<b>Started:</b> 5/11/19				
<b>Project:</b> Supplementary Contamination Assessment						<b>Finished:</b> 5/11/19				
<b>Location:</b> North Bankstown Public School						<b>Hole Location:</b> North Bankstown Public School		<b>Borehole Size</b> mm		
<b>Rig Type:</b>		<b>Hole Coordinates</b> , m				<b>Driller:</b>		<b>Logged:</b> AW		
<b>RL Surface:</b> m		<b>Contractor:</b> Alliance Geotechnical				<b>Bearing:</b> ---		<b>Checked:</b>		
Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Tests Remarks	Moisture Condition	Consistency/Density Index	Additional Observations
HA					FILL	FILL: Silty CLAY, brown, dry, soft. Concrete gravels.	BH15 - 0.0-0.1	D		No ACM, staining or hydrocarbon odours present.
					CL	CLAY, orange/grey, moist, firm.	BH15 - 0.1-0.3	M		
			0.5							
			1.0							
			1.5			Borehole BH15 terminated at 1.1m				



## Borehole Log

<b>Client:</b> JDH Architects						<b>Started:</b> 5/11/19				
<b>Project:</b> Supplementary Contamination Assessment						<b>Finished:</b> 5/11/19				
<b>Location:</b> North Bankstown Public School						<b>Hole Location:</b> North Bankstown Public School		<b>Borehole Size</b> mm		
<b>Rig Type:</b>		<b>Hole Coordinates</b> , m				<b>Driller:</b>		<b>Logged:</b> AW		
<b>RL Surface:</b> m		<b>Contractor:</b> Alliance Geotechnical				<b>Bearing:</b> ---		<b>Checked:</b>		
Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Tests Remarks	Moisture Condition	Consistency/Density Index	Additional Observations
HA			0.5		FILL	FILL: Silty CLAY, brown, dry, soft. Concrete gravels.	BH16 - 0.0-0.1	D		No ACM, staining or hydrocarbon odours present.
					CL	CLAY, grey/orange, moist, very stiff.	BH16 - 0.1-0.3	M		
			1.0							
			1.5			Borehole BH16 terminated at 1.1m				



## Borehole Log

<b>Client:</b> JDH Architects						<b>Started:</b> 5/11/19		
<b>Project:</b> Supplementary Contamination Assessment						<b>Finished:</b> 5/11/19		
<b>Location:</b> North Bankstown Public School				<b>Hole Location:</b> North Bankstown Public School		<b>Borehole Size</b> mm		
<b>Rig Type:</b>		<b>Hole Coordinates</b> , m		<b>Driller:</b>		<b>Logged:</b> AW		
<b>RL Surface:</b> m		<b>Contractor:</b> Alliance Geotechnical		<b>Bearing:</b> ---		<b>Checked:</b>		

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Tests Remarks	Moisture Condition	Consistency/Density Index	Additional Observations
HA					FILL	FILL: Silty CLAY, brown, dry, soft. Concrete gravels.	BH17 - 0.0-0.1	D		No ACM, staining or hydrocarbon odours present.
					CL	CLAY, grey/orange, moist, firm.	BH17 - 0.1-0.3	M		
			0.5							
			1.0							
			1.5			Borehole BH17 terminated at 1.1m				



## Borehole Log

<b>Client:</b> JDH Architects						<b>Started:</b> 5/11/19			
<b>Project:</b> Supplementary Contamination Assessment						<b>Finished:</b> 5/11/19			
<b>Location:</b> North Bankstown Public School						<b>Hole Location:</b> North Bankstown Public School		<b>Borehole Size</b> mm	
<b>Rig Type:</b>		<b>Hole Coordinates</b> , m				<b>Driller:</b>		<b>Logged:</b> AW	
<b>RL Surface:</b> m		<b>Contractor:</b> Alliance Geotechnical				<b>Bearing:</b> ---		<b>Checked:</b>	

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Tests Remarks	Moisture Condition	Consistency/Density Index	Additional Observations
HA			0.0		FILL	FILL: Silty CLAY, brown, dry, very loose, soft. Concrete gravels.	BH18 - 0.0-0.1	D		No ACM, staining or hydrocarbon odours present.
					CL	CLAY, grey/brown with orange mottling, moist, firm.	BH18 - 0.1-0.3	M		
			0.5							
			1.0							
			1.5							
						Borehole BH18 terminated at 1.1m				



## Borehole Log

<b>Client:</b> JDH Architects						<b>Started:</b> 5/11/19		
<b>Project:</b> Supplementary Contamination Assessment						<b>Finished:</b> 5/11/19		
<b>Location:</b> North Bankstown Public School				<b>Hole Location:</b> North Bankstown Public School		<b>Borehole Size</b> mm		
<b>Rig Type:</b>		<b>Hole Coordinates</b> , m		<b>Driller:</b>		<b>Logged:</b> AW		
<b>RL Surface:</b> m		<b>Contractor:</b> Alliance Geotechnical		<b>Bearing:</b> ---		<b>Checked:</b>		

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Tests Remarks	Moisture Condition	Consistency/Density Index	Additional Observations
HA					FILL	FILL: Silty CLAY, brown, dry, very loose, soft. Concrete gravels.	BH19 - 0.0-0.2	D		No ACM, staining or hydrocarbon odours present.
			0.5		CL	CLAY, grey/orange, moist, firm.	BH19 - 0.3-0.5	M		
			1.0							
			1.5			Borehole BH19 terminated at 1.1m				





## Borehole Log

<b>Client:</b> JDH Architects						<b>Started:</b> 5/11/19		
<b>Project:</b> Supplementary Contamination Assessment						<b>Finished:</b> 5/11/19		
<b>Location:</b> North Bankstown Public School				<b>Hole Location:</b> North Bankstown Public School		<b>Borehole Size</b> mm		
<b>Rig Type:</b>		<b>Hole Coordinates</b> , m		<b>Driller:</b>		<b>Logged:</b> AW		
<b>RL Surface:</b> m		<b>Contractor:</b> Alliance Geotechnical		<b>Bearing:</b> ---		<b>Checked:</b>		

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Tests Remarks	Moisture Condition	Consistency/Density Index	Additional Observations
HA			0.0		FILL	FILL: Silty CLAY, dark brown, dry, very loose, soft. Concrete gravels.	BH20 - 0.0-0.2	D		No ACM, staining or hydrocarbon odours present.
					CL	CLAY, grey/orange, moist, firm.	BH20 - 0.3-0.5	M		
			0.5							
			1.0							
			1.5							
						Borehole BH20 terminated at 1.1m				



## Borehole Log

<b>Client:</b> JDH Architects						<b>Started:</b> 5/11/19				
<b>Project:</b> Supplementary Contamination Assessment						<b>Finished:</b> 5/11/19				
<b>Location:</b> North Bankstown Public School						<b>Hole Location:</b> North Bankstown Public School		<b>Borehole Size</b> mm		
<b>Rig Type:</b>		<b>Hole Coordinates</b> , m				<b>Driller:</b>		<b>Logged:</b> AW		
<b>RL Surface:</b> m		<b>Contractor:</b> Alliance Geotechnical				<b>Bearing:</b> ---		<b>Checked:</b>		
Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Tests Remarks	Moisture Condition	Consistency/Density Index	Additional Observations
HA					FILL	FILL: Silty CLAY, dark brown, dry, very loose, soft. Concrete gravels.	BH21 - 0.0-0.2	D		No ACM, staining or hydrocarbon odours present.
			0.5		CL	CLAY, grey/orange, moist, firm.	BH21 - 0.3-0.5	M		
			1.0							
			1.5			Borehole BH21 terminated at 1.1m				



**BH No: BH25**  
**Sheet: 1 of 1**  
**Job No:9150**

## Borehole Log

Borehole Size mm

**Logged:** AW

**Checked:**

3BOREHOLE 9150-ER-1-1-FINAL.GPJ GINT STD AUSTRALIA.GDT 29/11/19



## Borehole Log

<b>Client:</b> JDH Architects						<b>Started:</b> 5/11/19			
<b>Project:</b> Supplementary Contamination Assessment						<b>Finished:</b> 5/11/19			
<b>Location:</b> North Bankstown Public School						<b>Hole Location:</b> North Bankstown Public School		<b>Borehole Size</b> mm	
<b>Rig Type:</b>		<b>Hole Coordinates</b> , m				<b>Driller:</b>		<b>Logged:</b> AW	
<b>RL Surface:</b> m		<b>Contractor:</b> Alliance Geotechnical				<b>Bearing:</b> ---		<b>Checked:</b>	

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Tests Remarks	Moisture Condition	Consistency/Density Index	Additional Observations
HA					FILL	FILL: Silty CLAY, brown, dry, soft.	BH26 - 0.0-0.2	D		No ACM, staining or hydrocarbon odours present.
					CL	CLAY, orange/brown with red mottling, moist, stiff.	BH26 - 0.2-0.4	M		
			0.5							
			1.0							
						Borehole BH26 terminated at 1.1m				
			1.5							



## Borehole Log

<b>Client:</b> JDH Architects						<b>Started:</b> 5/11/19				
<b>Project:</b> Supplementary Contamination Assessment						<b>Finished:</b> 5/11/19				
<b>Location:</b> North Bankstown Public School						<b>Hole Location:</b> North Bankstown Public School		<b>Borehole Size:</b> mm		
<b>Rig Type:</b>		<b>Hole Coordinates</b> , m				<b>Driller:</b>		<b>Logged:</b> AW		
<b>RL Surface:</b> m		<b>Contractor:</b> Alliance Geotechnical				<b>Bearing:</b> ---		<b>Checked:</b>		
Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Tests Remarks	Moisture Condition	Consistency/Density Index	Additional Observations
E					FILL	FILL: Silty CLAY, brown, dry, soft, trace gravels.	TP01 - 0.0-0.1 (DUP01/DUP1A)	D		No ACM, staining or hydrocarbon odours present.
					CL	CLAY, red with grey mottling, dry, very stiff.	TP01 - 0.1-0.3	D		
			0.5							
			1.0							
			1.5							
						Borehole TP01 terminated at 0.5m				



## Borehole Log

<b>Client:</b> JDH Architects						<b>Started:</b> 5/11/19				
<b>Project:</b> Supplementary Contamination Assessment						<b>Finished:</b> 5/11/19				
<b>Location:</b> North Bankstown Public School						<b>Hole Location:</b> North Bankstown Public School		<b>Borehole Size</b> mm		
<b>Rig Type:</b>		<b>Hole Coordinates</b> , m		<b>Driller:</b>		<b>Logged:</b> AW				
<b>RL Surface:</b> m		<b>Contractor:</b> Alliance Geotechnical		<b>Bearing:</b> ---		<b>Checked:</b>				
Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Tests Remarks	Moisture Condition	Consistency/Density Index	Additional Observations
E					FILL	FILL: Silty CLAY, brown, dry, soft, trace gravels.	TP02 - 0.0-0.2	D		No ACM, staining or hydrocarbon odours present.
					CL	CLAY, red with grey mottling, dry, very stiff.	TP02 - 0.2-0.4	D		
			0.5							
			1.0							
			1.5							
						Borehole TP02 terminated at 0.6m				



## Borehole Log

<b>Client:</b> JDH Architects						<b>Started:</b> 5/11/19		
<b>Project:</b> Supplementary Contamination Assessment						<b>Finished:</b> 5/11/19		
<b>Location:</b> North Bankstown Public School				<b>Hole Location:</b> North Bankstown Public School		<b>Borehole Size</b> mm		
<b>Rig Type:</b>		<b>Hole Coordinates</b> , m		<b>Driller:</b>		<b>Logged:</b> AW		
<b>RL Surface:</b> m		<b>Contractor:</b> Alliance Geotechnical		<b>Bearing:</b> ---		<b>Checked:</b>		

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Tests Remarks	Moisture Condition	Consistency/Density Index	Additional Observations
E					FILL	FILL: Silty CLAY, brown, dry, soft, trace gravels.	TP03 - 0.0-0.15	D		No ACM, staining or hydrocarbon odours present.
					CL	CLAY, red with grey mottling, dry, very stiff.	TP03 - 0.15-0.3	D		
			0.5			Borehole TP03 terminated at 0.5m				
			1.0							
			1.5							

## Borehole Log

<b>Client:</b> JDH Architects						<b>Started:</b> 5/11/19			
<b>Project:</b> Supplementary Contamination Assessment						<b>Finished:</b> 5/11/19			
<b>Location:</b> North Bankstown Public School						<b>Hole Location:</b> North Bankstown Public School		<b>Borehole Size</b> mm	
<b>Rig Type:</b>		<b>Hole Coordinates</b> , m				<b>Driller:</b>		<b>Logged:</b> AW	
<b>RL Surface:</b> m		<b>Contractor:</b> Alliance Geotechnical				<b>Bearing:</b> ---		<b>Checked:</b>	

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Tests Remarks	Moisture Condition	Consistency/Density Index	Additional Observations
E				FILL		FILL: Silty CLAY, brown, dry, soft, trace gravels.				No ACM, staining or hydrocarbon odours present.
				CL		CLAY, red with grey mottling, dry, very stiff.	TP04 - 0.0-0.2			
				CL			TP04 - 0.2-0.4			
			0.5			Borehole TP04 terminated at 0.5m				
			1.0							
			1.5							





## Borehole Log

<b>Client:</b> JDH Architects						<b>Started:</b> 5/11/19			
<b>Project:</b> Supplementary Contamination Assessment						<b>Finished:</b> 5/11/19			
<b>Location:</b> North Bankstown Public School						<b>Hole Location:</b> North Bankstown Public School		<b>Borehole Size</b> mm	
<b>Rig Type:</b>		<b>Hole Coordinates</b> , m				<b>Driller:</b>		<b>Logged:</b> AW	
<b>RL Surface:</b> m		<b>Contractor:</b> Alliance Geotechnical				<b>Bearing:</b> ---		<b>Checked:</b>	

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Tests Remarks	Moisture Condition	Consistency/Density Index	Additional Observations
E					FILL	FILL: Silty CLAY, dark brown, dry, soft. Glass, brick, tile.	TP05 - 0.0-0.2	D		No ACM, staining or hydrocarbon odours present.
					CL	CLAY, red with grey mottling, dry, very stiff.		D		
			0.5				TP05 - 0.5-0.7			
			1.0			Borehole TP05 terminated at 0.9m				
			1.5							





## Borehole Log

<b>Client:</b> JDH Architects						<b>Started:</b> 5/11/19				
<b>Project:</b> Supplementary Contamination Assessment						<b>Finished:</b> 5/11/19				
<b>Location:</b> North Bankstown Public School						<b>Hole Location:</b> North Bankstown Public School		<b>Borehole Size</b> mm		
<b>Rig Type:</b>		<b>Hole Coordinates</b> , m				<b>Driller:</b>		<b>Logged:</b> AW		
<b>RL Surface:</b> m		<b>Contractor:</b> Alliance Geotechnical				<b>Bearing:</b> ---		<b>Checked:</b>		
Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Tests Remarks	Moisture Condition	Consistency/Density Index	Additional Observations
E					FILL	FILL: Silty CLAY, light brown, dry, soft. Gravels.	TP06 - 0.0-0.2 (DUP02/DUP2A)	D		No ACM, staining or hydrocarbon odours present.
			0.5		CL	CLAY, red/grey, moist, firm.	TP06 - 0.4-0.6	M		
			1.0			Borehole TP06 terminated at 0.8m				
			1.5							



## Borehole Log

<b>Client:</b> JDH Architects						<b>Started:</b> 5/11/19				
<b>Project:</b> Supplementary Contamination Assessment						<b>Finished:</b> 5/11/19				
<b>Location:</b> North Bankstown Public School						<b>Hole Location:</b> North Bankstown Public School		<b>Borehole Size</b> mm		
<b>Rig Type:</b>		<b>Hole Coordinates</b> , m				<b>Driller:</b>		<b>Logged:</b> AW		
<b>RL Surface:</b> m		<b>Contractor:</b> Alliance Geotechnical				<b>Bearing:</b> ---		<b>Checked:</b>		
Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Tests Remarks	Moisture Condition	Consistency/Density Index	Additional Observations
E					FILL	FILL: Silty CLAY, brown, dry, soft, trace gravels.	TP12 - 0.0-0.1	D		No ACM, staining or hydrocarbon odours present.
					CL	CLAY, red with grey mottling, dry, very stiff.	TP12 - 0.1-0.3	D		
			0.5							
			1.0							
			1.5							
						Borehole TP12 terminated at 0.5m				



## Borehole Log

<b>Client:</b> JDH Architects						<b>Started:</b> 5/11/19				
<b>Project:</b> Supplementary Contamination Assessment						<b>Finished:</b> 5/11/19				
<b>Location:</b> North Bankstown Public School						<b>Hole Location:</b> North Bankstown Public School		<b>Borehole Size:</b> mm		
<b>Rig Type:</b>		<b>Hole Coordinates</b> , m				<b>Driller:</b>		<b>Logged:</b> AW		
<b>RL Surface:</b> m		<b>Contractor:</b> Alliance Geotechnical				<b>Bearing:</b> ---		<b>Checked:</b>		
Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Tests Remarks	Moisture Condition	Consistency/Density Index	Additional Observations
E					FILL	FILL: Silty CLAY, brown, dry, soft, trace gravels.	TP13 - 0.0-0.15  TP13 - 0.15-0.3	D		No ACM, staining or hydrocarbon odours present.
					CL	CLAY, red with grey mottling, dry, very stiff.		D		
			0.5							
			1.0							
			1.5							
						Borehole TP13 terminated at 0.5m				



## Borehole Log

<b>Client:</b> JDH Architects						<b>Started:</b> 5/11/19			
<b>Project:</b> Supplementary Contamination Assessment						<b>Finished:</b> 5/11/19			
<b>Location:</b> North Bankstown Public School				<b>Hole Location:</b> North Bankstown Public School		<b>Borehole Size</b> mm			
<b>Rig Type:</b>		<b>Hole Coordinates</b> , m		<b>Driller:</b>		<b>Logged:</b> AW			
<b>RL Surface:</b> m		<b>Contractor:</b> Alliance Geotechnical		<b>Bearing:</b> ---		<b>Checked:</b>			
Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Tests Remarks	Moisture Condition Consistency/ Density Index	Additional Observations
E					FILL	FILL: Silty CLAY, grey/brown, dry, stiff. Concrete gravels, brick, tile.	TP14 - 0.0-0.2	D	ACM noted within FILL layer.
			0.5						
			1.0				TP14 - 0.8-1.0		
			1.5		CL	CLAY, red with grey mottling, dry, very stiff.	TP14 - 1.3-1.5	D	No ACM, staining or hydrocarbon odours present.

BOREHOLE 9150-ER-1-1-FINAL.GPJ GINT STD AUSTRALIA.GDT 29/11/19

Borehole TP14 terminated at 1.8m



## Borehole Log

<b>Client:</b> JDH Architects						<b>Started:</b> 5/11/19			
<b>Project:</b> Supplementary Contamination Assessment						<b>Finished:</b> 5/11/19			
<b>Location:</b> North Bankstown Public School						<b>Hole Location:</b> North Bankstown Public School		<b>Borehole Size</b> mm	
<b>Rig Type:</b>		<b>Hole Coordinates</b> , m		<b>Driller:</b>		<b>Logged:</b> AW			
<b>RL Surface:</b> m		<b>Contractor:</b> Alliance Geotechnical		<b>Bearing:</b> ---		<b>Checked:</b>			

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Tests Remarks	Moisture Condition	Consistency/Density Index	Additional Observations
E					FILL	FILL: Silty CLAY, brown, dry, soft, trace gravels.	TP22 - 0.0-0.2	D		No ACM, staining or hydrocarbon odours present.
					CL	CLAY, red with grey mottling, dry, very stiff.	TP22 - 0.3-0.5	D		
			0.5							
			1.0							
			1.5							
						Borehole TP22 terminated at 0.6m				



## Borehole Log

<b>Client:</b> JDH Architects						<b>Started:</b> 5/11/19				
<b>Project:</b> Supplementary Contamination Assessment						<b>Finished:</b> 5/11/19				
<b>Location:</b> North Bankstown Public School						<b>Hole Location:</b> North Bankstown Public School		<b>Borehole Size</b> mm		
<b>Rig Type:</b>		<b>Hole Coordinates</b> , m		<b>Driller:</b>		<b>Logged:</b> AW				
<b>RL Surface:</b> m		<b>Contractor:</b> Alliance Geotechnical		<b>Bearing:</b> ---		<b>Checked:</b>				
Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Tests Remarks	Moisture Condition	Consistency/Density Index	Additional Observations
E					FILL	FILL: Silty CLAY, brown, dry, soft, trace gravels.	TP23 - 0.0-0.2	D		No ACM, staining or hydrocarbon odours present.
			0.5		CL	CLAY, red with grey mottling, dry, very stiff.	TP23 - 0.3-0.5	D		
						Borehole TP23 terminated at 0.6m				



## Borehole Log

<b>Client:</b> JDH Architects						<b>Started:</b> 5/11/19		
<b>Project:</b> Supplementary Contamination Assessment						<b>Finished:</b> 5/11/19		
<b>Location:</b> North Bankstown Public School				<b>Hole Location:</b> North Bankstown Public School		<b>Borehole Size:</b> mm		
<b>Rig Type:</b>		<b>Hole Coordinates</b> , m		<b>Driller:</b>		<b>Logged:</b> AW		
<b>RL Surface:</b> m		<b>Contractor:</b> Alliance Geotechnical		<b>Bearing:</b> ---		<b>Checked:</b>		

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Tests Remarks	Moisture Condition	Consistency/Density Index	Additional Observations
E					FILL	FILL: Silty CLAY, brown, dry, soft. Trace gravels and aggregate gravels.	TP24 - 0.0-0.2	D		No ACM, staining or hydrocarbon odours present.
			0.5							
			1.0		CL	CLAY, red with grey mottling, dry, firm.	TP24 - 0.8-1.0	D		
			1.5			Borehole TP24 terminated at 1.1m				





## Borehole Log

<b>Client:</b> JDH Architects						<b>Started:</b> 5/11/19			
<b>Project:</b> Supplementary Contamination Assessment						<b>Finished:</b> 5/11/19			
<b>Location:</b> North Bankstown Public School						<b>Hole Location:</b> North Bankstown Public School		<b>Borehole Size</b> mm	
<b>Rig Type:</b>		<b>Hole Coordinates</b> , m				<b>Driller:</b>		<b>Logged:</b> AW	
<b>RL Surface:</b> m		<b>Contractor:</b> Alliance Geotechnical				<b>Bearing:</b> ---		<b>Checked:</b>	

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Tests Remarks	Moisture Condition Consistency/ Density Index	Additional Observations
E					FILL	FILL: Silty CLAY, brown, moist, soft.	TP27 - 0.0-0.2	M	No ACM, staining or hydrocarbon odours present.
<div style="display: flex;"> <div style="flex: 1; border-right: 1px solid black; padding-right: 5px;"> <div style="text-align: center; margin-bottom: 10px;">Borehole TP27 terminated at 0.2m</div> <div style="position: relative; height: 480px;"> <div style="position: absolute; top: 0; left: 0; right: 0; bottom: 0; border-left: 1px solid black; border-right: 1px solid black;"></div> <div style="position: absolute; top: 40%; left: 50%; transform: translate(-50%, -50%);">0.5</div> <div style="position: absolute; top: 65%; left: 50%; transform: translate(-50%, -50%);">1.0</div> <div style="position: absolute; top: 85%; left: 50%; transform: translate(-50%, -50%);">1.5</div> </div> </div> <div style="flex: 4; padding-left: 5px;"></div> </div>									



## Borehole Log

<b>Client:</b> JDH Architects						<b>Started:</b> 5/11/19			
<b>Project:</b> Supplementary Contamination Assessment						<b>Finished:</b> 5/11/19			
<b>Location:</b> North Bankstown Public School						<b>Hole Location:</b> North Bankstown Public School		<b>Borehole Size</b> mm	
<b>Rig Type:</b>		<b>Hole Coordinates</b> , m				<b>Driller:</b>		<b>Logged:</b> AW	
<b>RL Surface:</b> m		<b>Contractor:</b> Alliance Geotechnical				<b>Bearing:</b> ---		<b>Checked:</b>	

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Samples Tests Remarks	Moisture Condition Consistency/Density Index	Additional Observations
E					FILL	FILL: Silty CLAY, brown, moist, soft.	TP28 - 0.0-0.2	M	No ACM, staining or hydrocarbon odours present.
<div style="display: flex;"> <div style="flex: 1; border-right: 1px solid black; padding-right: 5px;"> <div style="text-align: center;">Borehole TP28 terminated at 0.2m</div> <div style="margin-top: 100px;">0.5</div> <div style="margin-top: 100px;">1.0</div> <div style="margin-top: 100px;">1.5</div> </div> <div style="flex: 4; padding-left: 5px;"></div> </div>									

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APPENDIX C

DATA QUALITY ASSESSMENT

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## C.1 Completeness

### Table C-1 Completeness DQI

Field Considerations	Target	Actual	Comment
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ÚÚÚ•Áæ ] { ] æʰÁæ áÁ &{ } ] ʰâÁ æĚ	FĚĚ Á	FĚĚ Á	Úʌ:ʈ { æ ʂʌʼæ æ }•ŋ áææ  Á & }•æʌʰâʌæʂʌ] ææ ʰĚ
æ âʌ[ &{ ^ } ææ } Á &{ } ] ʰʰÁ	ŲÁæ ] â*Á[ áŋ *•Ě &ææ ææ } Á *•Áæ á&æ / [*•Ě&æ ææ } Á *•/& }•æʌʰâʌæʂʌ] ææ ʰĚ [ -&•q â^ Á { •Á æ á&æ Á -Á &•q â^ Á { •Á	ŲÁæ ] â*Á[ áŋ *•Ě &ææ ææ } Á *•Áæ á&æ / [*•Ě&æ ææ } Á *•/& }•æʌʰâʌæʂʌ] ææ ʰĚ æ á&æ Á -Á &•q â^ Á { •Á	Úʌ:ʈ { æ ʂʌʼæ æ }•ŋ áææ  Á & }•æʌʰâʌæʂʌ] ææ ʰĚ
Laboratory Considerations	Target	Actual	Comment
Ô:âæçÁæ ] ʰ•Áæ æʰ•ʰâÁ æ&  íâq* Á  ÁŲŲÁ	Ü^-ʌ ÁŲ&æ } Á Ě Á	FĚĚ Á	Úʌ:ʈ { æ ʂʌʼæ æ }•ŋ áææ  Á & }•æʌʰâʌæʂʌ] ææ ʰĚ
Ųæʰʰ•Áæ æʰ•ʰâʌ&æ  íâq* Á Ü^-ʌ ÁŲ&æ } Á Ě Á q ÁŲŲÁ	FĚĚ Á	FĚĚ Á	Úʌ:ʈ { æ ʂʌʼæ æ }•ŋ áææ  Á & }•æʌʰâʌæʂʌ] ææ ʰĚ
Ų ] { ] æʰÁæ[ íæ  ʰ Á æʰ ææçÁ ^æq â•Áæ áŲŲŲ•	Ü^-ʌ ÁŲ&æ } Á Ě Á	FĚĚ Á	Úʌ:ʈ { æ ʂʌʼæ æ }•ŋ áææ  Á & }•æʌʰâʌæʂʌ] ææ ʰĚ
Úæ ] ʰÁ[ &{ ^ } ææ } Á &{ } ] ʰʰÁ	ŲÁæ ] ʰÁʰ&æ á ææçÁ•Ěæ ʰ& áææ• Á -Á æʰæʰ•â Á	FĚĚ Á	Úʌ:ʈ { æ ʂʌʼæ æ }•ŋ áææ  Á & }•æʌʰâʌæʂʌ] ææ ʰĚ
Úæ ] ʰÁçæææ } Áæ áÁ @ âq* Áæ ʰ•&{ } ] ʰâÁ æĚ	Ü^-ʌ ÁŲ&æ } Á Ě Á	FĚĚ Á	Úʌ:ʈ { æ ʂʌʼæ æ }•ŋ áææ  Á & }•æʌʰâʌæʂʌ] ææ ʰĚ

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|||b&dĀ

## C.2 Comparability

Table C-2

### Table C-2 Comparability DQI

Field Considerations	Target	Actual	Comment
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ÔǺ æǺǺ } áǺ } • Á	Üæ ] ʌ̥•ǺǺ :ǺǺ Á Ǻ • ʌ̥ǺǺǺ } æǺ ʌ̥• Á , æǺǺ { ʌ̥ǺǺ ʌ̥ æǺǺǺ } ʌ̥ǺǺ } Á	FEEǺ Á	Üʌ̥:Ǻ{ { æ & ʌ̥æ æ • ʌ̥Ǻ æǺ :Ǻ & } • æʌ̥ʌ̥ǺæǺ } æǺʌ̥Ǻ
Üæ ʌ̥Ǻ } ʌ̥•Ǻ ʌ̥æ ] ʌ̥• Á & ʌ̥ǺǺǺǺ áǺ ǺǺ áǺǺǺ ʌ̥•ǺǺǺ ʌ̥æ ʌ̥ Á { æ } ʌ̥Ǻ	ÜǺǺǺǺ ] ʌ̥•Ǻ ʌ̥Ǻ • áǺǺǺǺ :ǺǺ Á Ǻ • ʌ̥ǺǺǺ } æǺ ʌ̥• Á , æǺǺ ʌ̥	FEEǺ Á	Üʌ̥:Ǻ{ { æ & ʌ̥æ æ • ʌ̥Ǻ æǺ :Ǻ & } • æʌ̥ʌ̥ǺæǺ } æǺʌ̥Ǻ
Laboratory Considerations	Target	Actual	Comment
Üæ ʌ̥Ǻ æǺ æǺǺ ʌ̥ǺǺ • Á ʌ̥•ǺǺǺǺ æǺ æǺǺǺ ʌ̥Ǻ	Üʌ̥ǺǺǺ ʌ̥ǺǺ } ʌ̥Ǻ Á	FEEǺ Á	Üʌ̥:Ǻ{ { æ & ʌ̥æ æ • ʌ̥Ǻ æǺ :Ǻ & } • æʌ̥ʌ̥ǺæǺ } æǺʌ̥Ǻ
Üæ ʌ̥ǺÜ•ǺǺǺ æǺ ʌ̥ ǺǺǺǺ ʌ̥Ǻ	Üʌ̥ǺǺǺ ʌ̥ǺǺ } ʌ̥Ǻ Á	FEEǺ Á	Üʌ̥:Ǻ{ { æ & ʌ̥æ æ • ʌ̥Ǻ æǺ :Ǻ & } • æʌ̥ʌ̥ǺæǺ } æǺʌ̥Ǻ
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### C.3 Representativeness

Table C-3

### Table C-3 Representativeness DQI

[illegible]

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## C.4 Precision

### Table C-4 Precision DQI

[illegible]

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## C-5 Accuracy

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 1040

### Table C-5 Accuracy DQI

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## APPENDIX D

## LABORATORY CERTIFICATES

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**Alliance Geotechnical**  
**10 Welder Road**  
**Seven Hills**  
**NSW 2147**



**NATA Accredited**  
**Accreditation Number 1261**  
**Site Number 18217**

Accredited for compliance with ISO/IEC 17025 – Testing  
 The results of the tests, calibrations and/or  
 measurements included in this document are traceable  
 to Australian/national standards.

**Attention:** **Steven Wallace**

**Report** **686434-S**  
 Project name **NORTH BANKSTOWN PUBLIC SCHOOL**  
 Project ID **9150**  
 Received Date **Nov 05, 2019**

Client Sample ID			TP01-0.0-0.1	TP02-0.0-0.2	TP02-0.2-0.4	TP03-0.0-0.15
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-No06605	S19-No06606	S19-No06607	S19-No06608
Date Sampled			Nov 05, 2019	Nov 05, 2019	Nov 05, 2019	Nov 05, 2019
Test/Reference	LOR	Unit				
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	74	77	< 50	71
TRH C29-C36	50	mg/kg	94	89	< 50	84
TRH C10-C36 (Total)	50	mg/kg	168	166	< 50	155
<b>BTEX</b>						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	99	99	128	61
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>						
Naphthalene <sup>N02</sup>	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) <sup>N04</sup>	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) <sup>N01</sup>	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	140	140	< 100	130
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	140	140	< 100	130
<b>Polycyclic Aromatic Hydrocarbons</b>						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene <sup>N07</sup>	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			TP01-0.0-0.1	TP02-0.0-0.2	TP02-0.2-0.4	TP03-0.0-0.15
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-No06605	S19-No06606	S19-No06607	S19-No06608
Date Sampled			Nov 05, 2019	Nov 05, 2019	Nov 05, 2019	Nov 05, 2019
Test/Reference	LOR	Unit				
<b>Polycyclic Aromatic Hydrocarbons</b>						
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	92	92	94	89
p-Terphenyl-d14 (surr.)	1	%	103	107	107	104
<b>Organochlorine Pesticides</b>						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Toxaphene	1	mg/kg	< 1	< 1	-	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	-	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	-	< 0.2
Dibutylchloroendate (surr.)	1	%	74	101	-	75
Tetrachloro-m-xylene (surr.)	1	%	99	90	-	88
<b>Polychlorinated Biphenyls</b>						
Aroclor-1016	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Total PCB*	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Dibutylchloroendate (surr.)	1	%	74	101	-	75
Tetrachloro-m-xylene (surr.)	1	%	99	90	-	88

Client Sample ID			TP01-0.0-0.1	TP02-0.0-0.2	TP02-0.2-0.4	TP03-0.0-0.15
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-No06605	S19-No06606	S19-No06607	S19-No06608
Date Sampled			Nov 05, 2019	Nov 05, 2019	Nov 05, 2019	Nov 05, 2019
Test/Reference	LOR	Unit				
Conductivity (1:5 aqueous extract at 25°C as rec.)	10	uS/cm	-	-	220	-
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	-	-	5.2	-
% Moisture	1	%	12	14	14	13
<b>Heavy Metals</b>						
Arsenic	2	mg/kg	13	8.8	9.5	9.0
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	33	24	23	21
Copper	5	mg/kg	33	33	46	34
Lead	5	mg/kg	59	170	24	130
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	0.1
Nickel	5	mg/kg	10	9.5	11	11
Zinc	5	mg/kg	73	120	68	140

Client Sample ID			TP04-0.0-0.2	TP04-0.2-0.4	G01 TP05-0.0-0.2	TP05-0.5-0.7
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-No06609	S19-No06610	S19-No06611	S19-No06612
Date Sampled			Nov 05, 2019	Nov 05, 2019	Nov 05, 2019	Nov 05, 2019
Test/Reference	LOR	Unit				
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 200	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	1100	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	1100	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	2200	< 50
<b>BTEX</b>						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	84	112	118	73
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>						
Naphthalene <sup>N02</sup>	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) <sup>N04</sup>	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 500	< 50
TRH >C10-C16 less Naphthalene (F2) <sup>N01</sup>	50	mg/kg	< 50	< 50	< 500	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	1900	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 1000	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	1900	< 100
<b>Polycyclic Aromatic Hydrocarbons</b>						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	8.6	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	8.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	8.6	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	0.6	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	0.8	< 0.5

Client Sample ID			TP04-0.0-0.2	TP04-0.2-0.4	G01 TP05-0.0-0.2	TP05-0.5-0.7
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-No06609	S19-No06610	S19-No06611	S19-No06612
Date Sampled			Nov 05, 2019	Nov 05, 2019	Nov 05, 2019	Nov 05, 2019
Test/Reference	LOR	Unit				
<b>Polycyclic Aromatic Hydrocarbons</b>						
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	1.4	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	5.2	< 0.5
Benzo(b&j)fluoranthene <sup>N07</sup>	0.5	mg/kg	< 0.5	< 0.5	6.6	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	6.7	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	2.0	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	2.2	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	1.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	1.7	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	7.7	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	2.1	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	39	< 0.5
2-Fluorobiphenyl (surr.)	1	%	95	94	98	77
p-Terphenyl-d14 (surr.)	1	%	108	105	107	96
<b>Organochlorine Pesticides</b>						
Chlordanes - Total	0.1	mg/kg	< 0.1	-	< 0.1	-
4,4'-DDD	0.05	mg/kg	< 0.05	-	< 0.05	-
4,4'-DDE	0.05	mg/kg	< 0.05	-	< 0.05	-
4,4'-DDT	0.05	mg/kg	< 0.05	-	< 0.05	-
a-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
Aldrin	0.05	mg/kg	< 0.05	-	< 0.05	-
b-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
d-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
Dieldrin	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan I	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan II	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan sulphate	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin aldehyde	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin ketone	0.05	mg/kg	< 0.05	-	< 0.05	-
g-BHC (Lindane)	0.05	mg/kg	< 0.05	-	< 0.05	-
Heptachlor	0.05	mg/kg	< 0.05	-	< 0.05	-
Heptachlor epoxide	0.05	mg/kg	< 0.05	-	< 0.05	-
Hexachlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
Methoxychlor	0.2	mg/kg	< 0.2	-	< 0.2	-
Toxaphene	1	mg/kg	< 1	-	< 1	-
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	-	< 0.05	-
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	-	< 0.05	-
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2	-	< 0.2	-
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2	-	< 0.2	-
Dibutylchloroendate (surr.)	1	%	99	-	66	-
Tetrachloro-m-xylene (surr.)	1	%	134	-	91	-
<b>Polychlorinated Biphenyls</b>						
Aroclor-1016	0.5	mg/kg	< 0.5	-	< 5	-
Aroclor-1221	0.1	mg/kg	< 0.1	-	< 1	-
Aroclor-1232	0.5	mg/kg	< 0.5	-	< 5	-
Aroclor-1242	0.5	mg/kg	< 0.5	-	< 5	-

Client Sample ID			TP04-0.0-0.2	TP04-0.2-0.4	G01 TP05-0.0-0.2	TP05-0.5-0.7
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-No06609	S19-No06610	S19-No06611	S19-No06612
Date Sampled			Nov 05, 2019	Nov 05, 2019	Nov 05, 2019	Nov 05, 2019
Test/Reference	LOR	Unit				
<b>Polychlorinated Biphenyls</b>						
Aroclor-1248	0.5	mg/kg	< 0.5	-	< 5	-
Aroclor-1254	0.5	mg/kg	< 0.5	-	< 5	-
Aroclor-1260	0.5	mg/kg	< 0.5	-	< 5	-
Total PCB*	0.5	mg/kg	< 0.5	-	< 5	-
Dibutylchloroendate (surr.)	1	%	99	-	66	-
Tetrachloro-m-xylene (surr.)	1	%	134	-	91	-
% Clay	1	%	-	-	-	38
Conductivity (1:5 aqueous extract at 25°C as rec.)	10	uS/cm	-	57	-	330
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	-	5.8	-	5.3
% Moisture	1	%	15	7.3	13	16
<b>Heavy Metals</b>						
Arsenic	2	mg/kg	12	15	18	11
Cadmium	0.4	mg/kg	< 0.4	< 0.4	0.6	< 0.4
Chromium	5	mg/kg	23	31	15	23
Copper	5	mg/kg	26	17	87	34
Lead	5	mg/kg	18	44	290	21
Mercury	0.1	mg/kg	< 0.1	< 0.1	0.4	< 0.1
Nickel	5	mg/kg	9.9	13	16	22
Zinc	5	mg/kg	56	57	360	120
<b>Cation Exchange Capacity</b>						
Cation Exchange Capacity	0.05	meq/100g	-	-	-	13

Client Sample ID			TP06-0.0-0.2	TP06-0.4-0.6	BH07-0.0-0.2	BH07-0.2-0.4
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-No06613	S19-No06614	S19-No06615	S19-No06616
Date Sampled			Nov 05, 2019	Nov 05, 2019	Nov 05, 2019	Nov 05, 2019
Test/Reference	LOR	Unit				
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	21	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	110	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	100	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	231	< 50
<b>BTEX</b>						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	123	66	92	98
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>						
Naphthalene <sup>N02</sup>	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) <sup>N04</sup>	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50

Client Sample ID			TP06-0.0-0.2	TP06-0.4-0.6	BH07-0.0-0.2	BH07-0.2-0.4
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-No06613	S19-No06614	S19-No06615	S19-No06616
Date Sampled			Nov 05, 2019	Nov 05, 2019	Nov 05, 2019	Nov 05, 2019
Test/Reference	LOR	Unit				
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>						
TRH >C10-C16 less Naphthalene (F2) <sup>N01</sup>	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	180	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	180	< 100
<b>Polycyclic Aromatic Hydrocarbons</b>						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene <sup>N07</sup>	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	92	140	141	112
p-Terphenyl-d14 (surr.)	1	%	103	INT	INT	129
<b>Organochlorine Pesticides</b>						
Chlordanes - Total	0.1	mg/kg	< 0.1	-	< 0.1	-
4,4'-DDD	0.05	mg/kg	< 0.05	-	< 0.05	-
4,4'-DDE	0.05	mg/kg	< 0.05	-	< 0.05	-
4,4'-DDT	0.05	mg/kg	< 0.05	-	< 0.05	-
a-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
Aldrin	0.05	mg/kg	< 0.05	-	< 0.05	-
b-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
d-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
Dieldrin	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan I	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan II	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan sulphate	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin aldehyde	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin ketone	0.05	mg/kg	< 0.05	-	< 0.05	-
g-BHC (Lindane)	0.05	mg/kg	< 0.05	-	< 0.05	-
Heptachlor	0.05	mg/kg	< 0.05	-	< 0.05	-
Heptachlor epoxide	0.05	mg/kg	< 0.05	-	< 0.05	-
Hexachlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
Methoxychlor	0.2	mg/kg	< 0.2	-	< 0.2	-
Toxaphene	1	mg/kg	< 1	-	< 1	-

Client Sample ID			TP06-0.0-0.2	TP06-0.4-0.6	BH07-0.0-0.2	BH07-0.2-0.4
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-No06613	S19-No06614	S19-No06615	S19-No06616
Date Sampled			Nov 05, 2019	Nov 05, 2019	Nov 05, 2019	Nov 05, 2019
Test/Reference	LOR	Unit				
<b>Organochlorine Pesticides</b>						
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	-	< 0.05	-
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	-	< 0.05	-
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2	-	< 0.2	-
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2	-	< 0.2	-
Dibutylchloredate (surr.)	1	%	89	-	125	-
Tetrachloro-m-xylene (surr.)	1	%	99	-	126	-
<b>Polychlorinated Biphenyls</b>						
Aroclor-1016	0.5	mg/kg	< 0.5	-	< 0.5	-
Aroclor-1221	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1232	0.5	mg/kg	< 0.5	-	< 0.5	-
Aroclor-1242	0.5	mg/kg	< 0.5	-	< 0.5	-
Aroclor-1248	0.5	mg/kg	< 0.5	-	< 0.5	-
Aroclor-1254	0.5	mg/kg	< 0.5	-	< 0.5	-
Aroclor-1260	0.5	mg/kg	< 0.5	-	< 0.5	-
Total PCB*	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibutylchloredate (surr.)	1	%	89	-	125	-
Tetrachloro-m-xylene (surr.)	1	%	99	-	126	-
Conductivity (1:5 aqueous extract at 25°C as rec.)	10	uS/cm	-	66	-	120
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	-	5.9	-	5.3
% Moisture	1	%	11	14	24	15
<b>Heavy Metals</b>						
Arsenic	2	mg/kg	9.4	13	15	11
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	16	23	19	20
Copper	5	mg/kg	17	20	43	40
Lead	5	mg/kg	54	16	170	14
Mercury	0.1	mg/kg	< 0.1	< 0.1	0.1	< 0.1
Nickel	5	mg/kg	8.3	< 5	16	13
Zinc	5	mg/kg	63	30	380	98

Client Sample ID			BH08-0.0-0.2	BH09-0.0-0.3	BH10-0.0-0.2	BH10-0.2-0.4
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-No06617	S19-No06618	S19-No06619	S19-No06620
Date Sampled			Nov 05, 2019	Nov 05, 2019	Nov 05, 2019	Nov 05, 2019
Test/Reference	LOR	Unit				
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	83	40	21	< 20
TRH C15-C28	50	mg/kg	420	160	80	< 50
TRH C29-C36	50	mg/kg	270	230	130	< 50
TRH C10-C36 (Total)	50	mg/kg	773	430	231	< 50
<b>BTEX</b>						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1



Client Sample ID			BH08-0.0-0.2	BH09-0.0-0.3	BH10-0.0-0.2	BH10-0.2-0.4
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-No06617	S19-No06618	S19-No06619	S19-No06620
Date Sampled			Nov 05, 2019	Nov 05, 2019	Nov 05, 2019	Nov 05, 2019
Test/Reference	LOR	Unit				
<b>BTEX</b>						
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	90	118	111	67
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>						
Naphthalene <sup>N02</sup>	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) <sup>N04</sup>	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	87	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) <sup>N01</sup>	50	mg/kg	87	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	560	330	170	< 100
TRH >C34-C40	100	mg/kg	210	170	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	857	500	170	< 100
<b>Polycyclic Aromatic Hydrocarbons</b>						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene <sup>N07</sup>	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	59	124	99	INT
p-Terphenyl-d14 (surr.)	1	%	59	142	112	125
<b>Organochlorine Pesticides</b>						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	-
4,4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
4,4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
4,4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
a-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
b-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
d-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-



Client Sample ID			BH08-0.0-0.2	BH09-0.0-0.3	BH10-0.0-0.2	BH10-0.2-0.4
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-No06617	S19-No06618	S19-No06619	S19-No06620
Date Sampled			Nov 05, 2019	Nov 05, 2019	Nov 05, 2019	Nov 05, 2019
Test/Reference	LOR	Unit				
<b>Organochlorine Pesticides</b>						
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Toxaphene	1	mg/kg	< 1	< 1	< 1	-
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	< 0.2	-
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	< 0.2	-
Dibutylchloroendate (surr.)	1	%	150	98	85	-
Tetrachloro-m-xylene (surr.)	1	%	130	93	95	-
<b>Polychlorinated Biphenyls</b>						
Aroclor-1016	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	-
Aroclor-1232	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Aroclor-1242	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Aroclor-1248	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Aroclor-1254	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Aroclor-1260	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Total PCB*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Dibutylchloroendate (surr.)	1	%	150	98	85	-
Tetrachloro-m-xylene (surr.)	1	%	130	93	95	-
Conductivity (1:5 aqueous extract at 25°C as rec.)	10	uS/cm	-	-	-	450
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	-	-	-	5.1
% Moisture	1	%	21	13	11	18
<b>Heavy Metals</b>						
Arsenic	2	mg/kg	11	5.6	4.2	6.1
Cadmium	0.4	mg/kg	1.1	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	17	13	12	11
Copper	5	mg/kg	38	21	13	44
Lead	5	mg/kg	150	54	30	16
Mercury	0.1	mg/kg	0.2	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	12	6.3	9.7	6.6
Zinc	5	mg/kg	270	82	59	47

<b>Client Sample ID</b>			<b>BH11-0.0-0.1</b>	<b>TP12-0.0-0.1</b>	<b>TP12-0.1-0.3</b>	<b>TP13-0.0-0.15</b>
<b>Sample Matrix</b>			<b>Soil</b>	<b>Soil</b>	<b>Soil</b>	<b>Soil</b>
<b>Eurofins Sample No.</b>			<b>S19-No06621</b>	<b>S19-No06622</b>	<b>S19-No06623</b>	<b>S19-No06624</b>
<b>Date Sampled</b>			<b>Nov 05, 2019</b>	<b>Nov 05, 2019</b>	<b>Nov 05, 2019</b>	<b>Nov 05, 2019</b>
<b>Test/Reference</b>	<b>LOR</b>	<b>Unit</b>				
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	39	35	< 20	35
TRH C15-C28	50	mg/kg	110	78	< 50	96
TRH C29-C36	50	mg/kg	140	93	< 50	150
TRH C10-C36 (Total)	50	mg/kg	289	206	< 50	281
<b>BTEX</b>						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	111	114	113	119
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>						
Naphthalene <sup>N02</sup>	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) <sup>N04</sup>	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) <sup>N01</sup>	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	210	140	< 100	200
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	100
TRH >C10-C40 (total)*	100	mg/kg	210	140	< 100	300
<b>Polycyclic Aromatic Hydrocarbons</b>						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene <sup>N07</sup>	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	116	108	108	87
p-Terphenyl-d14 (surr.)	1	%	132	123	136	126

Client Sample ID			BH11-0.0-0.1	TP12-0.0-0.1	TP12-0.1-0.3	TP13-0.0-0.15
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-No06621	S19-No06622	S19-No06623	S19-No06624
Date Sampled			Nov 05, 2019	Nov 05, 2019	Nov 05, 2019	Nov 05, 2019
Test/Reference	LOR	Unit				
<b>Organochlorine Pesticides</b>						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
4,4'-DDD	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
4,4'-DDE	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
4,4'-DDT	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Toxaphene	1	mg/kg	< 1	< 1	-	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	-	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	-	< 0.2
Dibutylchloredate (surr.)	1	%	102	83	-	80
Tetrachloro-m-xylene (surr.)	1	%	112	96	-	86
<b>Polychlorinated Biphenyls</b>						
Aroclor-1016	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Total PCB*	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Dibutylchloredate (surr.)	1	%	102	83	-	80
Tetrachloro-m-xylene (surr.)	1	%	112	96	-	86
Conductivity (1:5 aqueous extract at 25°C as rec.)	10	uS/cm	-	-	110	-
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	-	-	5.3	-
% Moisture	1	%	18	11	14	9.1
<b>Heavy Metals</b>						
Arsenic	2	mg/kg	8.0	9.7	5.1	9.1
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	18	24	19	21
Copper	5	mg/kg	36	37	23	33
Lead	5	mg/kg	100	95	15	93
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1

<b>Client Sample ID</b>			<b>BH11-0.0-0.1</b>	<b>TP12-0.0-0.1</b>	<b>TP12-0.1-0.3</b>	<b>TP13-0.0-0.15</b>
<b>Sample Matrix</b>			<b>Soil</b>	<b>Soil</b>	<b>Soil</b>	<b>Soil</b>
<b>Eurofins Sample No.</b>			<b>S19-No06621</b>	<b>S19-No06622</b>	<b>S19-No06623</b>	<b>S19-No06624</b>
<b>Date Sampled</b>			<b>Nov 05, 2019</b>	<b>Nov 05, 2019</b>	<b>Nov 05, 2019</b>	<b>Nov 05, 2019</b>
Test/Reference	LOR	Unit				
<b>Heavy Metals</b>						
Nickel	5	mg/kg	10.0	9.7	8.5	9.1
Zinc	5	mg/kg	140	130	40	120

<b>Client Sample ID</b>			<b>TP14-0.0-0.2</b>	<b>TP14-1.3-1.5</b>	<b>BH15-0.0-0.1</b>	<b>BH16-0.0-0.1</b>
<b>Sample Matrix</b>			<b>Soil</b>	<b>Soil</b>	<b>Soil</b>	<b>Soil</b>
<b>Eurofins Sample No.</b>			<b>S19-No06625</b>	<b>S19-No06626</b>	<b>S19-No06627</b>	<b>S19-No06628</b>
<b>Date Sampled</b>			<b>Nov 05, 2019</b>	<b>Nov 05, 2019</b>	<b>Nov 05, 2019</b>	<b>Nov 05, 2019</b>
Test/Reference	LOR	Unit				
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	24	< 20	42	41
TRH C15-C28	50	mg/kg	< 50	< 50	150	140
TRH C29-C36	50	mg/kg	58	< 50	180	180
TRH C10-C36 (Total)	50	mg/kg	82	< 50	372	361
<b>BTEX</b>						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	107	104	108	107
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>						
Naphthalene <sup>N02</sup>	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) <sup>N04</sup>	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) <sup>N01</sup>	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	280	260
TRH >C34-C40	100	mg/kg	< 100	< 100	110	120
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	390	380
<b>Polycyclic Aromatic Hydrocarbons</b>						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene <sup>N07</sup>	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			TP14-0.0-0.2	TP14-1.3-1.5	BH15-0.0-0.1	BH16-0.0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-No06625	S19-No06626	S19-No06627	S19-No06628
Date Sampled			Nov 05, 2019	Nov 05, 2019	Nov 05, 2019	Nov 05, 2019
Test/Reference	LOR	Unit				
<b>Polycyclic Aromatic Hydrocarbons</b>						
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	102	81	112	110
p-Terphenyl-d14 (surr.)	1	%	132	144	128	113
<b>Organochlorine Pesticides</b>						
Chlordanes - Total	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
4,4'-DDD	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
4,4'-DDE	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
4,4'-DDT	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Toxaphene	1	mg/kg	< 1	-	< 1	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2	-	< 0.2	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2	-	< 0.2	< 0.2
Dibutylchloroendate (surr.)	1	%	76	-	98	85
Tetrachloro-m-xylene (surr.)	1	%	86	-	106	100
<b>Polychlorinated Biphenyls</b>						
Aroclor-1016	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Total PCB*	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Dibutylchloroendate (surr.)	1	%	76	-	98	85
Tetrachloro-m-xylene (surr.)	1	%	86	-	106	100
% Clay	1	%	-	34	-	-
Conductivity (1:5 aqueous extract at 25°C as rec.)	10	uS/cm	-	100	-	-
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	-	5.0	-	-
% Moisture	1	%	4.6	14	21	16

<b>Client Sample ID</b>			<b>TP14-0.0-0.2</b>	<b>TP14-1.3-1.5</b>	<b>BH15-0.0-0.1</b>	<b>BH16-0.0-0.1</b>
<b>Sample Matrix</b>			<b>Soil</b>	<b>Soil</b>	<b>Soil</b>	<b>Soil</b>
<b>Eurofins Sample No.</b>			<b>S19-No06625</b>	<b>S19-No06626</b>	<b>S19-No06627</b>	<b>S19-No06628</b>
<b>Date Sampled</b>			<b>Nov 05, 2019</b>	<b>Nov 05, 2019</b>	<b>Nov 05, 2019</b>	<b>Nov 05, 2019</b>
Test/Reference	LOR	Unit				
<b>Heavy Metals</b>						
Arsenic	2	mg/kg	3.0	5.4	9.3	6.7
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	13	19	14	12
Copper	5	mg/kg	16	15	28	26
Lead	5	mg/kg	41	17	100	90
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	7.1	12	9.6
Zinc	5	mg/kg	84	25	160	140
<b>Cation Exchange Capacity</b>						
Cation Exchange Capacity	0.05	meq/100g	-	11	-	-

<b>Client Sample ID</b>			<b>BH16-0.1-0.3</b>	<b>BH17-0.0-0.1</b>	<b>BH18-0.0-0.1</b>	<b>BH19-0.0-0.2</b>
<b>Sample Matrix</b>			<b>Soil</b>	<b>Soil</b>	<b>Soil</b>	<b>Soil</b>
<b>Eurofins Sample No.</b>			<b>S19-No06629</b>	<b>S19-No06630</b>	<b>S19-No06631</b>	<b>S19-No06632</b>
<b>Date Sampled</b>			<b>Nov 05, 2019</b>	<b>Nov 05, 2019</b>	<b>Nov 05, 2019</b>	<b>Nov 05, 2019</b>
Test/Reference	LOR	Unit				
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	36	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	140	53	65
TRH C29-C36	50	mg/kg	< 50	160	67	92
TRH C10-C36 (Total)	50	mg/kg	< 50	336	120	157
<b>BTEX</b>						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	92	106	116	112
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>						
Naphthalene <sup>N02</sup>	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) <sup>N04</sup>	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) <sup>N01</sup>	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	250	< 100	130
TRH >C34-C40	100	mg/kg	< 100	110	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	360	< 100	130
<b>Polycyclic Aromatic Hydrocarbons</b>						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			BH16-0.1-0.3	BH17-0.0-0.1	BH18-0.0-0.1	BH19-0.0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-No06629	S19-No06630	S19-No06631	S19-No06632
Date Sampled			Nov 05, 2019	Nov 05, 2019	Nov 05, 2019	Nov 05, 2019
Test/Reference	LOR	Unit				
<b>Polycyclic Aromatic Hydrocarbons</b>						
Benzo(b&j)fluoranthene <sup>N07</sup>	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	58	122	113	114
p-Terphenyl-d14 (surr.)	1	%	129	124	120	120
<b>Organochlorine Pesticides</b>						
Chlordanes - Total	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
4,4'-DDD	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
4,4'-DDE	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
4,4'-DDT	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
a-BHC	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
d-BHC	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Toxaphene	1	mg/kg	-	< 1	< 1	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	-	< 0.2	< 0.2	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	-	< 0.2	< 0.2	< 0.2
Dibutylchloroendate (surr.)	1	%	-	95	85	91
Tetrachloro-m-xylene (surr.)	1	%	-	105	103	102
<b>Polychlorinated Biphenyls</b>						
Aroclor-1016	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Aroclor-1221	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5



Client Sample ID			BH16-0.1-0.3	BH17-0.0-0.1	BH18-0.0-0.1	BH19-0.0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-No06629	S19-No06630	S19-No06631	S19-No06632
Date Sampled			Nov 05, 2019	Nov 05, 2019	Nov 05, 2019	Nov 05, 2019
Test/Reference	LOR	Unit				
<b>Polychlorinated Biphenyls</b>						
Aroclor-1260	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Total PCB*	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Dibutylchlorendate (surr.)	1	%	-	95	85	91
Tetrachloro-m-xylene (surr.)	1	%	-	105	103	102
Conductivity (1:5 aqueous extract at 25°C as rec.)	10	uS/cm	390	-	-	-
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	5.2	-	-	-
% Moisture	1	%	18	16	8.9	11
<b>Heavy Metals</b>						
Arsenic	2	mg/kg	8.9	4.8	16	12
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	14	10.0	28	27
Copper	5	mg/kg	30	25	22	22
Lead	5	mg/kg	15	96	98	47
Mercury	0.1	mg/kg	< 0.1	0.2	0.4	< 0.1
Nickel	5	mg/kg	9.8	7.4	9.6	26
Zinc	5	mg/kg	59	150	120	170

Client Sample ID			BH19-0.3-0.5	TP20-0.0-0.2	TP20-0.3-0.5	TP21-0.0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-No06633	S19-No06634	S19-No06635	S19-No06636
Date Sampled			Nov 05, 2019	Nov 05, 2019	Nov 05, 2019	Nov 05, 2019
Test/Reference	LOR	Unit				
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	48	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	170	54	< 50
TRH C29-C36	50	mg/kg	< 50	180	60	59
TRH C10-C36 (Total)	50	mg/kg	< 50	398	114	59
<b>BTEX</b>						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	107	119	65	114
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>						
Naphthalene <sup>N02</sup>	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) <sup>N04</sup>	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) <sup>N01</sup>	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	290	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	120	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	410	< 100	< 100



Client Sample ID			BH19-0.3-0.5	TP20-0.0-0.2	TP20-0.3-0.5	TP21-0.0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-No06633	S19-No06634	S19-No06635	S19-No06636
Date Sampled			Nov 05, 2019	Nov 05, 2019	Nov 05, 2019	Nov 05, 2019
Test/Reference	LOR	Unit				
<b>Polycyclic Aromatic Hydrocarbons</b>						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene <sup>N07</sup>	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	85	105	106	108
p-Terphenyl-d14 (surr.)	1	%	119	109	115	111
<b>Organochlorine Pesticides</b>						
Chlordanes - Total	0.1	mg/kg	-	< 0.1	-	< 0.1
4,4'-DDD	0.05	mg/kg	-	< 0.05	-	< 0.05
4,4'-DDE	0.05	mg/kg	-	< 0.05	-	< 0.05
4,4'-DDT	0.05	mg/kg	-	< 0.05	-	< 0.05
a-BHC	0.05	mg/kg	-	< 0.05	-	< 0.05
Aldrin	0.05	mg/kg	-	< 0.05	-	< 0.05
b-BHC	0.05	mg/kg	-	< 0.05	-	< 0.05
d-BHC	0.05	mg/kg	-	< 0.05	-	< 0.05
Dieldrin	0.05	mg/kg	-	< 0.05	-	< 0.05
Endosulfan I	0.05	mg/kg	-	< 0.05	-	< 0.05
Endosulfan II	0.05	mg/kg	-	< 0.05	-	< 0.05
Endosulfan sulphate	0.05	mg/kg	-	< 0.05	-	< 0.05
Endrin	0.05	mg/kg	-	< 0.05	-	< 0.05
Endrin aldehyde	0.05	mg/kg	-	< 0.05	-	< 0.05
Endrin ketone	0.05	mg/kg	-	< 0.05	-	< 0.05
g-BHC (Lindane)	0.05	mg/kg	-	< 0.05	-	< 0.05
Heptachlor	0.05	mg/kg	-	< 0.05	-	< 0.05
Heptachlor epoxide	0.05	mg/kg	-	< 0.05	-	< 0.05
Hexachlorobenzene	0.05	mg/kg	-	< 0.05	-	< 0.05
Methoxychlor	0.2	mg/kg	-	< 0.2	-	< 0.2
Toxaphene	1	mg/kg	-	< 1	-	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	-	< 0.05	-	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	-	< 0.05	-	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	-	< 0.2	-	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	-	< 0.2	-	< 0.2
Dibutylchloroendate (surr.)	1	%	-	92	-	85
Tetrachloro-m-xylene (surr.)	1	%	-	93	-	92

Client Sample ID			BH19-0.3-0.5	TP20-0.0-0.2	TP20-0.3-0.5	TP21-0.0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-No06633	S19-No06634	S19-No06635	S19-No06636
Date Sampled			Nov 05, 2019	Nov 05, 2019	Nov 05, 2019	Nov 05, 2019
Test/Reference	LOR	Unit				
<b>Polychlorinated Biphenyls</b>						
Aroclor-1016	0.5	mg/kg	-	< 0.5	-	< 0.5
Aroclor-1221	0.1	mg/kg	-	< 0.1	-	< 0.1
Aroclor-1232	0.5	mg/kg	-	< 0.5	-	< 0.5
Aroclor-1242	0.5	mg/kg	-	< 0.5	-	< 0.5
Aroclor-1248	0.5	mg/kg	-	< 0.5	-	< 0.5
Aroclor-1254	0.5	mg/kg	-	< 0.5	-	< 0.5
Aroclor-1260	0.5	mg/kg	-	< 0.5	-	< 0.5
Total PCB*	0.5	mg/kg	-	< 0.5	-	< 0.5
Dibutylchloroendate (surr.)	1	%	-	92	-	85
Tetrachloro-m-xylene (surr.)	1	%	-	93	-	92
Conductivity (1:5 aqueous extract at 25°C as rec.)	10	uS/cm	710	-	190	-
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	5.1	-	5.1	-
% Moisture	1	%	23	16	16	11
<b>Heavy Metals</b>						
Arsenic	2	mg/kg	4.0	5.8	8.5	7.4
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	8.1	18	21	15
Copper	5	mg/kg	29	25	24	24
Lead	5	mg/kg	11	47	15	51
Mercury	0.1	mg/kg	< 0.1	0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	9.9	9.0	8.2
Zinc	5	mg/kg	29	68	41	73

Client Sample ID			TP21-0.4-0.6	TP22-0.0-0.2	TP23-0.0-0.2	TP24-0.0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-No06637	S19-No06638	S19-No06639	S19-No06640
Date Sampled			Nov 05, 2019	Nov 05, 2019	Nov 05, 2019	Nov 05, 2019
Test/Reference	LOR	Unit				
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	42	27	< 20
TRH C15-C28	50	mg/kg	< 50	150	110	< 50
TRH C29-C36	50	mg/kg	< 50	130	94	80
TRH C10-C36 (Total)	50	mg/kg	< 50	322	231	80
<b>BTEX</b>						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	108	88	106	78
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>						
Naphthalene <sup>N02</sup>	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) <sup>N04</sup>	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50

Client Sample ID			TP21-0.4-0.6 Soil S19-No06637 Nov 05, 2019	TP22-0.0-0.2 Soil S19-No06638 Nov 05, 2019	TP23-0.0-0.2 Soil S19-No06639 Nov 05, 2019	TP24-0.0-0.2 Soil S19-No06640 Nov 05, 2019
Sample Matrix						
Eurofins Sample No.						
Date Sampled						
Test/Reference	LOR	Unit				
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>						
TRH >C10-C16 less Naphthalene (F2) <sup>N01</sup>	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	230	160	100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	230	160	100
<b>Polycyclic Aromatic Hydrocarbons</b>						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene <sup>N07</sup>	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	111	118	100	112
p-Terphenyl-d14 (surr.)	1	%	117	123	103	115
<b>Organochlorine Pesticides</b>						
Chlordanes - Total	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
4,4'-DDD	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
4,4'-DDE	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
4,4'-DDT	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
a-BHC	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
d-BHC	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Toxaphene	1	mg/kg	-	< 1	< 1	< 1

Client Sample ID			TP21-0.4-0.6	TP22-0.0-0.2	TP23-0.0-0.2	TP24-0.0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-No06637	S19-No06638	S19-No06639	S19-No06640
Date Sampled			Nov 05, 2019	Nov 05, 2019	Nov 05, 2019	Nov 05, 2019
Test/Reference	LOR	Unit				
<b>Organochlorine Pesticides</b>						
Aldrin and Dieldrin (Total)*	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	-	< 0.2	< 0.2	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	-	< 0.2	< 0.2	< 0.2
Dibutylchloroendate (surr.)	1	%	-	99	96	95
Tetrachloro-m-xylene (surr.)	1	%	-	92	98	101
<b>Polychlorinated Biphenyls</b>						
Aroclor-1016	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Aroclor-1221	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Aroclor-1260	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Total PCB*	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Dibutylchloroendate (surr.)	1	%	-	99	96	95
Tetrachloro-m-xylene (surr.)	1	%	-	92	98	101
Conductivity (1:5 aqueous extract at 25°C as rec.)	10	uS/cm	320	-	-	-
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	4.9	-	-	-
% Moisture	1	%	15	10	11	9.3
<b>Heavy Metals</b>						
Arsenic	2	mg/kg	8.6	19	9.7	13
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	22	35	18	18
Copper	5	mg/kg	28	24	26	15
Lead	5	mg/kg	20	58	56	28
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	12	11	11	10
Zinc	5	mg/kg	55	86	100	47

Client Sample ID			TP24-0.8-1.0	BH25-0.0-0.3	BH26-0.0-0.2	BH26-0.2-0.4
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-No06641	S19-No06642	S19-No06643	S19-No06644
Date Sampled			Nov 05, 2019	Nov 05, 2019	Nov 05, 2019	Nov 05, 2019
Test/Reference	LOR	Unit				
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	43	54	< 20
TRH C15-C28	50	mg/kg	< 50	170	310	< 50
TRH C29-C36	50	mg/kg	< 50	170	270	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	383	634	< 50
<b>BTEX</b>						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	0.5	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	0.3	< 0.1	< 0.1

Client Sample ID			TP24-0.8-1.0 Soil S19-No06641 Nov 05, 2019	BH25-0.0-0.3 Soil S19-No06642 Nov 05, 2019	BH26-0.0-0.2 Soil S19-No06643 Nov 05, 2019	BH26-0.2-0.4 Soil S19-No06644 Nov 05, 2019
Sample Matrix						
Eurofins Sample No.						
Date Sampled						
Test/Reference	LOR	Unit				
<b>BTEX</b>						
Xylenes - Total	0.3	mg/kg	< 0.3	0.8	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	85	104	73	84
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>						
Naphthalene <sup>N02</sup>	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) <sup>N04</sup>	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	110	< 50
TRH >C10-C16 less Naphthalene (F2) <sup>N01</sup>	50	mg/kg	< 50	< 50	110	< 50
TRH >C16-C34	100	mg/kg	< 100	270	460	< 100
TRH >C34-C40	100	mg/kg	< 100	120	160	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	390	730	< 100
<b>Polycyclic Aromatic Hydrocarbons</b>						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	1.1	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	1.4	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.7	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	0.7	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	0.9	< 0.5	< 0.5
Benzo(b&j)fluoranthene <sup>N07</sup>	0.5	mg/kg	< 0.5	0.9	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	0.7	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	0.7	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	1.4	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	0.6	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	0.6	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	1.4	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	7.9	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	55	119	101	89
p-Terphenyl-d14 (surr.)	1	%	117	126	111	116
<b>Organochlorine Pesticides</b>						
Chlordanes - Total	0.1	mg/kg	-	< 0.1	< 0.1	-
4,4'-DDD	0.05	mg/kg	-	< 0.05	< 0.05	-
4,4'-DDE	0.05	mg/kg	-	< 0.05	< 0.05	-
4,4'-DDT	0.05	mg/kg	-	< 0.05	< 0.05	-
a-BHC	0.05	mg/kg	-	< 0.05	< 0.05	-
Aldrin	0.05	mg/kg	-	< 0.05	< 0.05	-
b-BHC	0.05	mg/kg	-	< 0.05	< 0.05	-
d-BHC	0.05	mg/kg	-	< 0.05	< 0.05	-
Dieldrin	0.05	mg/kg	-	< 0.05	< 0.05	-
Endosulfan I	0.05	mg/kg	-	< 0.05	< 0.05	-
Endosulfan II	0.05	mg/kg	-	< 0.05	< 0.05	-
Endosulfan sulphate	0.05	mg/kg	-	< 0.05	< 0.05	-
Endrin	0.05	mg/kg	-	< 0.05	< 0.05	-
Endrin aldehyde	0.05	mg/kg	-	< 0.05	< 0.05	-

Client Sample ID			TP24-0.8-1.0	BH25-0.0-0.3	BH26-0.0-0.2	BH26-0.2-0.4
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-No06641	S19-No06642	S19-No06643	S19-No06644
Date Sampled			Nov 05, 2019	Nov 05, 2019	Nov 05, 2019	Nov 05, 2019
Test/Reference	LOR	Unit				
<b>Organochlorine Pesticides</b>						
Endrin ketone	0.05	mg/kg	-	< 0.05	< 0.05	-
g-BHC (Lindane)	0.05	mg/kg	-	< 0.05	< 0.05	-
Heptachlor	0.05	mg/kg	-	< 0.05	< 0.05	-
Heptachlor epoxide	0.05	mg/kg	-	< 0.05	< 0.05	-
Hexachlorobenzene	0.05	mg/kg	-	< 0.05	< 0.05	-
Methoxychlor	0.2	mg/kg	-	< 0.2	< 0.2	-
Toxaphene	1	mg/kg	-	< 1	< 1	-
Aldrin and Dieldrin (Total)*	0.05	mg/kg	-	< 0.05	< 0.05	-
DDT + DDE + DDD (Total)*	0.05	mg/kg	-	< 0.05	< 0.05	-
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	-	< 0.2	< 0.2	-
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	-	< 0.2	< 0.2	-
Dibutylchloroendate (surr.)	1	%	-	106	133	-
Tetrachloro-m-xylene (surr.)	1	%	-	92	91	-
<b>Polychlorinated Biphenyls</b>						
Aroclor-1016	0.5	mg/kg	-	< 0.5	< 0.5	-
Aroclor-1221	0.1	mg/kg	-	< 0.1	< 0.1	-
Aroclor-1232	0.5	mg/kg	-	< 0.5	< 0.5	-
Aroclor-1242	0.5	mg/kg	-	< 0.5	< 0.5	-
Aroclor-1248	0.5	mg/kg	-	< 0.5	< 0.5	-
Aroclor-1254	0.5	mg/kg	-	< 0.5	< 0.5	-
Aroclor-1260	0.5	mg/kg	-	< 0.5	< 0.5	-
Total PCB*	0.5	mg/kg	-	< 0.5	< 0.5	-
Dibutylchloroendate (surr.)	1	%	-	106	133	-
Tetrachloro-m-xylene (surr.)	1	%	-	92	91	-
% Clay	1	%	37	-	-	-
Conductivity (1:5 aqueous extract at 25°C as rec.)	10	uS/cm	280	-	-	110
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	5.0	-	-	5.4
% Moisture	1	%	17	8.8	8.4	16
<b>Heavy Metals</b>						
Arsenic	2	mg/kg	10	8.5	12	23
Cadmium	0.4	mg/kg	< 0.4	0.7	< 0.4	< 0.4
Chromium	5	mg/kg	20	15	18	23
Copper	5	mg/kg	21	24	19	20
Lead	5	mg/kg	20	81	83	14
Mercury	0.1	mg/kg	< 0.1	0.4	0.1	< 0.1
Nickel	5	mg/kg	7.2	13	12	5.9
Zinc	5	mg/kg	36	200	85	23
<b>Cation Exchange Capacity</b>						
Cation Exchange Capacity	0.05	meq/100g	18	-	-	-

<b>Client Sample ID</b>			<b>BH27-0.0-0.2</b>	<b>BH28-0.0-0.2</b>	<b>DUP-01</b>	<b>DUP-02</b>
<b>Sample Matrix</b>			<b>Soil</b>	<b>Soil</b>	<b>Soil</b>	<b>Soil</b>
<b>Eurofins Sample No.</b>			<b>S19-No06645</b>	<b>S19-No06646</b>	<b>S19-No06647</b>	<b>S19-No06648</b>
<b>Date Sampled</b>			<b>Nov 05, 2019</b>	<b>Nov 05, 2019</b>	<b>Nov 05, 2019</b>	<b>Nov 05, 2019</b>
Test/Reference	LOR	Unit				
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>						
TRH C6-C9	20	mg/kg	< 20	< 20	-	-
TRH C10-C14	20	mg/kg	32	110	-	-
TRH C15-C28	50	mg/kg	180	370	-	-
TRH C29-C36	50	mg/kg	220	430	-	-
TRH C10-C36 (Total)	50	mg/kg	432	910	-	-
<b>BTEX</b>						
Benzene	0.1	mg/kg	< 0.1	< 0.1	-	-
Toluene	0.1	mg/kg	< 0.1	< 0.1	-	-
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	-	-
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	-	-
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	-	-
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	-	-
4-Bromofluorobenzene (surr.)	1	%	103	95	-	-
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>						
Naphthalene <sup>N02</sup>	0.5	mg/kg	< 0.5	< 0.5	-	-
TRH C6-C10	20	mg/kg	< 20	< 20	-	-
TRH C6-C10 less BTEX (F1) <sup>N04</sup>	20	mg/kg	< 20	< 20	-	-
TRH >C10-C16	50	mg/kg	< 50	130	-	-
TRH >C10-C16 less Naphthalene (F2) <sup>N01</sup>	50	mg/kg	< 50	130	-	-
TRH >C16-C34	100	mg/kg	330	640	-	-
TRH >C34-C40	100	mg/kg	170	300	-	-
TRH >C10-C40 (total)*	100	mg/kg	500	1070	-	-
<b>Polycyclic Aromatic Hydrocarbons</b>						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	0.7	< 0.5	-	-
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	1.0	0.6	-	-
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.3	1.2	-	-
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	-	-
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	-	-
Anthracene	0.5	mg/kg	< 0.5	< 0.5	-	-
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	-	-
Benzo(a)pyrene	0.5	mg/kg	0.6	< 0.5	-	-
Benzo(b&j)fluoranthene <sup>N07</sup>	0.5	mg/kg	0.7	< 0.5	-	-
Benzo(g,h,i)perylene	0.5	mg/kg	0.7	< 0.5	-	-
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	-	-
Chrysene	0.5	mg/kg	< 0.5	< 0.5	-	-
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	-	-
Fluoranthene	0.5	mg/kg	0.6	< 0.5	-	-
Fluorene	0.5	mg/kg	< 0.5	< 0.5	-	-
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	0.5	< 0.5	-	-
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	-	-
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	-	-
Pyrene	0.5	mg/kg	0.7	< 0.5	-	-
Total PAH*	0.5	mg/kg	3.8	< 0.5	-	-
2-Fluorobiphenyl (surr.)	1	%	83	92	-	-
p-Terphenyl-d14 (surr.)	1	%	110	103	-	-



Client Sample ID			BH27-0.0-0.2	BH28-0.0-0.2	DUP-01	DUP-02
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-No06645	S19-No06646	S19-No06647	S19-No06648
Date Sampled			Nov 05, 2019	Nov 05, 2019	Nov 05, 2019	Nov 05, 2019
Test/Reference	LOR	Unit				
<b>Organochlorine Pesticides</b>						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	-	-
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	-	-
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	-	-
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	-	-
a-BHC	0.05	mg/kg	< 0.05	< 0.05	-	-
Aldrin	0.05	mg/kg	< 0.05	< 0.05	-	-
b-BHC	0.05	mg/kg	< 0.05	< 0.05	-	-
d-BHC	0.05	mg/kg	< 0.05	< 0.05	-	-
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	-	-
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	-	-
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	-	-
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	-	-
Endrin	0.05	mg/kg	< 0.05	< 0.05	-	-
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	-	-
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	-	-
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	-	-
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	-	-
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	-	-
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	-	-
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	-	-
Toxaphene	1	mg/kg	< 1	< 1	-	-
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	-	-
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	-	-
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	-	-
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	-	-
Dibutylchloroendate (surr.)	1	%	91	97	-	-
Tetrachloro-m-xylene (surr.)	1	%	96	84	-	-
<b>Polychlorinated Biphenyls</b>						
Aroclor-1016	0.5	mg/kg	< 0.5	< 0.5	-	-
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	-	-
Aroclor-1232	0.5	mg/kg	< 0.5	< 0.5	-	-
Aroclor-1242	0.5	mg/kg	< 0.5	< 0.5	-	-
Aroclor-1248	0.5	mg/kg	< 0.5	< 0.5	-	-
Aroclor-1254	0.5	mg/kg	< 0.5	< 0.5	-	-
Aroclor-1260	0.5	mg/kg	< 0.5	< 0.5	-	-
Total PCB*	0.5	mg/kg	< 0.5	< 0.5	-	-
Dibutylchloroendate (surr.)	1	%	91	97	-	-
Tetrachloro-m-xylene (surr.)	1	%	96	84	-	-
% Moisture	1	%	8.8	14	11	11
<b>Heavy Metals</b>						
Arsenic	2	mg/kg	4.9	5.6	6.9	8.8
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	8.7	14	22	15
Copper	5	mg/kg	31	21	24	13
Lead	5	mg/kg	68	57	41	34
Mercury	0.1	mg/kg	0.1	0.2	< 0.1	< 0.1
Nickel	5	mg/kg	6.4	5.5	8.4	7.2
Zinc	5	mg/kg	110	160	55	41



## Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Sydney	Nov 08, 2019	14 Days
BTEX - Method: LTM-ORG-2010 TRH C6-C40	Sydney	Nov 08, 2019	14 Days
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Sydney	Nov 08, 2019	14 Days
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Sydney	Nov 08, 2019	
Polycyclic Aromatic Hydrocarbons - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Sydney	Nov 08, 2019	14 Days
Conductivity (1:5 aqueous extract at 25°C as rec.) - Method: LTM-INO-4030 Conductivity	Sydney	Nov 08, 2019	7 Days
pH (1:5 Aqueous extract at 25°C as rec.) - Method: LTM-GEN-7090 pH in soil by ISE	Sydney	Nov 08, 2019	7 Days
Metals M8 - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Sydney	Nov 08, 2019	180 Days
Organochlorine Pesticides - Method: LTM-ORG-2220 OCP & PCB in Soil and Water	Sydney	Nov 08, 2019	14 Days
Polychlorinated Biphenyls - Method: LTM-ORG-2220 OCP & PCB in Soil and Water	Sydney	Nov 08, 2019	28 Days
% Clay - Method: LTM-GEN-7040	Brisbane	Nov 07, 2019	0 Days
% Moisture - Method: LTM-GEN-7080 Moisture	Sydney	Nov 06, 2019	14 Days
Cation Exchange Capacity - Method: LTM-MET-3060 Cation Exchange Capacity by bases & Exchangeable Sodium Percentage	Melbourne	Nov 07, 2019	180 Days

**Company Name:** Alliance Geotechnical  
**Address:** 10 Welder Road  
Seven Hills  
NSW 2147

**Project Name:** NORTH BANKSTOWN PUBLIC SCHOOL  
**Project ID:** 9150

**Order No.:**  
**Report #:** 686434  
**Phone:** 1800 288 188  
**Fax:** 02 9675 1888

**Received:** Nov 5, 2019 6:10 PM  
**Due:** Nov 12, 2019  
**Priority:** 5 Day  
**Contact Name:** Steven Wallace

**Eurofins Analytical Services Manager : Andrew Black**

Sample Detail						% Clay	Asbestos - AS4964	Asbestos Absence / Presence	HOLD	Metals M8	BTEX	Eurofins   mgt Suite B13	Moisture Set	Cation Exchange Capacity	Eurofins   mgt Suite B7	Alliance ENM Exemption Suite 2014 NSW EPA inc Asbestos AS4964
Melbourne Laboratory - NATA Site # 1254 & 14271														X		X
Sydney Laboratory - NATA Site # 18217							X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794						X										
Perth Laboratory - NATA Site # 23736																
External Laboratory																
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID											
1	TP01-0.0-0.1	Nov 05, 2019		Soil	S19-No06605		X					X	X		X	
2	TP02-0.0-0.2	Nov 05, 2019		Soil	S19-No06606		X					X	X		X	
3	TP02-0.2-0.4	Nov 05, 2019		Soil	S19-No06607								X			X
4	TP03-0.0-0.15	Nov 05, 2019		Soil	S19-No06608		X					X	X		X	
5	TP04-0.0-0.2	Nov 05, 2019		Soil	S19-No06609		X					X	X		X	
6	TP04-0.2-0.4	Nov 05, 2019		Soil	S19-No06610								X			X
7	TP05-0.0-0.2	Nov 05, 2019		Soil	S19-No06611		X					X	X		X	
8	TP05-0.5-0.7	Nov 05, 2019		Soil	S19-No06612		X						X	X		X
9	TP06-0.0-0.2	Nov 05, 2019		Soil	S19-No06613		X					X	X		X	

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Sample Detail						% Clay	Asbestos - AS4964	Asbestos Absence / Presence	HOLD	Metals M8	BTEX	Eurofins   mgt Suite B13	Moisture Set	Cation Exchange Capacity	Eurofins   mgt Suite B7	Alliance ENM Exemption Suite 2014 NSW EPA inc Asbestos AS4964
Melbourne Laboratory - NATA Site # 1254 & 14271														X		X
Sydney Laboratory - NATA Site # 18217							X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794						X										
Perth Laboratory - NATA Site # 23736																
10	TP06-0.4-0.6	Nov 05, 2019		Soil	S19-No06614								X			X
11	BH07-0.0-0.2	Nov 05, 2019		Soil	S19-No06615		X					X	X		X	
12	BH07-0.2-0.4	Nov 05, 2019		Soil	S19-No06616								X			X
13	BH08-0.0-0.2	Nov 05, 2019		Soil	S19-No06617		X					X	X		X	
14	BH09-0.0-0.3	Nov 05, 2019		Soil	S19-No06618		X					X	X		X	
15	BH10-0.0-0.2	Nov 05, 2019		Soil	S19-No06619		X					X	X		X	
16	BH10-0.2-0.4	Nov 05, 2019		Soil	S19-No06620								X			X
17	BH11-0.0-0.1	Nov 05, 2019		Soil	S19-No06621		X					X	X		X	
18	TP12-0.0-0.1	Nov 05, 2019		Soil	S19-No06622		X					X	X		X	
19	TP12-0.1-0.3	Nov 05, 2019		Soil	S19-No06623								X			X
20	TP13-0.0-0.15	Nov 05, 2019		Soil	S19-No06624		X					X	X		X	
21	TP14-0.0-0.2	Nov 05, 2019		Soil	S19-No06625		X					X	X		X	

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Sample Detail						% Clay	Asbestos - AS4964	Asbestos Absence / Presence	HOLD	Metals M8	BTEX	Eurofins   mgt Suite B13	Moisture Set	Cation Exchange Capacity	Eurofins   mgt Suite B7	Alliance ENM Exemption Suite 2014 NSW EPA inc Asbestos AS4964
Melbourne Laboratory - NATA Site # 1254 & 14271														X		X
Sydney Laboratory - NATA Site # 18217							X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794						X										
Perth Laboratory - NATA Site # 23736																
22	TP14-1.3-1.5	Nov 05, 2019		Soil	S19-No06626	X							X	X		X
23	BH15-0.0-0.1	Nov 05, 2019		Soil	S19-No06627		X					X	X		X	
24	BH16-0.0-0.1	Nov 05, 2019		Soil	S19-No06628		X					X	X		X	
25	BH16-0.1-0.3	Nov 05, 2019		Soil	S19-No06629								X			X
26	BH17-0.0-0.1	Nov 05, 2019		Soil	S19-No06630		X					X	X		X	
27	BH18-0.0-0.1	Nov 05, 2019		Soil	S19-No06631		X					X	X		X	
28	BH19-0.0-0.2	Nov 05, 2019		Soil	S19-No06632		X					X	X		X	
29	BH19-0.3-0.5	Nov 05, 2019		Soil	S19-No06633								X			X
30	TP20-0.0-0.2	Nov 05, 2019		Soil	S19-No06634		X					X	X		X	
31	TP20-0.3-0.5	Nov 05, 2019		Soil	S19-No06635								X			X
32	TP21-0.0-0.2	Nov 05, 2019		Soil	S19-No06636		X					X	X		X	
33	TP21-0.4-0.6	Nov 05, 2019		Soil	S19-No06637								X			X

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Sample Detail						% Clay	Asbestos - AS4964	Asbestos Absence / Presence	HOLD	Metals M8	BTEX	Eurofins   mgt Suite B13	Moisture Set	Cation Exchange Capacity	Eurofins   mgt Suite B7	Alliance ENM Exemption Suite 2014 NSW EPA inc Asbestos AS4964
Melbourne Laboratory - NATA Site # 1254 & 14271														X		X
Sydney Laboratory - NATA Site # 18217							X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794						X										
Perth Laboratory - NATA Site # 23736																
34	TP22-0.0-0.2	Nov 05, 2019		Soil	S19-No06638		X					X	X		X	
35	TP23-0.0-0.2	Nov 05, 2019		Soil	S19-No06639		X					X	X		X	
36	TP24-0.0-0.2	Nov 05, 2019		Soil	S19-No06640		X					X	X		X	
37	TP24-0.8-1.0	Nov 05, 2019		Soil	S19-No06641	X							X	X		X
38	BH25-0.0-0.3	Nov 05, 2019		Soil	S19-No06642		X					X	X		X	
39	BH26-0.0-0.2	Nov 05, 2019		Soil	S19-No06643		X					X	X		X	
40	BH26-0.2-0.4	Nov 05, 2019		Soil	S19-No06644								X			X
41	BH27-0.0-0.2	Nov 05, 2019		Soil	S19-No06645		X					X	X		X	
42	BH28-0.0-0.2	Nov 05, 2019		Soil	S19-No06646		X					X	X		X	
43	DUP-01	Nov 05, 2019		Soil	S19-No06647					X			X			
44	DUP-02	Nov 05, 2019		Soil	S19-No06648					X			X			
45	TP14-FCS	Nov 05, 2019		Building	S19-No06649			X								

**Company Name:** Alliance Geotechnical  
**Address:** 10 Welder Road  
Seven Hills  
NSW 2147

**Project Name:** NORTH BANKSTOWN PUBLIC SCHOOL  
**Project ID:** 9150

**Order No.:**  
**Report #:** 686434  
**Phone:** 1800 288 188  
**Fax:** 02 9675 1888

**Received:** Nov 5, 2019 6:10 PM  
**Due:** Nov 12, 2019  
**Priority:** 5 Day  
**Contact Name:** Steven Wallace

**Eurofins Analytical Services Manager : Andrew Black**

Sample Detail						% Clay	Asbestos - AS4964	Asbestos Absence / Presence	HOLD	Metals M8	BTEX	Eurofins   mgt Suite B13	Moisture Set	Cation Exchange Capacity	Eurofins   mgt Suite B7	Alliance ENM Exemption Suite 2014 NSW EPA inc Asbestos AS4964
Melbourne Laboratory - NATA Site # 1254 & 14271														X		X
Sydney Laboratory - NATA Site # 18217							X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794						X										
Perth Laboratory - NATA Site # 23736																
				Materials												
46	BH25-FCS	Nov 05, 2019		Building Materials	S19-No06650			X								
47	TRIPSPIKE1	Nov 05, 2019		Water	S19-No06651						X					
48	TRIPBLANK1	Nov 05, 2019		Water	S19-No06652						X					
49	TP01-0.1-0.3	Nov 05, 2019		Soil	S19-No06653				X							
50	TP03-0.15-0.3	Nov 05, 2019		Soil	S19-No06654				X							
51	BH09-0.3-0.5	Nov 05, 2019		Soil	S19-No06655				X							
52	BH11-0.1-0.3	Nov 05, 2019		Soil	S19-No06656				X							
53	TP13-0.15-0.3	Nov 05, 2019		Soil	S19-No06657				X							
54	TP14-0.8-1.0	Nov 05, 2019		Soil	S19-No06658				X							
55	BH15-0.1-0.3	Nov 05, 2019		Soil	S19-No06659				X							



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Sample Detail						% Clay	Asbestos - AS4964	Asbestos Absence / Presence	HOLD	Metals M8	BTEX	Eurofins   mgt Suite B13	Moisture Set	Cation Exchange Capacity	Eurofins   mgt Suite B7	Alliance ENM Exemption Suite 2014 NSW EPA inc Asbestos AS4964
Melbourne Laboratory - NATA Site # 1254 & 14271														X		X
Sydney Laboratory - NATA Site # 18217							X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794						X										
Perth Laboratory - NATA Site # 23736																
56	BH17-0.1-0.3	Nov 05, 2019		Soil	S19-No06660				X							
57	BH18-0.1-0.3	Nov 05, 2019		Soil	S19-No06661				X							
58	TP22-0.3-0.5	Nov 05, 2019		Soil	S19-No06662				X							
59	TP23-0.3-0.5	Nov 05, 2019		Soil	S19-No06663				X							
60	BH25-0.3-0.5	Nov 05, 2019		Soil	S19-No06664				X							
Test Counts						3	28	2	12	2	2	28	44	3	28	14

## Internal Quality Control Review and Glossary

### General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

### Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

**\*\*NOTE:** pH duplicates are reported as a range NOT as RPD

### Units

**mg/kg:** milligrams per kilogram

**mg/L:** milligrams per litre

**ug/L:** micrograms per litre

**ppm:** Parts per million

**ppb:** Parts per billion

**%:** Percentage

**org/100mL:** Organisms per 100 millilitres

**NTU:** Nephelometric Turbidity Units

**MPN/100mL:** Most Probable Number of organisms per 100 millilitres

### Terms

<b>Dry</b>	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
<b>LOR</b>	Limit of Reporting.
<b>SPIKE</b>	Addition of the analyte to the sample and reported as percentage recovery.
<b>RPD</b>	Relative Percent Difference between two Duplicate pieces of analysis.
<b>LCS</b>	Laboratory Control Sample - reported as percent recovery.
<b>CRM</b>	Certified Reference Material - reported as percent recovery.
<b>Method Blank</b>	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
<b>Surr - Surrogate</b>	The addition of a like compound to the analyte target and reported as percentage recovery.
<b>Duplicate</b>	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
<b>USEPA</b>	United States Environmental Protection Agency
<b>APHA</b>	American Public Health Association
<b>TCLP</b>	Toxicity Characteristic Leaching Procedure
<b>COC</b>	Chain of Custody
<b>SRA</b>	Sample Receipt Advice
<b>QSM</b>	US Department of Defense Quality Systems Manual Version 5.3
<b>CP</b>	Client Parent - QC was performed on samples pertaining to this report
<b>NC</b>	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
<b>TEQ</b>	Toxic Equivalency Quotient

### QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

### QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " - " in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

**Quality Control Results**

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
<b>Method Blank</b>							
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
<b>Method Blank</b>							
<b>BTEX</b>							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total	mg/kg	< 0.3			0.3	Pass	
<b>Method Blank</b>							
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
<b>Method Blank</b>							
<b>Polycyclic Aromatic Hydrocarbons</b>							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g,h,i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a,h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
<b>Method Blank</b>							
<b>Organochlorine Pesticides</b>							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4,4'-DDD	mg/kg	< 0.05			0.05	Pass	
4,4'-DDE	mg/kg	< 0.05			0.05	Pass	
4,4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
<b>Method Blank</b>							
<b>Polychlorinated Biphenyls</b>							
Aroclor-1016	mg/kg	< 0.5			0.5	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.5			0.5	Pass	
Aroclor-1242	mg/kg	< 0.5			0.5	Pass	
Aroclor-1248	mg/kg	< 0.5			0.5	Pass	
Aroclor-1254	mg/kg	< 0.5			0.5	Pass	
Aroclor-1260	mg/kg	< 0.5			0.5	Pass	
Total PCB*	mg/kg	< 0.5			0.5	Pass	
<b>Method Blank</b>							
% Clay	%	< 1			1	Pass	
Conductivity (1:5 aqueous extract at 25°C as rec.)	uS/cm	< 10			10	Pass	
<b>Method Blank</b>							
<b>Heavy Metals</b>							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
<b>Method Blank</b>							
<b>Cation Exchange Capacity</b>							
Cation Exchange Capacity	meq/100g	< 0.05			0.05	Pass	
<b>LCS - % Recovery</b>							
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>							
TRH C6-C9	%	97			70-130	Pass	
TRH C10-C14	%	115			70-130	Pass	
<b>LCS - % Recovery</b>							
<b>BTEX</b>							
Benzene	%	78			70-130	Pass	
Toluene	%	81			70-130	Pass	
Ethylbenzene	%	85			70-130	Pass	
m&p-Xylenes	%	121			70-130	Pass	
o-Xylene	%	110			70-130	Pass	
Xylenes - Total	%	117			70-130	Pass	
<b>LCS - % Recovery</b>							
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>							
Naphthalene	%	110			70-130	Pass	
TRH C6-C10	%	95			70-130	Pass	
TRH >C10-C16	%	81			70-130	Pass	
<b>LCS - % Recovery</b>							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
<b>Polycyclic Aromatic Hydrocarbons</b>							
Acenaphthene	%	76			70-130	Pass	
Acenaphthylene	%	79			70-130	Pass	
Anthracene	%	96			70-130	Pass	
Benz(a)anthracene	%	71			70-130	Pass	
Benzo(a)pyrene	%	77			70-130	Pass	
Benzo(b&j)fluoranthene	%	85			70-130	Pass	
Benzo(g,h,i)perylene	%	82			70-130	Pass	
Benzo(k)fluoranthene	%	84			70-130	Pass	
Chrysene	%	84			70-130	Pass	
Dibenz(a,h)anthracene	%	80			70-130	Pass	
Fluoranthene	%	77			70-130	Pass	
Fluorene	%	85			70-130	Pass	
Indeno(1,2,3-cd)pyrene	%	70			70-130	Pass	
Naphthalene	%	78			70-130	Pass	
Phenanthrene	%	84			70-130	Pass	
Pyrene	%	77			70-130	Pass	
<b>LCS - % Recovery</b>							
<b>Organochlorine Pesticides</b>							
Chlordanes - Total	%	90			70-130	Pass	
4,4'-DDD	%	97			70-130	Pass	
4,4'-DDE	%	88			70-130	Pass	
4,4'-DDT	%	77			70-130	Pass	
a-BHC	%	90			70-130	Pass	
Aldrin	%	93			70-130	Pass	
b-BHC	%	89			70-130	Pass	
d-BHC	%	90			70-130	Pass	
Dieldrin	%	89			70-130	Pass	
Endosulfan I	%	117			70-130	Pass	
Endosulfan II	%	115			70-130	Pass	
Endosulfan sulphate	%	87			70-130	Pass	
Endrin	%	81			70-130	Pass	
Endrin aldehyde	%	85			70-130	Pass	
Endrin ketone	%	91			70-130	Pass	
g-BHC (Lindane)	%	90			70-130	Pass	
Heptachlor	%	88			70-130	Pass	
Heptachlor epoxide	%	97			70-130	Pass	
Hexachlorobenzene	%	90			70-130	Pass	
Methoxychlor	%	80			70-130	Pass	
Toxaphene	%	112			70-130	Pass	
<b>LCS - % Recovery</b>							
<b>Polychlorinated Biphenyls</b>							
Aroclor-1260	%	92			70-130	Pass	
<b>LCS - % Recovery</b>							
% Clay	%	100			70-130	Pass	
Conductivity (1:5 aqueous extract at 25°C as rec.)	%	91			70-130	Pass	
<b>LCS - % Recovery</b>							
<b>Heavy Metals</b>							
Arsenic	%	107			70-130	Pass	
Cadmium	%	104			70-130	Pass	
Chromium	%	104			70-130	Pass	
Copper	%	104			70-130	Pass	
Lead	%	108			70-130	Pass	
Mercury	%	102			70-130	Pass	

Test				Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Nickel				%	104		70-130	Pass	
Zinc				%	100		70-130	Pass	
Test	Lab Sample ID	QA Source		Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
<b>Spike - % Recovery</b>									
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>					Result 1				
TRH C10-C14	S19-No06605	CP	%		101		70-130	Pass	
<b>Spike - % Recovery</b>									
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>					Result 1				
TRH >C10-C16	S19-No06605	CP	%		96		70-130	Pass	
<b>Spike - % Recovery</b>									
<b>Polycyclic Aromatic Hydrocarbons</b>					Result 1				
Acenaphthene	S19-No06605	CP	%		90		70-130	Pass	
Acenaphthylene	S19-No06605	CP	%		86		70-130	Pass	
Anthracene	S19-No06605	CP	%		83		70-130	Pass	
Benz(a)anthracene	S19-No06605	CP	%		88		70-130	Pass	
Benzo(a)pyrene	S19-No06605	CP	%		89		70-130	Pass	
Benzo(b&j)fluoranthene	S19-No06605	CP	%		101		70-130	Pass	
Benzo(g,h,i)perylene	S19-No06605	CP	%		89		70-130	Pass	
Benzo(k)fluoranthene	S19-No06605	CP	%		94		70-130	Pass	
Chrysene	S19-No06605	CP	%		87		70-130	Pass	
Dibenz(a,h)anthracene	S19-No06605	CP	%		95		70-130	Pass	
Fluoranthene	S19-No06605	CP	%		89		70-130	Pass	
Fluorene	S19-No06605	CP	%		91		70-130	Pass	
Indeno(1,2,3-cd)pyrene	S19-No06605	CP	%		92		70-130	Pass	
Naphthalene	S19-No06605	CP	%		86		70-130	Pass	
Phenanthrene	S19-No06605	CP	%		87		70-130	Pass	
Pyrene	S19-No06605	CP	%		85		70-130	Pass	
<b>Spike - % Recovery</b>									
<b>Organochlorine Pesticides</b>					Result 1				
4,4'-DDD	S19-No14554	NCP	%		116		70-130	Pass	
4,4'-DDT	S19-No07341	NCP	%		102		70-130	Pass	
Endrin aldehyde	S19-No14554	NCP	%		84		70-130	Pass	
Endrin ketone	S19-No14554	NCP	%		86		70-130	Pass	
Methoxychlor	S19-No07341	NCP	%		92		70-130	Pass	
Toxaphene	S19-No07341	NCP	%		100		70-130	Pass	
<b>Spike - % Recovery</b>									
<b>Polychlorinated Biphenyls</b>					Result 1				
Aroclor-1260	S19-No14554	NCP	%		87		70-130	Pass	
<b>Spike - % Recovery</b>									
<b>Heavy Metals</b>					Result 1				
Arsenic	S19-No06608	CP	%		103		70-130	Pass	
Cadmium	S19-No06608	CP	%		101		70-130	Pass	
Chromium	S19-No06608	CP	%		109		70-130	Pass	
Copper	S19-No06608	CP	%		110		70-130	Pass	
Lead	S19-No06608	CP	%		104		70-130	Pass	
Mercury	S19-No06608	CP	%		107		70-130	Pass	
Nickel	S19-No06608	CP	%		97		70-130	Pass	
Zinc	S19-No06608	CP	%		97		70-130	Pass	
<b>Spike - % Recovery</b>									
<b>Heavy Metals</b>					Result 1				
Arsenic	S19-No06618	CP	%		98		70-130	Pass	
Cadmium	S19-No06618	CP	%		97		70-130	Pass	
Chromium	S19-No06618	CP	%		98		70-130	Pass	
Copper	S19-No06618	CP	%		112		70-130	Pass	



Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Mercury	S19-No06618	CP	%	101		70-130	Pass	
Nickel	S19-No06618	CP	%	105		70-130	Pass	
<b>Spike - % Recovery</b>								
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>				Result 1				
TRH C6-C9	S19-No06619	CP	%	99		70-130	Pass	
TRH C10-C14	S19-No06619	CP	%	111		70-130	Pass	
<b>Spike - % Recovery</b>								
<b>BTEX</b>				Result 1				
Benzene	S19-No06619	CP	%	82		70-130	Pass	
Toluene	S19-No06619	CP	%	81		70-130	Pass	
Ethylbenzene	S19-No06619	CP	%	83		70-130	Pass	
m&p-Xylenes	S19-No06619	CP	%	111		70-130	Pass	
o-Xylene	S19-No06619	CP	%	103		70-130	Pass	
Xylenes - Total	S19-No06619	CP	%	108		70-130	Pass	
<b>Spike - % Recovery</b>								
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>				Result 1				
Naphthalene	S19-No06619	CP	%	79		70-130	Pass	
TRH C6-C10	S19-No06619	CP	%	99		70-130	Pass	
TRH >C10-C16	S19-No06619	CP	%	106		70-130	Pass	
<b>Spike - % Recovery</b>								
<b>Organochlorine Pesticides</b>				Result 1				
Chlordanes - Total	S19-No06621	CP	%	104		70-130	Pass	
4,4'-DDE	S19-No06621	CP	%	101		70-130	Pass	
a-BHC	S19-No06621	CP	%	109		70-130	Pass	
Aldrin	S19-No06621	CP	%	120		70-130	Pass	
b-BHC	S19-No06621	CP	%	107		70-130	Pass	
d-BHC	S19-No06621	CP	%	100		70-130	Pass	
Dieldrin	S19-No06621	CP	%	102		70-130	Pass	
Endosulfan I	S19-No06621	CP	%	101		70-130	Pass	
Endosulfan II	S19-No06621	CP	%	99		70-130	Pass	
Endosulfan sulphate	S19-No06621	CP	%	88		70-130	Pass	
Endrin	S19-No06621	CP	%	88		70-130	Pass	
g-BHC (Lindane)	S19-No06621	CP	%	89		70-130	Pass	
Heptachlor	S19-No06621	CP	%	70		70-130	Pass	
Heptachlor epoxide	S19-No06621	CP	%	107		70-130	Pass	
Hexachlorobenzene	S19-No06621	CP	%	112		70-130	Pass	
<b>Spike - % Recovery</b>								
<b>Polycyclic Aromatic Hydrocarbons</b>				Result 1				
Acenaphthene	S19-No06625	CP	%	102		70-130	Pass	
Acenaphthylene	S19-No06625	CP	%	93		70-130	Pass	
Anthracene	S19-No06625	CP	%	98		70-130	Pass	
Benz(a)anthracene	S19-No06625	CP	%	71		70-130	Pass	
Benzo(a)pyrene	S19-No06625	CP	%	98		70-130	Pass	
Benzo(b&j)fluoranthene	S19-No06625	CP	%	107		70-130	Pass	
Benzo(g,h,i)perylene	S19-No06625	CP	%	106		70-130	Pass	
Benzo(k)fluoranthene	S19-No06625	CP	%	119		70-130	Pass	
Chrysene	S19-No06625	CP	%	115		70-130	Pass	
Dibenz(a,h)anthracene	S19-No06625	CP	%	97		70-130	Pass	
Fluoranthene	S19-No06625	CP	%	106		70-130	Pass	
Fluorene	S19-No06625	CP	%	97		70-130	Pass	
Indeno(1,2,3-cd)pyrene	S19-No06625	CP	%	91		70-130	Pass	
Naphthalene	S19-No06625	CP	%	99		70-130	Pass	
Phenanthrene	S19-No06625	CP	%	87		70-130	Pass	
Pyrene	S19-No06625	CP	%	106		70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
<b>Spike - % Recovery</b>									
<b>Heavy Metals</b>				Result 1					
Arsenic	S19-No06648	CP	%	97			70-130	Pass	
Cadmium	S19-No06648	CP	%	100			70-130	Pass	
Chromium	S19-No06648	CP	%	103			70-130	Pass	
Copper	S19-No06648	CP	%	95			70-130	Pass	
Lead	S19-No06648	CP	%	107			70-130	Pass	
Mercury	S19-No06648	CP	%	105			70-130	Pass	
Nickel	S19-No06648	CP	%	96			70-130	Pass	
Zinc	S19-No06648	CP	%	105			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
<b>Duplicate</b>									
<b>Organochlorine Pesticides</b>				Result 1	Result 2	RPD			
Chlordanes - Total	S19-No06605	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4,4'-DDD	S19-No06605	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4,4'-DDE	S19-No06605	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4,4'-DDT	S19-No06605	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	S19-No06605	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S19-No06605	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S19-No06605	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S19-No06605	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S19-No06605	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S19-No06605	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S19-No06605	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S19-No06605	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S19-No06605	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S19-No06605	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S19-No06605	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S19-No06605	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S19-No06605	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S19-No06605	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S19-No06605	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S19-No06605	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Toxaphene	S19-No06605	CP	mg/kg	< 1	< 1	<1	30%	Pass	
<b>Duplicate</b>									
				Result 1	Result 2	RPD			
% Moisture	S19-No06607	CP	%	14	14	1.0	30%	Pass	
<b>Duplicate</b>									
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>				Result 1	Result 2	RPD			
TRH C6-C9	S19-No06608	CP	mg/kg	< 20	< 20	<1	30%	Pass	
<b>Duplicate</b>									
<b>BTEX</b>				Result 1	Result 2	RPD			
Benzene	S19-No06608	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S19-No06608	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S19-No06608	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S19-No06608	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S19-No06608	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total	S19-No06608	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
<b>Duplicate</b>									
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>				Result 1	Result 2	RPD			
Naphthalene	S19-No06608	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S19-No06608	CP	mg/kg	< 20	< 20	<1	30%	Pass	
<b>Duplicate</b>									
				Result 1	Result 2	RPD			
% Clay	M19-Oc35913	NCP	%	8.8	10	13	30%	Pass	

Duplicate				Result 1	Result 2	RPD		
Conductivity (1:5 aqueous extract at 25°C as rec.)	S19-No06616	CP	uS/cm	120	110	9.0	30%	Pass
pH (1:5 Aqueous extract at 25°C as rec.)	S19-No06616	CP	pH Units	5.3	5.3	Pass	30%	Pass
Duplicate				Result 1	Result 2	RPD		
% Moisture	S19-No06617	CP	%	21	20	6.0	30%	Pass
Duplicate				Result 1	Result 2	RPD		
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	S19-No06617	CP	mg/kg	11	12	7.0	30%	Pass
Cadmium	S19-No06617	CP	mg/kg	1.1	1.1	2.0	30%	Pass
Chromium	S19-No06617	CP	mg/kg	17	17	2.0	30%	Pass
Copper	S19-No06617	CP	mg/kg	38	39	3.0	30%	Pass
Lead	S19-No06617	CP	mg/kg	150	150	3.0	30%	Pass
Mercury	S19-No06617	CP	mg/kg	0.2	0.2	7.0	30%	Pass
Nickel	S19-No06617	CP	mg/kg	12	12	1.0	30%	Pass
Zinc	S19-No06617	CP	mg/kg	270	270	1.0	30%	Pass
Duplicate				Result 1	Result 2	RPD		
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD		
TRH C6-C9	S19-No06618	CP	mg/kg	< 20	< 20	<1	30%	Pass
TRH C10-C14	S19-No06618	CP	mg/kg	40	32	23	30%	Pass
TRH C15-C28	S19-No06618	CP	mg/kg	160	160	4.0	30%	Pass
TRH C29-C36	S19-No06618	CP	mg/kg	230	250	8.0	30%	Pass
Duplicate				Result 1	Result 2	RPD		
BTEX				Result 1	Result 2	RPD		
Benzene	S19-No06618	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Toluene	S19-No06618	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Ethylbenzene	S19-No06618	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
m&p-Xylenes	S19-No06618	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
o-Xylene	S19-No06618	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Xylenes - Total	S19-No06618	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass
Duplicate				Result 1	Result 2	RPD		
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD		
Naphthalene	S19-No06618	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
TRH C6-C10	S19-No06618	CP	mg/kg	< 20	< 20	<1	30%	Pass
TRH >C10-C16	S19-No06618	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH >C16-C34	S19-No06618	CP	mg/kg	330	340	3.0	30%	Pass
TRH >C34-C40	S19-No06618	CP	mg/kg	170	190	13	30%	Pass
Duplicate				Result 1	Result 2	RPD		
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Acenaphthene	S19-No06618	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Acenaphthylene	S19-No06618	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Anthracene	S19-No06618	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benz(a)anthracene	S19-No06618	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(a)pyrene	S19-No06618	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(b&j)fluoranthene	S19-No06618	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(g,h,i)perylene	S19-No06618	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(k)fluoranthene	S19-No06618	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chrysene	S19-No06618	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibenz(a,h)anthracene	S19-No06618	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluoranthene	S19-No06618	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluorene	S19-No06618	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Indeno(1,2,3-cd)pyrene	S19-No06618	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Naphthalene	S19-No06618	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Phenanthrene	S19-No06618	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Pyrene	S19-No06618	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass

Duplicate								
Organochlorine Pesticides				Result 1	Result 2	RPD		
Chlordanes - Total	S19-No06619	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
4,4'-DDD	S19-No06619	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4,4'-DDE	S19-No06619	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4,4'-DDT	S19-No06619	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
a-BHC	S19-No06619	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Aldrin	S19-No06619	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
b-BHC	S19-No06619	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
d-BHC	S19-No06619	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Dieldrin	S19-No06619	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan I	S19-No06619	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan II	S19-No06619	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan sulphate	S19-No06619	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin	S19-No06619	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin aldehyde	S19-No06619	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin ketone	S19-No06619	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
g-BHC (Lindane)	S19-No06619	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor	S19-No06619	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor epoxide	S19-No06619	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Hexachlorobenzene	S19-No06619	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Methoxychlor	S19-No06619	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Toxaphene	S19-No06619	CP	mg/kg	< 1	< 1	<1	30%	Pass
Duplicate								
Polychlorinated Biphenyls				Result 1	Result 2	RPD		
Aroclor-1016	S19-No06619	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1221	S19-No06619	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1232	S19-No06619	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1242	S19-No06619	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1248	S19-No06619	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1254	S19-No06619	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1260	S19-No06619	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
% Moisture	S19-No06627	CP	%	21	22	5.0	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
% Moisture	S19-No06637	CP	%	15	15	1.0	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
% Moisture	S19-No06647	CP	%	11	12	6.0	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	S19-No06647	CP	mg/kg	6.9	8.1	16	30%	Pass
Cadmium	S19-No06647	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
Chromium	S19-No06647	CP	mg/kg	22	22	3.0	30%	Pass
Copper	S19-No06647	CP	mg/kg	24	28	16	30%	Pass
Lead	S19-No06647	CP	mg/kg	41	49	19	30%	Pass
Mercury	S19-No06647	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Nickel	S19-No06647	CP	mg/kg	8.4	9.4	11	30%	Pass
Zinc	S19-No06647	CP	mg/kg	55	63	14	30%	Pass

## Comments

### Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

### Qualifier Codes/Comments

Code	Description
G01	The LORs have been raised due to matrix interference
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs

### Authorised By

Andrew Black	Analytical Services Manager
Andrew Sullivan	Senior Analyst-Organic (NSW)
Emily Rosenberg	Senior Analyst-Metal (VIC)
Gabriele Cordero	Senior Analyst-Inorganic (NSW)
Gabriele Cordero	Senior Analyst-Metal (NSW)
Jonathon Angell	Senior Analyst-Inorganic (QLD)
Julie Kay	Senior Analyst-Inorganic (VIC)
Nibha Vaidya	Senior Analyst-Asbestos (NSW)



### Glenn Jackson General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

\* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please [click here](#).

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**Alliance Geotechnical**  
**10 Welder Road**  
**Seven Hills**  
**NSW 2147**



**NATA Accredited**  
**Accreditation Number 1261**  
**Site Number 18217**

Accredited for compliance with ISO/IEC 17025 – Testing  
 The results of the tests, calibrations and/or  
 measurements included in this document are traceable  
 to Australian/national standards.

**Attention:** **Steven Wallace**

**Report** **686434-W**  
 Project name **NORTH BANKSTOWN PUBLIC SCHOOL**  
 Project ID **9150**  
 Received Date **Nov 05, 2019**

Client Sample ID			R20 <b>TRIPSPIKE1</b>	<b>TRIPBLANK1</b>
Sample Matrix			<b>Water</b>	<b>Water</b>
Eurofins Sample No.			<b>S19-No06651</b>	<b>S19-No06652</b>
Date Sampled			<b>Nov 05, 2019</b>	<b>Nov 05, 2019</b>
Test/Reference	LOR	Unit		
<b>BTEX</b>				
Benzene	0.001	mg/L	97	< 0.001
Toluene	0.001	mg/L	97	< 0.001
Ethylbenzene	0.001	mg/L	97	< 0.001
m&p-Xylenes	0.002	mg/L	130	< 0.002
o-Xylene	0.001	mg/L	97	< 0.001
Xylenes - Total	0.003	mg/L	95	< 0.003
4-Bromofluorobenzene (surr.)	1	%	128	78

**Sample History**

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

**Description**

BTEX

**Testing Site**

Sydney

**Extracted**

Nov 06, 2019

**Holding Time**

14 Days

- Method: LTM-ORG-2010 TRH C6-C40



**Company Name:** Alliance Geotechnical  
**Address:** 10 Welder Road  
Seven Hills  
NSW 2147

**Project Name:** NORTH BANKSTOWN PUBLIC SCHOOL  
**Project ID:** 9150

**Order No.:**  
**Report #:** 686434  
**Phone:** 1800 288 188  
**Fax:** 02 9675 1888

**Received:** Nov 5, 2019 6:10 PM  
**Due:** Nov 12, 2019  
**Priority:** 5 Day  
**Contact Name:** Steven Wallace

**Eurofins Analytical Services Manager : Andrew Black**

Sample Detail						% Clay	Asbestos - AS4964	Asbestos Absence / Presence	HOLD	Metals M8	BTEX	Eurofins   mgt Suite B13	Moisture Set	Cation Exchange Capacity	Eurofins   mgt Suite B7	Alliance ENM Exemption Suite 2014 NSW EPA inc Asbestos AS4964
Melbourne Laboratory - NATA Site # 1254 & 14271														X		X
Sydney Laboratory - NATA Site # 18217							X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794						X										
Perth Laboratory - NATA Site # 23736																
External Laboratory																
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID											
1	TP01-0.0-0.1	Nov 05, 2019		Soil	S19-No06605		X					X	X		X	
2	TP02-0.0-0.2	Nov 05, 2019		Soil	S19-No06606		X					X	X		X	
3	TP02-0.2-0.4	Nov 05, 2019		Soil	S19-No06607								X			X
4	TP03-0.0-0.15	Nov 05, 2019		Soil	S19-No06608		X					X	X		X	
5	TP04-0.0-0.2	Nov 05, 2019		Soil	S19-No06609		X					X	X		X	
6	TP04-0.2-0.4	Nov 05, 2019		Soil	S19-No06610								X			X
7	TP05-0.0-0.2	Nov 05, 2019		Soil	S19-No06611		X					X	X		X	
8	TP05-0.5-0.7	Nov 05, 2019		Soil	S19-No06612		X						X	X		X
9	TP06-0.0-0.2	Nov 05, 2019		Soil	S19-No06613		X					X	X		X	

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Seven Hills  
NSW 2147

**Project Name:** NORTH BANKSTOWN PUBLIC SCHOOL  
**Project ID:** 9150

**Order No.:**  
**Report #:** 686434  
**Phone:** 1800 288 188  
**Fax:** 02 9675 1888

**Received:** Nov 5, 2019 6:10 PM  
**Due:** Nov 12, 2019  
**Priority:** 5 Day  
**Contact Name:** Steven Wallace

**Eurofins Analytical Services Manager : Andrew Black**

Sample Detail						% Clay	Asbestos - AS4964	Asbestos Absence / Presence	HOLD	Metals M8	BTEX	Eurofins   mgt Suite B13	Moisture Set	Cation Exchange Capacity	Eurofins   mgt Suite B7	Alliance ENM Exemption Suite 2014 NSW EPA inc Asbestos AS4964
Melbourne Laboratory - NATA Site # 1254 & 14271														X		X
Sydney Laboratory - NATA Site # 18217							X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794						X										
Perth Laboratory - NATA Site # 23736																
10	TP06-0.4-0.6	Nov 05, 2019		Soil	S19-No06614								X			X
11	BH07-0.0-0.2	Nov 05, 2019		Soil	S19-No06615		X					X	X		X	
12	BH07-0.2-0.4	Nov 05, 2019		Soil	S19-No06616								X			X
13	BH08-0.0-0.2	Nov 05, 2019		Soil	S19-No06617		X					X	X		X	
14	BH09-0.0-0.3	Nov 05, 2019		Soil	S19-No06618		X					X	X		X	
15	BH10-0.0-0.2	Nov 05, 2019		Soil	S19-No06619		X					X	X		X	
16	BH10-0.2-0.4	Nov 05, 2019		Soil	S19-No06620								X			X
17	BH11-0.0-0.1	Nov 05, 2019		Soil	S19-No06621		X					X	X		X	
18	TP12-0.0-0.1	Nov 05, 2019		Soil	S19-No06622		X					X	X		X	
19	TP12-0.1-0.3	Nov 05, 2019		Soil	S19-No06623								X			X
20	TP13-0.0-0.15	Nov 05, 2019		Soil	S19-No06624		X					X	X		X	
21	TP14-0.0-0.2	Nov 05, 2019		Soil	S19-No06625		X					X	X		X	

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Melbourne Laboratory - NATA Site # 1254 & 14271														X		X
Sydney Laboratory - NATA Site # 18217							X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794						X										
Perth Laboratory - NATA Site # 23736																
22	TP14-1.3-1.5	Nov 05, 2019		Soil	S19-No06626	X							X	X		X
23	BH15-0.0-0.1	Nov 05, 2019		Soil	S19-No06627		X					X	X		X	
24	BH16-0.0-0.1	Nov 05, 2019		Soil	S19-No06628		X					X	X		X	
25	BH16-0.1-0.3	Nov 05, 2019		Soil	S19-No06629								X			X
26	BH17-0.0-0.1	Nov 05, 2019		Soil	S19-No06630		X					X	X		X	
27	BH18-0.0-0.1	Nov 05, 2019		Soil	S19-No06631		X					X	X		X	
28	BH19-0.0-0.2	Nov 05, 2019		Soil	S19-No06632		X					X	X		X	
29	BH19-0.3-0.5	Nov 05, 2019		Soil	S19-No06633								X			X
30	TP20-0.0-0.2	Nov 05, 2019		Soil	S19-No06634		X					X	X		X	
31	TP20-0.3-0.5	Nov 05, 2019		Soil	S19-No06635								X			X
32	TP21-0.0-0.2	Nov 05, 2019		Soil	S19-No06636		X					X	X		X	
33	TP21-0.4-0.6	Nov 05, 2019		Soil	S19-No06637								X			X

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Melbourne Laboratory - NATA Site # 1254 & 14271														X		X
Sydney Laboratory - NATA Site # 18217							X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794						X										
Perth Laboratory - NATA Site # 23736																
34	TP22-0.0-0.2	Nov 05, 2019		Soil	S19-No06638		X					X	X		X	
35	TP23-0.0-0.2	Nov 05, 2019		Soil	S19-No06639		X					X	X		X	
36	TP24-0.0-0.2	Nov 05, 2019		Soil	S19-No06640		X					X	X		X	
37	TP24-0.8-1.0	Nov 05, 2019		Soil	S19-No06641	X							X	X		X
38	BH25-0.0-0.3	Nov 05, 2019		Soil	S19-No06642		X					X	X		X	
39	BH26-0.0-0.2	Nov 05, 2019		Soil	S19-No06643		X					X	X		X	
40	BH26-0.2-0.4	Nov 05, 2019		Soil	S19-No06644								X			X
41	BH27-0.0-0.2	Nov 05, 2019		Soil	S19-No06645		X					X	X		X	
42	BH28-0.0-0.2	Nov 05, 2019		Soil	S19-No06646		X					X	X		X	
43	DUP-01	Nov 05, 2019		Soil	S19-No06647					X			X			
44	DUP-02	Nov 05, 2019		Soil	S19-No06648					X			X			
45	TP14-FCS	Nov 05, 2019		Building	S19-No06649			X								

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Melbourne Laboratory - NATA Site # 1254 & 14271														X		X
Sydney Laboratory - NATA Site # 18217							X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794						X										
Perth Laboratory - NATA Site # 23736																
				Materials												
46	BH25-FCS	Nov 05, 2019		Building Materials	S19-No06650			X								
47	TRIPSPIKE1	Nov 05, 2019		Water	S19-No06651						X					
48	TRIPBLANK1	Nov 05, 2019		Water	S19-No06652						X					
49	TP01-0.1-0.3	Nov 05, 2019		Soil	S19-No06653				X							
50	TP03-0.15-0.3	Nov 05, 2019		Soil	S19-No06654				X							
51	BH09-0.3-0.5	Nov 05, 2019		Soil	S19-No06655				X							
52	BH11-0.1-0.3	Nov 05, 2019		Soil	S19-No06656				X							
53	TP13-0.15-0.3	Nov 05, 2019		Soil	S19-No06657				X							
54	TP14-0.8-1.0	Nov 05, 2019		Soil	S19-No06658				X							
55	BH15-0.1-0.3	Nov 05, 2019		Soil	S19-No06659				X							

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Sample Detail						% Clay	Asbestos - AS4964	Asbestos Absence / Presence	HOLD	Metals M8	BTEX	Eurofins   mgt Suite B13	Moisture Set	Cation Exchange Capacity	Eurofins   mgt Suite B7	Alliance ENM Exemption Suite 2014 NSW EPA Inc Asbestos AS4964
Melbourne Laboratory - NATA Site # 1254 & 14271														X		X
Sydney Laboratory - NATA Site # 18217							X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794						X										
Perth Laboratory - NATA Site # 23736																
56	BH17-0.1-0.3	Nov 05, 2019		Soil	S19-No06660				X							
57	BH18-0.1-0.3	Nov 05, 2019		Soil	S19-No06661				X							
58	TP22-0.3-0.5	Nov 05, 2019		Soil	S19-No06662				X							
59	TP23-0.3-0.5	Nov 05, 2019		Soil	S19-No06663				X							
60	BH25-0.3-0.5	Nov 05, 2019		Soil	S19-No06664				X							
Test Counts						3	28	2	12	2	2	28	44	3	28	14

## Internal Quality Control Review and Glossary

### General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

### Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

**\*\*NOTE:** pH duplicates are reported as a range NOT as RPD

### Units

**mg/kg:** milligrams per kilogram

**mg/L:** milligrams per litre

**ug/L:** micrograms per litre

**ppm:** Parts per million

**ppb:** Parts per billion

**%:** Percentage

**org/100mL:** Organisms per 100 millilitres

**NTU:** Nephelometric Turbidity Units

**MPN/100mL:** Most Probable Number of organisms per 100 millilitres

### Terms

<b>Dry</b>	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
<b>LOR</b>	Limit of Reporting.
<b>SPIKE</b>	Addition of the analyte to the sample and reported as percentage recovery.
<b>RPD</b>	Relative Percent Difference between two Duplicate pieces of analysis.
<b>LCS</b>	Laboratory Control Sample - reported as percent recovery.
<b>CRM</b>	Certified Reference Material - reported as percent recovery.
<b>Method Blank</b>	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
<b>Surr - Surrogate</b>	The addition of a like compound to the analyte target and reported as percentage recovery.
<b>Duplicate</b>	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
<b>USEPA</b>	United States Environmental Protection Agency
<b>APHA</b>	American Public Health Association
<b>TCLP</b>	Toxicity Characteristic Leaching Procedure
<b>COC</b>	Chain of Custody
<b>SRA</b>	Sample Receipt Advice
<b>QSM</b>	US Department of Defense Quality Systems Manual Version 5.3
<b>CP</b>	Client Parent - QC was performed on samples pertaining to this report
<b>NC</b>	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
<b>TEQ</b>	Toxic Equivalency Quotient

### QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

### QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " - " in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.



## Quality Control Results

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
<b>Method Blank</b>									
<b>BTEX</b>									
Benzene			mg/L	< 0.001			0.001	Pass	
Toluene			mg/L	< 0.001			0.001	Pass	
Ethylbenzene			mg/L	< 0.001			0.001	Pass	
m&p-Xylenes			mg/L	< 0.002			0.002	Pass	
o-Xylene			mg/L	< 0.001			0.001	Pass	
Xylenes - Total			mg/L	< 0.003			0.003	Pass	
<b>LCS - % Recovery</b>									
<b>BTEX</b>									
Benzene			%	82			70-130	Pass	
Toluene			%	85			70-130	Pass	
Ethylbenzene			%	85			70-130	Pass	
m&p-Xylenes			%	84			70-130	Pass	
o-Xylene			%	84			70-130	Pass	
Xylenes - Total			%	84			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
<b>Spike - % Recovery</b>									
<b>BTEX</b>				Result 1					
Benzene	S19-No07461	NCP	%	89			70-130	Pass	
Toluene	S19-No07461	NCP	%	94			70-130	Pass	
Ethylbenzene	S19-No07461	NCP	%	95			70-130	Pass	
m&p-Xylenes	S19-No07461	NCP	%	96			70-130	Pass	
o-Xylene	S19-No07461	NCP	%	91			70-130	Pass	
Xylenes - Total	S19-No07461	NCP	%	94			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
<b>Duplicate</b>									
<b>BTEX</b>				Result 1	Result 2	RPD			
Benzene	S19-No07484	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Toluene	S19-No07484	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Ethylbenzene	S19-No07484	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
m&p-Xylenes	S19-No07484	NCP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
o-Xylene	S19-No07484	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Xylenes - Total	S19-No07484	NCP	mg/L	< 0.003	< 0.003	<1	30%	Pass	

## Comments

### Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

### Qualifier Codes/Comments

Code	Description
R20	This sample is a Trip Spike and therefore all results are reported as a percentage

## Authorised By

Andrew Black                      Analytical Services Manager



**Glenn Jackson**

### General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

\* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please [click here](#).

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**Alliance Geotechnical**  
**10 Welder Road**  
**Seven Hills**  
**NSW 2147**



**NATA Accredited**  
**Accreditation Number 1261**  
**Site Number 18217**

Accredited for compliance with ISO/IEC 17025-Testing  
 The results of the tests, calibrations and/or  
 measurements included in this document are traceable  
 to Australian/national standards.

**Attention:** Steven Wallace  
**Report** 686434-AID  
**Project Name** **NORTH BANKSTOWN PUBLIC SCHOOL**  
**Project ID** **9150**  
**Received Date** Nov 05, 2019  
**Date Reported** Nov 12, 2019

### Methodology:

Asbestos Fibre  
 Identification

Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques.

*NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*

Unknown Mineral  
 Fibres

Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity.

*NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*

Subsampling Soil  
 Samples

The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed.

*NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*

Bonded asbestos-  
 containing material  
 (ACM)

The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination. The resultant material is then further examined in accordance with AS 4964 - 2004.

*NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*

Limit of Reporting

The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w).

The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk).

*NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos". This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

**Project Name** NORTH BANKSTOWN PUBLIC SCHOOL  
**Project ID** 9150  
**Date Sampled** Nov 05, 2019  
**Report** 686434-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
TP01-0.0-0.1	19-No06605	Nov 05, 2019	Approximate Sample 69g Sample consisted of: Brown coarse-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP02-0.0-0.2	19-No06606	Nov 05, 2019	Approximate Sample 125g Sample consisted of: Brown coarse-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP02-0.2-0.4	19-No06607	Nov 05, 2019	Approximate Sample 92g Sample consisted of: Brown coarse-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP03-0.0-0.15	19-No06608	Nov 05, 2019	Approximate Sample 89g Sample consisted of: Brown coarse-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP04-0.0-0.2	19-No06609	Nov 05, 2019	Approximate Sample 72g Sample consisted of: Brown coarse-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP04-0.2-0.4	19-No06610	Nov 05, 2019	Approximate Sample 118g Sample consisted of: Brown coarse-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP05-0.0-0.2	19-No06611	Nov 05, 2019	Approximate Sample 86g Sample consisted of: Brown coarse-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP05-0.5-0.7	19-No06612	Nov 05, 2019	Approximate Sample 121g Sample consisted of: Brown coarse-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
TP06-0.0-0.2	19-No06613	Nov 05, 2019	Approximate Sample 120g Sample consisted of: Brown coarse-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP06-0.4-0.6	19-No06614	Nov 05, 2019	Approximate Sample 117g Sample consisted of: Brown coarse-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
BH07-0.0-0.2	19-No06615	Nov 05, 2019	Approximate Sample 50g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
BH07-0.2-0.4	19-No06616	Nov 05, 2019	Approximate Sample 121g Sample consisted of: Brown coarse-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
BH08-0.0-0.2	19-No06617	Nov 05, 2019	Approximate Sample 90g Sample consisted of: Brown coarse-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
BH09-0.0-0.3	19-No06618	Nov 05, 2019	Approximate Sample 117g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
BH10-0.0-0.2	19-No06619	Nov 05, 2019	Approximate Sample 65g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
BH10-0.2-0.4	19-No06620	Nov 05, 2019	Approximate Sample 101g Sample consisted of: Brown coarse-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
BH11-0.0-0.1	19-No06621	Nov 05, 2019	Approximate Sample 47g Sample consisted of: Brown coarse-grained soil, organic debris and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP12-0.0-0.1	19-No06622	Nov 05, 2019	Approximate Sample 109g Sample consisted of: Brown coarse-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP12-0.1-0.3	19-No06623	Nov 05, 2019	Approximate Sample 117g Sample consisted of: Brown coarse-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP13-0.0-0.15	19-No06624	Nov 05, 2019	Approximate Sample 108g Sample consisted of: Brown coarse-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP14-0.0-0.2	19-No06625	Nov 05, 2019	Approximate Sample 197g Sample consisted of: Brown coarse-grained soil, concrete cement-like material and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
TP14-1.3-1.5	19-No06626	Nov 05, 2019	Approximate Sample 74g Sample consisted of: Brown coarse-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
BH15-0.0-0.1	19-No06627	Nov 05, 2019	Approximate Sample 41g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
BH16-0.0-0.1	19-No06628	Nov 05, 2019	Approximate Sample 88g Sample consisted of: Brown coarse-grained soil, organic debris and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
BH16-0.1-0.3	19-No06629	Nov 05, 2019	Approximate Sample 122g Sample consisted of: Brown coarse-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
BH17-0.0-0.1	19-No06630	Nov 05, 2019	Approximate Sample 65g Sample consisted of: Brown coarse-grained soil, organic debris and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
BH18-0.0-0.1	19-No06631	Nov 05, 2019	Approximate Sample 100g Sample consisted of: Brown coarse-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
BH19-0.0-0.2	19-No06632	Nov 05, 2019	Approximate Sample 94g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
BH19-0.3-0.5	19-No06633	Nov 05, 2019	Approximate Sample 61g Sample consisted of: Brown coarse-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP20-0.0-0.2	19-No06634	Nov 05, 2019	Approximate Sample 93g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP20-0.3-0.5	19-No06635	Nov 05, 2019	Approximate Sample 96g Sample consisted of: Brown coarse-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP21-0.0-0.2	19-No06636	Nov 05, 2019	Approximate Sample 96g Sample consisted of: Brown coarse-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP21-0.4-0.6	19-No06637	Nov 05, 2019	Approximate Sample 80g Sample consisted of: Brown coarse-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP22-0.0-0.2	19-No06638	Nov 05, 2019	Approximate Sample 69g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
TP23-0.0-0.2	19-No06639	Nov 05, 2019	Approximate Sample 111g Sample consisted of: Brown coarse-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP24-0.0-0.2	19-No06640	Nov 05, 2019	Approximate Sample 129g Sample consisted of: Brown coarse-grained clayey soil, concrete cement-like material and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP24-0.8-1.0	19-No06641	Nov 05, 2019	Approximate Sample 100g Sample consisted of: Brown coarse-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
BH25-0.0-0.3	19-No06642	Nov 05, 2019	Approximate Sample 104g Sample consisted of: Brown coarse-grained soil, bituminous material and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
BH26-0.0-0.2	19-No06643	Nov 05, 2019	Approximate Sample 38g Sample consisted of: Brown coarse-grained soil, bitumen-like material, organic debris and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
BH26-0.2-0.4	19-No06644	Nov 05, 2019	Approximate Sample 76g Sample consisted of: Brown coarse-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
BH27-0.0-0.2	19-No06645	Nov 05, 2019	Approximate Sample 105g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
BH28-0.0-0.2	19-No06646	Nov 05, 2019	Approximate Sample 59g Sample consisted of: Brown coarse-grained soil, bitumen-like material and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP14-FCS	19-No06649	Nov 05, 2019	Approximate Sample 11g / 40x25x4mm Sample consisted of: Grey compressed fibre cement fragment	Chrysotile and amosite asbestos detected.
BH25-FCS	19-No06650	Nov 05, 2019	Approximate Sample 4g / 40x10x4mm Sample consisted of: Grey compressed fibre cement fragment	No asbestos detected. Organic fibre detected. No trace asbestos detected.



**Sample History**

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported. A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Nov 06, 2019	Indefinite
Asbestos - LTM-ASB-8020	Sydney	Nov 06, 2019	Indefinite

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**Address:** 10 Welder Road  
Seven Hills  
NSW 2147

**Project Name:** NORTH BANKSTOWN PUBLIC SCHOOL  
**Project ID:** 9150

**Order No.:**  
**Report #:** 686434  
**Phone:** 1800 288 188  
**Fax:** 02 9675 1888

**Received:** Nov 5, 2019 6:10 PM  
**Due:** Nov 12, 2019  
**Priority:** 5 Day  
**Contact Name:** Steven Wallace

**Eurofins Analytical Services Manager : Andrew Black**

Sample Detail						% Clay	Asbestos - AS4964	Asbestos Absence / Presence	HOLD	Metals M8	BTEX	Eurofins   mgt Suite B13	Moisture Set	Cation Exchange Capacity	Eurofins   mgt Suite B7	Alliance ENM Exemption Suite 2014 NSW EPA inc Asbestos AS4964
Melbourne Laboratory - NATA Site # 1254 & 14271														X		X
Sydney Laboratory - NATA Site # 18217							X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794						X										
Perth Laboratory - NATA Site # 23736																
External Laboratory																
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID											
1	TP01-0.0-0.1	Nov 05, 2019		Soil	S19-No06605		X					X	X		X	
2	TP02-0.0-0.2	Nov 05, 2019		Soil	S19-No06606		X					X	X		X	
3	TP02-0.2-0.4	Nov 05, 2019		Soil	S19-No06607								X			X
4	TP03-0.0-0.15	Nov 05, 2019		Soil	S19-No06608		X					X	X		X	
5	TP04-0.0-0.2	Nov 05, 2019		Soil	S19-No06609		X					X	X		X	
6	TP04-0.2-0.4	Nov 05, 2019		Soil	S19-No06610								X			X
7	TP05-0.0-0.2	Nov 05, 2019		Soil	S19-No06611		X					X	X		X	
8	TP05-0.5-0.7	Nov 05, 2019		Soil	S19-No06612		X						X	X		X
9	TP06-0.0-0.2	Nov 05, 2019		Soil	S19-No06613		X					X	X		X	

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Melbourne Laboratory - NATA Site # 1254 & 14271														X		X
Sydney Laboratory - NATA Site # 18217							X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794						X										
Perth Laboratory - NATA Site # 23736																
10	TP06-0.4-0.6	Nov 05, 2019		Soil	S19-No06614								X			X
11	BH07-0.0-0.2	Nov 05, 2019		Soil	S19-No06615		X					X	X		X	
12	BH07-0.2-0.4	Nov 05, 2019		Soil	S19-No06616								X			X
13	BH08-0.0-0.2	Nov 05, 2019		Soil	S19-No06617		X					X	X		X	
14	BH09-0.0-0.3	Nov 05, 2019		Soil	S19-No06618		X					X	X		X	
15	BH10-0.0-0.2	Nov 05, 2019		Soil	S19-No06619		X					X	X		X	
16	BH10-0.2-0.4	Nov 05, 2019		Soil	S19-No06620								X			X
17	BH11-0.0-0.1	Nov 05, 2019		Soil	S19-No06621		X					X	X		X	
18	TP12-0.0-0.1	Nov 05, 2019		Soil	S19-No06622		X					X	X		X	
19	TP12-0.1-0.3	Nov 05, 2019		Soil	S19-No06623								X			X
20	TP13-0.0-0.15	Nov 05, 2019		Soil	S19-No06624		X					X	X		X	
21	TP14-0.0-0.2	Nov 05, 2019		Soil	S19-No06625		X					X	X		X	

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<b>Melbourne Laboratory - NATA Site # 1254 &amp; 14271</b>														X		X
<b>Sydney Laboratory - NATA Site # 18217</b>							X	X	X	X	X	X	X	X	X	X
<b>Brisbane Laboratory - NATA Site # 20794</b>						X										
<b>Perth Laboratory - NATA Site # 23736</b>																
22	TP14-1.3-1.5	Nov 05, 2019		Soil	S19-No06626	X							X	X		X
23	BH15-0.0-0.1	Nov 05, 2019		Soil	S19-No06627		X					X	X		X	
24	BH16-0.0-0.1	Nov 05, 2019		Soil	S19-No06628		X					X	X		X	
25	BH16-0.1-0.3	Nov 05, 2019		Soil	S19-No06629								X			X
26	BH17-0.0-0.1	Nov 05, 2019		Soil	S19-No06630		X					X	X		X	
27	BH18-0.0-0.1	Nov 05, 2019		Soil	S19-No06631		X					X	X		X	
28	BH19-0.0-0.2	Nov 05, 2019		Soil	S19-No06632		X					X	X		X	
29	BH19-0.3-0.5	Nov 05, 2019		Soil	S19-No06633								X			X
30	TP20-0.0-0.2	Nov 05, 2019		Soil	S19-No06634		X					X	X		X	
31	TP20-0.3-0.5	Nov 05, 2019		Soil	S19-No06635								X			X
32	TP21-0.0-0.2	Nov 05, 2019		Soil	S19-No06636		X					X	X		X	
33	TP21-0.4-0.6	Nov 05, 2019		Soil	S19-No06637								X			X

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<b>Melbourne Laboratory - NATA Site # 1254 &amp; 14271</b>														X		X
<b>Sydney Laboratory - NATA Site # 18217</b>							X	X	X	X	X	X	X	X	X	X
<b>Brisbane Laboratory - NATA Site # 20794</b>						X										
<b>Perth Laboratory - NATA Site # 23736</b>																
34	TP22-0.0-0.2	Nov 05, 2019		Soil	S19-No06638		X					X	X		X	
35	TP23-0.0-0.2	Nov 05, 2019		Soil	S19-No06639		X					X	X		X	
36	TP24-0.0-0.2	Nov 05, 2019		Soil	S19-No06640		X					X	X		X	
37	TP24-0.8-1.0	Nov 05, 2019		Soil	S19-No06641	X							X	X		X
38	BH25-0.0-0.3	Nov 05, 2019		Soil	S19-No06642		X					X	X		X	
39	BH26-0.0-0.2	Nov 05, 2019		Soil	S19-No06643		X					X	X		X	
40	BH26-0.2-0.4	Nov 05, 2019		Soil	S19-No06644								X			X
41	BH27-0.0-0.2	Nov 05, 2019		Soil	S19-No06645		X					X	X		X	
42	BH28-0.0-0.2	Nov 05, 2019		Soil	S19-No06646		X					X	X		X	
43	DUP-01	Nov 05, 2019		Soil	S19-No06647					X			X			
44	DUP-02	Nov 05, 2019		Soil	S19-No06648					X			X			
45	TP14-FCS	Nov 05, 2019		Building	S19-No06649			X								

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Sample Detail						% Clay	Asbestos - AS4964	Asbestos Absence / Presence	HOLD	Metals M8	BTEX	Eurofins   mgt Suite B13	Moisture Set	Cation Exchange Capacity	Eurofins   mgt Suite B7	Alliance ENM Exemption Suite 2014 NSW EPA inc Asbestos AS4964
Melbourne Laboratory - NATA Site # 1254 & 14271														X		X
Sydney Laboratory - NATA Site # 18217							X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794						X										
Perth Laboratory - NATA Site # 23736																
				Materials												
46	BH25-FCS	Nov 05, 2019		Building Materials	S19-No06650			X								
47	TRIPSPIKE1	Nov 05, 2019		Water	S19-No06651						X					
48	TRIPBLANK1	Nov 05, 2019		Water	S19-No06652						X					
49	TP01-0.1-0.3	Nov 05, 2019		Soil	S19-No06653				X							
50	TP03-0.15-0.3	Nov 05, 2019		Soil	S19-No06654				X							
51	BH09-0.3-0.5	Nov 05, 2019		Soil	S19-No06655				X							
52	BH11-0.1-0.3	Nov 05, 2019		Soil	S19-No06656				X							
53	TP13-0.15-0.3	Nov 05, 2019		Soil	S19-No06657				X							
54	TP14-0.8-1.0	Nov 05, 2019		Soil	S19-No06658				X							
55	BH15-0.1-0.3	Nov 05, 2019		Soil	S19-No06659				X							

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<b>Melbourne Laboratory - NATA Site # 1254 &amp; 14271</b>														X		X
<b>Sydney Laboratory - NATA Site # 18217</b>							X	X	X	X	X	X	X	X	X	X
<b>Brisbane Laboratory - NATA Site # 20794</b>						X										
<b>Perth Laboratory - NATA Site # 23736</b>																
56	BH17-0.1-0.3	Nov 05, 2019		Soil	S19-No06660				X							
57	BH18-0.1-0.3	Nov 05, 2019		Soil	S19-No06661				X							
58	TP22-0.3-0.5	Nov 05, 2019		Soil	S19-No06662				X							
59	TP23-0.3-0.5	Nov 05, 2019		Soil	S19-No06663				X							
60	BH25-0.3-0.5	Nov 05, 2019		Soil	S19-No06664				X							
<b>Test Counts</b>						3	28	2	12	2	2	28	44	3	28	14



## Internal Quality Control Review and Glossary

### General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

### Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

### Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

### Terms

<b>Dry</b>	Sample is dried by heating prior to analysis
<b>LOR</b>	Limit of Reporting
<b>COC</b>	Chain of Custody
<b>SRA</b>	Sample Receipt Advice
<b>ISO</b>	International Standards Organisation
<b>AS</b>	Australian Standards
<b>WA DOH</b>	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
<b>NEPM</b>	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
<b>ACM</b>	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
<b>AF</b>	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to "non-bonded / friable".
<b>FA</b>	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
<b>Friable</b>	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory's remit to assess degree of friability.
<b>Trace Analysis</b>	Analytical procedure used to detect the presence of respirable fibres in the matrix.

## Comments

### Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

### Qualifier Codes/Comments

Code	Description
N/A	Not applicable

### Asbestos Counter/Identifier:

Sayeed Abu Senior Analyst-Asbestos (NSW)

### Authorised by:

Laxman Dias Senior Analyst-Asbestos (NSW)



**Glenn Jackson**  
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

\* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please [click here](#).

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## CERTIFICATE OF ANALYSIS

**Work Order** : **ES1936614**  
**Client** : **ALLIANCE GEOTECHNICAL**  
**Contact** : Enviro ALLIANCE GEO  
**Address** : 10 Welder Road, Seven Hills, NSW  
**Telephone** : ----  
**Project** : 9150 North Bankstown Public School  
**Order number** : ----  
**C-O-C number** : ----  
**Sampler** : A. Wallace, Stephen Wallace  
**Site** : ----  
**Quote number** : EN/222  
**No. of samples received** : 2  
**No. of samples analysed** : 2

**Page** : 1 of 2  
**Laboratory** : Environmental Division Sydney  
**Contact** : Customer Services ES  
**Address** : 277-289 Woodpark Road Smithfield NSW Australia 2164  
**Telephone** : +61-2-8784 8555  
**Date Samples Received** : 06-Nov-2019 13:45  
**Date Analysis Commenced** : 08-Nov-2019  
**Issue Date** : 12-Nov-2019 12:45



Accreditation No. 825  
 Accredited for compliance with  
 ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

**Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.**

### Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Celine Conceicao	Senior Spectroscopist	Sydney Inorganics, Smithfield, NSW



## General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.  
 LOR = Limit of reporting  
 ^ = This result is computed from individual analyte detections at or above the level of reporting  
 ø = ALS is not NATA accredited for these tests.  
 ~ = Indicates an estimated value.

## Analytical Results

Sub-Matrix: SOIL  
 (Matrix: SOIL)

Client sample ID

				DUP-1A	DUP-2A	----	----	----
Client sampling date / time				05-Nov-2019 00:00	05-Nov-2019 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES1936614-001	ES1936614-002	-----	-----	-----
				Result	Result	----	----	----
<b>EA055: Moisture Content (Dried @ 105-110°C)</b>								
Moisture Content	----	1.0	%	13.6	11.4	----	----	----
<b>EG005(ED093)T: Total Metals by ICP-AES</b>								
Arsenic	7440-38-2	5	mg/kg	6	9	----	----	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	----	----	----
Chromium	7440-47-3	2	mg/kg	18	16	----	----	----
Copper	7440-50-8	5	mg/kg	27	11	----	----	----
Lead	7439-92-1	5	mg/kg	54	39	----	----	----
Nickel	7440-02-0	2	mg/kg	8	5	----	----	----
Zinc	7440-66-6	5	mg/kg	59	35	----	----	----
<b>EG035T: Total Recoverable Mercury by FIMS</b>								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	----	----	----



# CHAIN OF CUSTODY RECORD

LAB 50 005 005 021

☒ Sydney Laboratory  
Unit F3 Bld F, 16 Mars Rd, Lane Cove West, NSW 2055  
02 9990 8400 EnviroSampleNSW@eurofins.com

☐ Brisbane Laboratory  
Unit 1, 21 Smallwood Pl, Maroon, QLD 4172  
07 3802 4600 EnviroSampleQLD@eurofins.com

☐ Perth Laboratory  
Unit 2, 97 Leach Highway, Kardinia WA 6105  
08 9251 9800 EnviroSampleWA@eurofins.com

☐ Melbourne Laboratory  
2 Kingston Town Cres, Oakleigh, VIC 3166  
03 5994 9000 EnviroSampleVIC@eurofins.com

Company	Altance Geotechnical Pty Ltd.	Project No	9150	Project Manager	S. Waksace	Samples	A. Williams, S. Bailey
Address	10 Welder Road, Seven Hills	Project Name	North bankstown Public Sch.	EDD Format (Sed, Equis, Custom)		Handed over by	"
Contact Name	A. Williams					Email for Invoice	admin@altgo.com.au
Phone No	0414 543 007					Email for Results	enviro@altgo.com.au
Special Directions		Analyses	(Note: Where metals are requested, please specify "Total" or "Filtered" / SUITE code must be used to attract SUITE pricing)				
Purchase Order						Turnaround Time (TAT) Requirements Detail will be 5 days if not indicated	
Quote ID No							
No	Client Sample ID	Sampled Date/Time (dd/mm/yy hh:mm)	Matrix (Solid (S) Water (W))	TRH			Overnight (9am)* <input type="checkbox"/> 1 Day* <input type="checkbox"/> 3 Day* <input type="checkbox"/> Other ( )
				BTET			
1	TPG1-0.0-0.1	5/11/19	S	X	X	X	Sample Comments / Dangerous Goods Hazard Warning
2	TP01-0.1-0.3			X	X	X	
3	TP02-0.0-0.2			X	X	X	
4	TP02-0.2-0.4			X	X	X	
5	TP03-0.0-0.15			X	X	X	
6	TP03-0.15-0.3			X	X	X	
7	TP04-0.0-0.2			X	X	X	
8	TP04-0.2-0.4			X	X	X	
9	TP05-0.0-0.2			X	X	X	
10	TP05-0.5-0.7			X	X	X	
Total Counts							
Method of Shipment		<input checked="" type="checkbox"/> Courier #	<input type="checkbox"/> Hand Delivered	Name		Signature	Date
Eurofins   mgf		Received By	Grave Turbine	Signature			5/11/19
Laboratory Use Only		Received By		Signature			6/10
		SND   BNE   MEL   PER   ADL   NTL   DRW		Signature			6/8/19





# CHAIN OF CUSTODY RECORD

AS/NZS 9300:2015

☒ Sydney Laboratory  
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☐ Brisbane Laboratory  
Unit 1, 21 Seabrook Pl, Murrumbidgee, QLD 4172  
07 3902 4000 EnviroSampleQLD@eurofins.com

☐ Perth Laboratory  
Unit 2, 91 Leach Highway, Kewdale WA 6105  
08 9251 9000 EnviroSampleWA@eurofins.com

☐ Melbourne Laboratory  
2 Kingston Team Cade, Oakleigh, VIC 3166  
03 8564 5000 EnviroSampleVIC@eurofins.com

Company		Alliance Geo Pty Ltd.		Project No		Q150		Project Manager		S. Wallace		Sample(s)		A. Williams, S. Scully	
Address		10 Weller Road, Seven Hills.		Project Name		North Yarramundi public school.		EDD Format (ESdt, EQuS, Custom)				Handed over by		"	
Contact Name		A. Williams										Email for Invoice		admin@alliance-geo.com.au	
Phone No		0418 343 007										Email for Results		enviro@alliance-geo.com.au	
Special Directions				Analyses		(Note: Where metals are requested, please specify "Total" or "Filtered"   SUITE mode must be used to attract SUITE pricing)						Containers		Turnaround Time (TAT) Requirements (optional will be 5 days if not stated)	
Purchase Order														Overnight (9am)* <input type="checkbox"/> 1 Day* <input type="checkbox"/> 2 Day* <input type="checkbox"/> 3 Day* <input checked="" type="checkbox"/> 5 Day* *Suchthings apply	
Quote ID No														Sample Comments / Dangerous Goods Hazard Warning	
Client Sample ID		TP06-0.0-0.2		Sampled Date/Time (dd/mm/yy hh:mm)		5/11/19		Matrix (Solid (S) Water (W))		S		1L Plastic		x	
		TP06-0.4-0.6										250mL Plastic		x	
		BH07-0.0-0.2										125mL Plastic		x	
		BH07-0.2-0.4										200mL Amber Glass		x	
		BH08-0.0-0.2										40mL VOA vial		x	
		BH09-0.0-0.3										500mL PFAS Bottle		x	
		BH09-0.3-0.5										Jar (Glass or HDPE)		x	
		BH10-0.0-0.2										Other (Asbestos AS4964 - WA Guidelines)		x	
		BH10-0.2-0.4												x	
		BH11-0.0-0.1												x	
Method of Shipment		<input checked="" type="checkbox"/> Courier (# ) <input type="checkbox"/> Hand Delivered													
Eurofins Ingt Laboratory/Use Only		Received By: Grace Timmerman		Signature: A. Williams		Date: 5/11/19		Time: 6:10		Temperature: 8.8					
Received By		Signature: Grace Timmerman		Signature: A. Williams		Date: 5/11/19		Time: 6:10		Temperature: 8.8					

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02 9500 9400 | Sydney Laboratory | 16 Mars Rd, Lane Cove West, NSW 2066



# CHAIN OF CUSTODY RECORD

ABN 59 005 085 821

☒ Sydney Laboratory

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02 9500 9400 EnviroSampleNSW@eurofins.com

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☐ Perth Laboratory

Unit 2, 91 Leach Highway, Kewdale WA 6105  
08 9251 9500 EnviroSampleWA@eurofins.com

☐ Melbourne Laboratory

2 Kingspan, 17000 Dandenong, VIC 3166  
03 8554 5000 EnviroSampleVIC@eurofins.com

Company		Alliance Electronics		Project Name		North Gannawarra Public School		Project Manager		S. Wallace		Sample(s)		A. Williams, S. Scully	
Address		110 WILCOX ROAD, STEVEN HILLS		Project Name				EDD Format (ESD, EQUIS, Custom)				Handed over by		"	
Contact Name		A. Williams		Project Name				Email for Invoice		admin@allgo.com.au		Email for Results		enviro@allgo.com.au	
Phone No		0415 343 007.		Project Name				Requirements		Turnaround Time (TAT) Requirements (Order will be 5 days if not stated)		Containers		1L Plastic 250mL Plastic 125mL Plastic 200mL Amber Glass 40mL VOA vial 500mL PFAS Bottle Jar (Glass or HDPE) Other (Asbestos AS4564 WA Guidelines)	
Special Directions				Project Name				Overnight (9am)* 1 Day* 2 Day* 3 Day* 5 Day* Other ( )		Sample Comments / Dangerous Goods Hazard Warning					
Purchase Order				Project Name											
Quote ID #				Project Name											
Client Sample ID		5H11-0.1-0.3		Sampled Date/Time (dd/mm/yy hh:mm)		5/11/19		Matrix (Solid (S) Water (W))		S					
1		5H11-0.1-0.3		5/11/19		S		TRIT							
2		TP12-0.0-0.1						BTX							
3		TP12-0.1-0.3						PAH							
4		TP13-0.0-0.15						BCP							
5		TP13-0.15-0.3						METALS							
6		TP14-0.0-0.2						PCB'S							
7		TP14-0.8-1.0						Asbestos (Presume/Asbestos)							
8		TP14-1.3-1.5						AG ENM SUNE							
9		PB15-0.0-0.1						CEC							
10		PB15-0.1-0.3						CHAY CONTENT							
Total Counts															
Method of Shipment		<input checked="" type="checkbox"/> Courier (# ) <input type="checkbox"/> Hand Delivered		Name		A. Williams		Signature				Date		5/11/19	
Eurofins   mgf Laboratory Use Only		Received By: Grace Thurman		Signature				Date		5/11/19		Time		6:10	
Received By:		Signature		Date		5/11/19		Time		6:10		Temperature		2.8	
SYD   BNE   MEL   PER   ADL   NT   DRW		Signature		Date		5/11/19		Time		6:10		Report No		686434	





# CHAIN OF CUSTODY RECORD

EN 15005:05-05-12

☒ Sydney Laboratory

Unit F3 Bld F, 16 Mars Rd, Lane Cove West, NSW 2066  
02 9300 8400 EnviroSampleNSW@eurofins.com

☐ Brisbane Laboratory

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☐ Perth Laboratory

Unit 2, 91 Leach Highway, Kewdale WA 6105  
08 9251 9900 EnviroSampleWA@eurofins.com

☐ Melbourne Laboratory

2 Kingston Town Close, Oakleigh VIC 3166  
03 8564 5000 EnviroSampleVIC@eurofins.com

Company **ALLIANCE CONCRETE PTY LTD**

Address **10 WELDON ROAD,  
SEVEN HILLS**

Contact Name **A. WILLIAMS**

Phone No **0418 343 007**

Special Directions

Purchase Order

Quote ID No

Project No **10000000000000000000**

Project Name **North Gannaburn public  
Highway School**

Project Manager **S. WALLACE**

EDD Format  
(ESdat, EQUS,  
Custom)

Sampler(s)

Handed over by

Email for Invoice

Email for Results

Containers

Turnaround Time (TAT)

Requirements (please call us 4 days prior)

Sample Comments / Dangerous Goods Hazard Warning

1L Plastic

250mL Plastic

125mL Plastic

200mL Amber Glass

40mL VOA vial

500mL PFAS Bottle

Jar (Glass or HDPE)

Other (Asbestos AS4564 WA Guidelines)

Overnight (2am)\*

1 Day\*

3 Day\*

5 Day\*

Other (

Method of Shipment

Counter (#) ☐ Hand Delivered ☐ Postal

Name

Signature

Date

Time

Laboratory Use Only

Received By **Gina Turner**

Signature

Date

Time

Report No

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Standard Terms and Conditions for the Supply of Laboratory Services (1 August 2017)



# CHAIN OF CUSTODY RECORD

AN ISO 9001:2015

☒ Sydney Laboratory  
Unit 13 Bldg 1, 16 Mars Rd, Lane Cove West, NSW 2086  
02 9900 1400 EnviroSampleNSW@eurofins.com

☐ Brisbane Laboratory  
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07 3902 4800 EnviroSampleQLD@eurofins.com

☐ Perth Laboratory  
Unit 2, 91 Leach Highway, Kewdale, WA 6105  
08 9251 1800 EnviroSampleWA@eurofins.com

☐ Melbourne Laboratory  
2 Kingston Town Close, Oakleigh, VIC 3166  
03 8564 5000 EnviroSampleVIC@eurofins.com

Company		ALLIANCE GEOTECHNICAL		Project No		9150	
Address		10 WELDER ROAD, SEVEN HILLS NSW		Project Name		North bankstown public school	
Contact Name		Alexander Williams		EOD Format (ES&A, EQ&S, Custom)		S. Scurrace	
Phone No		*0418 343 007		Sampler(s)		Williams, S. Scurrace	
Special Directions				Handed over by			
Purchase Order				Email for Invoice		adwin@allgeo.com.au	
Quote ID No				Email for Results		adwin@allgeo.com.au	
Client Sample ID		TP21-0.0-0.2		Containers		Turnaround Time (TAT) Requirements (Please see 3 days if not ticked)	
Sampled Date/Time (dd/mm/yyyy)		5/11/19		1L Plastic		<input type="checkbox"/> Overnight (9am*)	
Matrix (Solid (S) Water (W))		S		250mL Plastic		<input type="checkbox"/> 1 Day*	
Analyses		TRIT, DTET, PAH, OCP, METALS, PCB'S, Asbestos (Presence/Absence), AG ENM SUITE, CEC, CLAY CONTENT.		125mL Plastic		<input type="checkbox"/> 2 Day*	
				200mL Amber Glass		<input type="checkbox"/> 3 Day*	
				40mL VOA vial		<input checked="" type="checkbox"/> 5 Day	
				500mL PFAS Bottle		* Surcharges apply	
				Jar (Glass or HDPE)		Sample Comments / Dangerous Goods Hazard Warning	
				Other (Asbestos AS4594 WA Guidelines)			
1		TP21-0.0-0.2		X		11	
2		TP21-0.0-0.6		X		11	
3		TP22-0.0-0.2		X		11	
4		TP22-0.3-0.5		X		11	
5		TP23-0.0-0.2		X		11	
6		TP23-0.3-0.5		X		11	
7		TP24-0.0-0.2		X		11	
8		TP24-0.8-1.0		X		11	
9		TP25-0.0-0.3		X		11	
10		TP25-0.3-0.5		X		11	
Total Counts							
Method of Shipment		<input checked="" type="checkbox"/> Courier # ) <input type="checkbox"/> Hand Delivered		Postal		Name	
Eurofins Ingt Laboratory Use Only		Received By: Grace Turner		Signature: A. Williams		Date: 5/11/19	
Received By:		Signature: Grace Turner		Signature: Grace Turner		Date: 5/11/19	
Signature:		Signature: Grace Turner		Signature: Grace Turner		Date: 5/11/19	
Date:		Date: 5/11/19		Date: 5/11/19		Time: 4:00pm	
Time:		Time: 6:10		Time: 6:10		Temperature: 8.8	
Report No:		Report No: 686434		Report No: 686434		Report No: 686434	

Submission of samples to the laboratory will be deemed as acceptance of Eurofins Ingt Standard Terms and Conditions unless agreed otherwise. A copy of Eurofins Ingt Standard Terms and Conditions is available on request.

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ABN 50 005 086 52

**Sydney Laboratory**  
Unit F3 Bld.F, 16 Mars  
02 9900 8400 Enviro

Unit F3 Bld.F, 16 Mairs Rd, Lane Cove West, NSW 2066  
02 9900 8400 EnviroSampleNSW@eurofins.com

**Brisbane Laboratory**  
Unit 1, 21 Smallwood Pl  
07 3902 4600    EnviroS

Unit 1, 21 Smallwood Pl., Murrarie, QLD 4177  
07 3902 4600    [EnviroSampleQLD@eurofin.com.au](mailto:EnviroSampleQLD@eurofin.com.au)

☐ **Perth Laboratory**  
Unit 2, 91 Leach Highway  
Perth 9251 9800 Fax

Unit 2, 91 Leach Highway, Kowdalo WA 6105  
 PR 9251 9600 EvidoSamlwM@outrofine

☐ **Melbourne Laboratory**  
2 Kingston Town Close, O  
03 8564 6000 Fax: 03 8564 6001

2 Kingston Town Close, Oakleigh, VIC 3166  
03 8554 5000 Fax 03 8554 5001

## CHAIN OF CUSTODY RECORD

ABN 50 005 086 52

**Sydney Laboratory**  
Unit F3 Bld.F, 16 Mars  
02 9900 8400 Enviro

Unit F3 Bld.F, 16 Mairs Rd, Lane Cove West, NSW 2066  
02 9900 8400 EnviroSampleNSW@eurofins.com

**Brisbane Laboratory**  
Unit 1, 21 Smallwood Pl  
07 3902 4600    EnviroS

Unit 1, 21 Smallwood Pl., Murrarie, QLD 4177  
07 3902 4600    [EnviroSampleQLD@eurofin.com.au](mailto:EnviroSampleQLD@eurofin.com.au)

☐ **Perth Laboratory**  
Unit 2, 91 Leach Highway  
Perth 9251 9800 Fax

Unit 2, 91 Leach Highway, Kowdalo WA 6105  
 PR 9251 9600 EvidoSamlwM@outrofine

☐ **Melbourne Laboratory**  
2 Kingston Town Close, O  
03 8564 6000 Fax: 03 8564 6001

2 Kingston Town Close, Oakleigh, VIC 3166  
03 8554 5000 Fax 03 8554 5001

Company		Project Name		Project Manager		Sampler(s)	
ALLIANCE GEOTECHNICAL		9150		S. WALLACE		A. Williams, S. Scully	
Address		Project Name		EDD Format (ES&I, EQuIS, Custom)		Handed over by	
10 WELDER ROAD, SEVEN HILLS NSW		North Brisbane				"	
Contact Name						"	
Alexander Williams						"	
Phone No						"	
*0418 343 007						"	
Special Directions						"	
Purchase Order						"	
Quote ID No						"	
Client Sample ID		Sampled Date/Time (dd/mm/yy hh:mm)		Matrix (Solid (S) Water (W))		Containers	
1 BH26-0-0-0.2		5/11/19		S		1L Plastic	
2 BH26-0-2-0.4						250mL Plastic	
3 MH27-0-0-0.2						125mL Plastic	
4 BH28-0-0-0.2						200mL Amber Glass	
5 DUP-01						40mL VOA vial	
6 DUP-02						500mL PFAS Bottle	
7 DUP-1A						Jar (Glass or HDPE)	
8 DUP-2A						Other (Asbestos AS4964 WA Guidelines)	
9 TP14-FCS						1L Plastic	
10 BH25-FCS						250mL Plastic	
Total Counts						125mL Plastic	
						200mL Amber Glass	
						40mL VOA vial	
						500mL PFAS Bottle	
						Jar (Glass or HDPE)	
						Other (Asbestos AS4964 WA Guidelines)	
						1L Plastic	
						250mL Plastic	
						125mL Plastic	
						200mL Amber Glass	
						40mL VOA vial	
						500mL PFAS Bottle	
						Jar (Glass or HDPE)	
						Other (Asbestos AS4964 WA Guidelines)	
						1L Plastic	
						250mL Plastic	
						125mL Plastic	
						200mL Amber Glass	
						40mL VOA vial	
						500mL PFAS Bottle	
						Jar (Glass or HDPE)	
						Other (Asbestos AS4964 WA Guidelines)	
						1L Plastic	
						250mL Plastic	
						125mL Plastic	
						200mL Amber Glass	
						40mL VOA vial	
						500mL PFAS Bottle	
						Jar (Glass or HDPE)	
						Other (Asbestos AS4964 WA Guidelines)	
						1L Plastic	
						250mL Plastic	
						125mL Plastic	
						200mL Amber Glass	
						40mL VOA vial	
						500mL PFAS Bottle	
						Jar (Glass or HDPE)	
						Other (Asbestos AS4964 WA Guidelines)	
						1L Plastic	
						250mL Plastic	
						125mL Plastic	
						200mL Amber Glass	
						40mL VOA vial	
						500mL PFAS Bottle	
						Jar (Glass or HDPE)	
						Other (Asbestos AS4964 WA Guidelines)	
						1L Plastic	
						250mL Plastic	
						125mL Plastic	
						200mL Amber Glass	
						40mL VOA vial	
						500mL PFAS Bottle	
						Jar (Glass or HDPE)	
						Other (Asbestos AS4964 WA Guidelines)	
						1L Plastic	
						250mL Plastic	
						125mL Plastic	
						200mL Amber Glass	
						40mL VOA vial	
						500mL PFAS Bottle	
						Jar (Glass or HDPE)	
						Other (Asbestos AS4964 WA Guidelines)	
						1L Plastic	
						250mL Plastic	
						125mL Plastic	
						200mL Amber Glass	
						40mL VOA vial	
						500mL PFAS Bottle	
						Jar (Glass or HDPE)	
						Other (Asbestos AS4964 WA Guidelines)	
						1L Plastic	
						250mL Plastic	
						125mL Plastic	
						200mL Amber Glass	
						40mL VOA vial	
						500mL PFAS Bottle	



# CHAIN OF CUSTODY RECORD

APR 30 2025 09:32

☒ Sydney Laboratory

Unit F3 Bld F, 16 Mars Rd, Lane Cove West, NSW 2055  
02 8900 1600 EnviroSampleNSW@eurofins.com

☐ Brisbane Laboratory

Unit 1, 21 Smeadow Pl., Murrumbidgee, QLD 4172  
07 3902 4600 EnviroSampleQLD@eurofins.com

☐ Perth Laboratory

Unit 2, 91 Leach Highway, Kewdale WA 6105  
08 9251 9600 EnviroSampleWA@eurofins.com

☐ Melbourne Laboratory

2 Kingsford Town Close, Oakleigh, VIC 3166  
03 8564 5000 EnviroSampleVIC@eurofins.com

Company **ALLIANCE GEOTECHNICAL**

Address

**10 WELDER ROAD, SEVEN  
HILLS NSW**

Contact Name

**Alexander Williams**

Phone No

**\*0418 343 007**

Special Directions

Purchase Order

Quote ID No

Project Name

**North Brunswick  
Public School.**

Project No

**9150**

Project Manager

**S. WALLACE**

EDD Format  
(Esat. Equis.  
Custom)

Sampler(s)

**A. Williams, S. Sullivan.**

Handed over by

**"**

Email for invoice

**admin@allgeo.com.au**

Email for Results

**enquiries@allgeo.com.au**

Containers

Turnaround Time (TAT) Requirements  
(Select all that apply)

☐ Overnight (9am)\*

☐ 1 Day\* ☐ 2 Day\*

☐ 3 Day\* ☒ 5 Day\*

☐ Other ( )

Sample Comments / Dangerous  
Goods Hazard Warning

1L Plastic

250mL Plastic

125mL Plastic

200mL Amber Glass

40mL VOA vial

500mL PFAS Bottle

Jar (Glass or HDPE)

Other (Asbestos AS4954 WA Guidelines)

Sample Comments / Dangerous  
Goods Hazard Warning

No

Client Sample ID

Sampled  
Date/Time  
(dd/mm/yyyy  
hh:mm)

Matrix (Solid  
(S) Water (W))

Analyses

Quote ID No

Purchase Order

Special Directions

Quote ID No

Purchase Order

Special Directions

Quote ID No

Purchase Order

Special Directions

Quote ID No

Purchase Order

Special Directions

Quote ID No

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Quote ID No

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Quote ID No

Purchase Order

Special Directions

Quote ID No

Purchase Order

Special Directions

Quote ID No

**TRIPSPICE1**

**3/11/19**

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Total Counts

Method of Shipment

Counter #

Hand Delivered

Postal

Name

Signature

Signature

Date

Date

Date

Date

Date

Date

Date

Standard / Freight

Received By

**Gina Turkula**

Signature

Signature

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Date

Substitution of samples to the laboratory will be deemed as acceptance of Eurofins (mg) Standard Terms and Conditions unless agreed otherwise. A copy of Eurofins (mg) Standard Terms and Conditions is available on request.

Eurofins Environment Testing Australia Pty Ltd trading as Eurofins | mg



## **APPENDIX D**

### **PROUCL OUTPUT**



1	UCL Statistics for Uncensored Full Data Sets											
2												
3	User Selected Options											
4	Date/Time of Computation			ProUCL 5.130/06/2020 6:00:08 PM								
5	From File			WorkSheet_a.xls								
6	Full Precision			OFF								
7	Confidence Coefficient			95%								
8	Number of Bootstrap Operations			2000								
9												
10												
11	TRH >C16-C34											
12												
13	General Statistics											
14	Total Number of Observations			28		Number of Distinct Observations			19			
15						Number of Missing Observations			0			
16	Minimum			100		Mean			285.7			
17	Maximum			1900		Median			190			
18	SD			345.3		Std. Error of Mean			65.25			
19	Coefficient of Variation			1.208		Skewness			4.085			
20												
21	Normal GOF Test											
22	Shapiro Wilk Test Statistic			0.513		Shapiro Wilk GOF Test						
23	5% Shapiro Wilk Critical Value			0.924		Data Not Normal at 5% Significance Level						
24	Lilliefors Test Statistic			0.306		Lilliefors GOF Test						
25	5% Lilliefors Critical Value			0.164		Data Not Normal at 5% Significance Level						
26	Data Not Normal at 5% Significance Level											
27												
28	Assuming Normal Distribution											
29	95% Normal UCL				95% UCLs (Adjusted for Skewness)							
30	95% Student's-t UCL			396.9		95% Adjusted-CLT UCL (Chen-1995)			446.9			
31						95% Modified-t UCL (Johnson-1978)			405.3			
32												
33	Gamma GOF Test											
34	A-D Test Statistic			1.604		Anderson-Darling Gamma GOF Test						
35	5% A-D Critical Value			0.76		Data Not Gamma Distributed at 5% Significance Level						
36	K-S Test Statistic			0.185		Kolmogorov-Smirnov Gamma GOF Test						
37	5% K-S Critical Value			0.168		Data Not Gamma Distributed at 5% Significance Level						
38	Data Not Gamma Distributed at 5% Significance Level											
39												
40	Gamma Statistics											
41	k hat (MLE)			1.775		k star (bias corrected MLE)			1.609			
42	Theta hat (MLE)			161		Theta star (bias corrected MLE)			177.6			
43	nu hat (MLE)			99.39		nu star (bias corrected)			90.08			
44	MLE Mean (bias corrected)			285.7		MLE Sd (bias corrected)			225.3			
45					Approximate Chi Square Value (0.05)			69.19				
46	Adjusted Level of Significance			0.0404		Adjusted Chi Square Value			68.06			
47												
48	Assuming Gamma Distribution											
49	95% Approximate Gamma UCL (use when n>=50))			371.9		95% Adjusted Gamma UCL (use when n<50)			378.1			
50												
51	Lognormal GOF Test											
52	Shapiro Wilk Test Statistic			0.887		Shapiro Wilk Lognormal GOF Test						
53	5% Shapiro Wilk Critical Value			0.924		Data Not Lognormal at 5% Significance Level						
54	Lilliefors Test Statistic			0.141		Lilliefors Lognormal GOF Test						
55	5% Lilliefors Critical Value			0.164		Data appear Lognormal at 5% Significance Level						



100

	A	B	C	D	E	F	G	H	I	J	K	L
1	UCL Statistics for Uncensored Full Data Sets											
2												
3	User Selected Options											
4	Date/Time of Computation			ProUCL 5.130/06/2020 5:56:43 PM								
5	From File			WorkSheet.xls								
6	Full Precision			OFF								
7	Confidence Coefficient			95%								
8	Number of Bootstrap Operations			2000								
9												
10												
11	TRH >C10-C16											
12												
13	General Statistics											
14	Total Number of Observations				26		Number of Distinct Observations				4	
15							Number of Missing Observations				0	
16	Minimum				50		Mean				56.81	
17	Maximum				130		Median				50	
18	SD				20.16		Std. Error of Mean				3.954	
19	Coefficient of Variation				0.355		Skewness				2.975	
20												
21	Normal GOF Test											
22	Shapiro Wilk Test Statistic				0.389		Shapiro Wilk GOF Test					
23	5% Shapiro Wilk Critical Value				0.92		Data Not Normal at 5% Significance Level					
24	Lilliefors Test Statistic				0.517		Lilliefors GOF Test					
25	5% Lilliefors Critical Value				0.17		Data Not Normal at 5% Significance Level					
26	Data Not Normal at 5% Significance Level											
27												
28	Assuming Normal Distribution											
29	95% Normal UCL					95% UCLs (Adjusted for Skewness)						
30	95% Student's-t UCL				63.56		95% Adjusted-CLT UCL (Chen-1995)				65.78	
31							95% Modified-t UCL (Johnson-1978)				63.95	
32												
33	Gamma GOF Test											
34	A-D Test Statistic				7.908		Anderson-Darling Gamma GOF Test					
35	5% A-D Critical Value				0.744		Data Not Gamma Distributed at 5% Significance Level					
36	K-S Test Statistic				0.523		Kolmogorov-Smirnov Gamma GOF Test					
37	5% K-S Critical Value				0.171		Data Not Gamma Distributed at 5% Significance Level					
38	Data Not Gamma Distributed at 5% Significance Level											
39												
40	Gamma Statistics											
41	k hat (MLE)				12.9		k star (bias corrected MLE)				11.43	
42	Theta hat (MLE)				4.405		Theta star (bias corrected MLE)				4.968	
43	nu hat (MLE)				670.6		nu star (bias corrected)				594.6	
44	MLE Mean (bias corrected)				56.81		MLE Sd (bias corrected)				16.8	
45						Approximate Chi Square Value (0.05)				539		
46	Adjusted Level of Significance				0.0398		Adjusted Chi Square Value				535.5	
47												
48	Assuming Gamma Distribution											
49	95% Approximate Gamma UCL (use when n>=50))				62.66		95% Adjusted Gamma UCL (use when n<50)				63.07	
50												
51	Lognormal GOF Test											
52	Shapiro Wilk Test Statistic				0.392		Shapiro Wilk Lognormal GOF Test					
53	5% Shapiro Wilk Critical Value				0.92		Data Not Lognormal at 5% Significance Level					
54	Lilliefors Test Statistic				0.52		Lilliefors Lognormal GOF Test					
55	5% Lilliefors Critical Value				0.17		Data Not Lognormal at 5% Significance Level					

	A	B	C	D	E	F	G	H	I	J	K	L
56	Data Not Lognormal at 5% Significance Level											
57												
58	Lognormal Statistics											
59	Minimum of Logged Data				3.912	Mean of logged Data					4	
60	Maximum of Logged Data				4.868	SD of logged Data					0.256	
61												
62	Assuming Lognormal Distribution											
63	95% H-UCL				61.85	90% Chebyshev (MVUE) UCL					64.95	
64	95% Chebyshev (MVUE) UCL				68.84	97.5% Chebyshev (MVUE) UCL					74.24	
65	99% Chebyshev (MVUE) UCL				84.85							
66												
67	Nonparametric Distribution Free UCL Statistics											
68	Data do not follow a Discernible Distribution (0.05)											
69												
70	Nonparametric Distribution Free UCLs											
71	95% CLT UCL				63.31	95% Jackknife UCL					63.56	
72	95% Standard Bootstrap UCL				N/A	95% Bootstrap-t UCL					N/A	
73	95% Hall's Bootstrap UCL				N/A	95% Percentile Bootstrap UCL					N/A	
74	95% BCA Bootstrap UCL				N/A							
75	90% Chebyshev(Mean, Sd) UCL				68.67	95% Chebyshev(Mean, Sd) UCL					74.04	
76	97.5% Chebyshev(Mean, Sd) UCL				81.5	99% Chebyshev(Mean, Sd) UCL					96.15	
77												
78	Suggested UCL to Use											
79	95% Student's-t UCL				63.56	or 95% Modified-t UCL					63.95	
80												
81	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
82	Recommendations are based upon data size, data distribution, and skewness.											
83	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
84	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
85												