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Origin Energy Asset Management

Groundwater Monitoring Results at the Former Gas Manufacture Plant Site

McMillan Street, SALE

APRIL 2005

Contract No: OE 054

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4th August 2005

Mr Andrew Hensman
Property Coordinator
Asset Management
Origin Energy
1 Wood Street
THOMASTOWN VIC 3074

Dear Andrew

Re: Groundwater Monitoring Results at the Former Gas Manufacture Plant Site – MacMillan Street, Sale

This report is prepared solely for the use of OEAM and Vic Gas Distribution Pty. Ltd. OEAM is the manager for the site owner Vic Gas Distribution Pty. Ltd.

Yours sincerely

Jim Nikolareas
MANAGING DIRECTOR
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DEHQ Environmental Management
DEHQ Quality Endorsed Company

DOCUMENTATION CONTROL
MONARC ENVIRONMENTAL

DOCUMENT TITLE: GROUNDWATER MONITORING RESULTS OF THE FORMER GAS MANUFACTURING PLANT SITE, SALE

VOLUME: 1

AUTHOR: MONARC ENVIRONMENTAL PTY LTD

VERSION NUMBER: 8

DATE OF ISSUE OF ORIGINAL VERSION NO. 1: January 1997

UPDATED ON: April 1999
February 2000
March 2001

COPY NO.	VERSION NUMBER	HOLDER	ISSUE DATE
1 (Master)	1	Land Remediation	January 1997
2 (Master)	2	Land Remediation	April 1999
3	2	Stratus Networks	April 1999
4	3	VEMCO Environmental	February 2000
5	3	VEMCO Environmental	February 2000
6	3	Stratus Networks	February 2000
7	4	VEMCO Environmental	March 2001
8	4	Origin Energy	March 2001
9	5	VEMCO Environmental	February 2002
10	5	Origin Energy	February 2002
11	6	Origin Energy	March 2003
12	6	VEMCO Environmental	March 2003
13	6	EPA	
14	7	Origin Energy	May 2004
15	7	MONARC Environmental	May 2004
16	8	Origin Energy	April 2005
17	8	MONARC Environmental	April 2005

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1. AIM

1.1 Introduction

One of the properties managed by Origin Energy Asset Management and formerly owned by the Gas and Fuel Corporation of Victoria is located at 2-14 McMillan Street, Sale (the "site"). The site is bounded by the South Gippsland Highway to the east and by Punt Lane to the west.

The site is a former gas manufacture plant site ("GMPS") and is subject of a Site Environmental Management Plan (SEMP) prepared by OEAM that provides guidance on the environmental management of the site. This report fulfils Objective 1.3.1 of the 2004/2005 SEMP which requires ongoing monitoring of the groundwater.

This report has been prepared in conjunction with the following:

- "Site Description Report, Sale ex-GMPS", May 1994, which describes the Site's history of ownership, operations and likely areas of onsite contamination.
- "Potential of Offsite Migration of Residuals from the Former Gas Manufacture Plant Site, Sale," May 1994, Gas and Fuel. This report investigated the potential for offsite contaminant migration via the shallow aquifer system, testing a number of soil samples above and below the water table. Evidence of contamination attributable to the ex GMPS was reported in both field observations and sample analysis.
- "Sale Former Gasworks Depot - Site Investigations", March 1996, CMPS&F. This reported an onsite soil investigation that involved the excavation of ten testpits, to a depth of 4.8 metres.
- "Onsite Characterisation of the Former Gas Manufacture Plant Site, Sale", September 1996. This report investigated an onsite soil investigation, which involved the drilling of eight soil bores.
- "Ground Penetrating Radar Survey, Sale", November 1996, Geo-Eng Report which involved the trial of a ground penetrating radar survey to identify lithological changes, changes in moisture content, and the presence of hydrocarbons.
- "Environmental Assessment of Former Gasworks Site, McMillan Street, Sale", November 1997, Sinclair Knight Merz. This report investigated on-site soil conditions.
- "Soil Assessment and Chromatographic Comparisons, Sale", 2001
- "Qualitative Environmental Assessment of Former Gasworks Site, McMillan Street, Sale", March 2002, Sinclair Knight Merz.
- "Groundwater Monitoring Results of the Former Gas Manufacture Plant Site, Sale", Versions 1 (January 1997) through to Version 7 (May 2004). These reports investigated the groundwater conditions on and in the vicinity of the gasworks site reporting on the respective annual monitoring rounds.

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1.2 Purpose of Work

This report describes a program of groundwater monitoring undertaken for the 2004/2005 year as part of the continuing acquisition of groundwater data associated with this site. It has been undertaken in partial fulfillment of the objectives contained within the 2004/2005 SEMP prepared for the Sale site.

The purpose of this study was to provide the necessary data to enable a review and assessment of the risk associated with potential offsite groundwater movement and to determine if there is evidence of natural attenuation. In addition, groundwater level monitoring was utilised for a determination of the groundwater flow direction in the vicinity of the site.

2. ENVIRONMENTAL SETTING

The environmental setting has been discussed extensively in the report "Potential of Offsite Migration of Residuals from the former Gas Manufacture Plant Site, Sale".

3. METHODOLOGY

The groundwater investigation to date consists of seven sampling events from 1997 to 2005.

3.1 Groundwater Sampling

January 1997

Five groundwater monitoring bores, BH10, BH11, BH12, BH13, and BH14, were installed in October 1996 to intersect the shallow unconfined aquifer and sampled. The methodology used was previously reported in Version 1: "Groundwater Monitoring Results at the Former Gas Manufacturing Plant Site, Sale", January 1997.

February 1999

The monitoring bores were resampled. The methodology used was previously reported in Version 2: "Groundwater Monitoring Results at the Former Gas Manufacture Plant Site, McMillan Street, Sale", April 1999.

February 2000

Five groundwater monitoring bores, BH15 to BH19, were installed in December 1999 including one bore (BH18) installed to intersect the deeper aquifer. Two soil samples from each bore were analysed. The five new monitoring bores, in addition to the five existing bores were sampled in February 2000. The methodology used was previously reported in Version 3: "Groundwater Monitoring Results of the Former Gas Manufacture Plant Site, Sale", February 2000.

October -December 2000

Four groundwater-monitoring bores, BH20 to BH23, were installed in October 2000. Two soil samples from each bore were analysed. All monitoring bores were sampled in December 2000. The methodology used was previously reported in Version 4: "Groundwater Monitoring Results of the Former Gas Manufacture Plant Site, Sale", March 2001.

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February 2002

All fourteen existing bores were resampled. The methodology used was previously reported in Version 5: "Groundwater Monitoring Results of the Former Gas Manufacture Plant Site, Sale", February 2002.

March 2003

Seven additional groundwater-monitoring bores, BH24 to BH30, were installed in May 2002 (soil samples were taken during installation) and groundwater was sampled in March 2003. The methodology used was previously reported in Version 6: "Groundwater Monitoring Results of the Former Gas Manufacture Plant Site, Sale", March 2003.

March 2004

The monitoring bores were resampled. The methodology used was previously reported in Version 7: "Groundwater Monitoring Results of the Former Gas Manufacture Plant Site, Sale", March 2004.

March 2005

Figure 1: Groundwater Bore Locations shows the location of the groundwater monitoring bores. The Laboratory Request forms with details of the analytical schedule for groundwater samples removed during the current program are included in APPENDIX 1: Laboratory Request ORG-453 Sa Mon.

Logs of all bores are found in APPENDIX 2: Borelogs. A professional surveying contractor surveyed fourteen bores in October 2000 to two permanent benchmarks, PSM 213 and PSM 110. A record of the survey and map can be found in APPENDIX 3: Survey Results showing bore positions in AMG coordinates and RLs in metres to AHD.

Static water levels were measured from the top of borehole risers (the survey reference points) from which reduced water levels and the groundwater flow direction could later be determined. A record of water levels can be found in APPENDIX 4: Water Levels, Purge and Field Parameters Record .

Groundwater from twenty-one monitoring bores, plus the access bore installed in May 2004, was sampled during 1-3 March 2005. Prior to sampling, the bores were purged of at least four volumes of standing water. A record of purging details and observations can be referred to APPENDIX 4: Water Levels, Purge and Field Parameters Record .

Each bore was sampled for gasworks residuals and the indicators of microbial activity. All samples were submitted to the analyzing laboratories under Chain-of-Custody procedures. Chain of Custody records for samples taken form part of APPENDIX 6: Laboratory Results - Groundwater (2005).

All sampling and analysis was undertaken in compliance with EPA Publications No. 441 "A Guide to the Sampling and Analysis of Waters, Wastewaters, Soils and Wastes" and No. 669 "Groundwater Sampling Guidelines" and included:

- Sampling procedures as outlined in Monarc Environmental Work Instruction (W1-01101) "Sample Collection, Handling and Transportation"

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- Use of dedicated sample tubing for each bore to minimize the potential for cross-contamination between bores
- Use of laboratory supplied bottles with appropriate preservatives as provided by the analyzing laboratory
- Storage of all samples under icebox conditions until delivery to the laboratory
- Use of laboratories NATA certified for the proposed analytes
- Analytical methods as approved by the EPA

Replicates of the water samples were prepared in the field as part of the quality assurance and control (QA/QC) program, employing both blind and external replicates, to augment the analytical laboratories internal QA/QC procedures. Results of the program are discussed in Section 4.2

3.2 Aquifer Tests

Aquifer (rising head) tests were performed on 2 March 2005 at bore locations BH20, BH23 and BH29. Field results and hydraulic conductivity determinations have been documented in APPENDIX 8: Slug Tests & Seepage Velocity.

3.3 Monitoring Natural Attenuation

A total of twenty-one locations were tested for the indicators used for evidence of microbial activity. An interpretive assessment of natural attenuation, including tabulation of results, has been attached in APPENDIX 9: Natural Attenuation.

4. SUMMARY OF RESULTS

In total, groundwater samples from twenty-two locations were recovered during March 2005. APPENDIX 6: Laboratory Results - Groundwater (2005) consists of NATA accredited laboratory results of all these tests.

4.1 Lithology and Water Flow

4.1.1 Lithology

Bores indicated the presence of a clayey gravel unit underlying a two to nine metre thick silty clay. These form a shallow, unconfined to semi-confined aquifer from approximately 2.5 metres below ground level, with a yield of up to 0.4 L/sec. This shallow aquifer represents buried alluvial deposits.

The deep aquifer monitoring bore, BH18 indicated a clay/clayey sand to a depth of 14 metres, with a 2 metre gravel layer at 5 metres depth. The clay/clayey sand is underlain by a loose red brown/grey sand to a depth of 25 metres where the bore was terminated.

4.1.2 Water Flow Direction

The head distribution of the groundwater on and surrounding the site was determined from the reduced water levels in twenty surveyed monitoring bores. The indicated flow direction is SSE towards the Flooding Canal (refer APPENDIX 5: Groundwater Flow Direction, 1996 - 2005). Continued monitoring of water levels is recommended.

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4.2 Groundwater Sampling

Previous Sampling Rounds

For evaluation of longer term trends in groundwater monitoring refer to the data set titled; Table 1: Sale, Summary of Groundwater Results, 1996 - 2005. Original NATA certified laboratory results of earlier investigations are included in "*Groundwater Monitoring Results at the Former Gas Manufacture Plant Site, Sale*", Version 1 (January 1997) to Version 7 (March 2004), respectively.

March 2005

The results from the March 2005 program have been summarised in Table 1: Sale, Summary of Groundwater Results, 1996 - 2005. For a record of the NATA certified laboratory results sheets refer to APPENDIX 6: Laboratory Results – Groundwater (2005) .

The 1997 State Environment Protection Policy (Groundwaters of Victoria), 'the SEPP', outlines government requirements regarding:

- Policy goal and principles
- Classification of various groundwater segments
- Beneficial uses to be protected within each segment
- Groundwater quality indicators and objectives and an
- Obtainment program

The protected beneficial use of groundwater is determined by the salinity of the water, which is measured by the total dissolved solids (TDS). Groundwater with TDS values in the range of 1,001mg/L to 3,500mg/L falls within segment B as defined in the Groundwater SEPP. The TDS values on the Sale site are generally between 1,700mg/L (at BH14 in 1999) and 2,900mg/L (at BH10 in 2002) indicating a Segment B, potable mineral water, beneficial use. The most recent 2005 results from all bores show a range between 1,000mg/L (at the downgradient bore BH22) to 3,600mg/L (nearby at bore BH21).

Beneficial uses to be protected for groundwater defined as belonging to Segment B includes:

- Maintenance of ecosystems
- Potable mineral water supply
- Agriculture, parks and gardens
- Stock watering
- Industrial water use and
- Primary contact recreation

However, the site or surrounding area is not located within an existing or potential mineral water production zone nor is background groundwater typical of Victorian mineral waters (naturally effervescent and/or containing high bicarbonate levels). Therefore, this beneficial use is not considered to be relevant at the site.

The levels of groundwater quality required to protect beneficial uses for Segment B are specified by the groundwater quality indicators and objectives referred to within the SEPP (Table 3). Consequently, the relevant criteria for evaluation of the aquifer are mostly contained within ANZECC (2000) Australian Water Quality Guidelines for Fresh and marine Waters.

The relevant ANZECC 2000 guidelines for this aquifer are therefore: -

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- Freshwater Aquatic Ecosystem Maintenance,
- Agriculture, Parks and Gardens
- Livestock Watering
- Primary Contact Recreational criteria

However, it is recognized that criteria for all potential chemicals of interest have not yet been established within ANZECC (2000). Where groundwater quality guidelines for Beneficial Uses of chemicals do not exist, the following hierarchy has been applied to determine appropriate screening criteria:

- NHMRC/NRMMC 2004
- ANZECC 1992
- WHO 2004
- Dutch Intervention values

The most conservative (lowest available concentration) quality indicator/objective values have been used as the initial 'adopted screening criteria'. Results have also been compared with appropriate guideline values for specific Beneficial Uses such as Aquatic Ecosystem Protection for Fresh Waters and for Primary Contact Recreation (refer APPENDIX 10: Impact on Beneficial Uses for presentation of results in comparison to nominated criteria for each beneficial use).

A discussion of results and relevant criteria is provided below. Refer to APPENDIX 7: Contaminant Distributions for contour maps of selected contaminants based on the results of the January 2005 sampling event.

i) Field Observations

Colour and odour observations were made during purging/sampling of the groundwater.

- An organic odour (either described as tar based or phenolic) was detected at BH10-12, BH14, BH16, BH20-22 and BH32. Odours (generally described as sewer-like) were also noted in BH17, BH19, BH23-26 and BH28. The upgradient bore, BH19, also indicated a slight non-gasworks odour (sewer-like).
- The three bores on the former army reserve lot to the south, BH20, BH21 and BH22 were observed to have an initially dark colour that cleared but a strong sulphurous odour (H_2S) remained. BH27 to the west of these bores was noted to have a strong organic odour possibly as a result of a slug infestation noted at the mouth of the bore.
- Locations BH10, BH20, BH21 and BH32 indicated variations in the colour of the water and the presence of non-aqueous material.

The gatic cover around BH15, located in the parking area of the reserve to the west of the site, was noted to be full of sediment. The bore is located in a heavily trafficked area and within a slight depression where water may accumulate. It was therefore difficult to prevent sediment falling into the bore when cleaning and removing the cap. The location of the bore, where it is probably subject to vibration and occasional traffic load, may be affecting the condition of the bore.

Recharge was noted to be particularly slow at BH12.

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ii) Phenols

Phenols were detected in seventeen of the twenty-two bores: -

- Aquatic Ecosystems – Freshwater (ANZECC 2000): while a criterion for Total Phenols is not currently available, the criterion for Phenols is exceeded at BH10, BH11, BH12, BH20, BH21 and BH32 but not in the bores closest to the Flooding Canal.
- Agriculture, Parks and Gardens (ANZECC 2000): a criterion for Total Phenols is not currently available
- Livestock (ANZECC 2000): the criterion for Total Phenols is exceeded at BH10-BH23, BH25, BH27 and BH32.
- Primary Contact Recreation (ANZECC 2000): the criterion for Total Phenols is exceeded at BH10-BH23, BH25, BH27 and BH32. BH25 is one of the three bores located closest to Flooding Canal.

In general, phenols were reported at levels slightly greater than those in the immediately preceding year except for BH20-BH22. This may be a reflection of the generally greater amount of rainfall in the preceding period compared to the same time last year.

iii) Total PAHs

PAHs (dominantly naphthalene) were detected in eleven of the twenty-two bores: -

- Aquatic Ecosystems – Freshwater (ANZECC 2000): criteria for PAHs are currently not available but the ANZECC 1992 criterion for Total PAHs (0.003mg/l) is exceeded at BH10, BH11, BH12, BH14, BH16, BH20-BH23, BH25 and BH32.
- Agriculture, Parks and Gardens - (ANZECC 2000): criteria for PAHs are currently not available
- Livestock (ANZECC 2000): a criterion for Total PAHs is not currently available. A criterion is available for B(a)P but this compound was not detected at any location (although it is noted that the criterion is less than the detection limit reported for the current round).
- Primary Contact Recreation - (ANZECC 2000): a criterion for Total PAHs is not currently available. A criterion is available for B(a)P but the compound was not detected at any location (although it is noted that the criterion is less than the detection limit reported for the current round).

It is noted that PAHs (mostly in the form of naphthalene) were detected within BH25, one of the three bores located closest to the Flooding Canal. Aquatic Ecosystems – Freshwater (ANZECC 2000) criteria for naphthalene were exceeded at bores onsite (BH10-BH12, BH14 and BH32), downgradient west (BH16, BH23 and BH25) and downgradient south (BH20-BH22).

iv) MAHs and TPHs

Benzene, toluene, ethyl benzene and xylene were detected in eleven of the twenty-two bores. This consisted of five onsite (BH10-12, BH14 and BH32) and six offsite bores (BH16, BH20-23 and BH25). Trends in these results are discussed in detail in APPENDIX 9: Natural Attenuation.

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- Aquatic Ecosystems – Freshwater (ANZECC 2000): criteria for benzene, toluene and xylene were exceeded at BH10-BH12, BH14, BH16, BH20-BH21 and BH32.
- Agriculture, Parks and Gardens (ANZECC 2000): criteria for BTEX are not currently available
- Livestock (ANZECC 2000): criteria for benzene, toluene, ethyl benzene and xylene were exceeded BH11, BH20 and BH32. Criteria for a combination of two or three of the BTEX components were exceeded at BH10, BH12, BH14, BH16 and BH21. Criteria for benzene alone were exceeded at BH22, BH23 and BH25, the last bore being located close to the Flooding Canal.
- Primary Contact Recreational (ANZECC 2000): criteria for benzene, toluene, ethyl benzene and xylene were exceeded as per those locations described above for Livestock criteria

Petroleum hydrocarbons were detected in thirteen of the twenty-two bores. Recorded levels were highest at BH10, BH11 and BH20-21.

- Aquatic Ecosystems – Freshwater (ANZECC 2000): criteria for TPHs are not currently available.
- Agriculture, Parks and Gardens - (ANZECC 2000): criteria for TPHs are not currently available.
- Livestock (ANZECC 2000): criteria for TPHs are not currently available.
- Primary Contact Recreation: criteria for TPHs are not currently available.

In lieu of appropriate Australian derived criteria, results have also been reviewed in comparison with intervention values established by the Dutch for mineral oil of 0.6mg/L. This value is exceeded at BH10-BH12, BH14, BH16, BH20-BH23, BH25 and BH32.

v) Cyanide and Ammonia

Cyanide was detected in eleven of the twenty-two bores. This consisted of five onsite (BH10-12, BH14 and BH32) and six offsite bores (BH16, BH17, BH20-21, BH23 and BH25).

- Aquatic Ecosystems – Freshwater (ANZECC 2000): criteria were exceeded at BH10-BH12, BH14, BH16, BH17, BH20-BH21, BH23, BH25 and BH32.
- Agriculture, Parks and Gardens - (ANZECC 2000): a criterion is not currently available.
- Livestock (ANZECC 2000): criteria were exceeded within BH10-BH12, BH14, BH16, BH20-BH21, BH23 and BH32.
- Primary Contact Recreation: criteria were exceeded at BH10, BH12, BH14, BH16 and BH20-BH21.

Ammonia was detected in all bores.

- Aquatic Ecosystems – Freshwater (ANZECC 2000): criteria were exceeded at BH10-BH12, BH14-BH17, BH20-BH27, BH29-BH30 and BH32. This includes those bores located adjacent to Flooding Canal.
- Agriculture, Parks and Gardens (ANZECC 2000): criteria are not currently available.

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- Livestock (ANZECC 2000): criteria were exceeded in all bores.
- Primary Contact Recreation: criteria were exceeded in all bores including locations adjacent to the Flooding Canal.

vi) QA/QC

Samples were analysed using Ecowise Environmental as the primary laboratory and MGT Environmental Consulting Pty Ltd as the second quality control laboratory. Both laboratories have NATA certification for the analyses undertaken.

Both laboratories performed their own internal laboratory quality control program as part of the analysis. This consisted of the analysis of reagent blanks, duplicates split in the laboratory and the analysis of samples spiked with a known quantity of the analyte. Results of these programs showed good agreement between the results of the original and duplicate analyses (refer APPENDIX 6: Laboratory Results). No contamination was detected in the blanks and acceptable recoveries of the targeted analytes were also obtained.

The quality control program also included the preparation in the field of replicates of one of the water samples for forwarding of one replicate to the primary laboratory as a blind duplicate and one replicate to a second laboratory as a cross-check on the accuracy of the primary laboratory.

The precision of the blind/internal duplicate submitted to Ecowise Environmental (BH20W/QA1) and external duplicate QA-2 submitted to MGT, has been assessed by calculating the relative percentage difference (RPD) between samples. RPD is the absolute difference between the two values of a set of duplicate results with the results expressed as a percentage of the mean. Results with 30% or lower for metals and 50% or lower for organic contaminants are generally considered as acceptable measures for satisfactory performance. Higher RPD values may be acceptable in certain conditions such as when concentrations are near the laboratory detection limit. The results of the replicate samples and RPD analysis are summarised in Table 2: Sale QA/QC, March 2005.

Sample QA-1 was a duplicate sample of BH20W and was forwarded to the primary laboratory (Ecowise Environmental) as a blind duplicate. In general, the RPD calculations showed very good correlation between the original and blind duplicate results although minor variations were noted for manganese. However, the both results are low (of the same order of magnitude) and near the detection limit and differences may be attributable to an artifact of the calculation method which can magnify differences near the resolution limit. The differences are not considered significant.

MGT Environmental Consulting Pty Ltd was used as the external laboratory check and was sent a duplicate of BH20W named as QA-2. Results from the RPD calculation indicated a good overall correlation between the two laboratories although slightly elevated RPD values are noted from results for Total Phenols, acenapthylene, ammonia, ferrous iron and cyanide. Levels reported by MGT for acenapthylene, ferrous iron and cyanide are lower than those reported by Ecowise Environmental while levels for Total Phenols and ammonia were higher. In general results were of the same order of magnitude except for ferrous iron which was an order of magnitude less within results provided by MGT. The respective Relative Percent Differences are not considered significant.

The quality control program also included the collection during the field sampling program of a rinsate sample to check on equipment washing techniques between sampling episodes:

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phenol, benzene and ammonia were detected at low levels within the rinsate sample. The following is noted:

- The order of the sampling program progressed from bores that were believed to be the least affected by contamination to those that may be the most affected ie closest to sources of contamination. The rinsate sample was therefore taken late in the sampling program, between the removal of samples from BH12 and BH11, where some contamination may be expected within the bores being sampled;
- Samples were removed using an electric submersible pump coupled to a Teflon sample tube dedicated to each bore. The only equipment transferred between bores was therefore the submersible pump;
- Decontamination techniques between samples included two rinses passed through the pump consisting of tap water and deionised water (5-10 litres each);
- Bores were also purged prior to sampling using the same pump as that used for the sampling. This would be expected to provide an additional flush of the equipment prior to the actual sampling.
- While low levels of phenol, benzene and ammonia were detected in the rinsate, levels are generally of a very low order of magnitude compared to levels of the contaminants detected within bores and are not expected to adversely affect interpretation of the results.

Although some variability in results has occurred, it is considered that the overall data quality provided by the quality assurance program is acceptable and consistent with the objectives of the assessment.

vii) Natural Attenuation

A total of twenty-one locations were also tested for a number of parameters that may be used as indicators of natural attenuation. The results of the testing are included in Table 1: Sale, Summary of Groundwater Results, 1996 - 2005 and are discussed in greater detail in APPENDIX 9: Natural Attenuation.

4.3 Hydraulic Conductivity and Seepage Velocity

Aquifer (rising head) test were also performed on 2nd and 3rd March 2005 at bore locations BH20, BH23 and BH29. Refer to APPENDIX 8: Slug Tests & Seepage Velocity for field data and computations to determine the hydraulic conductivity at location: -

Using an insitu field-logging unit (minitroll) and applying the Hvorslev Method, hydraulic conductivity was determined as follows:

BH20 (K_h = 2.5 metres/day)
BH23 (K_h = 0.02 metres/day)
BH29 (K_h = 0.02 metres/day)

A sensitive analysis of the seepage velocity indicates a range of 1m/yr for (assuming low conductivity and gradient) to 320m/yr (assuming higher conductivity and gradients).

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5. CONCLUSION & RECOMMENDATIONS

The purpose of the program documented in this report was to continue the annual monitoring programme for contamination at the Sale ex-GMPS via subsurface pathways. The program involved the sampling and analysis of all groundwater-monitoring bores present for a suite of analytes associated with the manufacture of coal gas.

Salinity results from the Sale site indicate that the groundwater belongs to Segment B as defined within the SEPP (Groundwaters of Victoria). Consequently, the protected beneficial uses of the groundwater and the relevant ANZECC (2000) guidelines for the assessment of groundwater quality are: -

- Freshwater Aquatic Ecosystem Maintenance,
- Agriculture, Parks and Gardens
- Livestock Watering
- Primary Contact Recreational criteria

The OEAM property is located on the southern fringe of Sale, with the surrounding land uses including public open space to the east and west, and a secondary school to the north. The Flooding Canal runs near the western boundary and Lake Guthridge lies less than 100 metres to the east.

Significant groundwater contamination has been found beneath the western portion of the site. There is evidence of some migration of ammonia, phenol and benzene in a westerly direction and phenols, naphthalene and ammonia in a southerly direction. A review of the results of the 2005 sampling program with respect to the screening criteria contained within the guidelines described above indicates the following:

- In general, phenols were reported at levels slightly greater than those in the immediately preceding year except for BH20-BH22. This may be a reflection of the generally greater amount of rainfall in the preceding period compared to the same time last year. In general, however, Total phenols continue to indicate an overall decrease from 1996 when the bores were first analysed, although phenol was noted in an upgradient bore BH13. The onsite bores, BH10 and BH11, continued to report the highest concentrations of total phenols.

- Levels of Total PAHs have varied between the sampling rounds with concentrations at onsite bores and some bores to the west (BH16 and BH25) reported at levels slightly greater than those in the immediately preceding year. Overall, results appear to indicate a decrease in concentrations over the monitoring period including the onsite bore BH11.

- MAH levels were relatively stable with a slight decrease noted in BH12, BH21, BH22 and BH23. The greatest concentrations were found within the three onsite bores, BH10, BH11 BH12 and immediately offsite to the south (BH20-BH22). MAHs have not been detected in the bores BH13 (upgradient) and BH18 (lower aquifer) in any of the sampling rounds.

- Ammonia results continue to be reported at relatively elevated levels within the monitoring bores. The greatest concentrations continue to be reported within the bores BH10, BH20 and BH21 with lesser but relatively stable concentrations reported in BH16 to the west of the site.

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It is noted that Primary Contact Recreational criteria were exceeded for benzene, phenol and ammonia at BH25, one of the bores located closest to the Flooding Canal. Freshwater Ecosystem criteria for PAHs and ammonia were exceeded at the same location. All analytes were below the detection limit from the bore installed into the deeper aquifer (BH18) except for phenol.

An analysis of the groundwater flow pattern was found to indicate a dominantly southwest flow direction. This appears to be mediated to some extent by the presence of a clay gravel unit from approximately 2.5 metres below ground level that occurs in some, but not all, bores.

The primary line of evidence of natural attenuation processes occurring at the ex-GMPS, Sale has been previously demonstrated in the reported reduction of concentrations between 1996 and 2001. The more recent trends in BTEX (2002 -2004), however, have been indicative of a somewhat expanding benzene plume geometry west of the former GMPS at BH12, BH16 and BH23 relative to previous years. The increases are considered to reflect groundwater changes rather than any artifacts of the sampling process and may be evidence of recent remediation works that resulted in the remobilisation of residual gasworks contamination. Results from the latest round of sampling (2005) indicate a stabilisation of benzene plume geometry with either relatively stable levels or a slight reduction in levels relative to previous years reported.

A secondary line of evidence that the plume area is subject to the influence of microbial activity has been shown in the form of correlation between the known spatial distribution of contaminants and the spatial concentration changes in the following geochemical indicators:

- dissolved oxygen;
- nitrate;
- methane; and
- the reduction products, ferrous iron and manganese.

Due to the surrounding land uses, it is important that the contamination in the groundwater continues to be monitored in accordance with the Site Environmental Management Plan (SEMP) prepared for the Sale site and that offsite impacts on beneficial use continue to be assessed.

It is further recommended that consideration be given to the examination of the condition of a number of bores, including BH12 and BH15, and implementation of possible maintenance requirements.

6. LIMITATIONS OF THIS REPORT

This report has been prepared by MONARC ENVIRONMENTAL for Origin Energy for the site located on McMillan Street, Sale.

This report includes a review of certain information that was obtained from the sources and contacts described or quoted in this report, including information obtained from Origin Energy. Experience has demonstrated that the records for former Gas Manufacturing Sites (many of which were owned and operated by other entities before becoming part of the old Gas and Fuel Corporation and the responsibility of Origin Energy) indicating the location of sources of potential pollution and underground infrastructure are not always complete or accurate.

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MONARC Environmental has exercised care in checking and interpreting the data and information referred to in this report. The site assessment program has been designed in good faith in a manner, which seeks to confirm the information available and test its accuracy or completeness. However, MONARC Environmental cannot guarantee the accuracy or completeness of that data and information. Accordingly, while our conclusions are based on the information available to us during our assessment of the site, some of those conclusions could be different if the information upon which they are based is determined to be inaccurate or incomplete.

This report has been prepared specifically for Origin Energy Asset Management for its intended use. Any other persons seeking to rely upon the report should only do so after seeking approval from Origin Energy Asset Management and independent expert advice from an Environmental Auditor accredited by the Victorian EPA, or other appropriately qualified person. The extent of any environmental, health and safety or financial risks associated with the site may vary significantly according to the proposed use or development of the site.

Therefore, any representation, statement, opinion or advice expressed or implied in this report is made in good faith but on the basis that MONARC Environmental, its agents and employees are not liable (whether by reason of negligence, lack of care or otherwise) to any person for any damage or loss whatsoever which has occurred or may occur in relation to that person taking or not taking (as the case may be) action in respect of any representation, statement or advice referred to above.

MONARC Environmental disclaims any obligation to update the report for events taking place, or information becoming available, or known to us, after the preparation of this report.

7. REFERENCES

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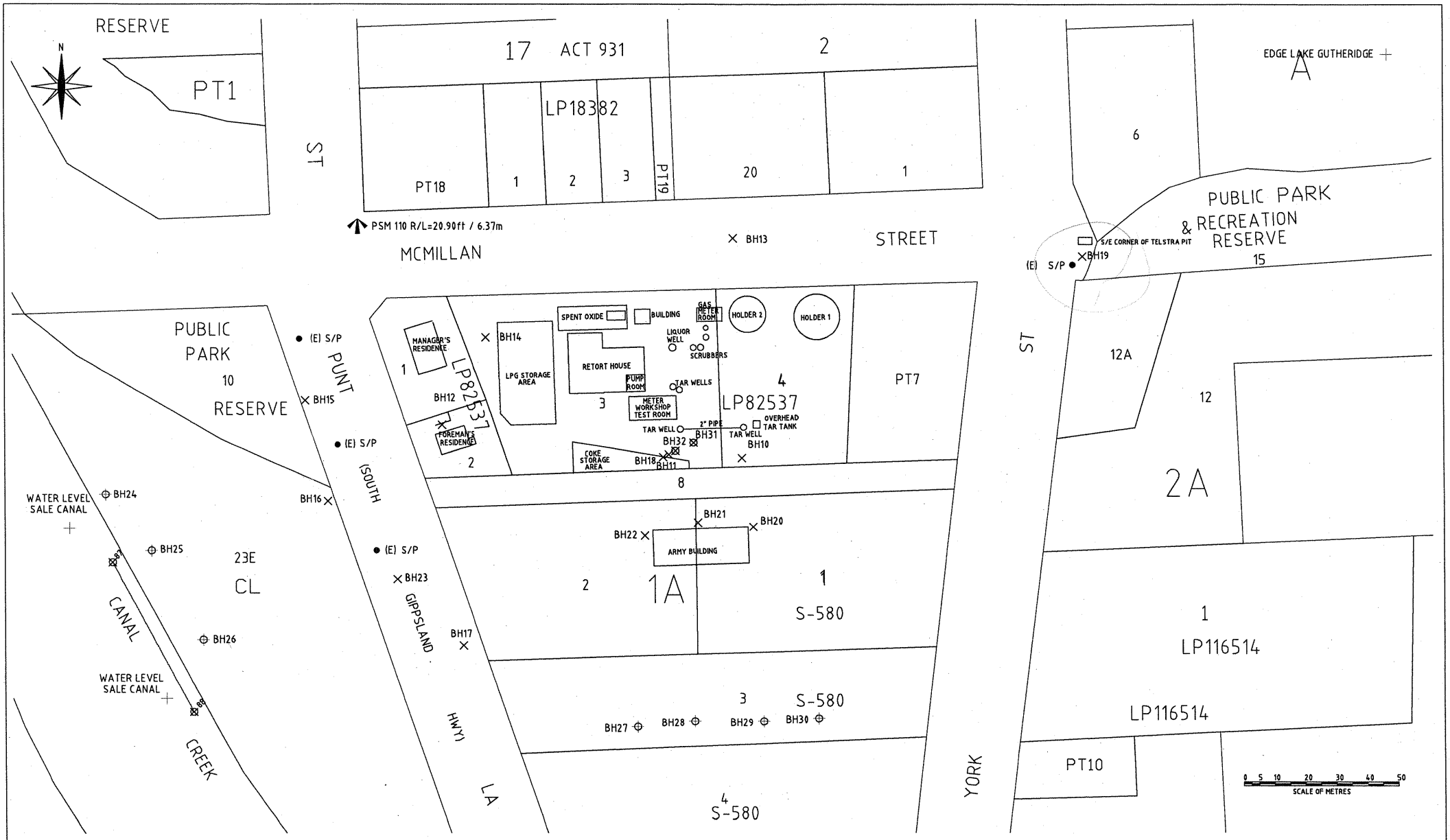

FIGURE

LEGEND

● (E) S/P	EXISTING POWER POLE
× BH22	MONITORING BORES (1996-2000)
⊕ BH26	MONITORING BORES (2002)
⊠ BH31	BORES (2003 & 2004)
○	TAR WELL

REV	DATE	INITIALS	COMMENT
B	11.5.2004	W.G.M.	ADDED GROUNDWATER FLOW INFORMATION
A	22.3.2003	W.G.M.	ADDED MONITORING BORES 2003

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DATE: 6.7.2002
CHECKED: S.GUBA
DATE: 7.7.2002

FILE LOCATION: S:\\DWG\ENIVRONMENTAL\SALE\SALE_AMG

SCALE: AS SHOWN | SHEET 1 of 1 | REV B

BORE LOCATIONS
ORIGIN ENERGY ASSET MANAGEMENT
SALE

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TABLE 1: SALE, SUMMARY OF GROUNDWATER ANALYSES in mg/l, (1996 - 2005)

Sample Location	Lab	Sample Type	Sample Name	Sampling Date	Total Phenols	Phenol	Cresols	Total PAHs	Napth-alene	Acenap-thylene	Acena-pthene	Fluorene	Phenanthr ene	Anthra-cene	Fluora-nthene	Pyrene	Benzo(a) anthracene	Chrysene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	B(a)P	Dibenzo(a,h)an thracene	Benzo(g,h,i) perylene	Indeno(1,2,3-c,d)pyrene	TPHs C6-C9	TPHs C10-C14	TPHs C15-C28	TPHs C29-C36	Total TPHs	Benzene	Toluene	Ethyl Benz.	Xylene	Total Vocs
BH10	WSL		BH10W	3/03/2005	36			3.9	3.6	0.15	0.012	0.031	0.031	0.004	0.003	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	14	31	5.4	<0.1	50.4	14	4.4	0.27	2.2	20.87
BH10	MGT		BH10W	20/03/2004	21.3	7.3	14	2	1.8	0.08	0.008	0.009	0.02	<0.005	0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	19	44	8.4	0.34	71.74	13	3.6	0.32	1.8	18.72
BH10	WSL		BH-10	18/03/2003	98			4	3.8	0.19	0.011	0.031	0.027	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	7.5	35	7.3	0.2	50	15	4.2	0.34	2.2	21.74
BH10	WSL		BH-10	6/2/02	31	31		3.4	3.2	0.14	0.011	0.044	0.034	0.007	0.004	0.004	<0.001	<0.001	<0.001	<0.001	0.0003	<0.001	<0.001	<0.001	34	54	11	0.2	99.2	18	4.8	0.28	2.3	25.38
BH10	WSL		SA-BH10W	6/12/00	11	11		4.7	4.4	0.22	0.012	0.031	0.033	0.006	0.004	0.003	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	5.5	27	5.6	<0.1	38.1	5.6	1.5	0.12	0.74	7.96
BH10	WSL		BH10W	3/2/00	62	62		4.3	4	0.19	0.014	0.045	0.046	0.011	0.006	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	11	57	8	<0.1	76	5.6	1.9	0.17	0.98	8.65
BH10	MGT		BH10W	10/2/99	15	15		2.7	2.6	<0.001	<0.001	<0.001	0.036	0.001	0.003	0.004	0.001	0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001	19	25	2	<0.1	46	12	3.6	0.3	2.3	18.2
BH10	MGT		BH10-W	20/11/96	160	160		17.3	9.8	1.1	3.5	0.31	0.82	0.27	0.39	0.34	0.18	0.13	0.082	<0.001	0.16	<0.001	0.043	0.081	22	57	31	4.2	114.2	14	4.2	0.42	2.9	21.52
BH11	WSL		BH11W	3/03/2005	31			8.0	7.6	0.30	0.021	0.052	0.058	0.015	0.007	0.006	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	30	51	9.7	<0.1	90.7	20	12	0.33	5.1	37.43
BH11	MGT		BH11W	19/03/2004	38	11	27	5.5	5	0.37	0.01	0.03	0.04	0.01	0.007	<0.0005	0.002	0.009	0.002	0.001	0.002	<0.0005	<0.0005	<0.0005	43	30	21	1.8	95.8	22	15	0.38	6.2	43.58
BH11	WSL		BH-11	18/03/2003	18			4.2	3.9	0.2	0.009	0.04	0.029	0.012	<0.003	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	12	23	5	0.2	40.2	12	9.7	0.26	3.9	25.86
BH11	WSL		BH-11	6/2/02	12	12		12	10	0.59	0.036	0.27	0.38	0.14	0.17	0.18	0.08	0.063	0.038	0.038	0.057	0.008	0.027	0.024	130	170	51	3.5	354.5	35	22	0.55	6.1	63.65
BH11	WSL		SA-BH11W	6/12/00	12	12		21	17	1.1	0.1	0.47	1	0.31	0.47	0.42	0.19	0.16	0.073	0.073	0.11	0.01	0.052	0.047	99	140	40	2.1	281.1	24	14	0.35	4.9	43.25
BH11	WSL		BH11W	3/2/00	26	26		11	10	0.44	0.02	0.069	0.06	0.058	0.005	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	33	84	19	<0.1	136	6.3	11	0.3	4.1	21.7
BH11	MGT		BH11W	11/2/99	18	18		3.8	3.7	<0.001	<0.001	<0.001	0.028	0.002	0.006	0.006	0.002	0.002	0.002	0.001	0.006	<0.001	0.002	0.002	65	39	4.9	<0.1	108.9	45	<0.1	0.44	7.3	52.74
BH11	WSL	Ext. Dup.	BH11W(B)	11/2/99	53	53		2.8	2.5	0.17	0.017	0.064	0.042	0.018	0.004	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	61	81	22	0.9	164.9	28	16	0.43	5.3	49.73
BH11	MGT		BH11-W	19/11/96	330	330		20.8	16	1	2.5	0.26	0.38	0.12	0.18	0.11	0.08	0.035	0.038	0.018	0.06	<0.001	0.005	0.035	80	110	39	5.8	234.8	49	19	0.49	7.8	76.29
BH11	MGT	Blind. Dup.	BH15-W	19/11/96	330	330		19.1	15	0.82	2	0.2	0.31	0.1	0.14	0.09	0.055	0.023	0.035	0.014	0.055	<0.001	<0.001	0.028	85	120	40	6	251	49	19	0.49	7.9	76.39
BH12	WSL		BH12W	3/03/2005	2.6			1.8	1.8	0.023	0.007	0.002	0.007	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	11	8.7	1.6	<0.1	21.3	8.9	0.57	0.77	2.6	12.84
BH12	MGT		BH12W	20/03/2004	0.98	0.22	0.76	0.55	0.53	0.007	0.003	<0.0005	0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	20	5	2.3	0.15	27.45	11	2.2	1.1	4.8	19.1
BH12	WSL		BH-12	18/03/2003	2.9			0.62	0.6	0.011	0.002	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	4.7	4.8	1.1	0.2	10.8	7.2	1.4	0.69	3.7	12.99
BH12	WSL		BH-12	6/2/02	0.32	0.32		0.47	0.46	0.006	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010	<0.001	<0.001	<0.001	12	5.6	1.4	<0.1	19	4.9	0.34	0.76	2.7	8.7
BH12	WSL		SA-BH12W	6/12/00	0.31	0.31		0.68	0.66	0.009	0.003	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	9.2	4.1	1	<0.1	14.3	2.6	0.11	<0.001	1.5	4.21
BH12	WSL		BH12W	3/2/00	2.7	2.7		0.84	0.83	0.003	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	6.1	5.9	0.7	<0.1	12.7	5.8	1.2	0.031	3.5	10.531
BH12	MGT		BH12W	11/2/99	0.46	0.46		0.04	0.023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	18	3.5	0.6	<0.1	22.1	11	1.1	0.98	5	18.08
BH12	MGT		BH12-W	20/11/96	10	10		<0.002	<0.0001	<0.0001	<0.0001	<0.0001	0.0009	0.0007	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	32	13	0.9	<0.1	45.9	19	2.7	1.1	5.4	28.2
BH12	WSL	Ext. Dup.	BH12-W (B)	20/11/96	5.3	5.3		0.6	0.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	8.7	8.1	1.3	<0.1	18.1	18	2.7	1.2	5.4	27.3
BH13	WSL		BH13W	1/03/2005	0.054			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	MGT		BH13W	18/03/2004	<0.0007	<0.0002	<0.0005	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	WSL		BH-13	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	WSL		BH-13	6/2/02	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0014	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	WSL		SA-BH13W	6/12/00	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	WSL		BH13W	3/2/00	0.005	0.005		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	MGT		BH13W	10/2/99	<0.01	<0.01		<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	MGT		BH13-W	19/11/96	<0.02	<0.02		<0.002	<0.0001	<0.0001	<0.0001	0.0002	0.0008	<0.0001	0.0003	0.0002	<0.0001	<0.0001	<0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH14	WSL		BH14W	3/03/2005	0.050			0.02	0.012	0.001	0.006	0.004	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	2.8	0.8	0.3	<0.1	3.9	4.1	0.007	0.36	0.019	4.486
BH14	MGT		BH14W	20/03/2004	<0.0115	0.011	<0.0005	0.024	0.008	0.002	0.005	0.005	0.001	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	4.4	1.5	1	<0.1	6.9	3.7	0.012	0.3	0.02	4.032
BH14	WSL		BH14	18/03/2003	<0.001			0.14	0.11	0.005	0.008	0.007	0.006	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	2.1	1.5	0.6	<0.1	4.2	7.2	1.4	0.69	3.7	12.99
BH14	WSL		BH-14B	6/2/02	0.085	0.085		0.2	0.18	0.002	0.004	0.004	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	11	3.4	0.6	<0.1	15	2.7	0.1	0.49	0.69	3.98
BH14	MGT		BH-14	6/2/02	0.08	0.08			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	2.7	0.24	0.19	<0.1	3.13	2.9	0.11	0.52	0.99	4.52
BH14	WSL		BH-24(int)	6/2/02	0.085	0.085		0.2	0.19	0.002	0.004	0.004	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	9.7	3.1	0.6	<0.1	13.4	2.7	0.11	0.46	0.9	4.17
BH14	WSL		SA-BH14W	6/12/00	0.018	0.018		0.03	0.017	0.001	0.004	0.003	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	0.8	0.4	0.2	<0.1	1.4	0.088	<0.001	<0.001	0.006	0.094
BH14	MGT	Ext. Dup.	SA-BH14W(B)	6/12/00	<0.01	<0.01		<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.12	0.21	0.13	<0.1	0.46	<0.001	<0.001	0.002	0.01	0.012
BH14	WSL		BH14W	3/2/00	0.063	0.063		0.02	0.002	0.002	0.005	0.003	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	0.7	0.6	<0.1	1.3	0.005	0.003	<0.001	0.009	0.017
BH14	MGT		BH14W	10/2/99	0.14	0.14		0.02	0.006	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	3.2	0.53	0.3	<0.1	4.03	2.6	0.01	0.32	0.085	3.015
BH14	MGT	Blind. Dup.	BH15W	10/2/99	0.07	0.07		0.02	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	3.7	0.45	0.11	<0.1	4.26	3	0.014	0.37	0.096	3.48
BH14	MGT		BH14-W	20/11/96	0.6	0.6		<0.0062	<0.0001	<0.0001	<0.0001	0.0018	0.0041	<0.0001	0.0003	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	24	3.5	<0.1	<0.1	27.5	12	1.2	8.1	3.1	24.4
BH15	WSL		BH15W	2/03/2005	0.027			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH15	MGT		BH15W	18/03/2004	<0.0003	<0.0001	<0.0002	<0.002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH15	WSL		BH-15	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH15	WSL		BH-15	6/2/02	0.011	0.011		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00010	<0.001	<0.001	<0.001	0.5	0.2	0.2	<0.1	0.9	0.36	<0.002	0.004	<0.002	0.364
BH15	WSL		SA-BH15W	6/12/00	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH15	WSL		BH15W	3/2/00	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH16	WSL		BH16W	2/03/2005	0.20			1.3	1.2	0.012	0.007	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	10	5.4	1.3	<0.1	16.7	11	0.12	0.92	1.1	13.14
BH16	MGT		BH16W	18/03/2004	<0.025	0.005	<0.02	0.16	0.14	0.01	0.005	0.001	0.001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	12	3.4	1.7	<0.1	17.1	10	0.12	0.88	1.1	12.10
BH16	WSL		BH16W	18/03/2003	0.071			0.48	0.46	0.012	0.004	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	14	5	1.7	<0.1	20.7	17	0.3	1.2	1.8	20.3
BH16	WSL		BH-16	6/2/02	0.56	0.56		<0.001	1.5	0.015	0.004	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010	<0.001	<0.001	39	15	3.5	<0.1	57.5	6.5	0.49	1	1.7	9.69
BH16	WSL		SA-BH16W	6/12/00	0.36	0.36		2.2	2.1	0.016	0.005	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	22	8.6	2.1	<0.1	32.7	4.8	0.044	<0.001	0.92	5.764
BH16	WSL		BH16W	3/2/00	1.2	1.2		0.95	0.94	0.007	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	1.5	4.8	1.3	<0.1	7.6	7.1	0.2	0.23	0.63	8.16
BH16	WSL	Blind. Dup.	BH20W	3/2/00	1.1	1.1		1.1	1.1	0.008	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	2.3	6.6	1.8	<0.1	10.7	7.3	0.18	0.048	0.66	8.188
BH17	WSL		BH17W	2/03/2005	0.027			<0.01	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH17	MGT		BH17W	18/03/2004	<0.0003	<0.0001	<0.0002	0.001	0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH17	WSL		BH17	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH17	WSL		BH-17	6/2/02	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00005	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH17	WSL		SA-BH17W	6/12/00	0.001	0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH17	WSL		BH17W	3/2/00	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.002	<0.001	<0.001	0.003	0.005
BH18	WSL		BH18W	2/03/2005	0.023			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH18	MGT		BH18W	19/03/2004	<0.0003	<0.0001	<0.0002	<0.002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH18	WSL		BH18	18/03/2003	0.34			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH18	WSL		BH-18	6/2/02	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH18	WSL		SA-BH18W	6/12/00	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH18	WSL		BH18W	3/2/00	0.004	0.004		<0.01	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.003	0.006	<0.001	0.006	0.015
BH19	WSL		BH19W	1/03/2005	0.023			<0.01	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.2	0.1	0.2	<0.1	0.5	<0.001	<0.001	<0.001	<0.001	<0.004
BH19	MGT		BH19W	19/03/2004	<0.003	<0.001	<0.002	7.8	7.8	<0.001	<0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.34	0.05	0.23	<0.1	0.62	0.34	<0.001	<0.001	<0.001	0.34
BH19	WSL		BH19	18/03/2003	<0.001			<0.01	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.6	0.2	0.2	<0.1	1	0.77	0.002	0.002	0.003	0.777
BH19	WSL		BH-19	6/2/02	0.026	0.026		<0.01	0.006	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	1.6	0.4	0.3	<0.1	2.3	0.87	0.003	0.006	0.006	0.885
BH19	WSL		SA-BH19W	6/12/00	0.03	0.03		0.01	0.009	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	<0.1	0.4	0.3	<0.1	0.7	0.35	<0.001	0.007	0.004	0.361
BH19	WSL		BH19W	3/2/00	0.068	0.068		0.02	0.016	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.1	0.9	0.3	<0.1	1.3	0.003	<0.001	0.013	0.018	0.034
BH19	MGT	Ext. Dup.	BH19W(B)	3/2/00	<0.1	<0.1		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	0.31	0.42	<0.1	0.73	<0.001	0.002	0.003	0.004	0.009
BH20	WSL		BH20W	2/03/2005	3.3			4.3	4.2	0.066	0.011	0.017	0.004	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	17	36	5.0	<0.1	58	12	4.9	0.39	2.7	19.99
BH20	WSL	Blind. Dup.	QA-1	2/03/2005	5.4			4.8	4.7	0.065	0.011	0.018	0.004	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	27	47	7.1	<0.1	81.1	13	5.2	0.44	2.9	21.54
BH20	MGT	Ext. Dup.	QA-2	2/03/2005	8.1			4.6	4.5	0.03	0.006	0.006	0.006	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	20	30	4.4	<0.1	54.4	12	4.6	0.41	2.6	19.61
BH20	MGT		BH20W	20/03/2004	6.45	0.25	6.2	2.1	2	0.05	<0.02	<0.005	0.003	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	21	30	4.7	0.18	55.88	13	5.2	0.28	2.5	20.98
BH20	WSL	Ext. Dup.	BH20(B)IN	20/03/2004		5		5.4	5.3	0.061	0.013	0.021	0.005	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	14	41	6.2	0.1	61.3	20	9.1	0.51	4.1	33.71
BH20	MGT	Blind. Dup.	BH9W	20/03/2004		0.33		2.4	2.3	0.03	<0.01	0.007	0.003	<0.005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	23	37	8.4	0.22	68.62	14	5.8	0.31	2.4	22.51
BH20	WSL		BH20W	18/03/2003	2.2			6.6	6.5	0.044	0.005	0.009	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	9.4	32	4.8	0.1	46.3	11	4.5	0.37	2.8	18.67
BH20	WSL		BH-20	6/2/02	0.15	0.15		3.4	3.3	0.036	0.008	0.015	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	42	62	9.5	0.1	113.6	15	6.6	0.57	3.3	25.47
BH20	WSL		SA-BH20W	6/12/00	1.2	1.2		1.4	1.3	0.034	0.012	0.011	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	19	30	4.4	<0.1	53.4	5.6	2.1	0.19	1	8.89
BH20	WSL	Blind. Dup.	SA-BH24W	6/12/00	1	1		1.4	1.3	0.034	0.01	0.009	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	20	31	4.6	<0.1	55.6	5.5	2.1	0.19	1	8.79
BH21	WSL		BH21W	2/03/2005	4.1			1.6	1.6	0.011	0.003	0.003	<0.001	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	17	32	2.5	<0.1	51.5	12	4.5	0.21	1.7	18.41
BH21	MGT		BH21W	20/03/2004	4.96	0.06	4.9	1	0.96	0.01	<0.01	<0.001	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	25	27	3.3	<0.1	55.3	16	6.3	0.25	2.0	24.55
BH21	WSL		BH21W	18/03/2003	14			2	2	0.014	0.004	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	10	40	4.8	0.2	55	15	6.3	0.23	2.1	23.63
BH21	WSL	Blind. Dup.	BH9W	18/03/2003	19			1.8	1.7	0.02	0.002	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	10	38	5	0.5	53.5	14	5.6	0.26	2.3	22.16
BH21	MGT	Ext. Dup.	BH21W(B)	18/03/2003	0.94			1.81	1.8	0.01	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	23	24	2.3	<0.1	49.3	15	5.8	0.27	2.3	23.37
BH21	WSL		BH-21	6/2/02	27	27		2.1	2.1	0.02	0.002	0.006	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	60	85	8.3	<0.1	153.3	22	9.2	0.4	3.1	34.7
BH21	WSL		SA-BH21W	6/12/00	<0.001	<0.001		0.05	0.049	<0.001	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	24	37	3.2	<0.1	64.2	6.2	2.1	0.1	0.74	9.14
BH22	WSL		BH22W	2/03/2005	0.24			0.57	0.56	0.005	0.003	0.001	<0.001	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	2.3	3.7	0.9	<0.1	6.9	0.89	0.2	0.072	0.18	1.342
BH22	MGT		BH22W	20/03/2004	0.839	0.009	0.83	0.19	0.16	0.01	0.004	0.003	0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	4.8	7.1	3.1	0.18	15.18	3.1	0.91	0.17	0.55	4.73
BH22	WSL		BH22W	18/03/2003	21			1.3	1.3	0.008	0.002	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.9	4.8	1.8	<0.1	7.5	2.6	0.81	0.13	0.55	4.09
BH22	WSL		SA-BH22W	6/2/02	0.87	0.87		1.1	1.1	0.013	0.003	0.005	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	20	22	3.6	<0.1	45.6	6.6	2.2	0.24	0.94	9.98
BH22	WSL		SA-BH22W	6/12/00	0.007	0.007		0.09	0.076	0.003	0.004	0.003	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	5.8	8.4	1.4	<0.1	15.6	0.75	0.19	0.013	0.17	1.123
BH23	WSL		BH23W	2/03/2005	0.037			0.02	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.6	0.3	0.2	<0.1	1.1	0.30	0.002	0.011	0.054	0.37
BH23	MGT		BH23W	19/03/2004		<0.0002	<0.0005	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.83	0.07	<0.1	<0.1	0.9	0.74	<0.001	0.03	0.06	0.83
BH23	WSL		BH-23	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.17	<0.002	<0.002	0.046	0.216
BH23			BH-23	6/2/02	0.055	0.055		<0.01	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0003	<0.001	<0.001	<0.001	0.2	0.4	0.5	0.2	1.3	<0.001	<0.001	<0.001	<0.001	<0.004
BH23	WSL		SA-BH23W	6/12/00	0.02	0.02		<0.01	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	0.2	0.1	<0.1	<0.1	0.3	0.002	<0.001	<0.001	0.004	0.006
BH24	WSL		BH24W	2/03/2005	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH24	MGT		BH24W	18/03/2004	<0.0007	<0.0002	<0.0005	<0.005	<0.001	<0.001	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.001
BH24	WSL		BH-24	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	0.001	0.001
BH25	WSL		BH25W	2/03/2005	0.003			0.11	0.10	<0.001	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.6	0.9	0.4	<0.1	1.9	0.30	<0.001	<0.001	0.048	0.35
BH25	MGT		BH25W	18/03/2004	<0.0012	<0.001	<0.0002	0.005	<0.001	<0.0002	0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.54	0.05	0.13	<0.1	0.72	0.54	<0.001	<0.001	<0.001	0.54
BH25	WSL		BH-25	18/03/2003	<0.001			0.07	0.071	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	0.5	0.2	<0.1	0.7	0.2	<0.001	<0.001	0.035	0.235
BH26	WSL		BH26W	2/03/2005	<0.001			<0.01	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.2	0.1	<0.1	<0.1	0.3	<0.001	<0.001	0.004	0.009	0.01
BH26	MGT		BH26W	18/03/2004	<0.0012	<0.001	<0.0002	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	<0.05	0.17	<0.1	0.17	<0.001	<0.001	<0.001	<0.001	<0.001
BH26	WSL		BH-26	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.056	<0.001	<0.001	0.003	0.059
BH27	WSL		BH27W	2/03/2005	0.028			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH27	MGT		BH27W	19/03/2004	<0.0012	<0.001	<0.0002	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	0.05	0.18	<0.1	0.23	<0.001	<0.001	<0.001	<0.001	<0.001
BH27	WSL		BH-27	18/03/2003	0.041			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.002	0.001	<0.001	<0.001	0.003
BH28	WSL		BH28W	2/03/2005	<0.001			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH28	MGT		BH28W	19/03/2004	<0.0012	<0.001	<0.0002	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH28	WSL		BH-28	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH29	WSL		BH29W	2/03/2005	<0.001			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH29	MGT		BH29W	19/03/2004	<0.0012	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	<0.05	0.10	<0.1	0.1	<0.001	<0.001	<0.001	<0.001	<0.001
BH29	WSL		BH-29	18/03/2003	0.25			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.001	0.002	<0.001	<0.001	0.003
BH30	WSL		BH30W	1/03/2005	<0.001			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH30	MGT		BH30W	19/03/2004	<0.0012	<0.001	<0.0002	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.001
BH30	WSL		BH-30	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.001	<0.001	<0.001	<0.001	0.001
BH31	MGT		BH31W	18/03/2004	109.6	9.6	100	6.2	4.7	0.49	0.1	0.16	0.4	0.08	0.07	0.07	0.04	0.02	0.02	0.02	0.03	<0.002	0.009	0.01	41	170	28	0.38	239.38	23	12	0.31	5.7	41.01
BH32	WSL		BH32W	3/03/2005	79			6.6	6.3	0.19	0.020	0.046	0.044	0.011	0.004	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	55	87	11	<0.5	153	25	16	0.43	6.4	47.83
Sample Location	Lab	Sample Type	Sample Name	Sampling Date	Total Phenols	Phenol	Cresols	Total PAHs	Napth-alene	Acenap-thylene	Acena-pthene	Fluorene	Phenanthr ene	Anthra-cene	Fluora-nthene	Pyrene	Benzo(a) anthracene	Chrysene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	B(a)P	Dibenzo(a,h)an thracene	Benzo(g,h,i) perylene	Indeno(1,2,3-c,d)pyrene	TPHs C6-C9	TPHs C10-C14	TPHs C15-C28	TPHs C29-C36	Total TPHs	Benzene	Toluene	Ethyl Benz.	Xylene	Total Vocs

PROTECTED BENEFICIAL USES at Sale Depot — GROUNDWATER QUALITY OBJECTIVES (mg/l) for Segment B

	Total Phenols	Phenol	Cresols	Total PAHs	Napth-alene	Acenap-thylene	Acena-pthene	Fluorene	Phenanthr ene	Anthra-cene	Fluora-nthene	Pyrene	Benzo(a) anthracene	Chrysene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	B(a)P	Dibenzo(a,h)an thracene	Benzo(g,h,i) perylene	Indeno(1,2,3-c,d)pyrene	TPHs C6-C9	TPHs C10-C14	TPHs C15-C28	TPHs C29-C36	Total TPHs	Benzene	Toluene	Ethyl Benz.	Xylene	Total Vocs
Criteria for Ecosystem Protection	0.32	0.32	-	0.003	0.016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	-	-	-	-	0.95	0.3	-	0.2	-
Criteria for Agricult. Water Supply (Irrigation)[6]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	-	-	-	-	-	-	-	-	-
Criteria for Livestock	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00001	-	-	-	0.6	-	-	-	-	0.01	0.7	0.3	0.5	-
Criteria for Primary Contact Recreation	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00001	-	-	-	0.6	-	-	-	-	0.01	0.7	0.3	0.5	-
Adopted Screening Criteria (minimum value)	0.002	-	-	0.003	0.016	-	-	-	-	-	-	-	-	-	-	-	0.00001	-	-	-	0.6	-	-	-	-	0.01	0.3	0.3	0.2	0

NOTES:
1: Taken from Australian Drinking Water Guidelines (ADWG) (NHMRC & NRMMC 2004)
2: Based on Dutch Intervention Values (2000) for groundwater in lieu of ANZECC/NHMRC (1992) or ANZECC/ARMCANZ (2000) for TPH (C10-C36)
3: ANZECC guidelines recommend ADWG 1996
4: The most conservative value has been selected where several are available for a variety of livestock
5: Guidelines expressed as nitrate have been converted to nitrate-N as follows: 1mg/L nitrate-N =4.43mg/L nitrate
6: Depending on sensitivity of crop
7: Italics denotes MDL is less than adopted screening criteria

TABLE 1: SALE, SUMMARY OF GROUNDWATER ANALYSES (1996 - 2005)

Sample Location	Lab	Sample Type	Sample Name	Sampling Date	Total Cyanide	N as NH3	Arsenic	Cadmium	Copper	Iron	Nickel	Lead	Mercury	Zinc	TDS (Field)	TDS (Lab)	DO Field	DO Lab	Fe 2+	Fe 3+	Nitrate	Nitrite	Sulphate	BOD	COD	Mn	Methane	pH (lab)	pH (field)
BH10	WSL		BH10W	3/03/2005	0.25	390									2805		0.49		1.6		<0.01					2.1	1.9		7.5
BH10	MGT		BH10W	20/03/2004	0.27	350									2750		1.07		1.6		0.15			14		1.8	6.6		7.35
BH10	WSL		BH-10	18/03/2003	0.28	380									2266		0.17		4.5		0.03					1.3	3.6		7.53
BH10	WSL		BH-10	6/2/02	1.5	650									2893.0		0.8												7.36
BH10	WSL		SA-BH10W	6/12/00	0.08	300																						7.6	
BH10	WSL		BH10W	3/2/00	0.33	400																							
BH10	MGT		BH10W	10/2/99		380										1900							330					7.27	
BH10	MGT		BH10-W	20/11/96	<0.01	570																							
BH11	WSL		BH11W	3/03/2005	0.08	1.6									2350		1.36		0.24		0.13				200	5.4	0.64		7.5
BH11	MGT		BH11W	19/03/2004	0.059	330	0.007	<0.0002	0.003			<0.001	<0.001	<0.001	2365		0.81		1.8		<0.02			27	380	7.3	8.8		7.46
BH11	WSL		BH-11	18/03/2003	0.03	220									1875.5		0.07		6.1		1.7			42	160	8.1	0.62		6.95
BH11	WSL		BH-11	6/2/02	0.18	410									2552.0	1600	0.22		2.6		0.58		820				0.47		7.37
BH11	WSL		SA-BH11W	6/12/00	0.16	250												<0.1	1.8	<0.05	<0.10		530				0.77	7.5	
BH11	WSL		BH11W	3/2/00	0.17	310																					<0.05		
BH11	MGT		BH11W	11/2/99		300															0.18								
BH11	WSL	Ext. Dup.	BH11W(B)	11/2/99		290																							
BH11	MGT		BH11-W	19/11/96	<0.01	610										2300													
BH11	MGT	Blind. Dup.	BH15-W	19/11/96	<0.01	620																							
BH12	WSL		BH12W	3/03/2005	0.22	140									1755		3.39		1.3		0.37				94	0.34	1.5		7.6
BH12	MGT		BH12W	20/03/2004	0.27	170									1760		3.02		0.58		0.07				110	0.28	13		7.55
BH12	WSL		BH-12	18/03/2003	0.11	69									1749		2.52		4.1		3.9			21	54	0.48	2.4		7.27
BH12	WSL		BH-12	6/2/02	0.5	150	<0.001	<0.001	<0.01	0.12	<0.01	<0.01		<0.01	1980	1400	4.01		2.1		1.1		13				0.6		7.33
BH12	WSL		SA-BH12W	6/12/00	0.18	120												0.9	9.6	<0.05	<0.10		10				0.2	7.7	
BH12	WSL		BH12W	3/2/00	0.17	180													<0.1	0.33			5.8		90				
BH12	MGT		BH12W	11/2/99		130																							
BH12	MGT		BH12-W	20/11/96	<0.01	140																							
BH12	WSL	Ext. Dup.	BH12-W (B)	20/11/96	0.9	300																							
BH13	WSL		BH13W	1/03/2005	<0.01	0.2									1680		2.72		<0.10		11				2	0.03	<0.01		7.0
BH13	MGT		BH13W	18/03/2004	0.02	0.02									1485		0.2		0.23		10			<0.0005	11	0.022	<0.5		6.86
BH13	WSL		BH-13	18/03/2003	0.02	<0.1									1666.5		7		<0.1		9.2		57	<2	5	0.02	<0.005		4.02
BH13	WSL		BH-13	6/2/02	0.02	<0.1	<0.001	<0.001	<0.01	<0.05	<0.01	<0.01		<0.01	1897	1600	0.53		0.25		11		59				<0.01		6.91
BH13	WSL		SA-BH13W	6/12/00	0.02	0.4												1.7	0.39	<0.05	9		62				<0.01	8.1	
BH13	WSL		BH13W	3/2/00	0.03	0.2																							
BH13	MGT		BH13W	10/2/99		<0.05										1800			<0.1	0.12				1				7.23	
BH13	MGT		BH13-W	19/11/96	<0.01	<0.02										1700													
BH14	WSL		BH14W	3/03/2005	0.13	97									1940		1.41		0.22		0.03				19	0.40	0.10		7.6
BH14	MGT		BH14W	20/03/2004	0.074	110	0.012	<0.0002	0.002			<0.001	<0.001	<0.001	1870		0.52		0.39		0.05			<0.0005	25	0.4	9.2		7.55
BH14	WSL		BH14	18/03/2003	0.08	120									2024		0.19		0.8		0.02			9	33	0.29	3.3		7.64
BH14	WSL		BH-14B	6/2/02	0.11	120	0.012	<0.001	<0.01	0.19	<0.01	<0.01		<0.01	1980	1500	0.44		1.1		0.04		38				1.7		7.64
BH14	MGT		BH-14	6/2/02	<0.05	140	<0.002	<0.002	<0.005	0.25	<0.005	<0.005		<0.005															
BH14	WSL		BH-24(int)	6/2/02	0.11	110	<0.001	<0.001	<0.01	<0.05	<0.01	<0.01		<0.01														7.9	
BH14	WSL		SA-BH14W	6/12/00	0.05	110																						7.59	
BH14	MGT	Ext. Dup.	SA-BH14W(B)	6/12/00	0.09	120																							
BH14	WSL		BH14W	3/2/00	0.09	150																							
BH14	MGT		BH14W	10/2/99		160										1700					0.29						<0.05	7.67	
BH14	MGT	Blind. Dup.	BH15W	10/2/99		160																							
BH14	MGT		BH14-W	20/11/96	<0.01	170																							
BH15	WSL		BH15W	2/03/2005	<0.01	2.7									1905		3.21		0.84		3.1					0.36	<0.01		7.4
BH15	MGT		BH15W	18/03/2004	0.005	2.1									1815		2.14		0.82		5.6			<0.0002		0.4	<0.1		6.84
BH15	WSL		BH-15	18/03/2003	<0.01	4.1									1820.5		4.01		<0.1		3.9					0.41	0.011		6.91
BH15	WSL		BH-15	6/2/02	0.05	9.1									1650.0	1600	3.99		0.2		0.47		75				0.03	7.6	7.00
BH15	WSL		SA-BH15W	6/12/00	<0.01	2.2													<0.2	0.1	1		110				<0.05		
BH15	WSL		BH15W	3/2/00	0.01	8.1																							
BH16	WSL		BH16W	2/03/2005	0.24	160									2150		3.81		0.23		0.10				65	0.17	0.76		8.0
BH16	MGT		BH16W	18/03/2004	0.11	170									2035		4.21		0.36		0.02			<0.02	89	0.15	7.6		7.92
BH16	WSL		BH16W	18/03/2003	0.18	180									2167		18.74		1.3		0.02			55	100	0.18	0.58		7.16
BH16	WSL		BH-16	6/2/02	0.27	160	<0.001	<0.001	<0.01	0.23	<0.01	<0.01		<0.01	2183.5	1500	2.45		0.32		1.3		4				1.4		7.62
BH16	WSL		SA-BH16W	6/12/00	0.37	160												0.1	4.3	<0.05	<0.10		13				0.47	8	
BH16	WSL		BH16W	3/2/00	0.3	180													<0.2	0.4	<0.1		210				<0.05		
BH16	WSL	Blind. Dup.	BH20W	3/2/00	0.32	180													0.4	<0.1	<0.1		210				<0.05		
BH17	WSL		BH17W	2/03/2005	0.05	27									1630		2.01		0.54		0.37					0.15	0.05		7.5
BH17	MGT		BH17W	18/03/2004	0.009	32									1155		0.58		0.63		0.02			<0.0002		0.14	1.8		6.95
BH17	WSL		BH17	18/03/2003	<0.01	29									1666.5		4.94		10		<0.01					0.11	0.14		6.95
BH17	WSL		BH-17	6/2/02	0.01	27									1628	1500	3.5		1.8		0.08		33				0.14	7.5	
BH17	WSL		SA-BH17W	6/12/00	0.02	40																							
BH17	WSL		BH17W	3/2/00	0.02	68													0.2	<0.1	<0.1		47				<0.05		
BH18	WSL		BH18W	2/03/2005	<0.01	0.4									1060		2.34										0.01		6.7
BH18	MGT		BH18W	19/03/2004	0.006	0.24									935		0.41		4.2		<0.02			<0.0002		0.23	0.18		6.58
BH18	WSL		BH18	18/03/2003	<0.01	4.6									1078		19		12		<0.01					0.25	0.3		6.39
BH18	WSL		BH-18	6/2/02	<0.01	0.3	<0.001	<0.001	<0.01	5.4	<0.01	<0.01		<0.01	1045		0.55											7.2	6.39
BH18	WSL		SA-BH18W	6/12/00	0.01	1																					<0.05		
BH18	WSL		BH18W	3/2/00	0.01	0.8													<0.2	0.4	<0.1		38						
BH19	WSL		BH19W	1/03/2005	<0.01	0.2									2060		2.34		0.63		0.09					0.32	0.16		7.3
BH19	MGT		BH19W	19/03/2004	0.026	40									1925		0.69		1.3		<0.02			<0.002		0.33	9.5		7.08
BH19	WSL		BH19	18/03/2003	0.03	33									1980		0.56		4		<0.01		54			0.4	0.73		6.16
BH19	WSL		BH-19	6/2/02	0.05	32	<0.001	<0.001	<0.01	0.09	<0.01	<0.01		<0.01	1996.5													7.6	7.20
BH19	WSL		SA-BH19W	6/12/00	0.06	33													<0.2	0.3	<0.1		85				0.75		
BH19	WSL		BH19W	3/2/00	0.11	49													<0.2	0.22	18		100						
BH19	MGT	Ext. Dup.	BH19W(B)	3/2/00	0.09	46																							
BH20	WSL		BH20W	2/03/2005	0.15	400									3650		0.24		0.56		0.01					0.01	4.7		8.4
BH20	WSL	Blind. Dup.	QA-1	2/03/2005	0.13	380													0.58		<0.01					0.02			
BH20	MGT	Ext. Dup.	QA-2	2/03/2005	0.056	670				0.08									0.09		<0.02					0.009			8.05
BH20	MGT		BH20W	20/03/2004	0.2	620									2915		0.41		0.77		<0.02			6.2		0.01	41		
BH20	WSL	Ext. Dup.	BH20(B)N	20/03/2004	0.21	380	<0.001	<0.001	<0.01			<0.01		<0.01					<0.1		<0.01				690	0.02			
BH20	MGT	Blind. Dup.	BH9W	20/03/2004	0.17	600													0.98		0.25			5.1		0.009	21		
BH20	WSL		BH20W	18/03/2003	0.19	430									3588		0.06		3.7		0.03					0.03	15		8.08
BH20	WSL		BH-20	6/2/02	0.21	670									4026	1800	0.37		1.8		0.94		100				5.1		8.07
BH20	WSL		SA-BH20W	6/12/00	0.16	450																						8.2	
BH20	WSL	Blind. Dup.	SA-BH24W	6/12/00	0.19	470																						8.1	
BH21	WSL		BH21W	2/03/2005	0.27	390									3595		0.32		0.53		<0.01				1200	0.19	12		8.6
BH21	MGT		BH21W	20/03/2004	0.25	520	0.013	<0.0002		0.001		<0.001	<0.001	<0.001	2640		0.73		1.1		<0.02			4.9	380	0.17	25		8.31
BH21	WSL		BH21W	18/03/2003	0.28	390									3432		0		3.2		<0.01		71	270	280	0.18	5.2		8.35
BH21	WSL	Blind. Dup.	BH9W	18/03/2003	0.03	390															4.5					0.2	12		
BH21	MGT	Ext. Dup.	BH21W(B)	18/03/2003	0.1	600													7		<0.05		23			0.16	13		
BH21	WSL		BH-21	6/2/02	0.32	950	0.012	<0.001	<0.01	0.36	<0.01	<0.01		<0.01	4361.5	1400	0.18		3.1		1.2		140				4.8		8.49
BH21	WSL		SA-BH21W	6/12/00	<0.01	650												<0.1	28	<0.05	<0.10		20				3.1	8.4	
BH22	WSL		BH22W	2/03/2005	<0.01	95									980		0.68		0.64		0.01					0.26	5.5		7.4
BH22	MGT		BH22W	20/03/2004	0.076	190									1045		5.04		0.77		<0.02			0.83		0.2	9.9		7.46
BH22	WSL		BH22W	18/03/2003	0.09	110									1006.5		0.16		0.9		<0.01					<0.01	3.3		7.58
BH22	WSL		SA-BH22W	6/2/02	0.08	210									2381.5		0.46		1.4		0.38		28				3.0		7.49
BH22	WSL		SA-BH22W	6/12/00	0.59	170												<0.1	5.3	<0.05	<0.10		31				2.2	7.6	
BH23	WSL		BH23W	2/03/2005	0.08	94									1685		3.05		1.3		<0.01					0.08	1.0		7.2
BH23	MGT		BH23W	19/03/2004	0.068	99									1595		1.98		0.82		<0.02			<0.0005		0.077	29		6.94
BH23	WSL		BH-23	18/03/2003	0.1	100									1710.5		14.23		13		<0.01					0.08	4.7		6.91
BH23			BH-23	6/2/02	0.11	49									646.3	870	6.6		3.3		0.65		3				<0.01		6.85
BH23	WSL		SA-BH23W	6/12/00	0.19	62												3.8	14	<0.05	<0.10		<1				0.94	7.3	
BH24	WSL		BH24W	2/03/2005	<0.01	22									1520		1.41		1.1		<0.01					0.08	0.02		7.1
BH24	MGT		BH24W	18/03/2004	0.01	34									1375		1.18		5.3		<0.02			<0.0005		0.064	<0.5		6.69
BH24	WSL		BH-24	18/03/2003	0.02	44									1375		1.74		1.2		<0.01		48			0.05	0.29		7.04
BH25	WSL		BH25W	2/03/2005	0.02	75									1980		1.51		0.67		0.01				4	0.04	3.3		7.4
BH25	MGT		BH25W	18/03/2004	0.035	79									1540		1.43		0.77		<0.02			<0.0002	17	0.036	0.76		7.07
BH25	WSL		BH-25	18/03/2003	0.02	74									1699.5		1.64		5.3		0.02		<1	81	170	0.04	1.4		7.11
BH26	WSL		BH26W	2/03/2005	<0.01	55									1680		2.01		1.9		0.01				<2	0.06	1.5		7.1
BH26	MGT		BH26W	18/03/2004	0.009	65									1540		2.04		150		<0.02			<0.0002	15	0.061	9.5		6.81
BH26	WSL		BH-26	18/03/2003	<0.01	61									1485		1.12		0.6		<0.01		2	3	17	0.07	1.4		6.83
BH27	WSL		BH27W	2/03/2005	<0.01	3.6									1685		1.82		2.1		0.01				44	0.29	1.8		7.6
BH27	MGT		BH27W	19/03/2004	<0.005	0.87									1650		2.74		1.2		<0.02			<0.0002	55	0.36	7.6		7.05
BH27	WSL		BH-27	18/03/2003	<0.01	0.9									1573		0.56		1.9		<0.01		20	5	33	<0.01	0.96		6.89
BH28	WSL		BH28W	2/03/2005	<0.01	0.5									1220		0.84		0.33		0.64					0.26	0.47		6.9
BH28	MGT		BH28W	19/03/2004	0.006	0.6									1210		0.34		0.43		<0.02			<0.0002		0.28	7.7		6.87
BH28	WSL		BH-28	18/03/2003	<0.01	<0.1									1320		0.22		7.3		0.01		15			0.34	0.56		6.82
BH29	WSL		BH29W	2/03/2005	<0.01	17									2680		3.01		1.7		<0.01				31	1.6	5.6		7.0
BH29	MGT		BH29W	19/03/2004	0.006	4.1													5		<0.02			<0.0002	23	1.5	29		
BH29	WSL		BH-29	18/03/2003	<0.01	7.7									4328.5		0.73		2.6		<0.01		130	<2	17	0.9	5.7		6.81
BH30	WSL		BH30W	1/03/2005	<0.01	1.5									1755		1.27		1.1		<0.01					0.34	0.08		7.0
BH30	MGT		BH30W	19/03/2004	0.008	1.8									1760		0.31		8.3		<0.02			<0.0002		0.26	4.4		6.52
BH30	WSL		BH-30	18/03/2003	0.01	1.3									1633.5		0.18		9.1		<0.01		45			0.31	0.18		6.75
BH31	MGT		BH31W	18/03/2004	0.12	570																					1.3		7.7
BH32	WSL		BH32W	3/03/2005	0.09	530									3525		0.81												

Sample Location	Lab	Sample Type	Sample Name	Sampling Date	Total Cyanide	N as NH3	Arsenic	Cadmium	Copper	Iron	Nickel	Lead	Mercury	Zinc	TDS (Field)	TDS (Lab)	DO Field	DO Lab	Fe 2+	Fe 3+	Nitrate	Nitrite	Sulphate	BOD	COD	Mn	Methane	pH (lab)	pH Field

PROTECTED BENEFICIAL USES at Sale Depot	GROUNDWATER QUALITY OBJECTIVES (mg/l) for Segment B																											
Criteria for Ecosystem Protection	0.007	0.9	0.003	0.00015	0.0014	1	0.011	0.0034	0.0006	-			-	110	110	-		0.16		-	-	-	-	-	6.5	6.5
Criteria for Agricult. Water Supply (Irrigation)	-	-	0.1	0.01	0.2	1	0.2	0.2	0.002	-			-	-	-	-		-		-	-	-	0.2	0.01	-	-	-
Criteria for Livestock	0.07	0.1	0.5	0.01	0.5	1.0	0.1	0.002	-				-	3000		85	85	-		30		1000	-	-	0.01	-	-	-
Criteria for Primary Contact Recreation	0.1	0.1	0.05	0.005	1.0	0.3	0.1	0.05	0.001	-			-	1000		80	80	-		10		400	-	-	0.07	-	5-9	5-9
Adopted Screening Criteria (minimum value)	0.007	0.1	0.003	0.00015	0.0014	0.3	0.011	0.0034	0.0006	-			-	1000	0	80	80	-		0.16		400	-	-	0.01	-	6.5	6.5

TABLE 2: SALE - QA/QC RESULTS, MARCH 2005

Sample Location	BH-20					
Laboratory	WSL	WSL	RPD	MGT	RPD	WSL
Sample Type		blind dup		external		rinsate
Sample Name	BH20W	QA-1		QA-2		QA-R
Date of sampling	2/03/2005	2/03/2005		2/03/2005		3/03/2005
Total Phenols	3.3	5.4	48.3	8.1	84.2	0.007
Total PAHs	4.3	4.8	11.0	4.6	6.7	ND
Napthalene	4.2	4.7	11.2	4.5	6.9	<0.001
Acenapthylene	0.066	0.065	1.5	0.03	75.0	<0.001
Acenapthene	0.011	0.011	0.0	0.006	<MDL	<0.001
Fluorene	0.017	0.018	5.7	0.006	<MDL	<0.001
Phenanthrene	0.004	0.004	0.0	0.006	<MDL	<0.001
Anthracene	0.001	<0.001	<MDL	<0.0005	<MDL	<0.001
Fluoranthene	0.001	0.001	0.0	<0.0002	<MDL	<0.001
Pyrene	<0.001	<0.001	<MDL	<0.0002	<MDL	<0.001
Benzo(a)anthracene	<0.001	<0.001	<MDL	<0.0002	<MDL	<0.001
Chrysene	<0.001	<0.001	<MDL	<0.0002	<MDL	<0.001
Benzo(b)fluoranthene	<0.001	<0.001	<MDL	<0.0002	<MDL	<0.001
Benzo(k)fluoranthene	<0.001	<0.001	<MDL	<0.0002	<MDL	<0.001
Benzo(a)pyrene	<0.001	<0.001	<MDL	<0.0002	<MDL	<0.001
Dibenzo(a,h)anthracene	<0.001	<0.001	<MDL	<0.0002	<MDL	<0.001
Benzo(g,h,i)perylene	<0.001	<0.001	<MDL	<0.0002	<MDL	<0.001
Indeno(1,2,3-c,d)pyrene	<0.001	<0.001	<MDL	<0.0002	<MDL	<0.001
TPHs:						
TPH (C6-C9)	17	27	45.5	20	16.2	
TPH (C10-C14)	36	47	26.5	30	18.2	
TPH (C15-C28)	5.0	7.1	34.7	4.4	12.8	
TPH (C29-C36)	<0.1	<0.1	<MDL	<0.1	<MDL	
Total VOCs:						
Benzene	12	13.0	8.0	12	0.0	0.002
Toluene	4.9	5.2	5.9	4.6	6.3	0.001
Ethyl Benzene	0.39	0.44	12.0	0.41	5.0	<0.001
Xylenes	2.7	2.9	7.1	2.6	3.8	<0.001
Ammonia as N	400	380	5.1	670	50.5	0.1
Ferrous Iron	0.56	0.58	3.5	0.09	144.6	
Manganese	0.01	0.02	66.7	0.009	10.5	
Nitrate	0.01	<0.01	<MDL	<0.02	<MDL	
Cyanide	0.15	0.13	14.3	0.056	91.3	

APPENDIX 1: Laboratory Request ORG-408 SaMon

WSL
2-8 Harvey St, Richmond, VIC 3121
ph: 9429 4666
fax: 9429 2294

ANALYTICAL PROGRAM

Monarc Environmental
Building 2, Level 3
18 Compark Circuit
Mulgrave, VIC 3170

WSL **Groundwater**
Job Ref No: **ORG-453-**
No. of Locations: **22**

Analysis	Qty	total	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	blind	rinsat	rinse
			BORE number / location																									
			10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32			
PAHs	**23**	24	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	
phenols (waters), total	**24**	24	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	
phenols (speciated)	0																											
BTEX	**24**	24	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	
Metals(6)	0																											
Metals Screen (24)	0																											
Al, As, Cu, Cd, Cr, Pb, Zn, Hg	0																											
	0																											
TPH (C_6 to C_{36})	**23**	23	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1	1		
pH	0																											
N as NH3	**24**	24	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	
N as TKN	0																											
Cyanide (waters), total	**23**	23	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1	1		
Cyanide - WAD	0																											
	0																											
Chlor Hydrocarbons	0																											
PCBs (in transformer oil)	0																											
Pesticides, OCP	0																											
Pesticides, OPP	0																											
	0																											
EPA Screen	0																											
microtox	0																											
Major Ions Screen	0																											
	0																											
BOD_5	0																											
COD	**10**	10		1	1	1	1		1					1				1	1	1		1						
DO	0																											
Sulphate	0																											
Sulphide (waters)	0																											
Nitrate	**21**	21	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1			1		
Nitrite	0																											
Methane	0																											
Iron, Ferrous (Fe2+)	**21**	21	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1			1		
Manganese	**21**	21	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1			1		
EC - field test only	**22**	22	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1			
redox/pH - field test only	**22**	22	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1			
DO - field test only	**22**	22	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1			
Sub-Total																												
Less Discount (in batch >10)																												
Sub-Total																												
Total																												

3 Kingston Town Close, Oakleigh, VIC 3166
ph 9564 7055
fax 9564 7190

ANALYTICAL PROGRAM

Monaro Environmental
Building 2, Level 3
18 Compark Circuit
Mulgrave, VIC 3170

MGT **Groundwater**
Job Ref No: **ORG-453-Sa mon**
No. of Locations: **1**

Analysis	Qty	DETECTION LIMITS	total	BORE number/location 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	external
PAHs	1	Benzo(a)pyr. 0.00001 mg/L	1																								1
phenolics (waters), total	1		1																								1
phenols (speciated)																											
BTEX	1		1																								1
Metals(6)																											
Metals Screen (24)																											
TPH (C_6 to C_{36})	1		1																								1
pH																											
N as NH3	1		1																								1
N as TKN																											
Cyanide (waters), total	1		1																								1
Cyanide - WAD																											
Chlor Hydrocarbons																											
PCBs (in transformer oil)																											
Pesticides, OCP																											
Pesticides, OPP																											
EPA Screen																											
Major Ions Screen																											
BOD_5																											
COD			0																								
DO																											
Sulphate																											
Sulphide (waters)																											
Nitrate	1		1																								1
Nitrite																											
Methane	22		22	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1	
Iron, Ferrous (Fe2+)	1		1																								1
Manganese	1		1																								1
EC - field test only			0																								
pH - field test only			0																								
report preparation	1		0																								
Sub-Total																											
Less Discount (in batch >10)																											
Sub-Total																											
Total																											

APPENDIX 2: Borelogs

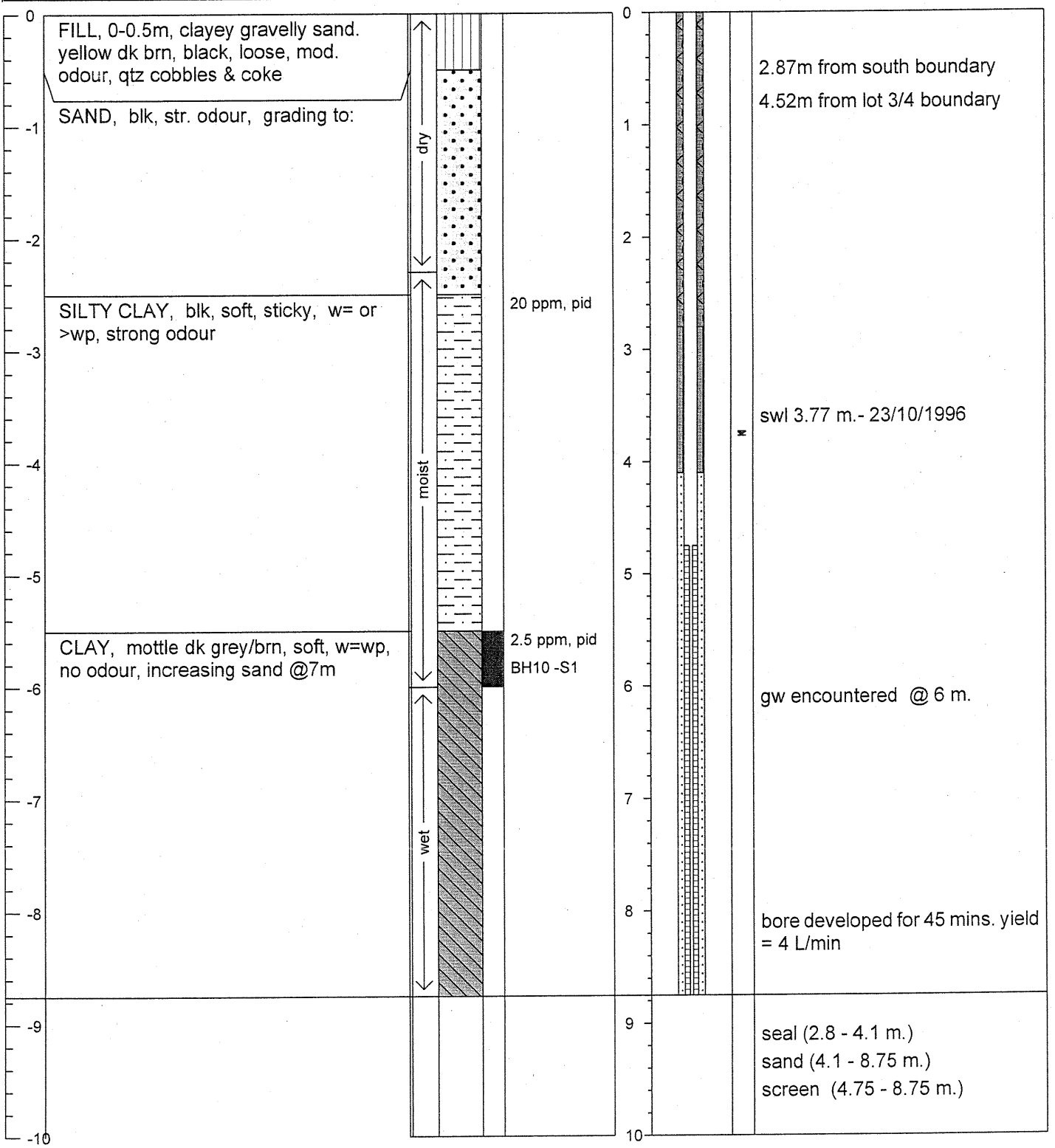
BORELOG

bore no. BH 10

VEMCO
Environmental Services

client	OEAM	location	lot 4	status	G'water Monitor.
project	Sale	co-ords	505,825 amg	date	21.10.1996
project no.	Sa-96		5,781,337 amg		
drill co.	Turnbull	bcl	46447	rl & datum	5.857 m bgl (ahd)
rig type	FOX LS-22	logged	sg	depth	8.75 m

MATERIAL DESCRIPTION | SAMPLING | BORE CONSTRUCTION DETAILS

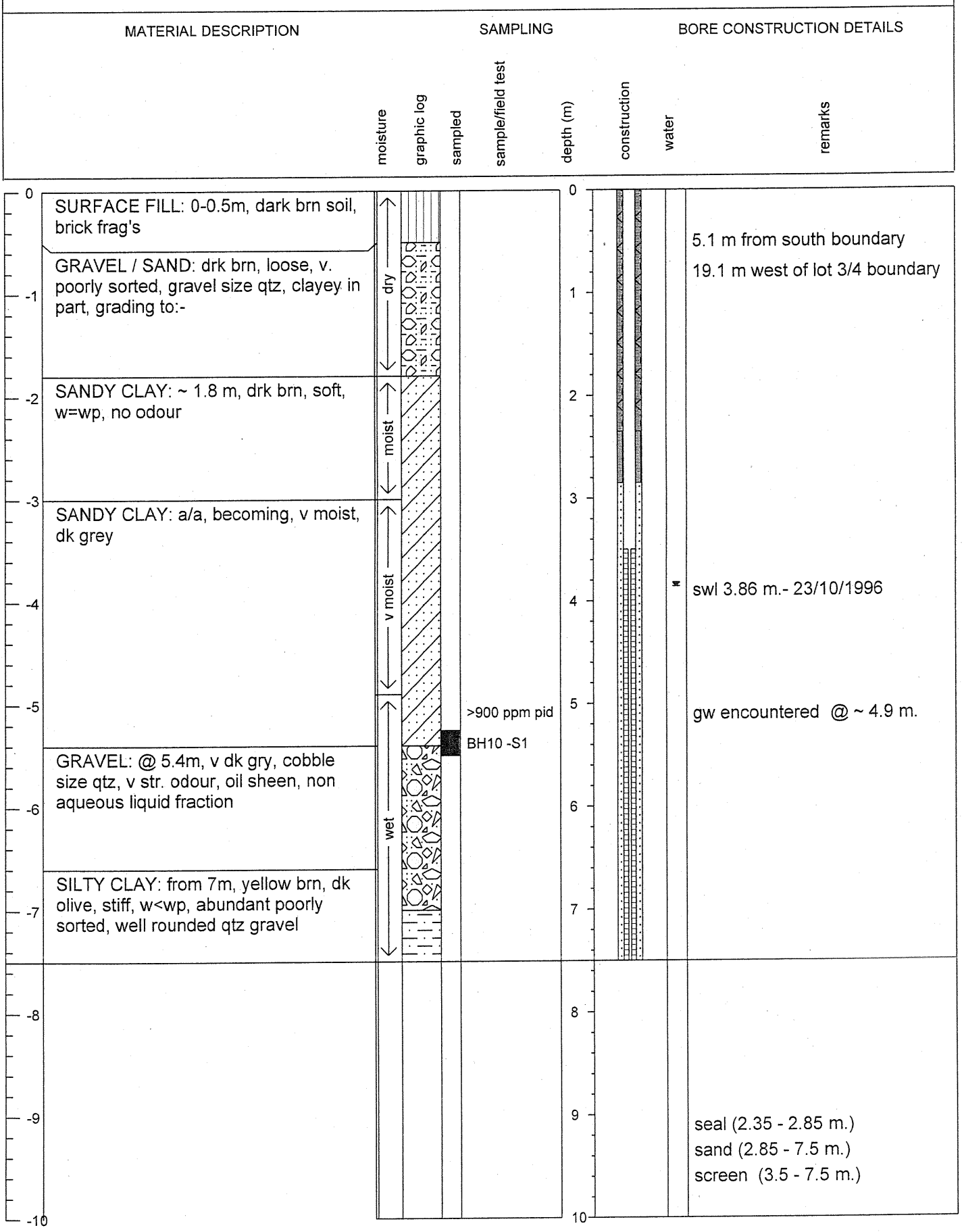


filename OEAM_BH10

BORELOG

VEMCO
Environmental Services

client	OEAM	location	lot 3	bore no.	BH 11
project	Sale	co-ords	505,800 amg	status	G'water Monitor.
project no.	Sa-96		5,781,337 amg	date	22.10.1996
drill co.	Turnbull	bcl	46447	rl & datum	5.897 m bgl (ahd)
rig type	FOX LS-22	logged	sg	depth	7.5 m

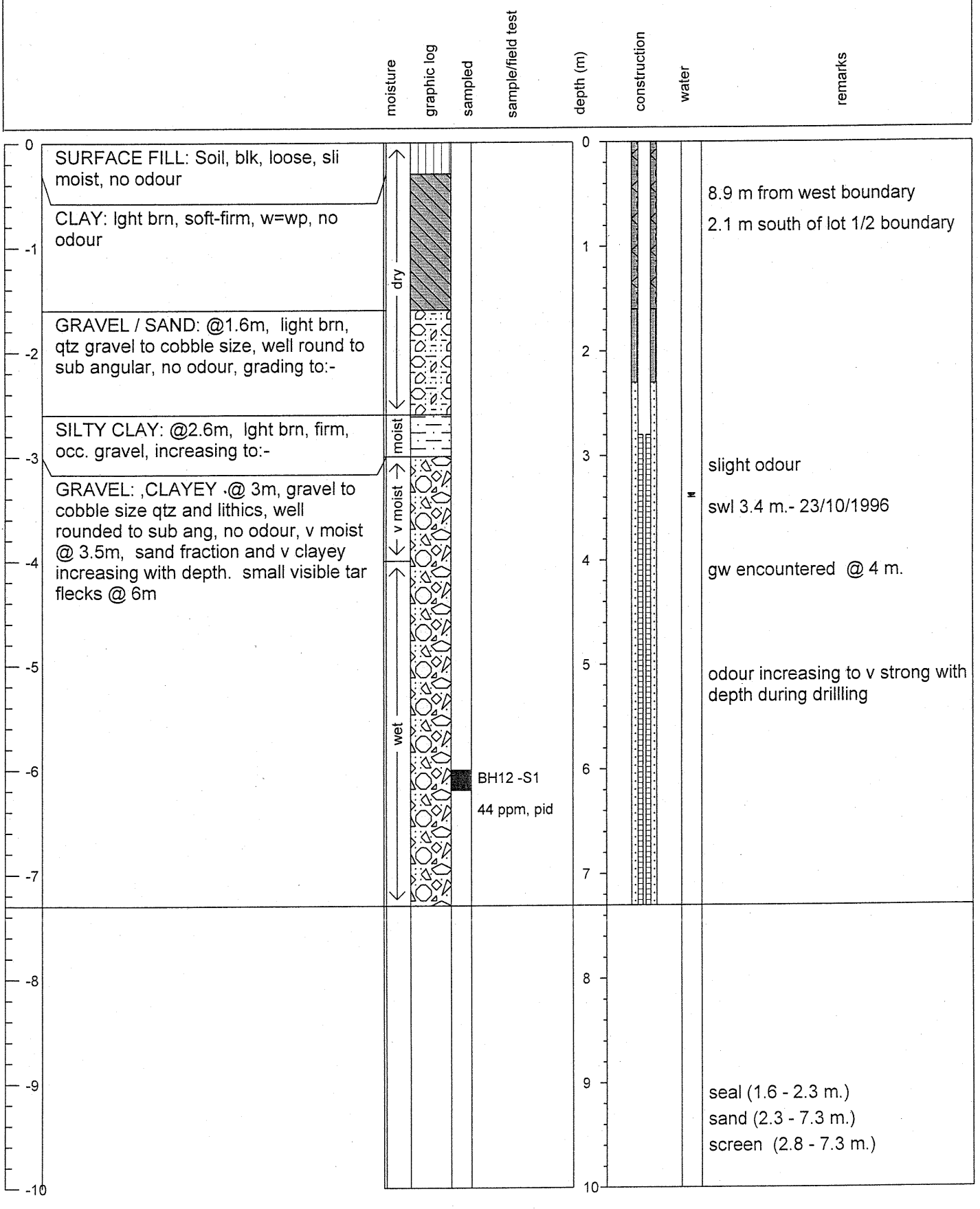


BORELOG

bore no. BH 12

VEMCO
Environmental Services

client	OEAM	location	lot 2	status	G'water Monitor.
project	Sale	co-ords	505,700 amg	date	22.10.1996
project no.	Sa-96		5,781,350 amg		
drill co.	Turnbull	bcl	46447	rl & datum	5.266 m bgl (ahd)
rig type	FOX LS-22	logged	sg	depth	7.3 m



lename OEAM_BH12

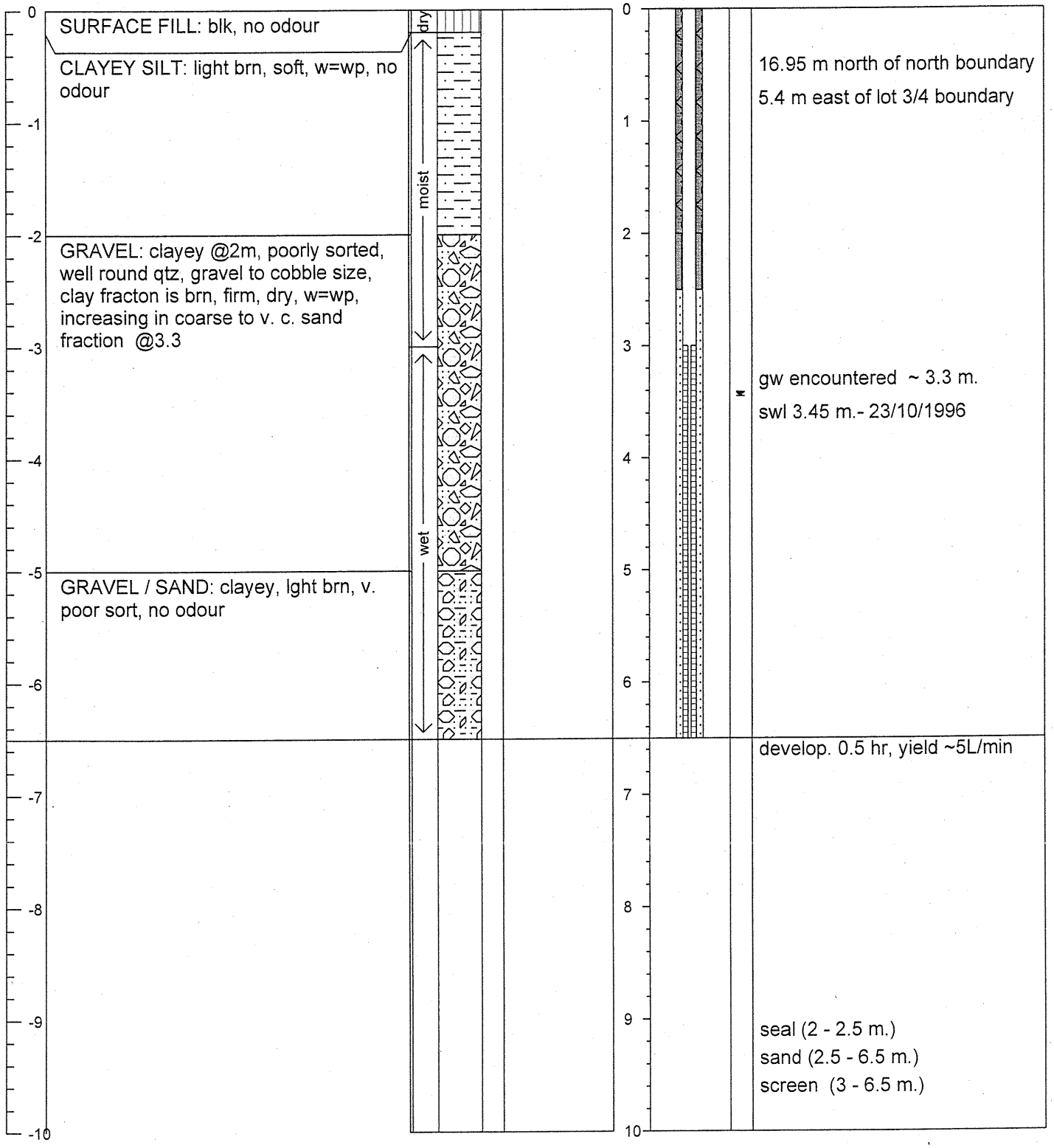
BORELOG

bore no. BH 13

VEMCO
Environmental Services

client	OEAM	location	MacMillan St	status	G'water Monitor.
project	Sale	co-ords	505,800 amg	date	22.10.1996
project no.	Sa-96		5,781,405 amg		
drill co.	Turnbull	bcl	46447	rl & datum	5.506 m bgl (ahd)
rig type	FOX LS-22	logged	sg	depth	6.5 m

MATERIAL DESCRIPTION | SAMPLING | BORE CONSTRUCTION DETAILS



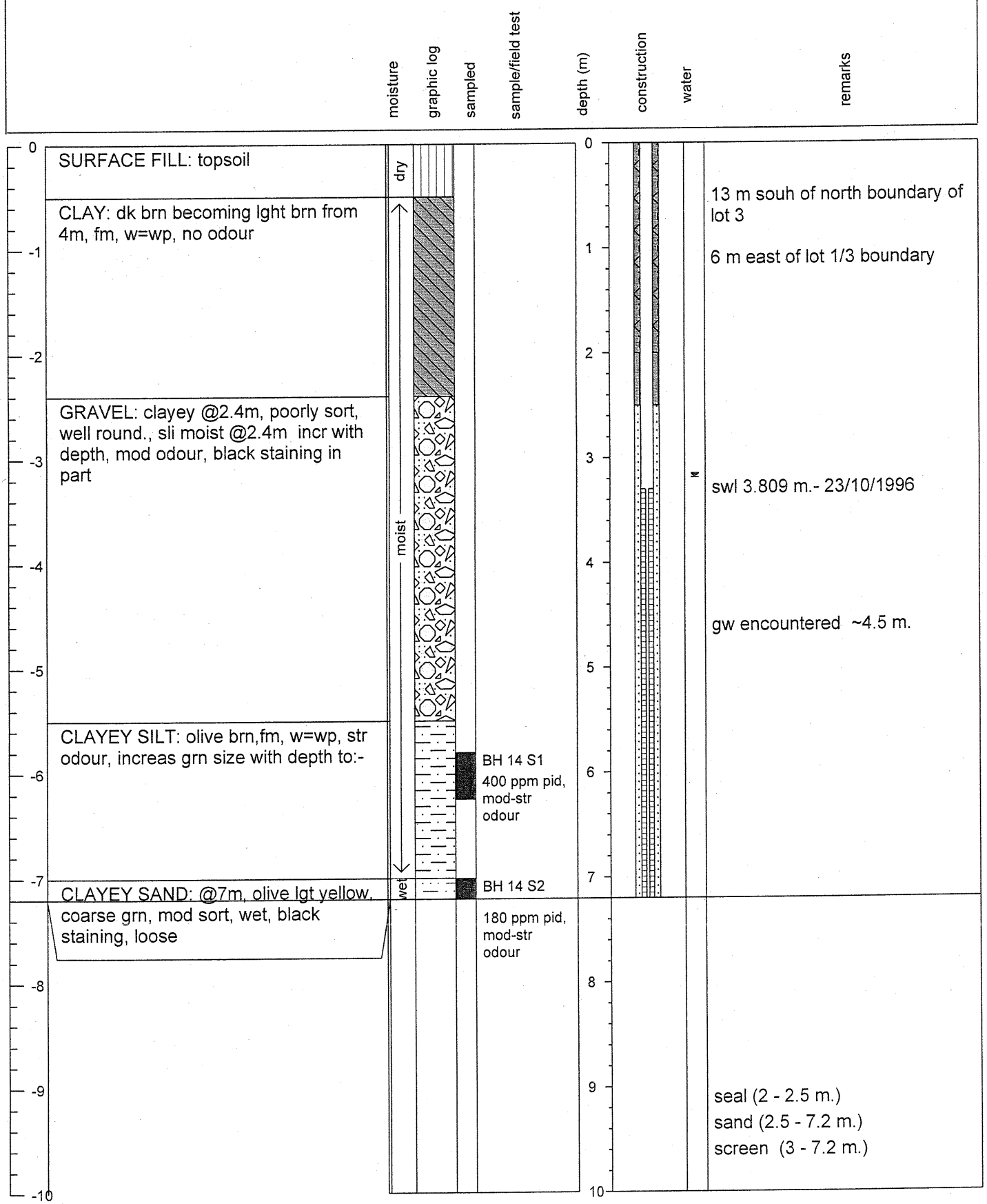
ename OEAM_BH13

BORELOG

bore no. BH14

VEMCO
Environmental Services

client	OEAM	location	lot 3	status	G'water Monitor.
project	Sale	co-ords	505,700 amg	date	23.10.1996
project no.	Sa-96		5,781,375 amg		
drill co.	turnbull	bcl	46447	rl & datum	5.693m bgl (ahd)
rig type	hollow auger	logged	sg	depth	7.2 m



filename OEAM_BH14

Log Sheet - VEMCO ENVIRONMENTAL

PROJECT: Sale - SA5

BOREHOLE No: BH15

LOCATION: On reserve west of GMPS

PARISH: Sale

STATUS: Monitoring

SURFACE ELEVATION: 8.947m (RL)

EASTING: 505625

DATE: 15/12/99

DATUM: Ground level

NORTHING: 5781350

DEPTH: 10m

DRILL TYPE: Hollow Auger

BCL: 54999

PAGE: 1 of 2

OPERATOR: L. Turnbull

LOGGED: E. Moore

OLD BORE No: N/A

s:\sites\sale\sl_bh15a.skd

DESCRIPTION		GRAPHIC LOG	DEPTH	SAMPLES	REMARKS	S.W.L.	BORE DETAILS
CLAY	light to medium brown, dry, minor gravel component, no odour, no visible contamination		0.0				
			0.5				
			1.0				
A/A	at 1.5m, without minor gravel component		1.5				
			2.0				
			2.5		BORE DETAILS:		
A/A	at 3m, becoming soft to friable, v. slightly moist, w<<wp		3.0		Grout: 0 - 2.9m (2.9m) Seal: 2.9 - 3.5m (0.6m) Sand: 3.5 - 11.5m (8.0m) Screen: 4.0 - 10.0 (6.0m) Riser: 0 - 4.0m (4m)		
			3.5				
A/A	at 4m, with light brown and grey mottling, soft, sl. moist, w<wp		4.0				
			4.5		SWL 4.388m, 1/2/00	▽	
A/A	becoming moist, w>wp, with secondary sand component		5.0				
			5.5				
			6.0				
CLAYEY SAND	light to med grey clay, fine to med grained sand, wet, mod. odour, no visible contamination		6.5				
			7.0				
				S1			
			7.5				
A/A	becoming wet at 8.0m		8.0				
			8.5		Slower R.O.P. at 8.5m due to minor gravel fraction		
A/A	with light and med brown, mottling becoming med grain size sand, wet at 9.0m		9.0				
SANDY CLAY	light to med brown grey, fine to med grn sand, v wet, mod odour, no visible contamination at 10.0m		9.5				
			10.0		TOTAL DEPTH: 10.0m		

Log Sheet - VEMCO ENVIRONMENTAL

PROJECT: Sale - SA5

BOREHOLE No: BH15

LOCATION: On reserve west of GMPS

PARISH: Sale

STATUS: Monitoring

SURFACE ELEVATION: 8.947m (RL)

EASTING: 505625

DATE: 15/12/99

DATUM: Ground level

NORTHING: 5781350

DEPTH: 10m

DRILL TYPE: Hollow Auger

BCL: 54999

PAGE: 2 of 2

OPERATOR: L. Turnbull

LOGGED: E. Moore

OLD BORE No: N/A

s:\sales\sales_bh15b.skd

DESCRIPTION	GRAPHIC LOG	DEPTH	SAMPLES	REMARKS	S.W.L.	BORE DETAILS
		10.0		Backfilled with sand		
CLAY pink grey, plastic, soft, wet, no odour, no visible contamination		10.5				
		11.0				
		11.5	S2			
Drilling terminated at 11.6m Groundwater encountered at 6.0m 36m West of West GMPS boundary 21.5m South of North GMPS boundary		12.0				
		12.5				
		13.0				
		13.5				
		14.0				
		14.5				
		15.0				
		5.5				
		6.0				
		6.5				
		7.0				
		7.5				
		8.0				
		8.5				
		9.0				
		9.5				
		10.0				

Log Sheet - VEMCO ENVIRONMENTAL

PROJECT: Sale - SA5

LOCATION: On reserve west of GMPS

SURFACE ELEVATION: 8.947m (RL)

DATUM: Ground level

DRILL TYPE: Hollow Auger

OPERATOR: L. Turnbull

PARISH: Sale

EASTING: 505625

NORTHING: 5781337

BCL: 54999

LOGGED: E. Moore

BOREHOLE No: BH16

STATUS: Monitoring

DATE: 15/12/99

DEPTH: 9.0m

PAGE: 1 of 1

OLD BORE No: N/A

s:\sites\sale\sl_bh16.skd

DESCRIPTION	GRAPHIC LOG	DEPTH	SAMPLES	REMARKS	S.W.L.	BORE DETAILS
CLAYEY TOPSOIL med brown, v. fine, v. dry, loose		0.0				
CLAY light yellow brown, dry, loose, with med - drk brn clay band at 1.8m no odour, no visible contamination		0.5, 1.0, 1.5				
A/A becoming light to medium yellow brown		2.0, 2.5, 3.0		BORE DETAILS: Grout: 0 - 2.4m (2.4m) Seal: 2.4 - 3.0m (2.6m) Sand: 3.0 - 9.0m (6m) Screen: 6.0 - 9.0m (3m) Riser: 0 - 6.0m (6m)		
		3.5		SWL 3.495m, 1/2/00	▽	
A/A becoming med grey brown, v. slightly moist, w<<wp		4.0, 4.5				
GRAVELLY CLAY md green brown, soft, sl. moist, w<wp, freq. gravel, poorly sorted, fine to med grain size, sl. odour, no visible contamination		5.0, 5.5				
CLAYEY GRAVEL medium to light brown clay, qtz gravel, poorly sorted, med to coarse, sl. moist, w<wp, no odour, no visible contamination, becoming;		6.0, 6.5				
SANDY CLAY medium grey brown, v. soft, poorly sorted, wet, w>>wp, mod odour, freq. fine gravel, no visible contamination		7.0				
SAND flecked medium grey, fine to med. grained, well sorted, wet, mod to sl. grey clay fraction, mod odour, no visible contamination		7.5	S1			
CLAY med yellow brown, v. moist, w>wp, occasional gravel, poorly sorted, sl. odour, no visible contam., becoming		8.0, 8.5	S2			
SANDY CLAY dk grey with infrequent med grey mottling, fine to med grn sand, sl. firm, sl. plastic, wet, sl. to mod. odour, no visible contamination at 8.5m		9.0		TOTAL DEPTH: 9.0m		
Groundwater encountered at 7.0m		9.5, 10.0				

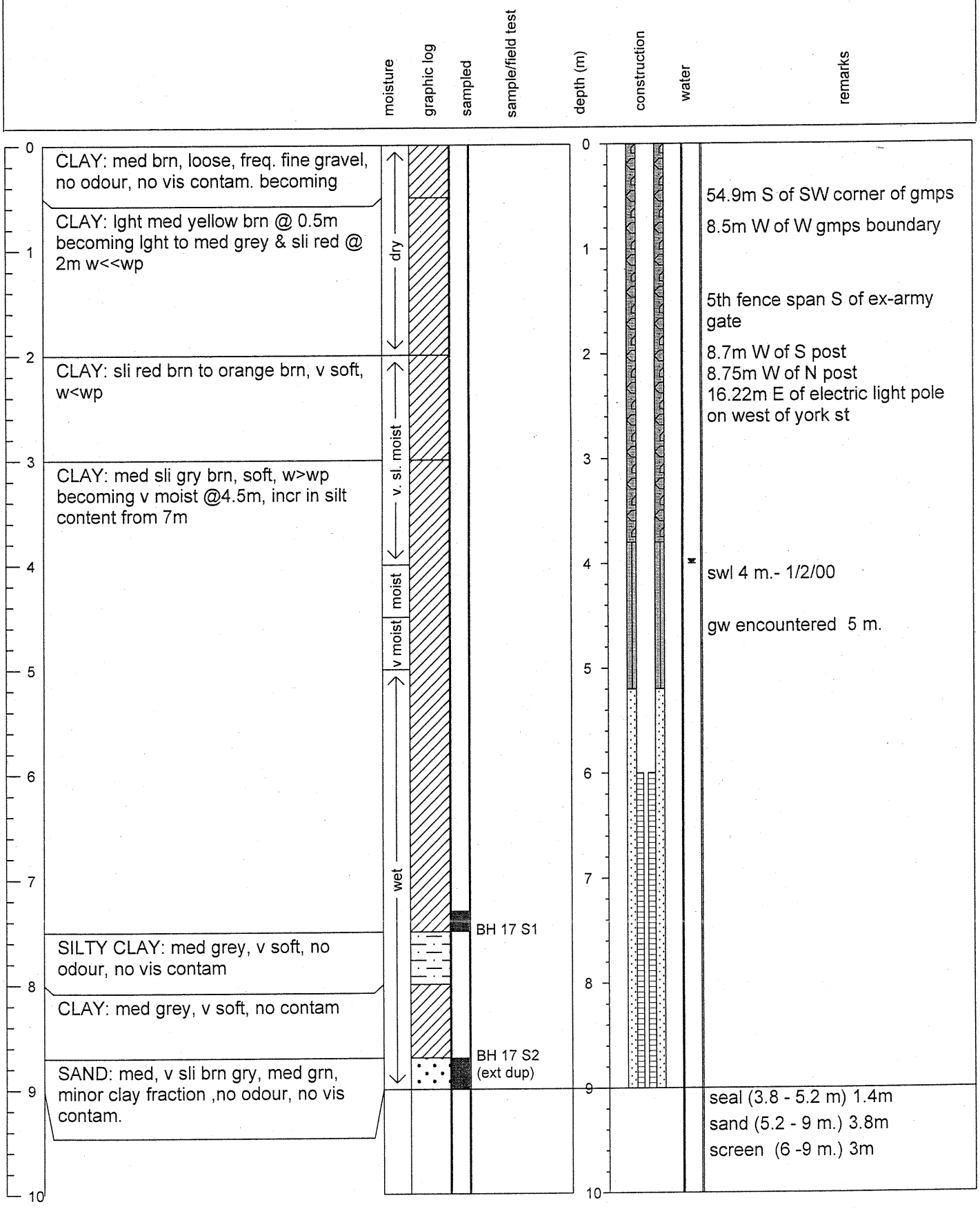
34.2m west of West GMPS boundary
4m north of Southwest corner of GMPS

BORELOG

bore no. BH17

monarc ENVIRONMENTAL

client	OEAM	location	york st	status	G'water Monitor.
project	Sale	co-ords	505708 amg	date	16.12.1999
project no.	Sa-5		5781267 amg		
drill co.	turnbull	bcl	54999	rl & datum	4.463 m gl (ahd)
rig type	hollow auger	logged	e moore	depth	9 m



Log Sheet - VEMCO ENVIRONMENTAL

PROJECT: Sale - SA5

BOREHOLE No: BH18

LOCATION: On site, adjacent to BH11

PARISH: Sale

STATUS: Monitoring

SURFACE ELEVATION: 10.012m (RL)

EASTING: 505752

DATE: 15/12/99

DATUM: Ground level

NORTHING: 5781330

DEPTH: 20.54m

DRILL TYPE: Cable Tool

BCL: 54999

PAGE: 1 of 3

OPERATOR: L. Turnbull

LOGGED: S. Guba

OLD BORE No: N/A

s:\sites\sale\sl_bh18c.skd

DESCRIPTION		GRAPHIC LOG	DEPTH	SAMPLES	REMARKS	S.W.L.	BORE DETAILS
FILL/TOPSOIL	lgt brn, loose, minor qtz, dry, rootlets, minor coke frags, brick frags, sinter		0.0				
			0.5				
CLAYEY SAND	drk brn, loose, c. grain, mod sort, occ. gravel, SA-SR, no odour		1.0				
			1.5				
A/A	grading to		2.0		BORE DETAILS: Grout: 0 - 8.25m (8.25m) Seal: Slurry 8.25 - 13.6m (5.36m) Pellets 13.6 - 14m (0.4m) Sand: 14 - 20.54m (6.54m) Screen: 14.5 - 20.54m (6m) Riser: 0 - 14.5m (14.5m)		
			2.5				
			3.0				
CLAY	@ 3.5m mottled, dk gry/dk orange, mod. firm, dry, w<wp, occ. qtz gravel, A-SR, rare carbonaceous frags		3.5				
			4.0				
	becoming moist at ~ 4.5m		4.5				
CLAY	black, firm, extensively saturated & stained by contam, mod odour incl. diesel odour		5.0		SWL 5.044m (1/2/00)	▽	
GRAVELS	@ 5m, black discolouration, loose, v.crse cobble size, v. poor sort, wet, odour, str. vis. contam., minor DNAPLs from ~6.5m		5.5				
			6.0		GROUT: 0.0 - 8.25m (8.25m)		
	grn. size decrease with depth		6.5				
			7.0				
CLAYEY SAND	blk, loose, crs grn, p. sort, tarry sheen/DNAPL v. strong vis contam., mod-strong odour, grading to		7.5				
CLAY	from ~8.1m, dk brn, olive blk, soft, moist, w=wp, silt-f. grn qtz, irregular contam, staining & decreasing odour,		8.0				
			8.5				
	becoming hard, mottled orange brown/ light green from 9.8m		9.0				
			9.5				
			10.0				

Log Sheet - VEMCO ENVIRONMENTAL

PROJECT: Sale - SA5

BOREHOLE No: BH18

LOCATION: On site, adjacent to BH11

PARISH: Sale

STATUS: Monitoring

SURFACE ELEVATION: 10.012m (RL)

EASTING: 505752

DATE: 16/12/99

DATUM: Ground level

NORTHING: 5781330

DEPTH: 20.54m

DRILL TYPE: Cable Tool

BCL: 54999

PAGE: 2 of 3

OPERATOR: L. Turnbull

LOGGED: S. Guba

OLD BORE No: N/A

s:\sites\sale\sl_bh18b.skd

DESCRIPTION		GRAPHIC LOG	DEPTH	SAMPLES	REMARKS	S.W.L.	BORE DETAILS
SILTY SAND	~ 10.3m v. lt grey/off white, loose, v. fine grn., poor sort, wet, no odour, no vis. contam, becoming		10.0				
			10.5				
CLAYEY SAND	at ~11m, firm, mottle lgt brn/ lt gry, w=wp, moist, sl. odour, no vis. contam., becoming		11.0				
			11.5				
CLAYEY SILT	lgt blue gry, firm-soft, moist, well sorted, no odour		12.0				
	grading to		12.5		SEAL: slurry: 8.25 - 13.6m (5.36m) pellets:13.6 - 14.0m (0.4m)		
CLAY	@ 13m, red brn soft, moist, well sorted, no odour		13.0				
			13.5				
SAND	@14.2m, red brn/gry, fine grn, loose, wet, no odour, no vis. contam		14.0				
			14.5				
	@ 15m becoming lgt gry, fine-med grn, loose, no contam		15.0		FILTER PACK: 14.0 - 20.54m (6.54m)		
			15.5	S1			
			16.0				
			16.5				
			17.0		SCREEN: 14.5 - 20.54m (6m)		
			17.5				
			18.0				
			18.5				
			19.0				
A/A	large fragment of timber, dk brn, firable & highly weathered ~19-20m		19.5				
			20.0				

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File Update: 29/2/00

Log Sheet - VEMCO ENVIRONMENTAL

PROJECT: Sale - SA5

LOCATION: On site, adjacent to BH11

SURFACE ELEVATION: 10.012m (RL)

DATUM: Ground level

DRILL TYPE: Cable Tool

OPERATOR: L. Turnbull

PARISH: Sale

EASTING: 505752

NORTHING: 5781330

BCL: 54999

LOGGED: S. Guba

BOREHOLE No: BH18

STATUS: Monitoring

DATE: 16/12/99

DEPTH: 20.54m

PAGE: 3 of 3

OLD BORE No: N/A

s:\sites\sale\sl_bh18c.skd

DESCRIPTION	GRAPHIC LOG	DEPTH	SAMPLES	REMARKS	S.W.L.	BORE DETAILS
CLAYEY SILT: @ 20.5m, lgt gry, soft, v. fine qtz, wet, no vis contam, grading to SAND lgt gry, loose, fine grn, poor sorted, clayey in part, wet, no odour or vis. contam		20.0 20.5 21.0 21.5 22.0 22.5 23.0 23.5 24.0 24.5 25.0	S2	TOTAL DEPTH: 20.54m Internal duplicate		
Groundwater encountered at 4.8m 4.8m N of S GMPS boundary 1.5m W of BH11		25.5 26.0 26.5 27.0 27.5 28.0 28.5 29.0 29.5 30.0				

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File Update: 29/2/00

Log Sheet - VEMCO ENVIRONMENTAL

PROJECT: Sale - SA5

BOREHOLE No: BH19

LOCATION: In park east of GMPS

PARISH: Sale

STATUS: Monitoring

SURFACE ELEVATION: 8.992m (RL)

EASTING: 505915

DATE: 16/12/99

DATUM: Ground level

NORTHING: 578400

DEPTH: 7.5m

DRILL TYPE: Hollow Auger

BCL: 54999

PAGE: 1 of 1

OPERATOR: L. Turnbull

LOGGED: E. Moore

OLD BORE No: N/A

DESCRIPTION	GRAPHIC LOG	DEPTH	SAMPLES	REMARKS	S.W.L.	BORE DETAILS
CLAY light brown, poorly sorted, fine to coarse qtz, occasional fine gravel, no odour, no visible contam, with gravelly clay band occuring between 0.3m and 0.7m, light brown, poorly sorted, fine to coarse qtz		0.0				
		0.5				
		1.0				
A/A becoming light yellow brown, without secondary gravel component		1.5				
A/A becoming light to medium yellow brown, v. sl. moist, rare fine gravel		2.0		BORE DETAILS: Grout: 0 - 2.7m (2.7m) Seal: 2.7 - 3.5m (0.8m) Sand: 3.5 - 7.5m (4.0m) Screen: 4.5 - 7.5m (3.0m) Riser: 0 - 4.5m (4.5m)		
		2.5				
GRAVELLY CLAY light brown grey, soft, fine to medium qtz gravel, moist, w=wp, no odour, no visible contamination		3.0		SWL 3.121, 1/2/00	▽	
		3.5				
A/A becoming med. grey brown, soft, poorly softed, v. common fine to med. gravel, very moist, w>wp. no odour, no visible contamination		4.0				
		4.5				
SANDY CLAY light to med. grey, poorly sorted sand, v.wet, occasional fine gravel, no odour, no visible contamination		5.0				
		5.5				
		6.0				
		6.5				
CLAY bright orange and light grey, very stiff, moist, occasional fine to med. gravel, sl. odour, no visible contamination		7.0				
		7.5	S1	Total Depth: 7.5m		
		8.0				
		8.5				
		9.0				
		9.5				
		10.0				

Groundwater encountered at 4.5m

7.2m N of N GMPS boundary
32m E of E Caltex boundary

5.3m E of Hwy curb
9.2m N of S boundary of park

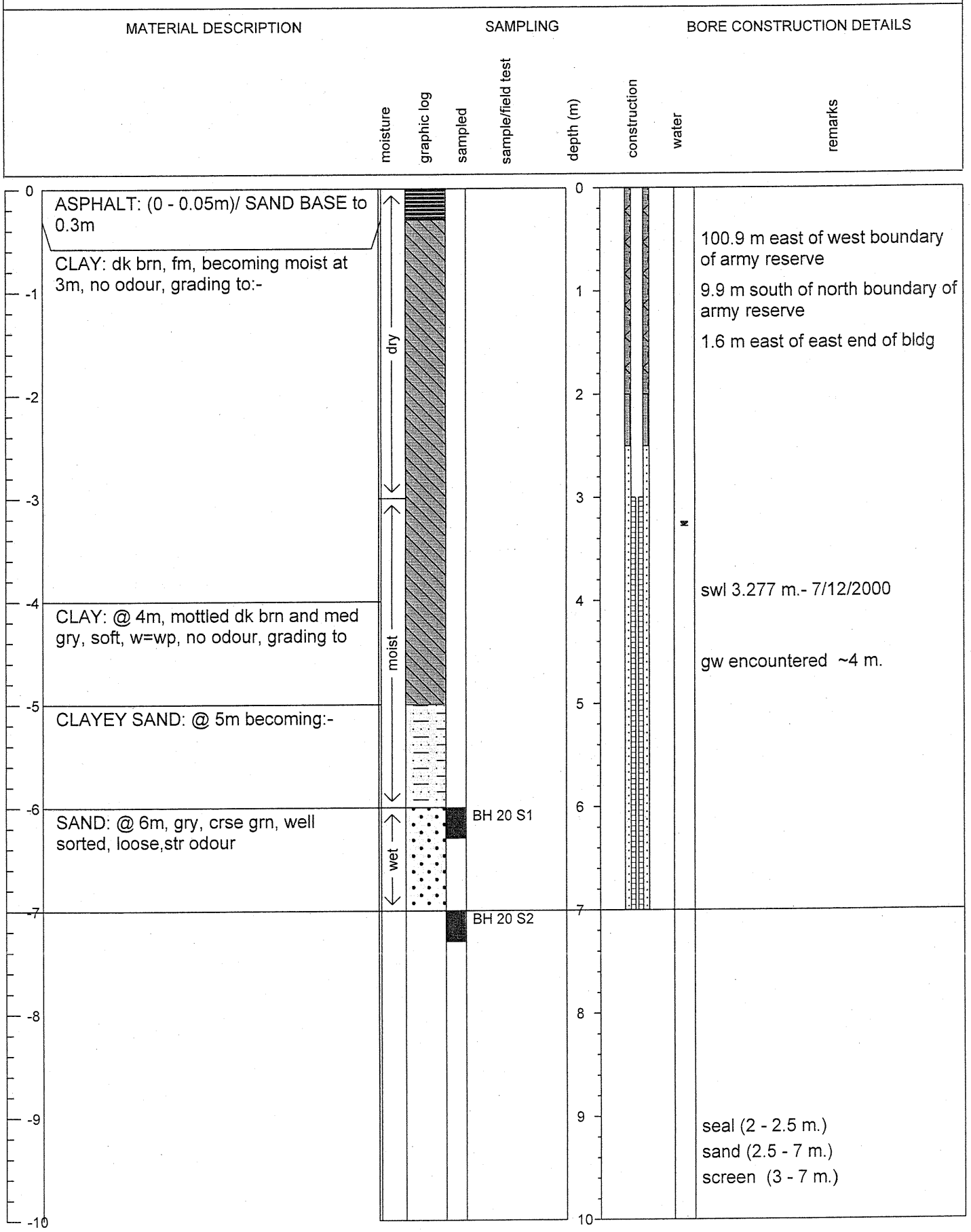
s:\sites\sale\sl_bh19.skd

BORELOG

bore no. **BH 20**

VEMCO
Environmental Services

client	OEAM	location	army reserve - east	status	G'water Monitor.
project	Sale	co-ords	505,803 amg	date	18.10.2000
project no.	Sa-2000		5,781,306 amg		
drill co.	Aqua Drilling	bcl	56710	rl & datum	4.318 m bgl (ahd)
rig type	hollow auger	logged	sg	depth	7 m



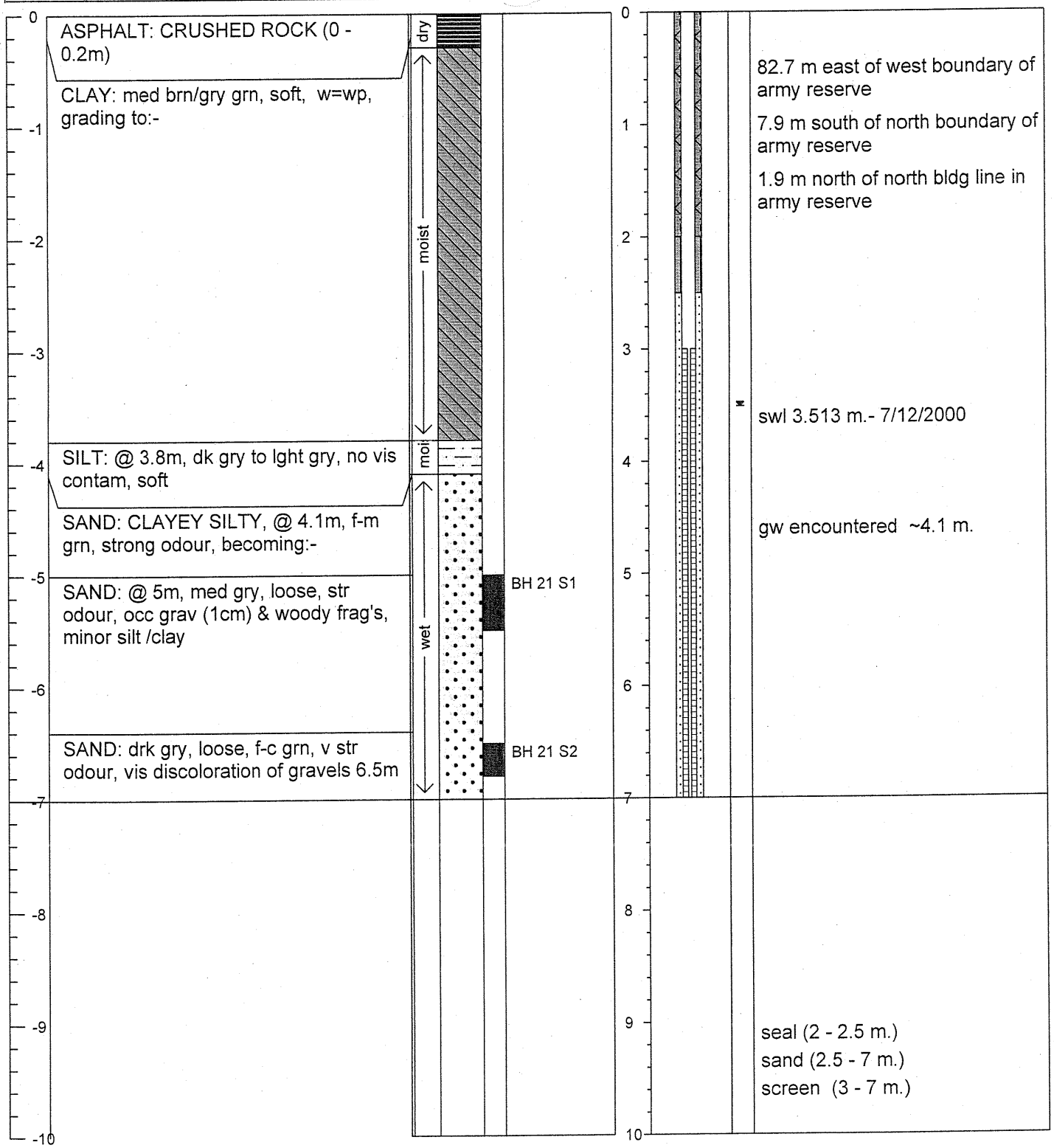
BORELOG

bore no. **BH 21**

VEMCO
Environmental Services

client	OEAM	location	army reserve - mid	status	G'water Monitor.
project	Sale	co-ords	505,785 amg	date	18.10.2000
project no.	Sa-2000		5,781,307 amg		
drill co.	Aqua Drilling	bcl	56710	rl & datum	4.483 m bgl (ahd)
rig type	hollow auger	logged	sg	depth	7 m

MATERIAL DESCRIPTION | SAMPLING | BORE CONSTRUCTION DETAILS

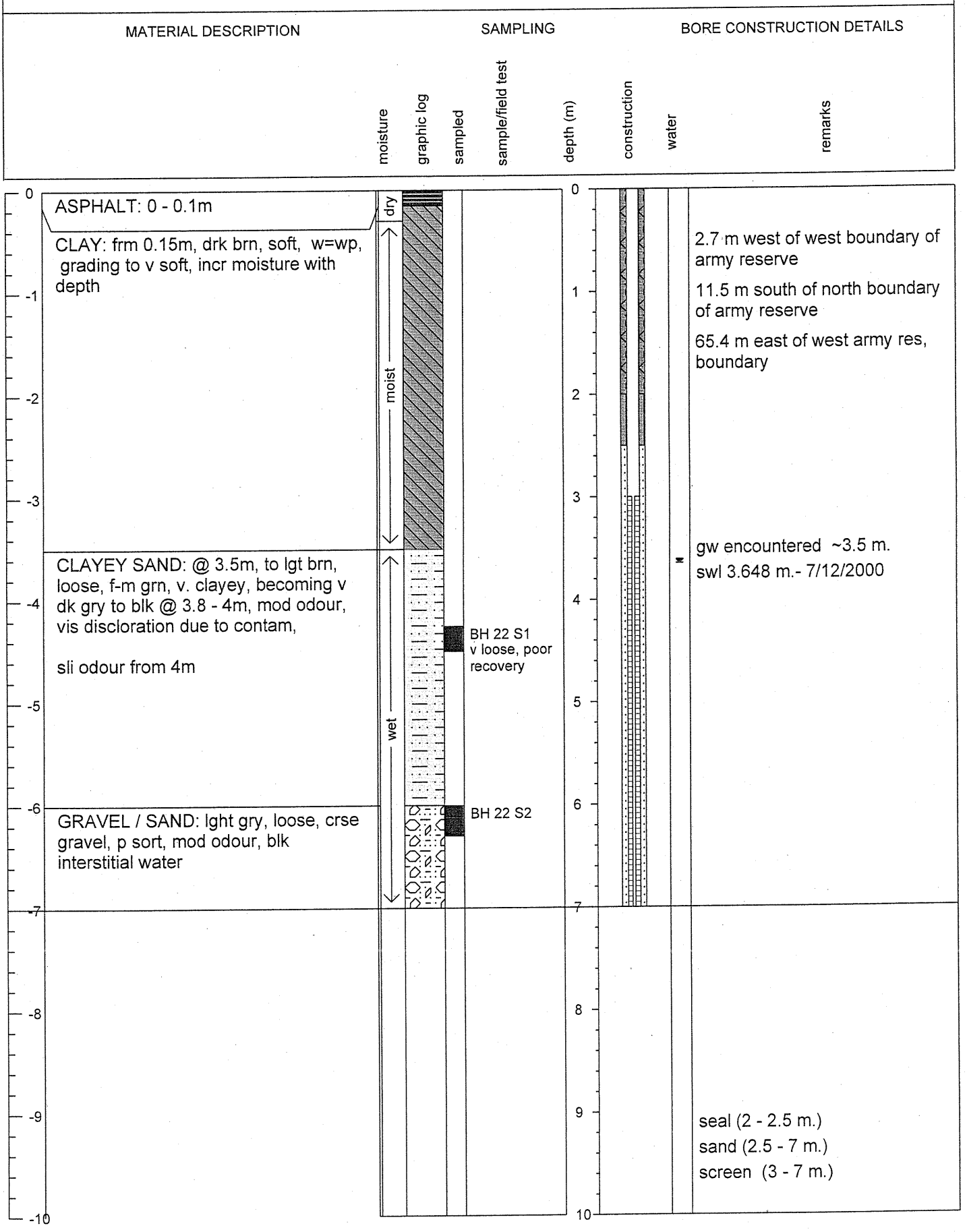


BORELOG

bore no. **BH 22**

VEMCO
Environmental Services

client	OEAM	location	army reserve - west	status	G'water Monitor.
project	Sale	co-ords	505,767 amg	date	18.10.2000
project no.	Sa-2000		5,781,303 amg		
drill co.	Aqua Drilling	bcl	56710	rl & datum	4.604 m bgl (ahd)
rig type	hollow auger	logged	sg	depth	7 m



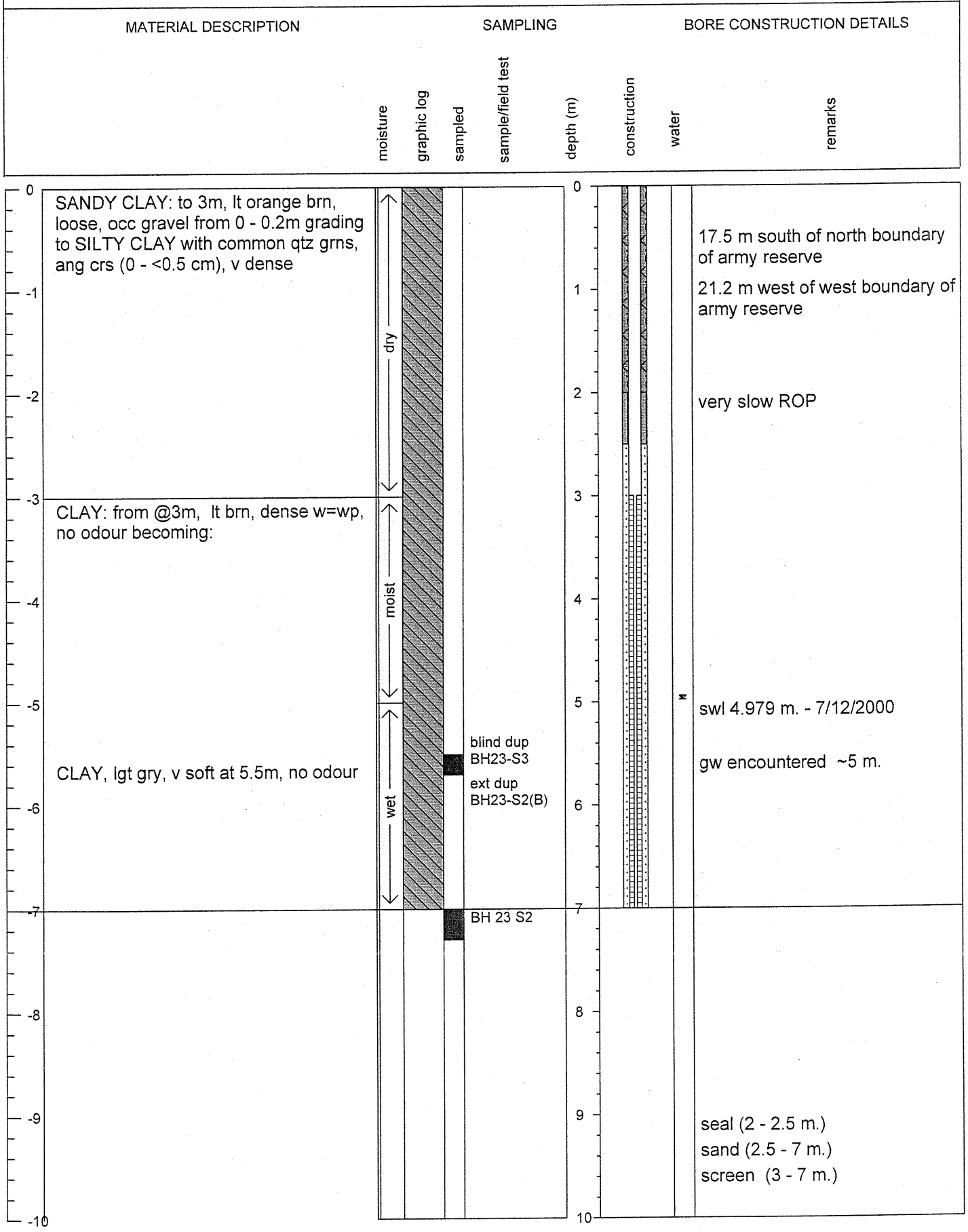
ilename OEAM_BH22

BORELOG

bore no. BH 23

VEMCO
Environmental Services

client	OEAM	location	river reserve - west	status	G'water Monitor.
project	Sale	co-ords	505,687 amg	date	18.10.2000
project no.	Sa-2000		5,781,209 amg		
drill co.	Aqua Drilling	bcl	56710	rl & datum	4.624 m bgl (ahd)
rig type	hollow auger	logged	sg	depth	7 m



filename OEAM_BH23

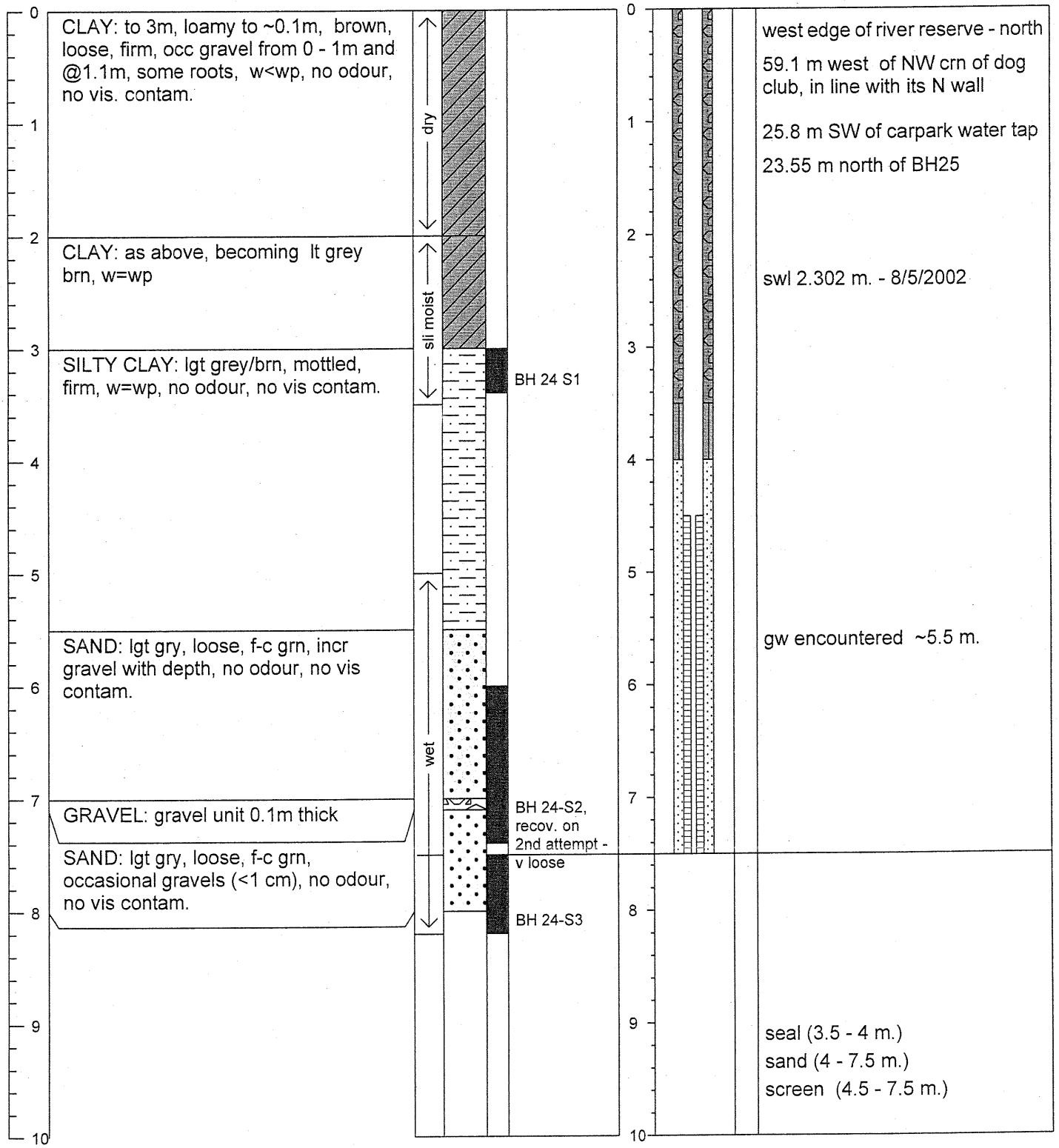
MONITORING WELL BORELOG

bore no. BH 24

VEMCO
Environmental Services

client	OEAM	**location**	river reserve - north	**status**	G'water Monitor.
project	Sale	**co-ords**	505,575 E amg	**date**	7.5.2002
project no.	Sa-2002		5,781,350 N amg		
drill co.	Aqua Drilling	**bcl**	59779	**rl & datum**	2.692 m.ahd & gl
rig type	hollow auger	**logged**	sg	**depth**	7.5 m

MATERIAL DESCRIPTION | SAMPLING | BORE CONSTRUCTION DETAILS



filename OEAM_BH24

MONITORING WELL BORELOG

bore no. BH 25

VEMCO
Environmental Services

client	OEAM	**location**	river reserve:opp. gmps	**status**	G'water Monitor.
project	Sale	**co-ords**	505,596 E amg	**date**	7.5.2002
project no.	Sa-2002		5,781,313 N amg		
drill co.	Aqua Drilling	**bcl**	59779	**rl & datum**	2.950 m (ahd) & gl
rig type	hollow auger	**logged**	sg	**depth**	7.5 m

MATERIAL DESCRIPTION | SAMPLING | BORE CONSTRUCTION DETAILS

moisture | graphic log | sampled | sample/field test | depth (m) | construction | SWL | remarks

0 — ALLUVIUM: to 0.6m, loamy, brown, loose

1 — CLAY: lt grey brn, firm, w < or = wp, becoming sli moist with depth

dry

2

sli moist

3

4

5

moist

6 — SILTY CLAY: lgt grey/olive brn, mottled, firm, v moist, no odour, no vis contam. incr. grnsize grading to:-

BH 25 S1

7 — CLAYEY SILT: lgt gry, v. fine grn, soft to loose, v sli odour, no vis contam.

wet

8 — SAND: lgt gry, loose, f-c grn qtz, common crse grn, occasional gravels (<1 cm), mod odour, no vis contam.

BH 25-S2

9

10

west edge river reserve opp gmps

in N-S line of west stand of trees 23.6 m south of BH24

swl 2.565 m. @ 5 pm, 8/5/2002

gw encountered ~6.5 m.

seal (3.5 - 4 m.)
sand (4 - 7.5 m.)
screen (4.5 - 7.5 m.)

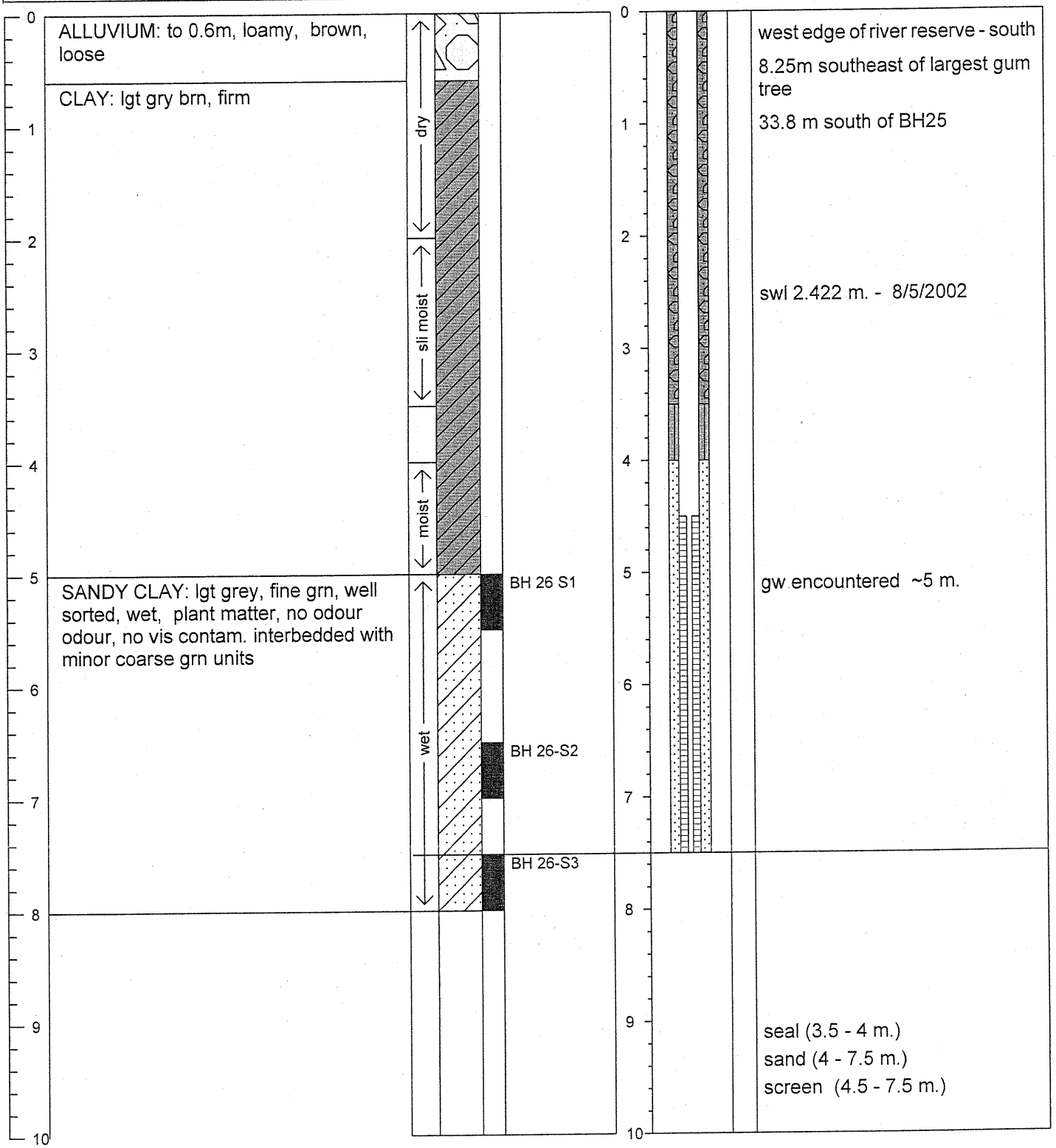
MONITORING WELL BORELOG

bore no. BH 26

VEMCO
Environmental Services

client	OEAM	**location**	river reserve	**status**	G'water Monitor.
project	Sale	**co-ords**	505,625 E amg	**date**	8.5.2002
project no.	Sa-2002		5,781,260 N amg		
drill co.	Aqua Drilling	**bcl**	59779	**rl & datum**	2.931 m.ahd & gl
rig type	hollow auger	**logged**	sg	**depth**	7.5 m

MATERIAL DESCRIPTION | SAMPLING | BORE CONSTRUCTION DETAILS



filename OEAM_BH26

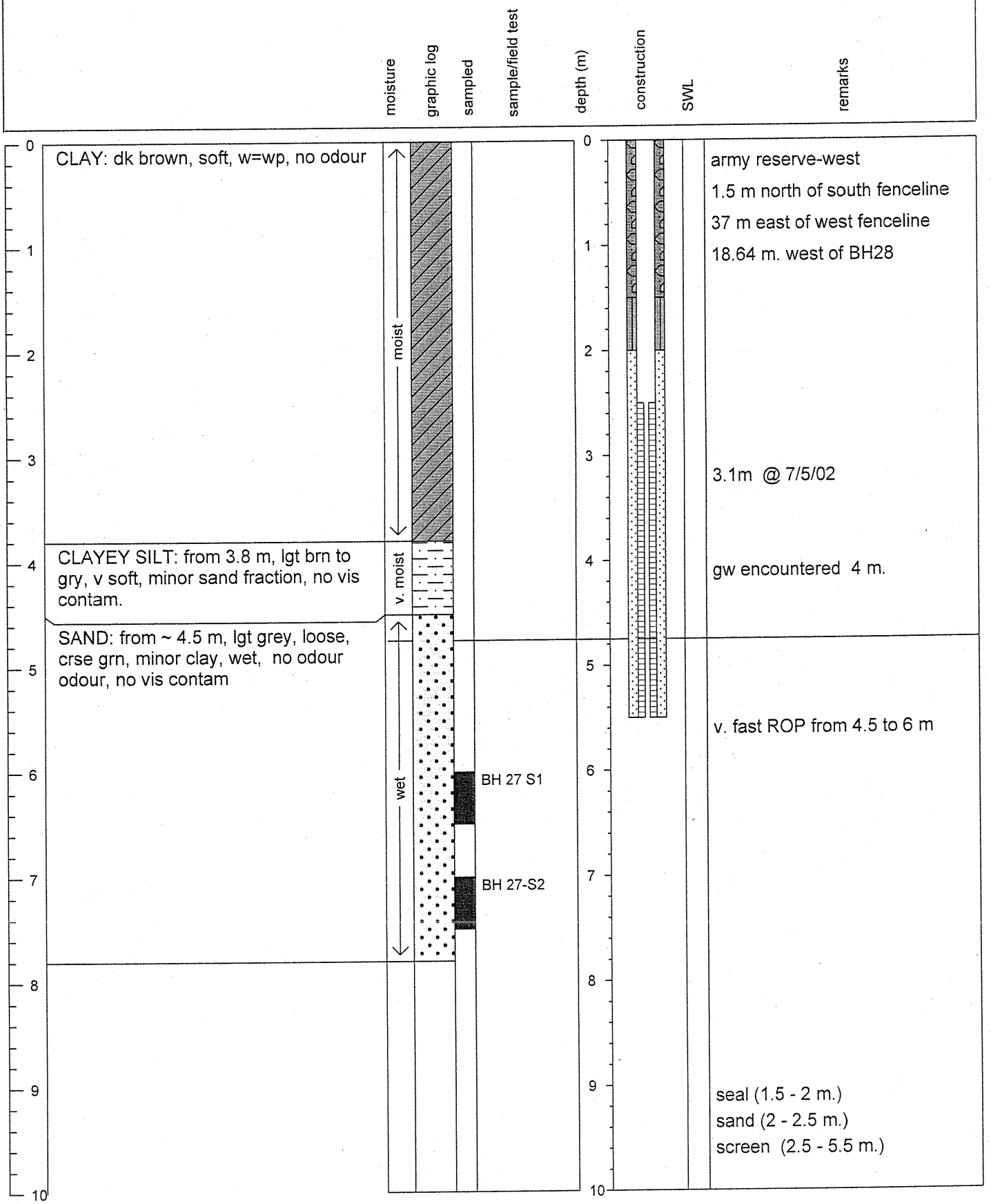
MONITORING WELL BORELOG

bore no. BH 27

VEMCO
Environmental Services

client	OEAM	**location**	army reserve	**status**	G'water Monitor.
project	Sale	**co-ords**	505,774 E amg	**date**	6.5.2002
project no.	Sa-2002		5,781,271 N amg		
drill co.	Aqua Drilling	**bcl**	59779	**rl & datum**	4.037 m.ahd & gl
rig type	hollow auger	**logged**	sg	**depth**	5.5 m

MATERIAL DESCRIPTION | SAMPLING | BORE CONSTRUCTION DETAILS



filename OEAM_BH27

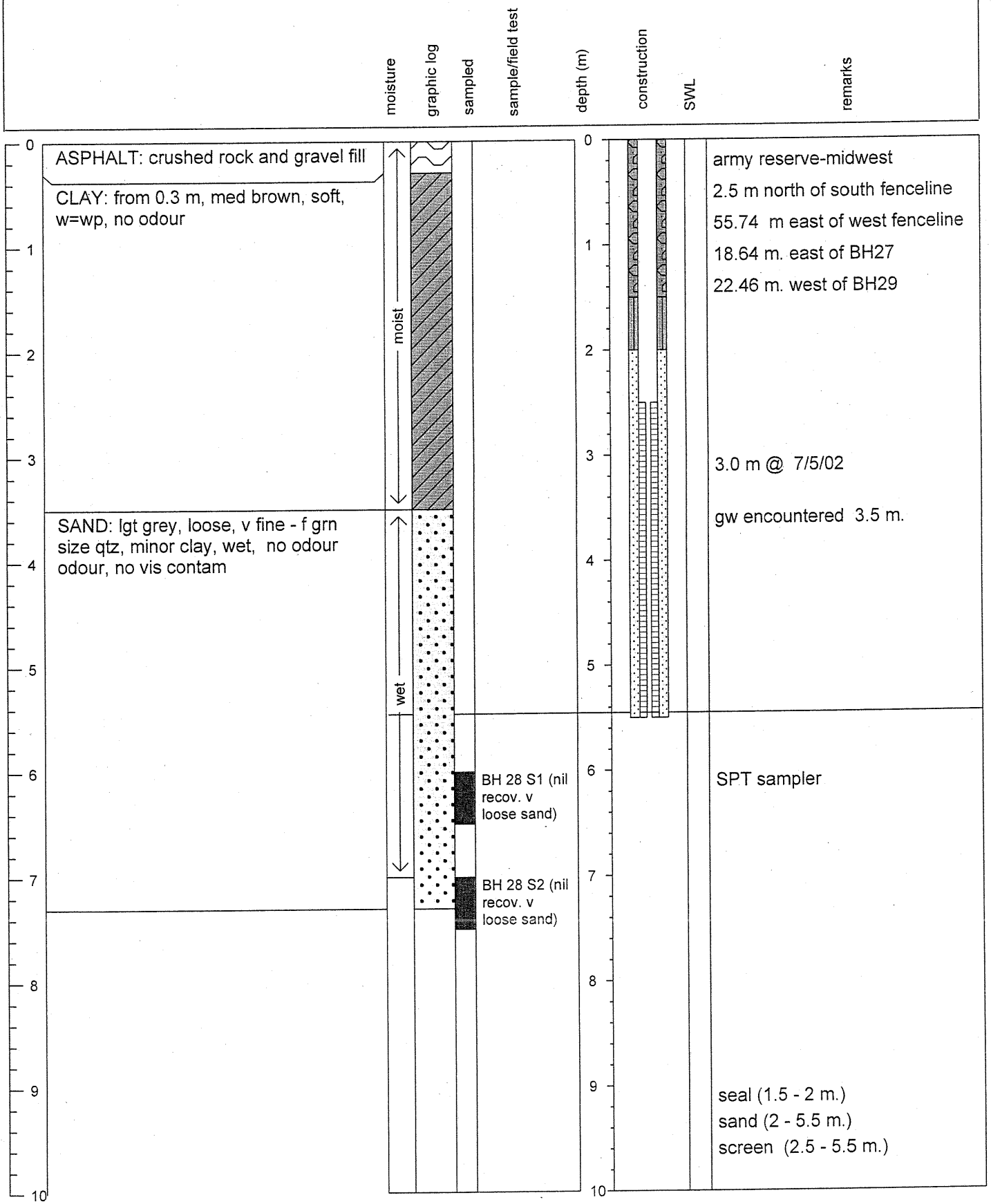
MONITORING WELL BORELOG

bore no. BH 28

VEMCO
Environmental Services

client	OEAM	**location**	army reserve	**status**	G'water Monitor.
project	Sale	**co-ords**	505,798 E amg	**date**	6.5.2002
project no.	Sa-2002		5,781,271 N amg		
drill co.	Aqua Drilling	**bcl**	59779	**rl & datum**	3.926 m.ahd & gl
rig type	hollow auger	**logged**	sg	**depth**	5.45 m

MATERIAL DESCRIPTION | SAMPLING | BORE CONSTRUCTION DETAILS



MONITORING WELL BORELOG

bore no. BH 29

VEMCO
Environmental Services

client	OEAM	**location**	army reserve	**status**	G'water Monitor.
project	Sale	**co-ords**	505,815 E amg	**date**	7.5.2002
project no.	Sa-2002		5,781,271 N amg		
drill co.	Aqua Drilling	**bcl**	59779	**rl & datum**	3.651 m.ahd & gl
rig type	hollow auger	**logged**	sg	**depth**	5.5 m

MATERIAL DESCRIPTION | SAMPLING | BORE CONSTRUCTION DETAILS

moisture | graphic log | sampled | sample/field test | depth (m) | construction | SWL | remarks

0 1 2 3 4 5 6 7 8 9 10

ALLUVIUM: some gravel fill (<100cm thick)

CLAY: dk brn, soft, occ, gravel (cobble size), w=wp, no odour

moist

CLAYEY SAND: @ 3.75m, dk gry, loose, f-c grn size, minor clay, interbedded with CLAYEY SILT, orange brn/lgt gry (paludal), soft, occ. plant matter, incr moisture with depth, no odour, no vis contam.

v moist

BH 29 S1

BH29-S2

army reserve - mideast
1.5 m north of south fenceline
78.6 m east of west fenceline
22.46 m. east of BH28
18 m. west of BH30

2.43 m @ 8/5/02

gw encountered 3.5 m.

blind dup BH31-S2, ext dup BH29-S2(B)

seal (1.5 - 2 m.)
sand (2 - 5.5 m.)
screen (2.5 - 5.5 m.)

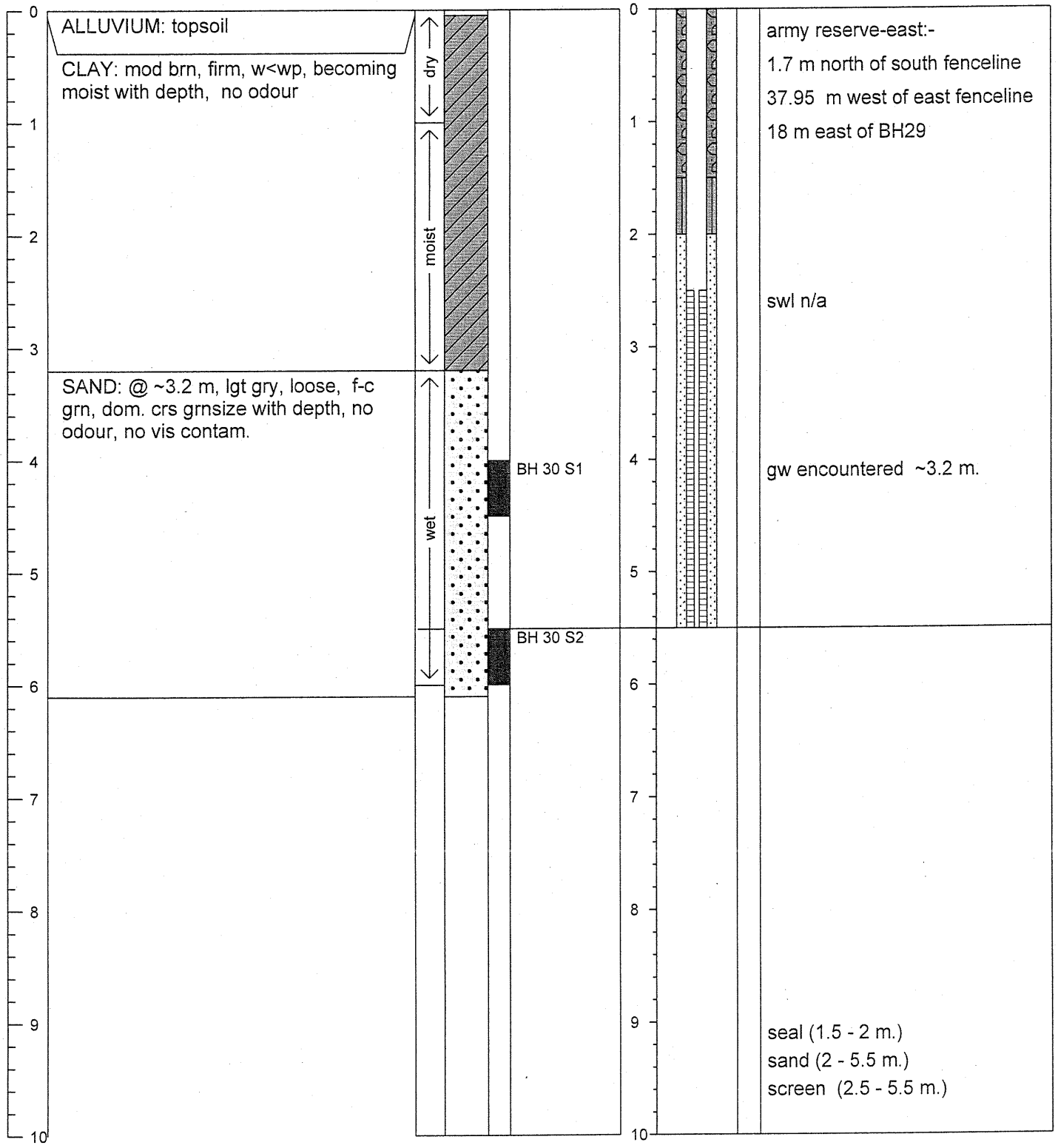
MONITORING WELL BORELOG

bore no. BH 30

VEMCO
Environmental Services

client	OEAM	**location**	army reserve-east	**status**	G'water Monitor.
project	Sale	**co-ords**	505,835 E amg	**date**	7.5.2002
project no.	Sa-2002		5,781,272 N amg		
drill co.	Aqua Drilling	**bcl**	59779	**rl & datum**	3.621 m.ahd & gl
rig type	hollow auger	**logged**	sg	**depth**	5.5 m

MATERIAL DESCRIPTION | SAMPLING | BORE CONSTRUCTION DETAILS



lename OEAM_BH30

BORELOG

bore no. BH 31

monarc environmental

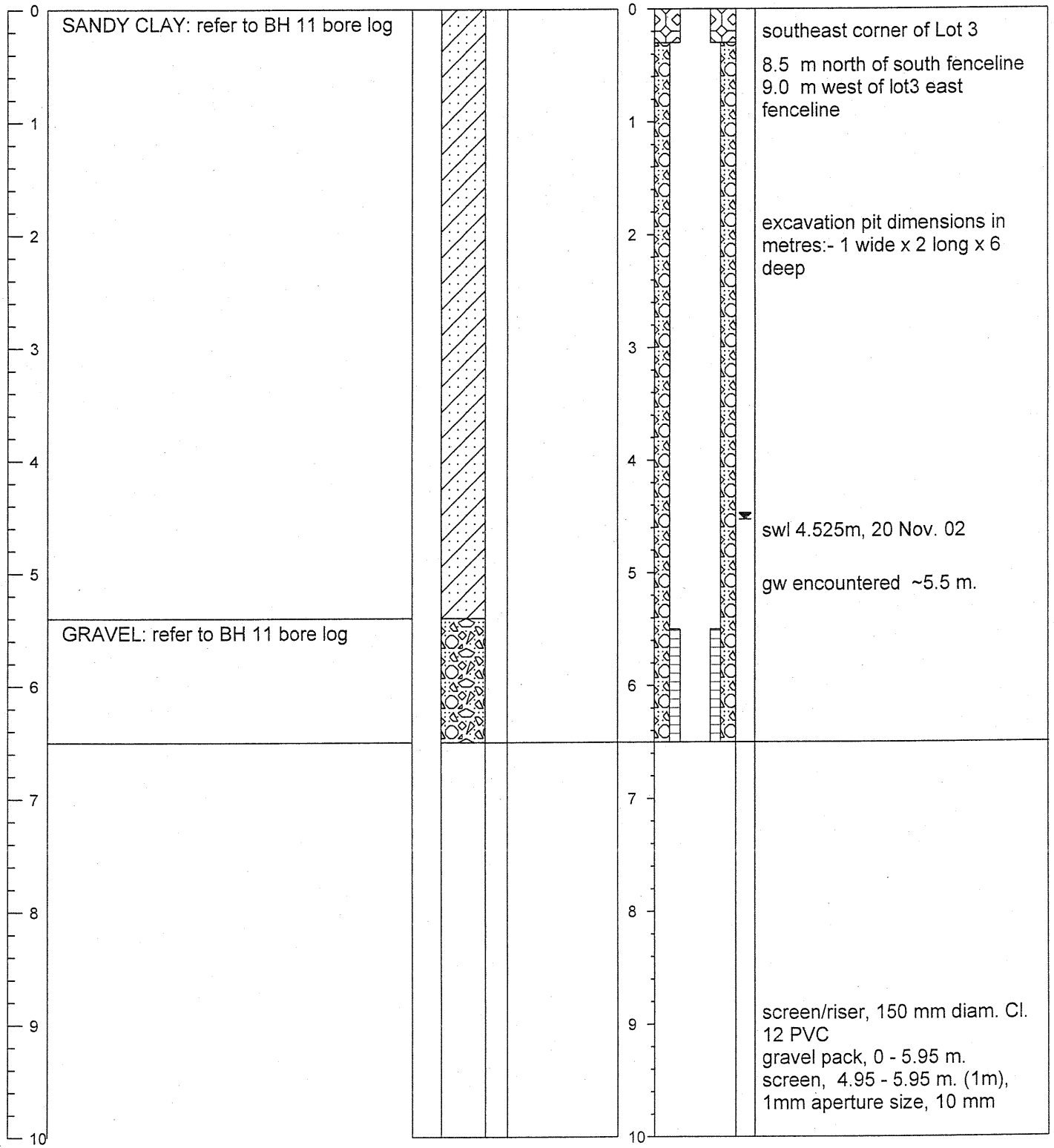
client	OEAM	location	SE lot3	status	Access Well
project	Sale	co-ords	505 785 E	date	7.5.2002
project no.	Sa-2002		5 781 333 N		
drill co.	Excavator	bcl	n/a	rl & datum	~ 5.9m (ahd)
rig type	n/a	logged	sg	depth	5.95 metres

MATERIAL DESCRIPTION | SAMPLING | BORE CONSTRUCTION DETAILS

moisture | graphic log | sampled | sample/field test | depth (m) | construction | water | remarks

SANDY CLAY: refer to BH 11 bore log

GRAVEL: refer to BH 11 bore log



southeast corner of Lot 3

8.5 m north of south fenceline
9.0 m west of lot3 east fenceline

excavation pit dimensions in metres:- 1 wide x 2 long x 6 deep

swl 4.525m, 20 Nov. 02

gw encountered ~5.5 m.

screen/riser, 150 mm diam. Cl. 12 PVC
gravel pack, 0 - 5.95 m.
screen, 4.95 - 5.95 m. (1m), 1mm aperture size, 10 mm

BORELOG

bore no. **BH 32**

monarc ENVIRONMENTAL

client	OEAM	location	lot 3	status	G'water Extract.
project	Sale	co-ords	505,771 amg	date	24.05.2004
project no.	ORG-408		5,781,331 amg		
drill co.	Powerbond P/L	bcl	9020074	rl & datum	5.780m bgl (ahd)
rig type	hollows,150mm ID	logged	sg	depth	9 m

MATERIAL DESCRIPTION	moisture	graphic log	sampled	sample/field test	depth (m)	construction	water	remarks
SURFACE FILL: 0-0.1m, dk brn/blk soil, overlying SAND, 0.1 to 0.5m, orange, well sorted, dry becoming SOIL, 0.5-0.9m, dk brn/blk comm. coke frags, occ.gravel <1cm, w<wp, clayey in part, no odour	dry				0			6.1 m N of south boundary 15.3 m W. of lot 3/4 boundary
GRAVEL / SAND: blk, loose, v. poorly sorted, gravel size qtz, clayey in part, grading to:-					1			
CLAYEY SAND: ~ 1.9 m, drk brn, some v. crs grn qtz, soft, w=wp, v. sli odour, decr in grn size to: -	v. sli. moist				2			well yield = 0.17ls, developed on 25/05/2004 for 6hrs using compressor,
CLAYEY SILT: blk-drk gry, v moist, vis rank: heavy contam, odour rank: slight	moist				3			
					4		W	swl ~4.248 m. @ 25/05/2004
					5		W	gw encountered @ ~ 5 m.
GRAVEL: @ 5.3m, Refer to BH18: "blk, v. crs cobble size qtz, v. poor srt, v str. odour, sheen, non aqueous liquid fraction from 6.5m" (no returns)	wet				6			drill method prevented logging from 5.3m due to lack of returns
CLAY: from ~7m . Refer to BH18: "CLAY, yellow brn, dk olive, stiff to hd, w=wp"	moist				7			slow rop from ~7.5m
					8			casing type: 125 mm diam. Cl. 12 PVC screen type: 125mm diam OD, stainless steel, 0.8mm apert.
					9			seal (3.9 - 5.05 m.) filter pack (5.05 - 9.00 m.) screen (5.5 - 7.5 m.) sump (7.5 - 9.0 m.)
					10			

APPENDIX 3: Survey Results

File: C:\SURFILES\2003\23920001 Date 21-03-2003 Time 15:02

Recorder file	23920001
PC file	
CPMS file number	03MTW120
COSMOS number	
DBC	
Job Title	VEMCO ENVIROMENTAL
DRP	
Job stage	
FieldBook	
Party leader	Don D
Date of survey	19-03-2003
Title	VEMCO ENVIRO
Title	
Road	MCMILLAN ST
Area	SALE

LEGEND

A Aerial earth	C Concrete pole
E Eleven (11kV)	E Existing Pole
F Fibre optic	F six point six (6.6kV)
L Low voltage	N New pole
R Replace pole	S Stobie pole
S Sixty six (66kV)	T Twenty two (22kV)
U sUpervisory cable	W sWer (12.7 kV)
W Wood pole	? not known

Pt	Easting	Northing	RL	Desc Code	Str Nbr	Pole Nbr	Pole Size	X-arm Insltr	X-arm Insltr	X-arm Insltr	X-arm Insltr
1	0.000	0.000	-999.000	??????	0						
2	0.000	0.000	-999.000	??????	0						
3	0.000	0.000	-999.000	??????	0						
4	0.000	0.000	-999.000	??????	0						
5	0.000	0.000	-999.000	??????	0						
6	0.000	0.000	-999.000	??????	0						
7	0.000	0.000	-999.000	??????	0						
8	0.000	0.000	-999.000	??????	0						
9	0.000	0.000	-999.000	??????	0						
10	0.000	0.000	-999.000	??????	0						
11	0.000	0.000	-999.000	??????	0						
12	0.000	0.000	-999.000	??????	0						
13	0.000	0.000	-999.000	??????	0						
14	0.000	0.000	-999.000	??????	0						
15	505675.320	5781406.980	6.010	GA	0						
# PSM 110 RL 20.90 FT. SALE S. A. DATUM CO ORDS FROM 2000 SURVEY											
16	0.000	0.000	-999.000	??????	0						
17	0.000	0.000	-999.000	??????	0						
18	0.000	0.000	-999.000	??????	0						
19	0.000	0.000	-999.000	??????	0						
20	505843.244	5781399.881	5.926	I1	0						
# MCMILLAN ST											
21	505682.298	5781237.468	3.504	I1	0						
# RAYMOND ST											
22	505581.447	5781306.007	0.105	N1	0						
# WATER LEVEL SALE CANAL											
23	505593.080	5781317.146	2.692	N1	0						
# BORE BH24											
24	505607.938	5781298.759	2.950	N1	0						
# BORE BH25											
25	505624.623	5781269.587	2.931	N1	0						
# BORE BH26											
26	505612.692	5781250.522	0.109	N1	0						
# WATER LEVEL SALE CANAL											
27	505824.113	5781243.755	3.621	N1	0						
# BORE BH30											
28	505806.205	5781242.863	3.651	N1	0						
# BORE BH29											
29	505783.782	5781242.860	3.926	N1	0						

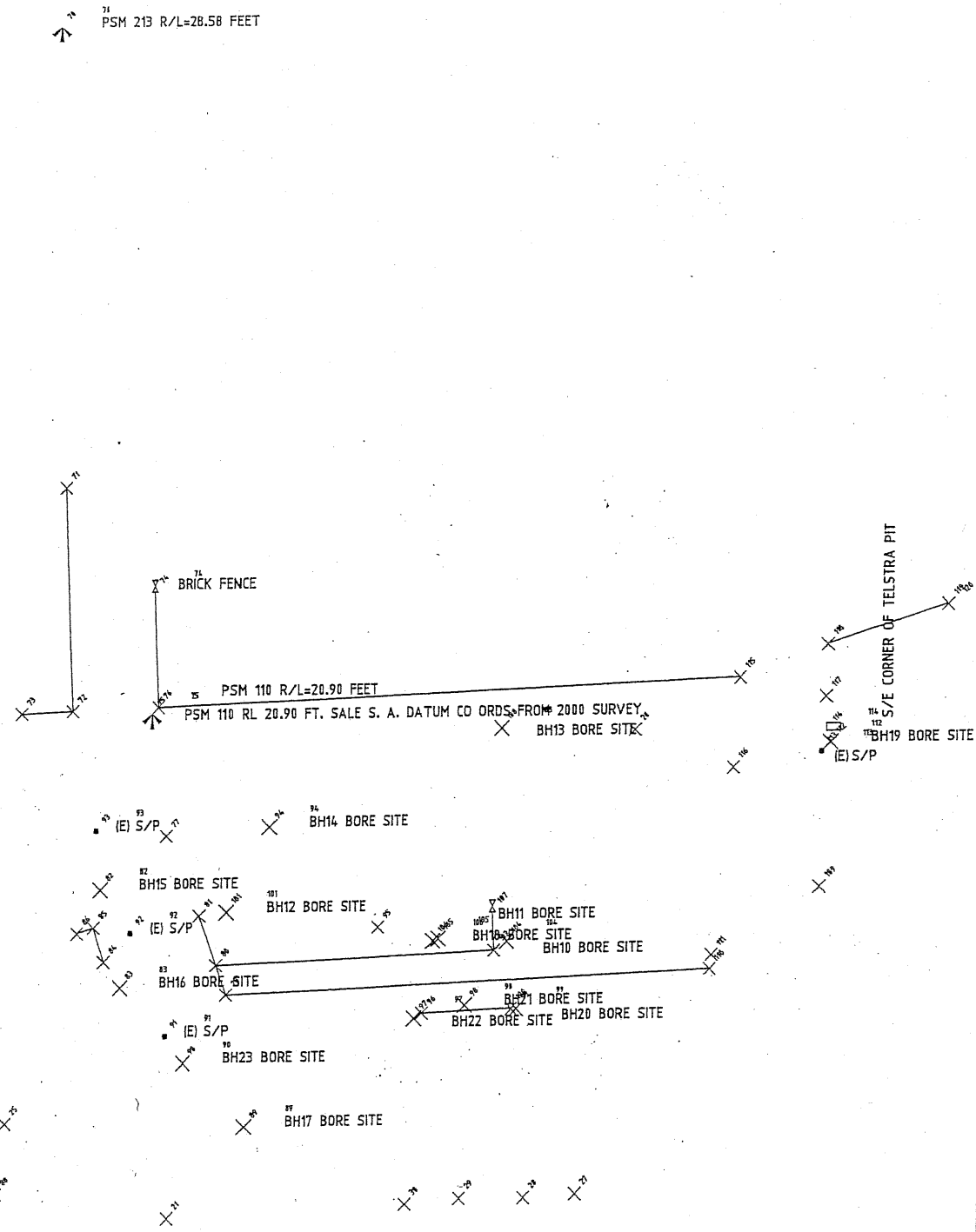
```
 # BORE BH28
     30 505765.186 5781241.083    4.037  N1        0
 # BORE BH27
     31 506011.351 5781460.022    2.336  N1        0
 # LAKE WATER LEVEL
     32       0.000       0.000 -999.000  ??????    0
     33       0.000       0.000 -999.000  ??????    0
     34       0.000       0.000 -999.000  ??????    0
     35       0.000       0.000 -999.000  ??????    0
     36       0.000       0.000 -999.000  ??????    0
     37       0.000       0.000 -999.000  ??????    0
     38       0.000       0.000 -999.000  ??????    0
     39       0.000       0.000 -999.000  ??????    0
     40       0.000       0.000 -999.000  ??????    0
     41       0.000       0.000 -999.000  ??????    0
     42       0.000       0.000 -999.000  ??????    0
     43       0.000       0.000 -999.000  ??????    0
     44       0.000       0.000 -999.000  ??????    0
     45       0.000       0.000 -999.000  ??????    0
     46       0.000       0.000 -999.000  ??????    0
     47       0.000       0.000 -999.000  ??????    0
     48       0.000       0.000 -999.000  ??????    0
     49       0.000       0.000 -999.000  ??????    0
     50       0.000       0.000 -999.000  ??????    0
     51       0.000       0.000 -999.000  ??????    0
     52       0.000       0.000 -999.000  ??????    0
     53       0.000       0.000 -999.000  ??????    0
     54       0.000       0.000 -999.000  ??????    0
     55       0.000       0.000 -999.000  ??????    0
     56       0.000       0.000 -999.000  ??????    0
     57       0.000       0.000 -999.000  ??????    0
     58       0.000       0.000 -999.000  ??????    0
     59       0.000       0.000 -999.000  ??????    0
     60       0.000       0.000 -999.000  ??????    0
     61       0.000       0.000 -999.000  ??????    0
     62       0.000       0.000 -999.000  ??????    0
     63       0.000       0.000 -999.000  ??????    0
     64       0.000       0.000 -999.000  ??????    0
     65       0.000       0.000 -999.000  ??????    0
     66       0.000       0.000 -999.000  ??????    0
     67       0.000       0.000 -999.000  ??????    0
     68       0.000       0.000 -999.000  ??????    0
     69       0.000       0.000 -999.000  ??????    0
     70 505640.030 5781637.569    8.351  GA        0
 # PSM 213 R/L=28.58 FEET
     71 505644.232 5781483.069    7.806  B3        2
 # STEEL FENCE
     72 505647.399 5781408.114    5.426  B3        2
     73 505629.449 5781407.368    4.815  B3        2
     74 505675.934 5781447.858    7.197  G7        3
 # BRICK FENCE
     75 505675.320 5781406.980    6.010  GA        0
 # PSM 110 R/L=20.90 FEET
     76 505677.540 5781409.207    6.218  B3        3
     77 505680.984 5781365.771    5.375  I1        0
     78 505702.222 5781312.067    4.762  B3        4
     79 505702.222 5781312.067    4.762  B3        5
     80 505698.760 5781322.080    4.898  B3        6
     81 505692.990 5781338.819    5.162  B3        4
 # END OF CYCLONE FENCE
```

```
      82 505657.882 5781347.936    4.796  R1        0
   # BH15 BORE SITE
      83 505665.095 5781314.859    4.261  R1        0
   # BH16 BORE SITE
      84 505659.153 5781323.554    4.296  A1        7
   # CORNER OF SHED
      85 505655.591 5781335.187    4.483  A1        7
   # CORNER OF SHED
      86 505649.725 5781333.403    4.282  A1        7
   # CORNER OF SHED
      87 505595.286 5781294.897    2.612  K1        8
   # Top edge of River Bank (Not water level)
      88 505621.452 5781246.081    2.514  K1        8
   # Top edge of River Bank (not water level)
      89 505708.861 5781267.644    4.463  R1        0
   # BH17 BORE SITE
      90 505687.503 5781289.258    4.624  R1        0
   # BH23 BORE SITE
      91 505681.015 5781298.360    4.515  L1        0  ES/P
      92 505668.623 5781333.160    4.714  L1        0  ES/P
      93 505656.298 5781367.652    5.183  L1        0  ES/P
      94 505716.446 5781368.467    5.693  R1        0
   # BH14 BORE SITE
      95 505754.761 5781334.395    5.978  I1        0
      96 505770.357 5781305.106    4.587  A1        9
   # CORNER OF BUILDING
      97 505767.762 5781303.444    4.604  R1        0
   # BH22 BORE SITE
      98 505785.057 5781307.610    4.483  R1        0
   # BH21 BORE SITE
      99 505803.039 5781306.284    4.318  R1        0
   # BH20 BORE SITE
     100 505801.216 5781306.383    4.255  A1        9
   # CORNER OF BUILDING
     101 505702.178 5781339.907    5.266  R1        0
   # BH12 BORE SITE
     102 505795.041 5781325.992    5.924  B3        6
     103 505795.041 5781325.992    5.924  B3       10
     104 505799.431 5781329.015    5.857  R1        0
   # BH10 BORE SITE
     105 505775.702 5781330.209    5.897  R1        0
   # BH11 BORE SITE
     106 505773.856 5781329.353    5.861  R1        0
   # BH18 BORE SITE
     107 505794.441 5781338.891    6.082  G7       10
     108 505796.819 5781400.878    5.506  R1        0
   # BH13 BORE SITE
     109 505906.996 5781346.245    4.164  I1        0
     110 505870.013 5781318.731    3.957  B3        5
   # END OF EASMENT
     111 505870.584 5781323.516    3.825  N1        0
   # END OF EASEMENT
     112 505910.030 5781394.996    4.855  R1        0
   # BH19 BORE SITE
     113 505907.084 5781391.825    5.105  L1        0  ES/P
     114 505908.731 5781398.847    5.144  G4        0
   # S/E CORNER OF TELSTRA PIT
     115 505879.452 5781417.141    6.192  B3        3
   # CORNER OF FENCE
     116 505877.228 5781386.803    5.453  N1        0
```

```
# CORNER OF FENCE
   117 505908.459 5781410.559    5.611  I1        0
   118 505908.987 5781428.038    5.912  B3       11
# CORNER OF FENCE
   119 505949.438 5781441.291    4.275  B3       11
# CORNER OF FENCE
   120 505952.273 5781441.700    4.223  AS        0
# CENTRE OF SEWER PIT
   121 506008.496 5781460.601    2.552  N1        0
# EXT.OF BUILDING LINE ON EDGE OF LAKE GUTHRIDGE
```

AUTOCAD A2

1017 X 995



SALE

20 10 0 20 40 60 80 100

SCALE OF METRES

ORIGINAL SCALE 1:1000

S:\Personnel\Steve\drafting for sg\Sale\RAW SURVEY PLOT 2003.dwg DATE: Wed, 07 May 2003 - TIME: 4:23PM

APPENDIX 4: Water Levels, Purge and Field Parameters Record

STATIC/REDUCED WATER LEVELS (metres), SALE

monarc

Location:	BH10 Sthrn boundary, onsite		BH11 Sthrn boundary, onsite		BH12 East boundary, onsite		BH13 Nth Boundary, offsite		BH14 NW corner, offsite		BH15 adj. Sth Gipps Hwy Punt La.		BH16 Reserve, Punt La.		BH17 adj. Sth Gipps Hwy Punt La.		BH18 adjacent BH11		BH19 Canal Reserve nth end		BH20 RAAC-East		BH21 RAAC-Mid		BH22 RAAC-West		BH23 adj. Sth Gipps Hwy sth end		Location:	Lake Guthridge	Flooding Creek Canal
RL: note1	10.000		10.048		9.411		9.652		9.837		8.947		8.402		8.612		10.012		8.992		10.012		8.992		10.012		8.992		RL: note1		
Measured fr	Top of riser		Top of riser		Top of riser		Top of riser		Top of riser		Top of riser		Top of riser		Top of riser		Top of riser		Top of riser		Top of riser		Top of riser		Top of riser		Top of riser		Measured		
RL: note2	5.857		5.897		5.266		5.506		5.693		4.796		4.261		4.463		5.861		4.855		4.318		4.483		4.604		4.624		RL: note2		
	BH10		BH11		BH12		BH13																								
Date	SWL	RWL	SWL	RWL	SWL	RWL	SWL	RWL	SWL	RWL	SWL	RWL	SWL	RWL	SWL	RWL	SWL	RWL	SWL	RWL	SWL	RWL	SWL	RWL	SWL	RWL	SWL	RWL	Date		
23-Oct-96	3.770	2.087	3.860	2.037	3.400	1.866	3.450	2.056	3.809	1.884																					
19-Nov-96	4.369	1.488	3.982	1.915	3.460	1.806	3.502	2.004	3.943	1.750																					
21-Sep-98	-	na	4.285	1.612	3.775	1.491	3.75	1.756	4.198	1.495																			21-Sep-98		
10-Feb-99	4.520	1.337	4.175	1.722	3.680	1.586	3.679	1.827	4.112	1.581																			10-Feb-99		
14-Dec-99	4.763	1.094	4.330	1.567	3.887	1.379	3.778	1.728	4.230	1.463																			14-Dec-99		
1-Feb-00	4.749	1.108	4.341	1.556	3.895	1.371	3.790	1.716	4.238	1.455	4.388	0.408	3.495	0.766	4.000	0.463	5.044	0.817	3.121	1.734									1-Feb-00		
7-Dec-00	4.597	1.260	4.294	1.603	3.802	1.464	3.809	1.697	3.188	2.505	4.208	0.588	3.397	0.864	3.880	0.583	4.946	0.915	3.128	1.727	3.277	1.041	3.513	0.970	3.648	0.956	4.979	-0.355	7-Dec-00	6.540	4.240
22-Jan-02	4.488	1.369	4.249	1.648	4.722	0.544	3.795	1.711	4.142	1.551	4.150	0.646	4.402	-0.141	3.787	0.676	4.881	0.980	3.113	1.742	3.218	1.100	3.448	1.035	3.588	1.016	3.122	1.502	22-Jan-02		
18-Mar-03	4.678	1.179	3.979	1.918	3.586	1.680	3.844	1.662	4.052	1.641	4.403	0.393	3.563	0.698	4.119	0.344	5.153	0.708	3.196	1.659	3.627	0.691	3.840	0.643	3.969	0.635	4.735	-0.111	18-Mar-03		
17-Mar-04	4.851	1.006	4.389	1.508	3.992	1.274	3.882	1.624	4.284	1.409	4.448	0.348	3.860	0.401	4.129	0.334	5.150	0.711	3.236	1.619	3.626	0.692	3.841	0.642	3.971	0.633	4.832	-0.208	17-Mar-04		
1-Mar-05	4.880	0.977	4.325	1.572	3.852	1.414	3.845	1.661	4.235	1.458	4.261	0.535	3.472	0.789	3.837	0.626	4.931	0.930	3.159	1.696	3.253	1.065	3.478	1.005	3.611	0.993	4.510	0.114	1-Mar-05		
Depth of bore (m)		8.75		7.50		7.30		6.50		7.20		8.75		7.50		7.30		6.50		7.20		7.00		7.00		7.00		7.00	TD (m)		

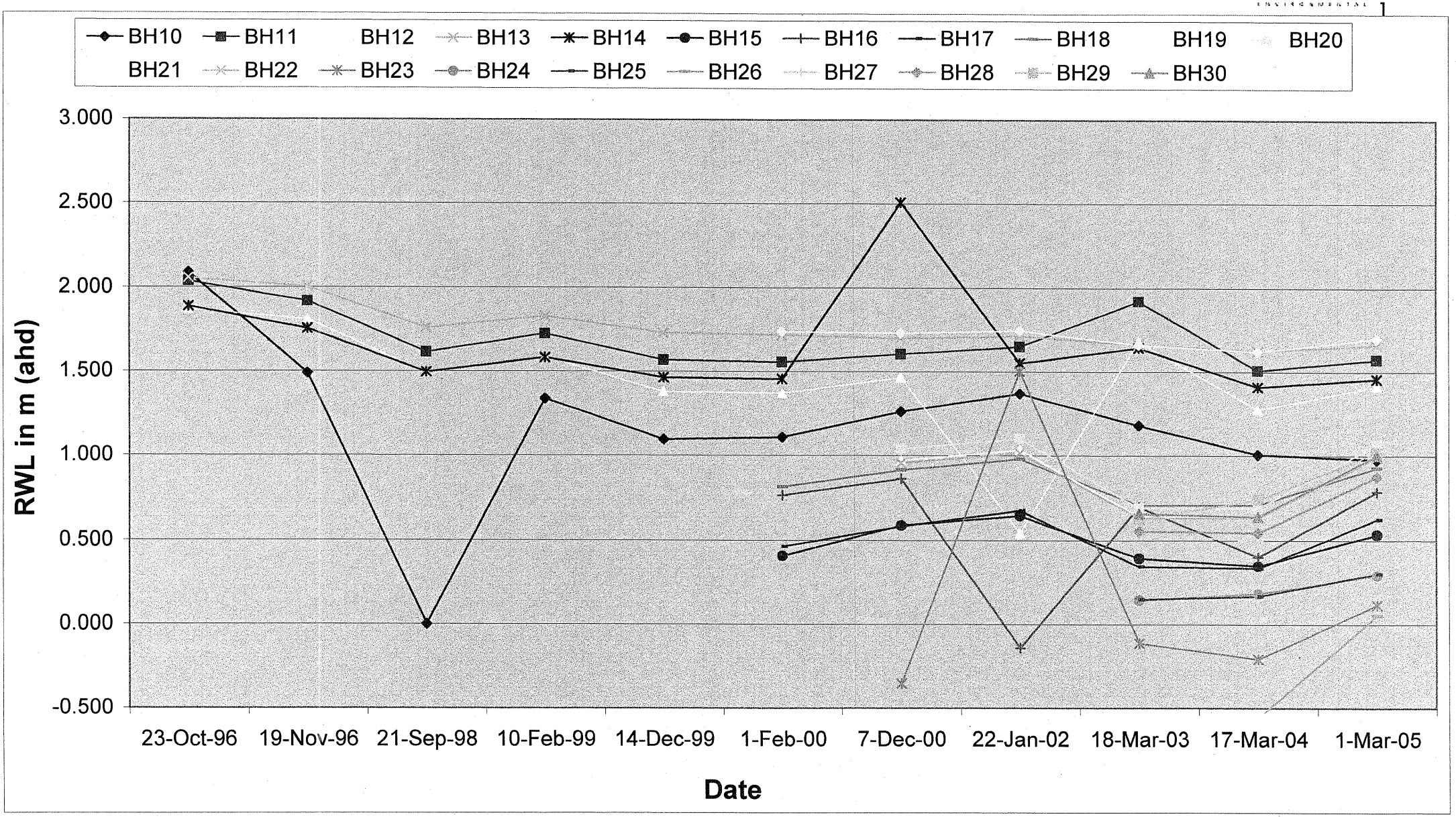
* SWL (relative to ground level, gl)
RWL: Reduced Water Level (relative to PSM 110)

Note 1: Survey date 1999
Note 2: Survey date 19 October 2000 using Permanent Survey Mark no.110
(corner Punt Lane and McMillan Street @ 20.9 feet or 6.370 metres AHD

Location:	BH24 Nth, adj. canal onsite		BH25 midway, adj. canal onsite		BH26 Sth, adj. canal onsite		BH27 Nth Boundary, offsite		BH28 NW corner, offsite		BH29 Reserve, Punt La.		BH30 Reserve, Punt La.		Location:	
Measured fr	Top of riser		Top of riser		Top of riser		Top of riser		Top of riser		Top of riser		Top of riser		Measured	
RL: note3	2.692		2.950		2.931		4.037		3.926		3.651		3.621		RL: note2	
	BH24		BH25		BH26		BH27		BH28		BH29		BH30			
Date	SWL	RWL	SWL	RWL	SWL	RWL	SWL	RWL	SWL	RWL	SWL	RWL	SWL	RWL	Date	
23-Oct-96																
19-Nov-96																
21-Sep-98																
10-Feb-99																
14-Dec-99																
1-Feb-00																
7-Dec-00																
22-Jan-02																
18-Mar-03	2.550	0.142	2.802	0.148	3.740	-0.809	3.494	0.543	3.372	0.554	3.026	0.625	2.963	0.658		
17-Mar-04	2.512	0.180	2.785	0.165	3.487	-0.556	3.539	0.498	3.381	0.545	2.910	0.741	2.980	0.641		
1-Mar-05	2.401	0.291	2.648	0.302	2.879	0.052	3.172	0.865	3.048	0.878	2.633	1.018	2.618	1.003		
Depth of bore (m)		8.75		7.50		7.30		6.50		7.20		8.75		7.50	TD (m)	

Note 3: Survey date 18 March 2003 using Permanent Survey Mark no.110
(corner Punt Lane and McMillan Street @ 20.9 feet or 6.370 metres AHD

Sale Hydrographs



BOREHOLE PURGING RECORD

Project Number : ORG-453-Sa mon **Project Name :** Sale

Client Company : Origin Energy **Location :** McMillan Street **Consultant :**

Bore No.	Borehole Depth (m.)	SWL (m.)	Sample Date	Bore diam. (mm)	Bore Volume (litres)		Total Vol. Purged (litres)	Purging/ Sampling Method	Recharge	Remarks	Field Comments
					Single	x 4					
BH-10	8.7	4.880	3/03/2005	50	7.5	30	30	Amazon	Very Good	Dark grey, Clear then very low turbidity (green-grey tinge). No oily sheen. Mod. to strong phenolic odour (3-3.5) followed by H2S odour after phenolic dissipates.	(21)
BH-11	7.5	4.325	3/03/2005	50	6.2	24.9	28	Amazon	Very Good	Dark grey green with very low turbidity. Oily sheen on 2nd bucket (result of LNAPL??) covering approx 80% of surface in patches and concentric streaks. Moderate creosote/tar odour (3).	(22)
BH-12	7.3	3.852	3/03/2005	50	6.8	27.2	16	Whale (single)	Very Very Poor	Red brown, moderately turbid clearing to low turbidity. Purge to empty 3X. Sewer-like odour with phenolic undertone (1.5-2). No sheen.	Purge to empty (19)
BH-13	6.5	3.845	1/03/2005	50	5.2	20.8	28	Whale	Very Good	Orange-brown with medium turbidity clearing after approx 10L to low turbidity. No odour, no sheen.	(1)
BH-14	7.5	4.235	3/03/2005	50	6.4	25.6	35	Amazon	Good	Initially dark grey with moderate turbidity clearing after approx 5L to grey and clear. Sewer-like odour (~2) with some phenolic/tar undertone. No sheen.	(18)
BH-15	10.0	4.261	2/03/2005	50	11.3	45.2	30	Whale	Poor	Medium brown with moderate turbidity clearing to low turbidity after ~ 10L. Minor suspended sediment. No odour, no sheen. Purge to empty @ 26L.	Purge to empty (13)
BH-16	9.0	3.472	2/03/2005	50	10.9	43.6	20	Whale	Poor	Dark grey with moderate to low turbidity. Some suspended sediment. Moderate sewer-like odour (2-2.5) with some tar/phenol. No sheen.	(14)
BH-17	9.0	3.837	2/03/2005	50	10.1	40.6	41	Whale	Moderate to good	Medium grey-brown with medium turbidity clearing after ~10L to low turbidity. Slight ozone odour. No sheen. Purge to empty @ 25L.	Purge to empty (12)
BH-18	20.5	4.931	2/03/2005	50	30.6	122.3	122	Whale	Very Good	Lght grey brown with moderate turbidity clearing after ~10L to slightly turbid. Minor suspended sediment. No odour, no sheen. Sample collected at ~ 17m.	(7)
BH-19	7.5	3.159	1/03/2005	50	8.5	34	36	Whale	Good	Dark grey at first clearing after ~5L to v low turbidity. No sheen. Slight sewer-like odour (1-1.5). NB area recently topsoiled (pipes laid??)	(2)
BH-20	7.0	3.253	2/03/2005	50	7.4	29.4	31	Whale	Good	Very dark grey and turbid clearing to light yellow with v low turbidity. Moderate to strong H2S odour (2-2.5) with slight phenolic/tar undertone. Very very small amount of streaks of oily sheen.	Int. Dupl. = QA-1; Ext. Dupl. = QA-2. (15)

Measuring Point: Top of PVC pipe. Vol. of cylinder (litres):'={((d/2)2 x pi) x (TD - SWL)} x 1000 = 1.964 litre/m. of a 50 mm pipe

Note: Figures in parentheses indicate sampling order of bores.

Note: Sample (20) was a rinsate blank

BOREHOLE PURGING RECORD

Project Number : ORG-453-Sa mon **Project Name :** Sale

Client Company : Origin Energy **Location :** McMillan Street **Consultant :**

Bore No.	Borehole Depth (m.)	SWL (m.)	Sample Date	Bore diam. (mm)	Bore Volume (litres)		Total Vol. Purged (litres)	Purging/ Sampling Method	Recharge	Remarks	Field Comments
					Single	x 4					
BH-21	7.0	*3.478*	2/03/2005	50	6.9	27.7	28	Amazon	Good	Initially black and turbid clearing to grey yellow with v low turbidity (occ surges of low turbidity). Strong H2S odour (3-4). No sheen but surface foam present.	(16)
BH-22	7.0	*3.611*	2/03/2005	50	6.7	26.6	28	Amazon	Good	Initially black and turbid clearing to clear grey (slight yellow tinge). Strong H2S odour (~2). No sheen.	(17)
BH-23	7.0	*4.510*	2/03/2005	50	4.9	19.6	15	Whale	Very Poor	Light brown with low turbidity clearing after ~3L to v low turbidity. Slight ozone-like odour (~1). No sheen.	Purge to empty (11)
BH-24	7.5	*2.401*	2/03/2005	50	10	40	40	Whale	Moderate to Poor	Light to medium brown with moderate turbidity clearing to low turbidity after 22L. Very slight ozone (sea) odour. No sheen. Purge to empty 38L.	Purge to empty (8)
BH-25	7.5	*2.648*	2/03/2005	50	9.5	38.1	29	Whale	Moderate to Poor	Medium to light grey brown with moderate turbidity claering afetr 8L to low turbidity. Slight sewer-like odour with ozone u/tone. No sheen. PTE 23L	Purge to empty (9)
BH-26	7.5	*2.879*	2/03/2005	50	9.1	36.3	24	Whale	Poor	Medium grey with moderate turbidity clearing to low turbidity after 6L. Slight sewer(H2S)/ozone odour (~1). No sheen.	Purge to empty (10)
BH-27	5.5	*3.172*	2/03/2005	50	4.6	18.3	12	Whale	Very Poor	Dark grey and turbid. Slug infested with very strong 'organic' odour (rotting seaweed?). No sheen. Purged to empty @ 5L.	Purge to empty (6)
BH-28	5.5	*3.048*	2/03/2005	50	4.8	19.3	20	Whale	Good	Light brown with low to medium turbidity clearing to very low turbidity. Very slight ozone odour. No sheen.	(4)
BH-29	5.5	*2.633*	2/03/2005	50	5.6	22.5	12	Amazon	Very Poor	Dark grey and very turbid. PTE 5L. Clearing to low turbidity. No odour. No sheen. (very thin film after standing ½hour) PTE 5L	Purge to empty (5)
BH-30	5.5	*2.618*	1/03/2005	50	5.7	22.6	27	Whale	Good	Dark grey and turbid clearing to grey low turbidity after ~5L. Slight ozone odour (ie sea water). No sheen.	(3)
BH-32	9	*4.261*	3/03/2005	150	83.9	335	180	Amazon	Very Good	Dark grey (greenish tinge) with v low turbidity. Moderate tarry odour (3-4). Slight oily sheen on first bucket (~5%, angular fragments), no sheen on 2nd bucket. .	Placed pump at 7m then adjusted pump to low flow (33s/L) for sampling. (23)

Measuring Point: Top of PVC pipe. Vol. of cylinder (litres):'={((d/2)2 x pi) x (TD - SWL)} x 1000 = 1.964 litre/m. of a 50 mm pipe

Note: Figures in parentheses indicate sampling order of bores.

Note: Sample (20) was a rinsate blank

Table: Field Parameters
Location: McMillan Street, Sale
Job No.: ORG-453-Sa mon

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Bore Number Units	pH	Temperature	Conductivity (mS/cm)	TDS (ppm)	DO (ppm)	Redox (mV)	Time	Date
BH-10	7.54	16.8	5.10	2805	0.49	-223.0	10:10	03-Mar-05
BH-11	7.52	17.4	4.27	2349	1.36	-114.2	11:25	03-Mar-05
BH-12	7.63	16.7	3.19	1755	3.39	-61.3	9:30	03-Mar-05
BH-13	7.02	18.7	3.05	1678	2.72	140.4	4:30	01-Mar-05
BH-14	7.59	17.5	3.52	1936	1.41	-137.1	8:30	03-Mar-05
BH-15	7.35	18.7	3.46	1903	3.21	123.4	3:15	02-Mar-05
BH-16	8.02	16.7	3.91	2151	3.81	-77.6	4:00	02-Mar-05
BH-17	7.45	17.6	2.96	1628	2.01	-89.2	2:25	02-Mar-05
BH-18	6.65	17.3	1.93	1062	2.34	-29.4	11:15	02-Mar-05
BH-19	7.33	19.8	3.74	2057	2.34	-132.4	4:55	01-Mar-05
BH-20	8.36	17.8	6.64	3652	0.24	-346.6	5:00	02-Mar-05
BH-21	8.64	18.4	6.54	3597	0.32	-338.6	5:50	02-Mar-05
BH-22	7.36	18.5	1.78	979	0.68	-275.3	6:15	02-Mar-05
BH-23	7.23	18.2	3.06	1683	3.05	-98.8	1:40	02-Mar-05
BH-24	7.10	16.5	2.76	1518	1.41	-79.9	11:55	02-Mar-05
BH-25	7.43	16.5	3.60	1980	1.51	-114.9	12:15	02-Mar-05
BH-26	7.10	16.4	3.05	1678	2.01	-78.7	12:45	02-Mar-05
BH-27	7.60	19.9	3.06	1683	1.82	-134.9	10:05	02-Mar-05
BH-28	6.90	18.6	2.22	1221	0.84	-77.6	8:20	02-Mar-05
BH-29	7.04	17.6	4.87	2679	3.01	-104.0	9:50	02-Mar-05
BH-30	6.97	17.6	3.19	1755	1.27	-104.0	5:30	01-Mar-05
BH-32	7.70	17.8	6.41	3526	0.81	-158.3	12:35	03-Mar-05

Note: TDS is based on Conductivity (in uS/cm) * 0.55

APPENDIX 5: Groundwater Flow Direction, 1996 – 2005

Groundwater Flow Direction
Sale
(RWL as at 3 March 2005)

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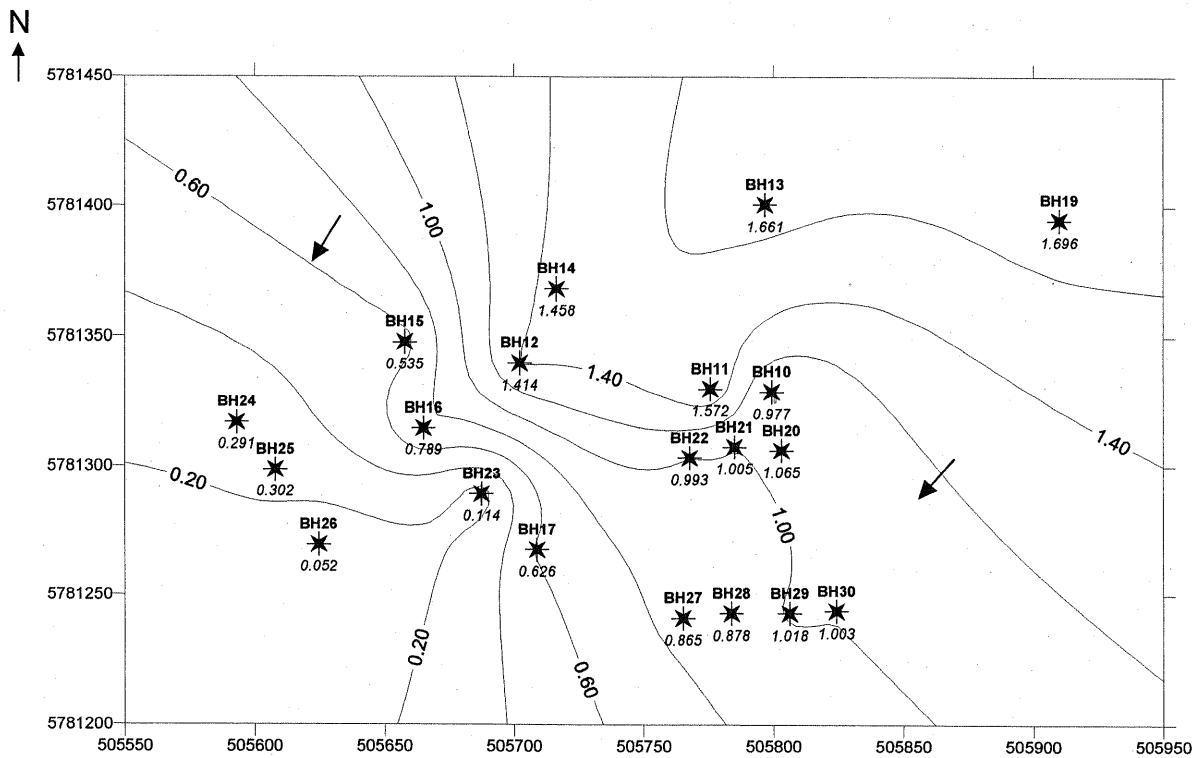


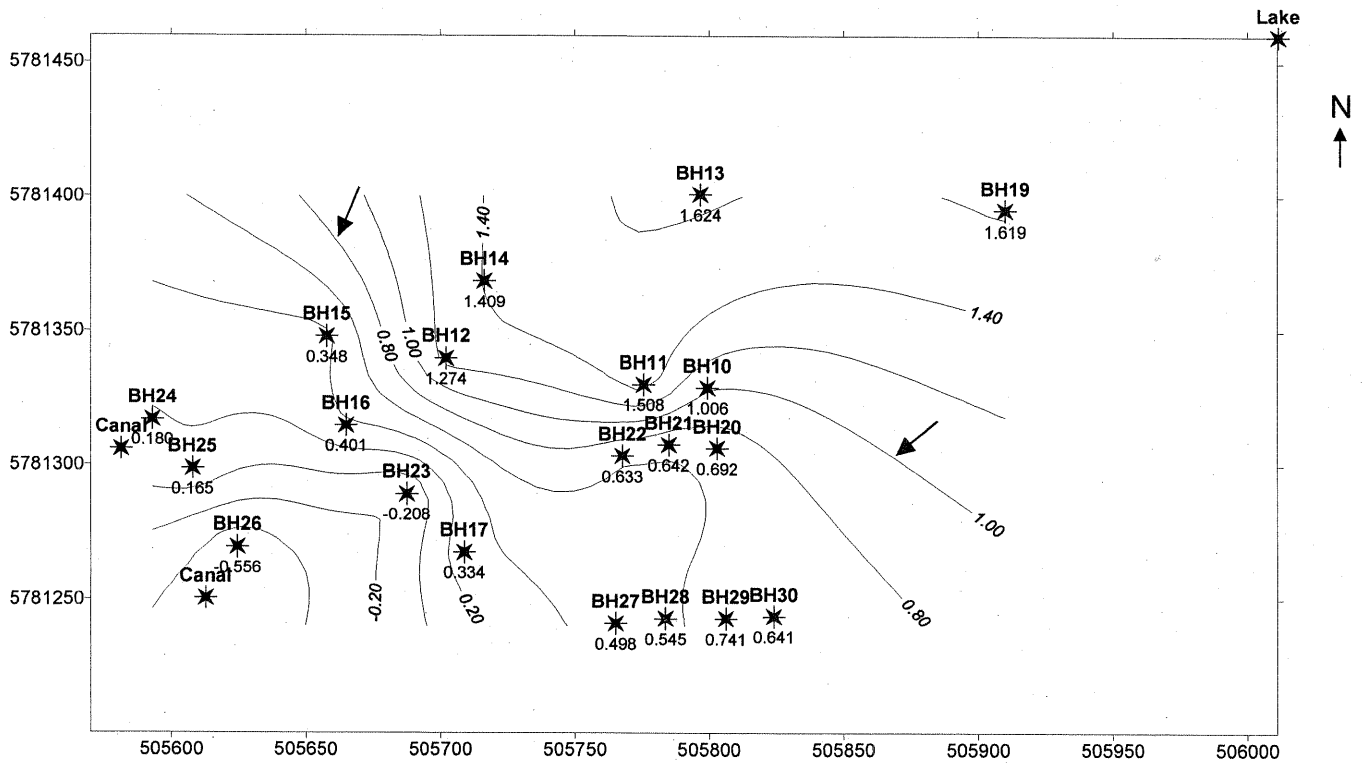
Datum: Permanent Benchmarks "PSM 213" R/L = 28.58 ft and "PSM 110" R/L = 20.90 ft

Groundwater Flow Direction

File: Sale020305 RWL.srf
Basemap: Sale.bln
Survey Date: 21/03/03
Data: Sale Data noBH18 020305.xls
Contour Interval: 0.2m

Groundwater Flow Direction
Sale

(RWL as at 20 March 2004)



Datum: Permanent Benchmarks "PSM 213" R/L = 28.58 ft and "PSM 110" R/L = 20.90 ft

Groundwater Flow Direction

File: SA0304RWL.srf
Basemap: Sale.bln
Survey Date: 21/03/03
Data: BHMarch04.xls
Contour Interval: 0.2m

APPENDIX 6: Laboratory Results – Groundwater (2005)

Ecowise Environmental

KMC:21730

Your Ref: **ORG-453-Sa mon**

21 March 2005

Monarc Environmental
PO Box 478
MT WAVERLEY VIC 3149

Date Received: 4/03/2005

Date Sampled: 1/03/2005- 3/03/2005

Attention: **Mr. David Coleman**

Certificate of Analysis

WSL Report Number: **791769**

The sample(s) referred to in this report were analysed by the following method(s):

Analyte(s)	Method
Ammonia Nitrogen	APHA 4120
Chemical Oxygen Demand	APHA 5220 D
Cyanide	APHA 4120
Ferrous Iron ^^	WSL 029
Metals	WSL-032
Nitrate Nitrogen	APHA 4120
PAHs	WSL8000
Total Phenolics	APHA 4120
TPH	WSL030
Volatiles	WSL3810B

Results pertain to samples as received

Details of this report were e-mailed on: 22/03/2005

Yours faithfully
WSL Consultants Pty Ltd

Victor Willms
Manager Chemistry Services

NATA

This laboratory is accredited by the National Association of Testing Authorities, Australia. The tests reported herein have been performed in accordance with its terms of accreditation. This document shall not be reproduced except in full.
Accreditation No 1205

^^ *Nata registration does not cover the performance of this test*

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An Approved EPA Auditor & Analyst

WSL Consultants Pty. Ltd. trading as Ecowise Environmental
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Date : 21-Mar-2005
WSL Report No: 791769
WSL JobNumber: 21730 Client: Monarc Environmental Job Reference: ORG-453-Sa mon

LAB NUM	Received	Sample	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	BENZENE	TOLUENE	ETHYL BENZENE	XYLENES	STYRENE	CUMENE	1 2 4-TRI-METHYL BENZENE	TOTAL PHENOLS
791769	4-Mar-2005	BH10W	14	31	5.4	<0.1	14	4.4	0.27	2.2	<0.001	0.010	0.20	36
791770	4-Mar-2005	BH11W	30	51	9.7	<0.1	20	12	0.33	5.1	<0.001	0.006	0.33	31
791771	4-Mar-2005	BH12W	11	8.7	1.6	<0.1	8.9	0.57	0.77	2.6	<0.001	0.028	0.39	2.6
791772	4-Mar-2005	BH13W	<0.1	<0.1	<0.1	<0.1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.054
791773	4-Mar-2005	BH14W	2.8	0.8	0.3	<0.1	4.1	0.007	0.36	0.019	<0.001	0.027	0.022	0.050
791774	4-Mar-2005	BH15W	<0.1	<0.1	<0.1	<0.1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.027
791775	4-Mar-2005	BH16W	10	5.4	1.3	<0.1	11	0.12	0.92	1.1	<0.001	0.031	0.30	0.20
791776	4-Mar-2005	BH17W	<0.1	<0.1	<0.1	<0.1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.027
791777	4-Mar-2005	BH18W	<0.1	<0.1	<0.1	<0.1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.023
791778	4-Mar-2005	BH19W	0.2	0.1	0.2	<0.1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
791779	4-Mar-2005	BH20W	17	36	5.0	<0.1	12	4.9	0.39	2.7	<0.001	0.007	0.22	3.3
791780	4-Mar-2005	BH21W	17	32	2.5	<0.1	12	4.5	0.21	1.7	<0.001	0.006	0.098	4.1
791781	4-Mar-2005	BH22W	2.3	3.7	0.9	<0.1	0.89	0.20	0.072	0.18	<0.001	0.002	0.019	0.24
791782	4-Mar-2005	BH23W	0.6	0.3	0.2	<0.1	0.30	0.002	0.014	0.054	<0.001	<0.001	0.003	0.037
791783	4-Mar-2005	BH24W	<0.1	<0.1	<0.1	<0.1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
791784	4-Mar-2005	BH25W	0.6	0.9	0.4	<0.1	0.30	<0.001	<0.001	0.048	<0.001	0.006	0.012	0.003

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WSL Report No: 791769
WSL JobNumber: 21730 Client: Monarc Environmental Job Reference: ORG-453-Sa mon

LAB NUM	Received	Sample	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	BENZENE	TOLUENE	ETHYL BENZENE	XYLENES	STYRENE	CUMENE	1 2 4-TRI-METHYL BENZENE	TOTAL PHENOLS
791785	4-Mar-2005	BH26W	0.2	0.1	<0.1	<0.1	<0.001	<0.001	0.004	0.009	<0.001	<0.001	0.001	<0.001
791786	4-Mar-2005	BH27W	<0.1	<0.1	<0.1	<0.1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.028
791787	4-Mar-2005	BH28W	<0.1	<0.1	<0.1	<0.1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
791788	4-Mar-2005	BH29W	<0.1	<0.1	<0.1	<0.1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
791789	4-Mar-2005	BH30W	<0.1	<0.1	<0.1	<0.1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
791790	4-Mar-2005	BH32W	55	87	11	<0.5	25	16	0.43	6.4	<0.001	0.010	0.37	79
791791	4-Mar-2005	QA.1	27	47	7.1	<0.1	13	5.2	0.44	2.9	<0.001	0.009	0.24	5.4
791792	4-Mar-2005	QA.R					0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.007

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Date : 21-Mar-2005
WSL Report No: 791769
WSL JobNumber: 21730 Client: Monarc Environmental Job Reference: ORG-453-Sa mon

LAB NUM	Received	Sample	CHEMICAL OXYGEN DEMAND	AMMONIA NITROGEN	NITRATE NITROGEN	CYANIDE	Mn	FERROUS IRON
791769	4-Mar-2005	BH10W		390	<0.01	0.25	2.1	1.6
791770	4-Mar-2005	BH11W	200	1.6	0.13	0.08	5.4	0.24
791771	4-Mar-2005	BH12W	94	140	0.37	0.22	0.34	1.3
791772	4-Mar-2005	BH13W	2	0.2	11	<0.01	0.03	<0.10
791773	4-Mar-2005	BH14W	19	97	0.03	0.13	0.40	0.22
791774	4-Mar-2005	BH15W		2.7	3.1	<0.01	0.36	0.84
791775	4-Mar-2005	BH16W	65	160	0.10	0.24	0.17	0.23
791776	4-Mar-2005	BH17W		27	0.37	0.05	0.15	0.54
791777	4-Mar-2005	BH18W		0.4		<0.01		
791778	4-Mar-2005	BH19W		0.2	0.09	<0.01	0.32	0.63
791779	4-Mar-2005	BH20W		400	0.01	0.15	0.01	0.56
791780	4-Mar-2005	BH21W	1,200	390	<0.01	0.27	0.19	0.53
791781	4-Mar-2005	BH22W		95	0.01	<0.01	0.26	0.64
791782	4-Mar-2005	BH23W		94	<0.01	0.08	0.08	1.3
791783	4-Mar-2005	BH24W		22	<0.01	<0.01	0.08	1.1
791784	4-Mar-2005	BH25W	4	75	0.01	0.02	0.04	0.67

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LAB NUM	Received	Sample	CHEMICAL OXYGEN DEMAND	AMMONIA NITROGEN	NITRATE NITROGEN	CYANIDE	Mn	FERROUS IRON
791785	4-Mar-2005	BH26W	<2	55	0.01	<0.01	0.06	1.9
791786	4-Mar-2005	BH27W	44	3.6	0.01	<0.01	0.29	2.1
791787	4-Mar-2005	BH28W		0.5	0.64	<0.01	0.26	0.33
791788	4-Mar-2005	BH29W	31	17	<0.01	<0.01	1.6	1.7
791789	4-Mar-2005	BH30W		1.5	<0.01	<0.01	0.34	1.1
791790	4-Mar-2005	BH32W		530		0.09		
791791	4-Mar-2005	QA.1		380	<0.01	0.13	0.02	0.58
791792	4-Mar-2005	QA.R		0.1				

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LAB NUM	Received	Sample	NAP	ACY	ACE	FLU	PHE	ANT	FLA	PYR	BAA	CHR	BBF	BKF	BAP	DBA	BGP	IPY	TOTAL* PAH
791769	4-Mar-2005	BH10W	3.6	0.15	0.012	0.031	0.031	0.004	0.003	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	3.9
791770	4-Mar-2005	BH11W	7.6	0.30	0.021	0.052	0.058	0.015	0.007	0.006	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	8.0
791771	4-Mar-2005	BH12W	1.8	0.023	0.007	0.002	0.007	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	1.8
791772	4-Mar-2005	BH13W	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
791773	4-Mar-2005	BH14W	0.012	0.001	0.006	0.004	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.02
791774	4-Mar-2005	BH15W	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
791775	4-Mar-2005	BH16W	1.2	0.012	0.007	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	1.3
791776	4-Mar-2005	BH17W	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01
791777	4-Mar-2005	BH18W	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
791778	4-Mar-2005	BH19W	0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01
791779	4-Mar-2005	BH20W	4.2	0.066	0.011	0.017	0.004	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	4.3
791780	4-Mar-2005	BH21W	1.6	0.011	0.003	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	1.6
791781	4-Mar-2005	BH22W	0.56	0.005	0.003	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.57
791782	4-Mar-2005	BH23W	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.02
791783	4-Mar-2005	BH24W	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01
791784	4-Mar-2005	BH25W	0.10	<0.001	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.11
791785	4-Mar-2005	BH26W	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01
791786	4-Mar-2005	BH27W	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
791787	4-Mar-2005	BH28W	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND

ND = None detected at a concentration greater than the reporting limits specified above.

**** Total PAH's refers only to the sum of the positive individual PAH's tested above.***

A blank space indicates no test performed

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QUALITY ASSURANCE REPORT

Date : 21-Mar-2005
WSL Report No: 791769
WSL JobNumber: 21730 Client: Monarc Environmental Job Reference: ORG-453-Sa mon

LAB NUM	Reference	Sample	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	BENZENE	TOLUENE	ETHYL BENZENE	XYLENES	STYRENE	CUMENE	1 2 4-TRI-METHYL BENZENE	TOTAL PHENOLS
793020	4-Mar-2005	BLANK	<0.1	<0.1	<0.1	<0.1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
793019	*(Duplicate of 791772)*		<0.1	<0.1	<0.1	<0.1								
791772	4-Mar-2005	BH13W	<0.1	<0.1	<0.1	<0.1								
% RPD			0	0	0	0								
793485	*(Duplicate of 791782)*		0.5	0.3	0.2	<0.1								
791782	4-Mar-2005	BH23W	0.6	0.3	0.2	<0.1								
% RPD			18.2	0	0	0								
793523	*(Duplicate of 791778)*													
791778	4-Mar-2005	BH19W												0.015
% RPD														
793525	*(Duplicate of 791791)*													
791791	4-Mar-2005	QA.1												4.2
% RPD														5.4
														25.0
794383	*(Duplicate of 791783)*						<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
791783	4-Mar-2005	BH24W					<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
% RPD							0	0	0	0	0	0	0	
794386	*(Duplicate of 791787)*						<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
791787	4-Mar-2005	BH28W					<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
% RPD							0	0	0	0	0	0	0	
794387	*(Duplicate of 791775)*						12	0.13	0.99	1.2	<0.001	0.034	0.33	
791775	4-Mar-2005	BH16W					11	0.12	0.92	1.1	<0.001	0.031	0.30	
% RPD							8.7	8.0	7.3	8.7	0	9.2	9.5	

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791788	4-Mar-2005	BH29W	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
791789	4-Mar-2005	BH30W	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
791790	4-Mar-2005	BH32W	6.3	0.19	0.020	0.046	0.044	0.011	0.004	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	6.6
791791	4-Mar-2005	QA.1	4.7	0.065	0.011	0.018	0.004	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	4.8
791792	4-Mar-2005	QA.R	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND

ND = None detected at a concentration greater than the reporting limits specified above.

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INTERNATIONAL QUALITY MANAGEMENT SYSTEM

QUALITY ASSURANCE REPORT

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WSL JobNumber: 21730 Client: Monarc Environmental Job Reference: ORG-453-Sa mon

LAB NUM	Reference	Sample	TPH C6-C9	TPH C10-C14	TPH C15-C28	TPH C29-C36	BENZENE	TOLUENE	ETHYL BENZENE	XYLENES	STYRENE	CUMENE	1 2 4-TRI-METHYL BENZENE	TOTAL PHENOLS
793491	*(Spike of 791789)*													
Expected					2.1									
% Recovery					2.5									
791789	4-Mar-2005	BH30W			84.0									
					<0.1									
794981	*(Spike of 791791)*													
Expected														
% Recovery														
791791	4-Mar-2005	QA.1												23
														25
														89.8
														5.4

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LAB NUM	Reference	Sample	CHEMICAL OXYGEN DEMAND	AMMONIA NITROGEN	NITRATE NITROGEN	CYANIDE	Mn	FERROUS IRON
			<2	<0.1	<0.01	<0.01	<0.01	<0.10
793020	4-Mar-2005	BLANK			0.27			
795047	4-Mar-2005	QC SAMPLE		0.2		<0.01		
793523	*(Duplicate of 791778)*			0.2		<0.01		
791778	4-Mar-2005	BH19W		0		0		
% RPD				460		0.12		
793525	*(Duplicate of 791791)*			380		0.13		
791791	4-Mar-2005	QA.1		19.0		8.0		
% RPD							2.1	
794739	*(Duplicate of 791769)*						2.1	
791769	4-Mar-2005	BH10W					0	
% RPD							0.20	
794742	*(Duplicate of 791780)*						0.19	
791780	4-Mar-2005	BH21W					5.1	
% RPD					0.28			
795048	*(Duplicate of 795047)*				0.27			
795047	4-Mar-2005	QC SAMPLE			3.6			
% RPD						8.3		
793524	*(Spike of 791778)*					10		
Expected						83.0		
% Recovery						<0.01		
791778	4-Mar-2005	BH19W						

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Web Page: www.ecowise.com.au

QUALITY ASSURANCE REPORT

Date : 21-Mar-2005
WSL Report No: 791769
WSL JobNumber: 21730 Client: Monarc Environmental Job Reference: ORG-453-Sa mon

LAB NUM	Reference	Sample	CHEMICAL OXYGEN DEMAND	AMMONIA NITROGEN	NITRATE NITROGEN	CYANIDE	Mn	FERROUS IRON
794740	*(Spike of 791769)*							
Expected							2.5	
% Recovery							2.5	
791769	4-Mar-2005	BH10W					100	
794743	*(Spike of 791780)*						2.1	
Expected								
% Recovery							0.65	
791780	4-Mar-2005	BH21W					0.59	
							115	
							0.19	

A blank space indicates no test performed

Results expressed as mg/L where applicable

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QUALITY ASSURANCE REPORT

Date : 21-Mar-2005
WSL Report No: 791769
WSL JobNumber: 21730 Client: Monarc Environmental Job Reference: ORG-453-Sa mon

LAB NUM	Reference	Sample	NAP	ACY	ACE	FLU	PHE	ANT	FLA	PYR	BAA	CHR	BBF	BKF	BAP	DBA	BGP	IPY	TOTAL* PAH
793020	4-Mar-2005	BLANK	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
793019	*(Duplicate of 791772)*		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND
791772	4-Mar-2005	BH13W	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0	0	0	0	0
% RPD			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
793485	*(Duplicate of 791782)*		0.014	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.01
791782	4-Mar-2005	BH23W	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.02
% RPD			6.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66.7
793664	*(Spike of 791773)*			0.012	0.016	0.014	0.010	0.010	0.009	0.009	0.011	0.011	0.010	0.010	0.010	0.009	0.009	0.009	0.16
Expected				0.011	0.016	0.014	0.011	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.16
% Recovery				110	100	100	90.0	100	90.0	90.0	110	110	100	100	100	90.0	90.0	90.0	100
791773	4-Mar-2005	BH14W		0.001	0.006	0.004	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.02
793665	*(Spike of 791787)*		0.009	0.009	0.009	0.009	0.009	0.009	0.008	0.008	0.010	0.011	0.009	0.009	0.009	0.008	0.008	0.008	0.14
Expected			0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.18
% Recovery			81.8	81.8	81.8	81.8	81.8	81.8	72.7	72.7	90.9	100	81.8	81.8	81.8	72.7	72.7	72.7	77.8
791787	4-Mar-2005	BH28W	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	ND

ND = None detected at a concentration greater than the reporting limits specified above.

**** Total PAH's refers only to the sum of the positive individual PAH's tested above.***

A blank space indicates no test performed

Results expressed as mg/L

CHAIN OF CUSTODY

monarc ENVIRONMENTAL

Project Number : ORG-453-Sa mon

Project Name : Groundwater Monitoring

Client Company :

Location : McMillan Street, Sale

Consultant Name & Contact No. : David Coleman (tel. 8542 0768)

Client Providing Samples:

Monarc Environmental Pty Ltd
Building 2, Level 3,
18 Compark Circuit
MULGRAVE VIC 3170
Phone : 03 8542 0702
Fax : 03 8542 0764

LOCATION REFERENCE	SAMPLE DATE	SAMPLE TIME	CONTAINER TYPE	CONTAINER SIZE	PRESERVATIVE	SAMPLED BY	Reporting limits: refer Note						Other Analytes								REMARKS/SPECIFIC INSTRUCTIONS
							EPA Screen (Publ 448.1)	PAHS	TPHs	MAH	Total Phenols	METALS Screen	METALS (see below)	Ammonia	Cyanide (total)	COD	Nitrate	Iron, Ferrous Fe2+	Manganese		
BH10W	3/3/05	10:05	As per lab supply + ice			DC		✓	✓	✓	✓			✓	✓		✓	✓	✓		
BH11W	3/3/05	11:20	"	"	"	DC		✓	✓	✓	✓			✓	✓	✓	✓	✓	✓		
BH12W	3/3/05	9:25	"	"	"	DC		✓	✓	✓	✓			✓	✓	✓	✓	✓	✓		
BH13W	1/3/05	4:25	"	"	"	DC		✓	✓	✓	✓			✓	✓	✓	✓	✓	✓		
BH14W	3/3/05	8:25	"	"	"	DC		✓	✓	✓	✓			✓	✓	✓	✓	✓	✓		
BH15W	2/3/05	3:10	"	"	"	DC		✓	✓	✓	✓			✓	✓		✓	✓	✓		
BH16W	2/3/05	3:55	"	"	"	DC		✓	✓	✓	✓			✓	✓	✓	✓	✓	✓		
BH17W	2/3/05	2:20	"	"	"	DC		✓	✓	✓	✓			✓	✓		✓	✓	✓		
BH18W	2/3/05	11:10	"	"	"	DC		✓	✓	✓	✓			✓	✓		✓				
BH19W	1/3/05	4:50	"	"	"	DC		✓	✓	✓	✓			✓	✓		✓	✓	✓		
BH20W	2/3/05	4:55	"	"	"	DC		✓	✓	✓	✓			✓	✓		✓	✓	✓		
BH21W	2/3/05	5:45	"	"	"	DC		✓	✓	✓	✓			✓	✓	✓	✓	✓	✓		

RELINQUISHED BY	TO	DATE	TIME
D Coleman	[illegible]	4/3/05	15:50

TRANSFER TO LABORATORY BY	TO	DATE	TIME
[illegible]			

LABORATORY: Ecowise Environmental

NOTE: Standard reporting Limits as per 'C1211 Reporting Limits for Soil and Water' issued WSL 15/4/04 except for the following where 'Lowered' reporting limit is requested: - cyanide, benzo(a)pyrene

METHOD OF SAMPLE REMOVAL: PUMP + PED-TUBING

SAMPLES REMOVED BY: D COLEMAN

Metals:

As	Cd	Cr	Cu	Co	Pb	Hg	Mo	Ni	Se	Sn	Zn		

mgt

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MGT ANALYSIS REPORT . 180554

CLIENT :- Monarc Environmental Pty Ltd
Building 2, Level 3
18 Compark Circuit,Mulgrave
Victoria 3170

SITE :- MCMILLAN ST SALE ORG-453-SAMON

DATE RECEIVED :- 04/03/05

DATE EXTRACTED OR PREPARED :- 04/03/05 - 05/03/05

DATE REPORTED :- 01/04/05

QA/QC DETAILS :- **The QA/QC for these samples is detailed in this report no** 180554

A total of 1 duplicate, 5 matrix spike % recovery and 8 method blank analyses or sets of analyses were carried out on this batch of samples.

All QA/QC results for duplicates, matrix spike % recoveries, method blanks and known QC standards were within the set acceptable criteria.

FINAL REPORT :- **The results in this report supersede any previously corresponded results.**

NATA Accredited Laboratory Number:1261

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Michael Wright
Laboratory Manager

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Monarc Environmental Pty Ltd
Building 2, Level 3
18 Compark Circuit,Mulgrave
Victoria 3170

Site : MCMILLAN ST SALE ORG-453-SAMON

HYDROCARBONS C1-C5 - NIOSH (HEADSPACE GC-FID)

Sample	BH22W	BH23W	BH24W	BH25W	BH26W	BH27W
Lab. No. / Sample matrix	MA0638#Water	MA0639#Water	MA0640#Water	MA0641#Water	MA0642#Water	MA0643#Water
Methane	5.5	1.0	0.02	3.3	1.5	1.8
Result in mg/l.						

Date received 04/03/05

Date Reported 01/04/05

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Victoria 3170

Site : MCMILLAN ST SALE ORG-453-SAMON

HYDROCARBONS C1-C5 - NIOSH (HEADSPACE GC-FID)

Sample	BH28W	BH29W	BH30W	BH32W	BH10W	BH11W
Lab. No. / Sample matrix	MA0644#Water	MA0645#Water	MA0646#Water	MA0647#Water	MA0649#Water	MA0650#Water
Methane	0.47	5.6	0.08	1.3	1.9	0.64
Result in mg/l.						

Date received 04/03/05

Date Reported 01/04/05

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18 Compark Circuit,Mulgrave
Victoria 3170

Site : MCMILLAN ST SALE ORG-453-SAMON

HYDROCARBONS C1-C5 - NIOSH (HEADSPACE GC-FID)

Sample	BH12W	BH13W	BH14W	BH15W	BH16W	BH17W
Lab. No. / Sample matrix	MA0651#Water	MA0652#Water	MA0653#Water	MA0654#Water	MA0655#Water	MA0656#Water
Methane	1.5	<0.01	0.10	<0.01	0.76	0.05
Result in mg/l.						

Date received 04/03/05

Date Reported 01/04/05

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Victoria 3170

Site : MCMILLAN ST SALE ORG-453-SAMON

HYDROCARBONS C1-C5 - NIOSH (HEADSPACE GC-FID)

Sample	BH18W	BH19W	BH20W	BH21W	Methd Blk	
Lab. No. / Sample matrix	MA0657#Water	MA0658#Water	MA0659#Water	MA0660#Water		
Methane	0.01	0.16	4.7	12	<0.01	
Result in mg/l.						

Date received 04/03/05

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Site : MCMILLAN ST SALE ORG-453-SAMON

HEAVY METALS USEPA 6010B (ICP), 7470/1 (CVAA)

Sample	QA-2	Dup QA-2	Spike % Recov	Meth.Bl.(mg/l)		
Lab. No. / Sample matrix	MA0648#Water	MA0648D#Water	MA0648S#Water			
Iron (total)	0.08	0.09	110%	<0.05		
Manganese	0.009	0.010	94%	<0.005		

Extraction with H2O2, HNO3 & HCl. Results in ppm (soils mg/kg dry, waters mg/l).

Date received 04/03/05

Date Reported 01/04/05

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Site : MCMILLAN ST SALE ORG-453-SAMON

MISCELLANEOUS ANALYSES. METHODS US EPA SW846 OR APHA STANDARD METHODS 19TH ED. 1995.

Sample	QA-2					
Lab. No. / Sample matrix	MA0648#Water					
Ferrous Iron(Fe++)	0.09					

Results in ppm (soils mg/kg dry, waters mg/l.) except where specified otherwise.

Date received 04/03/05

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Victoria 3170

Site : MCMILLAN ST SALE ORG-453-SAMON

CYANIDE (CN-) US EPA SW846 METHOD 9010B.

Sample	QA-2	Meth.Bl.(mg/l)				
Lab. No. / Sample matrix	MA0648#Water					
Cyanide (total)	0.056	<0.005				
Results in ppm (soils mg/kg dry, waters mg/l).						

Date received 04/03/05

Date Reported 01/04/05

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Victoria 3170

Site : MCMILLAN ST SALE ORG-453-SAMON

MAH's AROMATIC VOLATILE ORGANICS US EPA SW846 METHODS 8021B,8260B,5030 & MGT 350A

Sample	QA-2	Spike % Recov	Meth.Bl.(mg/l)			
Lab. No. / Sample matrix	MA0648#Water	MA0648S#Water				
Benzene	12	116%	<0.001			
Toluene	4.6	106%	<0.001			
Ethyl Benzene	0.41	107%	<0.001			
Xylenes	2.6	111%	<0.001			

Results in ppm (soils mg/kg dry, waters mg/l).

Date received 04/03/05

Date Reported 01/04/05

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18 Compark Circuit,Mulgrave
Victoria 3170

Site : MCMILLAN ST SALE ORG-453-SAMON

NITROGEN COMPOUNDS METHODS US EPA SW846 & APHA STANDARD METHODS 19TH EDITION 1995.

Sample	QA-2	Meth.Bl.(mg/l)				
Lab. No. / Sample matrix	MA0648#Water					
Ammonia (N)	670	<0.01				
Nitrate (N)	<0.02	<0.02				

Results in ppm (soils mg/kg dry, waters mg/l).

Date received 04/03/05

Date Reported 01/04/05

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Building 2, Level 3
18 Compark Circuit,Mulgrave
Victoria 3170

Site : MCMILLAN ST SALE ORG-453-SAMON

POLYNUCLEAR AROMATIC HYDROCARBONS US EPA SW846 METHOD 8310(HPLC) & 8270C(GC/MS).

Sample	QA-2	Spike % Recov	Meth.Bl.(mg/l)			
Lab. No. / Sample matrix	MA0648#Water	MA0648S#Water				
Naphthalene	4.5	112%	<0.0001			
Acenaphthylene	0.03	110%	<0.0001			
Acenaphthene	0.006	113%	<0.0001			
Fluorene	0.006	112%	<0.0001			
Phenanthrene	0.006	113%	<0.0001			
Anthracene	<0.0005	114%	<0.0001			
Fluoranthrene	<0.0002	112%	<0.0001			
Pyrene	<0.0002	117%	<0.0001			
Benzo(a)anthracene	<0.0002	110%	<0.0001			
Chrysene	<0.0002	114%	<0.0001			
Benzo(b)fluoranthene	<0.0002	108%	<0.0001			
Benzo(k)fluoranthene	<0.0002	106%	<0.0001			
Benzo(a)pyrene	<0.0002	102%	<0.0001			
Dibenzo(a,h)anthracene	<0.0002	103%	<0.0001			
Benzo(g,h,i)perylene	<0.0002	102%	<0.0001			
Indeno(1,2,3-cd)pyrene	<0.0002	88%	<0.0001			
Total PAH's	4.6	-	<0.002			

Results in ppm (soils mg/kg dry, waters mg/l). Extraction MGT 300A soils, USEPA 3510 waters.

Date received 04/03/05

Date Reported 01/04/05

NATA Accredited Laboratory Number:1261
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Report No. 180554

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Victoria 3170

Site : MCMILLAN ST SALE ORG-453-SAMON

TOTAL PHENOLICS - COLORIMETRIC APHA STANDARD METHODS 19TH EDITION 1995 METHODS 5530 B&D.

Sample	QA-2	Spike % Recov				
Lab. No. / Sample matrix	MA0648#Water	MA0648S#Water				
Phenolics (Total)	8.1	100%				
Results in ppm (soils mg/kg dry, waters mg/l)						

Date received 04/03/05

Date Reported 01/04/05

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Email: mgt@mgtenv.com.au

Monarc Environmental Pty Ltd
Building 2, Level 3
18 Compark Circuit,Mulgrave
Victoria 3170

Site : MCMILLAN ST SALE ORG-453-SAMON

TOTAL RECOVERABLE HYDROCARBONS (GC) MGT METHOD 100A-GC

Sample	QA-2	Spike % Recov	Meth.Bl.(mg/l)			
Lab. No. / Sample matrix	MA0648#Water	MA0648S#Water				
T.R.H. C6-C9 Fraction by GC	20	-	<0.02			
T.R.H. C10-C14 Fraction by GC	30	114%	<0.05			
T.R.H. C15-C28 Fraction by GC	4.4	-	<0.1			
T.R.H. C29-C36 Fraction by GC	<0.1	-	<0.1			

Results in ppm (soils mg/kg dry, waters mg/l). Extraction MGT 300A soils, USEPA 3510 waters.

Date received 04/03/05

Date Reported 01/04/05

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04/03 '05 FRI 14:50 FAX 61 3 9564 7190 MGT CONSULTING 002
04/03 2005 14:03 FAX 002

CHAIN OF CUSTODY

monarc

Project Number : ORG-453-Sa mm

Project Name : Groundwater Monitoring

Client Company :

Location : McMillan Street, Sale

Consultant Name & Contact No. : David Coleman (tel. 8542 0768)

Client Providing Samples: Monarc Environmental Pty Ltd, Building 2, Level 1, 16 Compark Circuit, MULGRAVE VIC 3170

Analysis required to detection limits as of ANZECC 'B' Investigation

LOCATION REFERENCE	SAMPLE DATE	SAMPLE TIME	CONTAINER TYPE	CONTAINER SIZE	PRESERVATIVE	SAMPLED BY	EPA Screen (Publ. #681)	PAHS	TPHs	MAH	Total Phenols @ 95	METALS Screen	Other Analytes: METALS (see below)	Ammonia	Cyanide (Total)	Methane	Nitrate	Iron, Ferrous Fe2+	Manganese	REMARKS/SPECIFIC INSTRUCTIONS
BH10W	3/3/05	10:10	As per	lab	supply	TC										✓				
BH11W	3/3/05	8:20	"	"	"	DC										✓				
BH12W	3/3/05	9:25	"	"	"	DC										✓				
BH13W	3/3/05	9:25	"	"	"	DC										✓				
BH14W	3/3/05	8:25	"	"	"	DC										✓				
BH15W	2/3/05	3:10	"	"	"	DC										✓				
BH16W	2/3/05	3:57	"	"	"	DC										✓				
BH17W	2/3/05	2:30	"	"	"	DC										✓				
BH18W	2/3/05	11:40	"	"	"	DC										✓				
BH19W	1/3/05	4:50	"	"	"	DC										✓				
BH20W	2/3/05	4:55	"	"	"	DC										✓				
BH21W	2/3/05	5:45	"	"	"	DC										✓				

RELINQUISHED BY	TO	DATE	TIME
D Cole	TC	4/3/04	10:50

TRANSFER TO LABORATORY BY	TO	DATE	TIME
TC	C Mus	4/3/05	3pm

LABORATORY: MGT Environmental Consulting P/L

METHOD OF SAMPLE REMOVAL: Pump + BAILER, TUBING

SAMPLES REMOVED BY: D. COLEMAN

Metals:

As	Cd	Cr	Co	Cu	Pb	Hg	Mo	Ni	Se	Sn	Zn		

001
03
MGT CONSULTING
04/03 '05 FRI 14:50 FAX 61 3 9564 7190
04/03 2005 14:03 FAX

CHAIN OF CUSTODY

monarc environmental

Project Number : ORG-453-Sa mm

Project Name : Groundwater Monitoring

Client Company :

Location : McMillan Street, Sale

Consultant Name & Contact No. : David Coleman (tel. 8542 0768)

Client Providing Samples:

Monarc Environmental Pty Ltd
Building 2, Level 3,
38 Colpark Circuit
MULGRAVE VIC 3170

Analysis required to detection limits as of ANZECC 'B' investigation

LOCATION REFERENCE	SAMPLE DATE	SAMPLE TIME	CONTAINER TYPE	CONTAINER SIZE	PRESERVATIVE	SAMPLED BY	EPA Screen (Publ. 448.2)	TARP	TPHs	MAH	Phenolics (Total)	METALS Screen	Other Analytes: METALS (see below)	Ammonia	Cyanide (total)	Methane	Nitrate	Iron, Ferrous Fe2+	Manganese	REMARKS/SPECIFIC INSTRUCTIONS
BH12W	2/3/05	10:40	As per	Lab	Esky + ice											✓				
BH23W	2/3/05	1:35	"	"	"											✓				
BH24W	2/3/05	11:55	"	"	"											✓				
BH25W	2/3/05	12:20	"	"	"											✓				
BH26W	2/3/05	12:40	"	"	"											✓				
BH27W	2/3/05	10:05	"	"	"											✓				
BH28W	2/3/05	9:15	"	"	"											✓				
BH29W	2/3/05	9:45	"	"	"											✓				
BH30W	3/3/05	8:25	"	"	"											✓				
BH32W	3/3/05	12:50	"	"	"											✓				
QA-2			"	"	"			✓	✓	✓	✓			✓	✓		✓	✓	✓	

RELINQUISHED BY	TO	DATE	TIME
		4/3/05	1:45

TRANSFER TO LABORATORY BY	TO	DATE	TIME
	C Mills	4/3/05	3:00

LABORATORY: MGT Environmental Consulting P/L

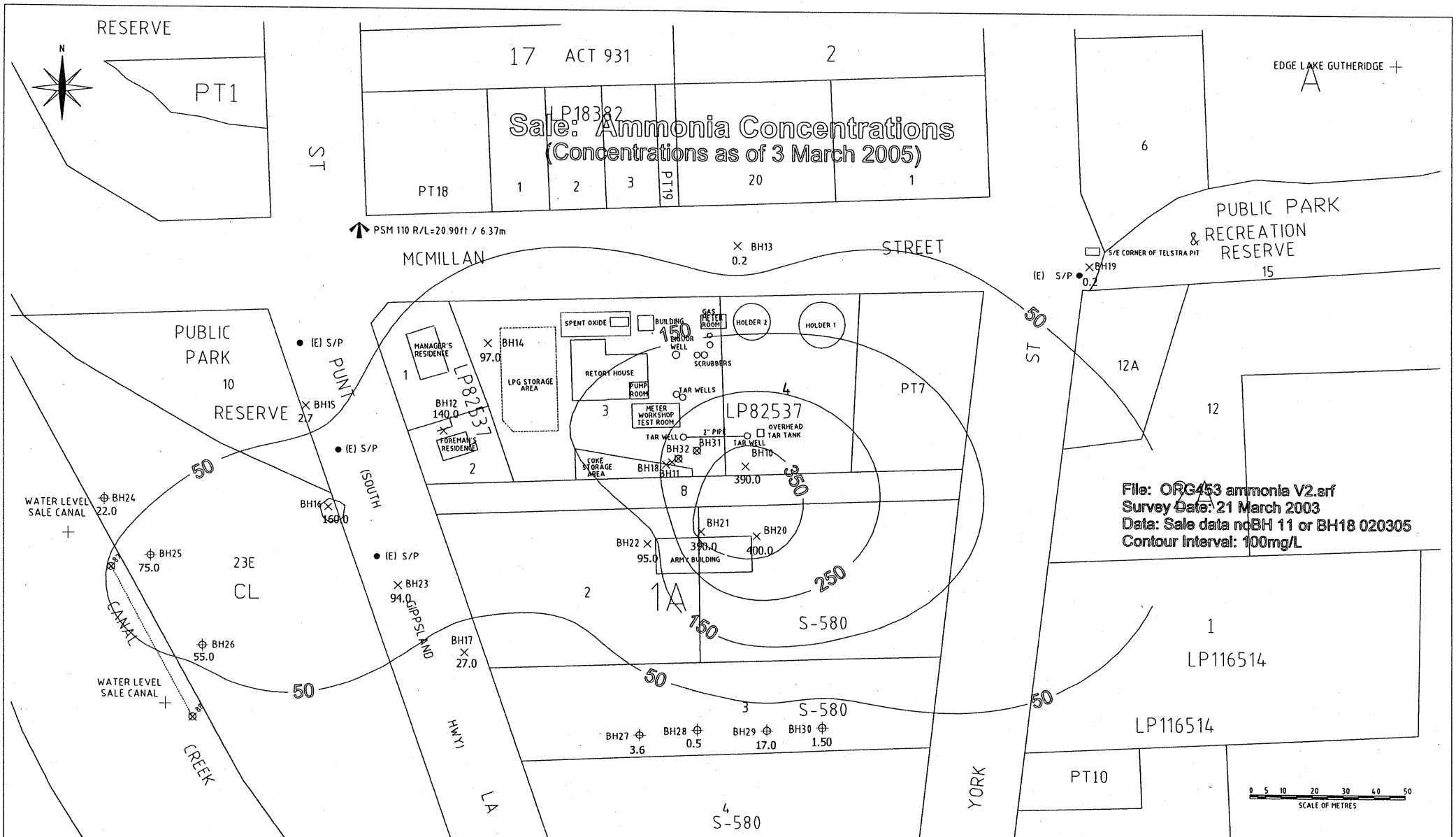
METHOD OF SAMPLE REMOVAL:

SAMPLES REMOVED BY:

Metals:

As	Cd	Cr	Cu	Co	Pb	Hg	Mo	Ni	Se	Sn	Zn		

APPENDIX 7: Contaminant Distributions



LEGEND

(E) S/P	EXISTING POWER POLE
BH22	MONITORING BORES (1996-2000)
BH26	MONITORING BORES (2002)
BH31	BORES (2003 & 2004)
	TAR WELL

REV	DATE	INITIALS	COMMENT
B	11.5.2004	W.G.M.	ADDED GROUNDWATER FLOW INFORMATION
A	22.3.2003	W.G.M.	ADDED MONITORING BORES 2003

monarc environmental
Building 2, Level 3, 18 Compark Circuit
Mulgrave, 3170
Phone: (03) 8542 0731
Facsimile: (03) 8542 0764

DRAWN: W.MAY
DATE: 6.7.2002
CHECKED: S.GUBA
DATE: 7.7.2002

FILE LOCATION: S:\\DWG\ENIVRONMENTAL\SALE\SALE_AMG

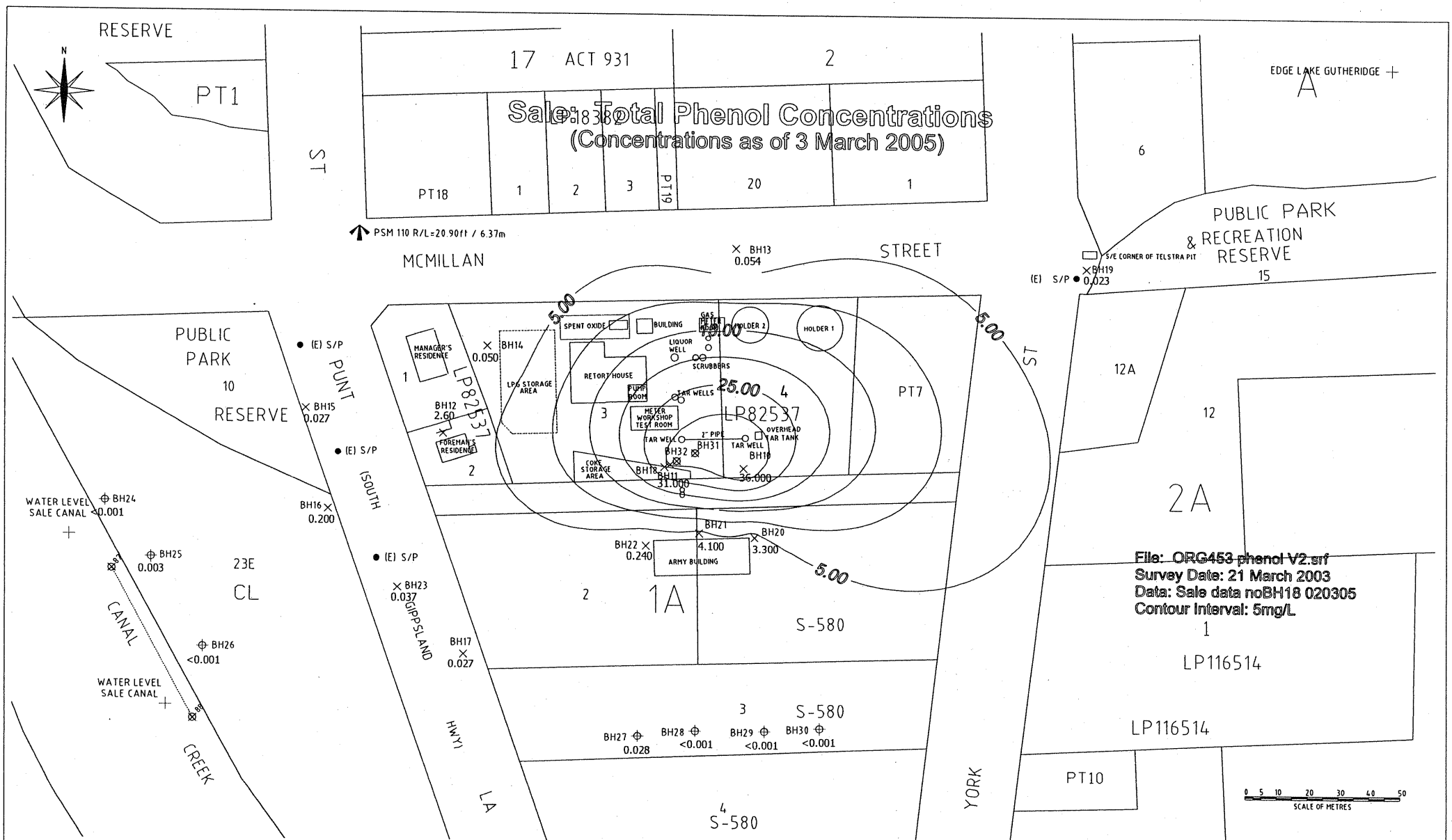
SCALE: AS SHOWN | SHEET 1 of 1 | REV B

FIGURE

BORE LOCATIONS
ORIGIN ENERGY ASSET MANAGEMENT
SALE
AMMONIA CONCENTRATIONS (2005)

C:\Dwg\environmental\sale\SALE_AMG.dwg, 13/04/2005 8:27:51 PM, DWF6 ePlot.pc3,
1:1

A3



LEGEND

● (E) S/P	EXISTING POWER POLE
× BH22	MONITORING BORES (1996-2000)
⊕ BH26	MONITORING BORES (2002)
⊠ BH31	BORES (2003 & 2004)
○	TAR WELL

REV	DATE	INITIALS	COMMENT
B	11.5.2004	W.G.M.	ADDED GROUNDWATER FLOW INFORMATION
A	22.3.2003	W.G.M.	ADDED MONITORING BORES 2003

monarc
Building 2, Level 3, 18 Compark Circuit
Mulgrave, 3170
Phone: (03) 8542 0731
Facsimile: (03) 8542 0764

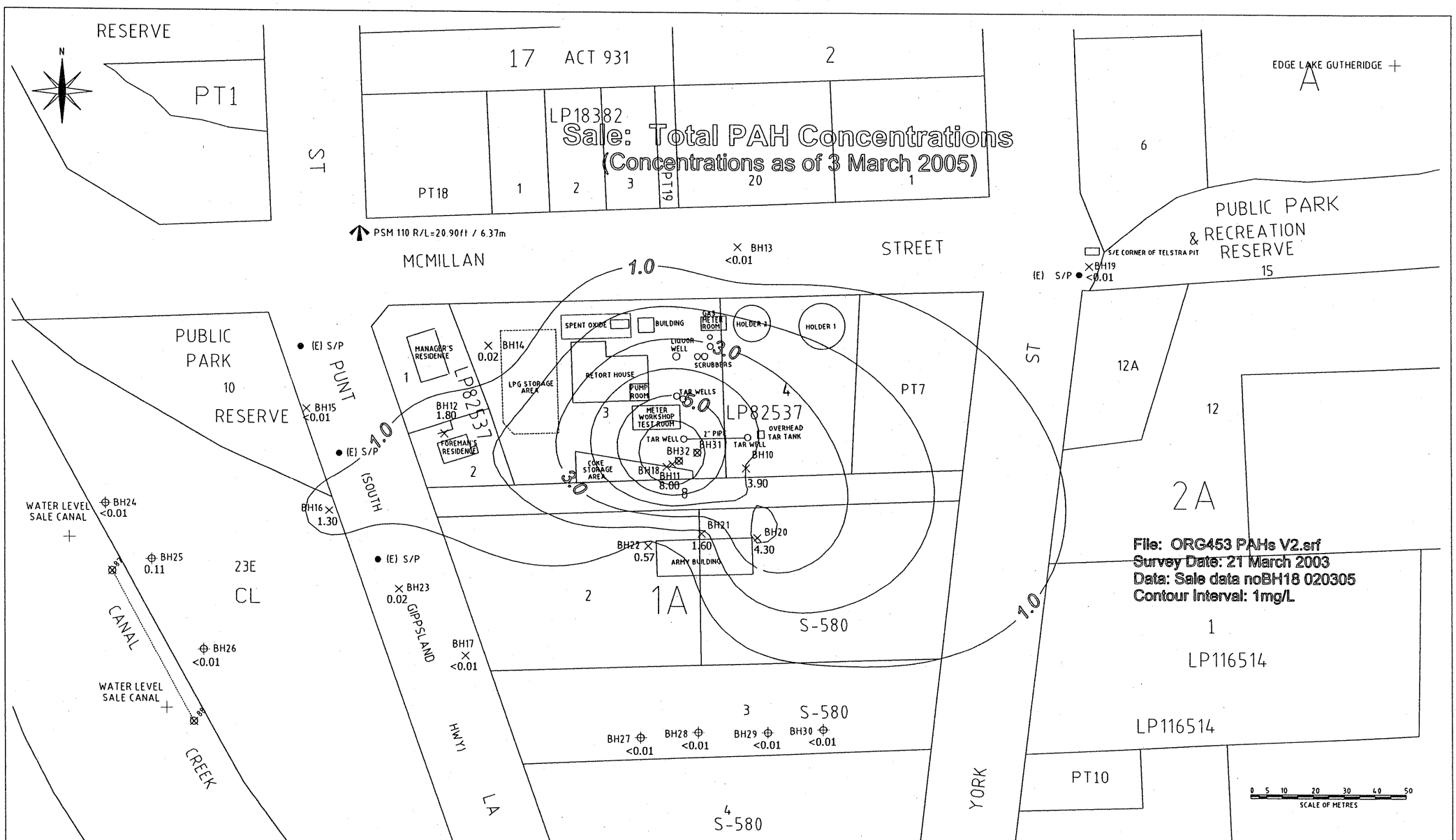
DRAWN: W.MAY
DATE: 6.7.2002
CHECKED: S.GUBA
DATE: 7.7.2002
FILE LOCATION: S:\\DWG\ENIVRONMENTAL\SALE\SALE_AMG
SCALE: AS SHOWN
SHEET 1 of 1
REV B

FIGURE

BORE LOCATIONS
ORIGIN ENERGY ASSET MANAGEMENT
SALE
PHENOL CONCENTRATIONS (2005)

C:\Dwg\environmental\sale\SALE_AMG.dwg, 13/04/2005 8:36:27 PM, DWF6 ePlot.pc3, 1:1

A3



FIGURE

LEGEND

● (E) S/P	EXISTING POWER POLE
× BH22	MONITORING BORES (1996-2000)
⊕ BH26	MONITORING BORES (2002)
⊠ BH31	BORES (2003 & 2004)
○	TAR WELL

REV	DATE	INITIALS	COMMENT
B	11.5.2004	W.G.M.	ADDED GROUNDWATER FLOW INFORMATION
A	22.3.2003	W.G.M.	ADDED MONITORING BORES 2003

monarc environmental

Building 2, Level 3, 18 Compark Circuit
Mulgrave, 3170
Phone: (03) 8542 0731
Facsimile: (03) 8542 0764

DRAWN: W.MAY DATE: 6.7.2002

CHECKED: S.GUBA DATE: 7.7.2002

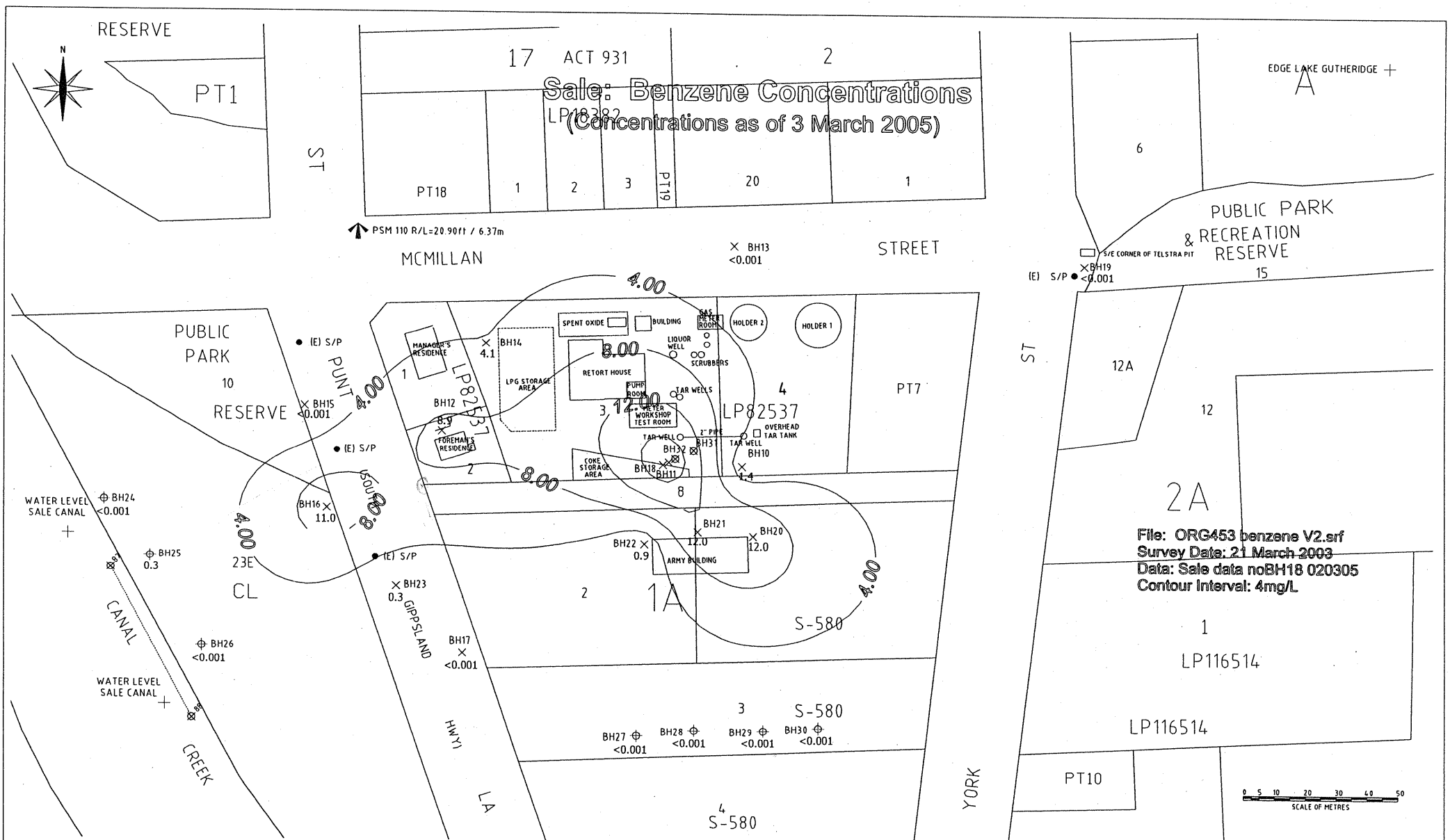
FILE LOCATION: S:\\DWG\ENIVRONMENTAL\SALE\SALE_AMG

SCALE: AS SHOWN | SHEET 1 of 1 | REV B

BORE LOCATIONS
ORIGIN ENERGY ASSET MANAGEMENT
SALE
PAH CONCENTRATIONS (2005)

C:\Dwg\environmental\sale\SALE_AMG.dwg, 13/04/2005 8:33:56 PM, DWF6 ePlot.pc3, 1:1

A3



LEGEND

● (E) S/P	EXISTING POWER POLE
× BH22	MONITORING BORES (1996-2000)
⊕ BH26	MONITORING BORES (2002)
⊠ BH31	BORES (2003 & 2004)
○	TAR WELL

REV	DATE	INITIALS	COMMENT
B	11.5.2004	W.G.M.	ADDED GROUNDWATER FLOW INFORMATION
A	22.3.2003	W.G.M.	ADDED MONITORING BORES 2003

monarc environmental
Building 2, Level 3, 18 Compark Circuit
Mulgrave, 3170
Phone: (03) 8542 0731
Facsimile: (03) 8542 0764

DRAWN: W.MAY
DATE: 6.7.2002
CHECKED: S.GUBA
DATE: 7.7.2002
FILE LOCATION: S:\\DWG\ENIVRONMENTAL\SALE\SALE_AMG
SCALE: AS SHOWN
SHEET 1 of 1
REV B

FIGURE

BORE LOCATIONS
ORIGIN ENERGY ASSET MANAGEMENT
SALE
BENZENE CONCENTRATIONS (2005)

C:\Dwg\environmental\sale\SALE_AMG.dwg, 13/04/2005 8:31:30 PM, DWF6 ePlot.pc3, 1:1

A3

APPENDIX 8: Slug Tests & Seepage Velocity

RISING HEAD TEST - SUMMARY

LOCATION SALE

BORE: BH 20 TEST NO. 1

PIEZOMETER GEOMETRY

Screen length L:	4.00 m	
Radius of well casing r:	0.025 m	
Radius of well screen R:	0.075 m	
Time for water to rise/fall 37% of initial change T(o):	10.8 secs or	0.18 mins

SLUG

Bail Vol.:	1.5 litre
Time removed:	8:27:13
Date:	3/03/2005

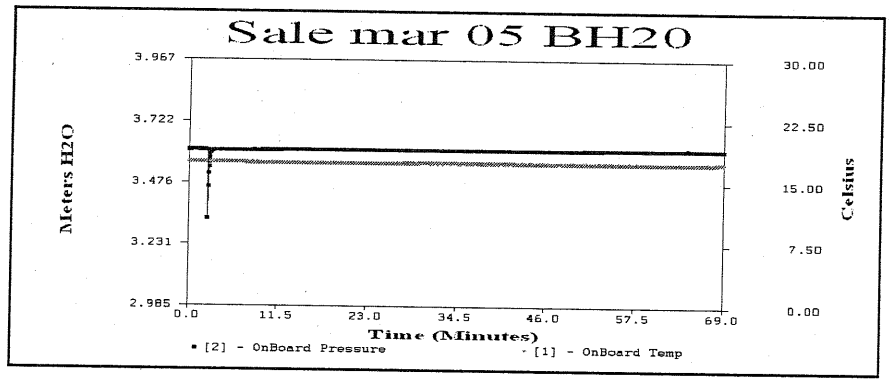
DATA LOGGER DETAILS

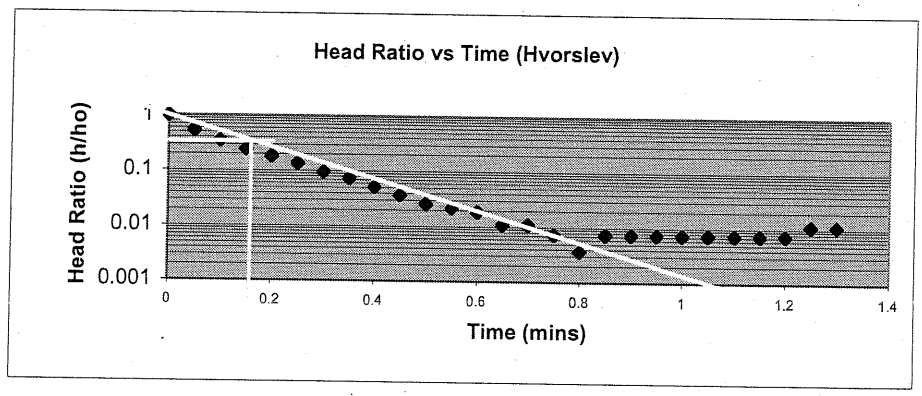
Data gathered using Linear testing

Time between data points:	0.05 Minutes.
Number of data samples:	1381

HYDRAULIC CONDUCTIVITY

Hvorslev	0.00003 meters/sec
	2.5 meters/day
	907 meters/year





Sale: Rising Head Test - Raw Data BH 20

Date Time	ET (min)	Celsius	Meters H2O
3/03/2005 8:29	2.45	17.61	3.61
3/03/2005 8:29	2.5	17.61	3.336
3/03/2005 8:29	2.55	17.61	3.464
3/03/2005 8:29	2.6	17.59	3.515
3/03/2005 8:29	2.65	17.59	3.543
3/03/2005 8:29	2.7	17.61	3.56
3/03/2005 8:29	2.75	17.59	3.573
3/03/2005 8:30	2.8	17.59	3.584
3/03/2005 8:30	2.85	17.59	3.59
3/03/2005 8:30	2.9	17.59	3.596
3/03/2005 8:30	2.95	17.59	3.6
3/03/2005 8:30	3	17.59	3.603
3/03/2005 8:30	3.05	17.59	3.604
3/03/2005 8:30	3.1	17.59	3.605
3/03/2005 8:30	3.15	17.59	3.607
3/03/2005 8:30	3.2	17.59	3.607
3/03/2005 8:30	3.25	17.59	3.608
3/03/2005 8:30	3.3	17.59	3.609
3/03/2005 8:30	3.35	17.59	3.608
3/03/2005 8:30	3.4	17.59	3.608
3/03/2005 8:30	3.45	17.59	3.608
3/03/2005 8:30	3.5	17.59	3.608
3/03/2005 8:30	3.55	17.59	3.608
3/03/2005 8:30	3.6	17.59	3.608
3/03/2005 8:30	3.65	17.58	3.608
3/03/2005 8:30	3.7	17.59	3.608
3/03/2005 8:30	3.75	17.58	3.607
3/03/2005 8:31	3.8	17.58	3.607
3/03/2005 8:31	3.85	17.58	3.608
3/03/2005 8:31	3.9	17.58	3.608
3/03/2005 8:31	3.95	17.58	3.608
3/03/2005 8:31	4	17.59	3.607
3/03/2005 8:31	4.05	17.58	3.607
3/03/2005 8:31	4.1	17.58	3.608
3/03/2005 8:31	4.15	17.58	3.607
3/03/2005 8:31	4.2	17.58	3.608
3/03/2005 8:31	4.25	17.58	3.608
3/03/2005 8:31	4.3	17.58	3.608
3/03/2005 8:31	4.35	17.58	3.607
3/03/2005 8:31	4.4	17.58	3.608
3/03/2005 8:31	4.45	17.58	3.608
3/03/2005 8:31	4.5	17.58	3.608
3/03/2005 8:31	4.55	17.58	3.608
3/03/2005 8:31	4.6	17.58	3.608
3/03/2005 8:31	4.65	17.58	3.608
3/03/2005 8:31	4.7	17.58	3.608
3/03/2005 8:31	4.75	17.58	3.608
3/03/2005 8:32	4.8	17.58	3.608
3/03/2005 8:32	4.85	17.58	3.608
3/03/2005 8:32	4.9	17.58	3.608
3/03/2005 8:32	4.95	17.58	3.608
3/03/2005 8:32	5	17.58	3.608
3/03/2005 8:32	5.05	17.58	3.609
3/03/2005 8:32	5.1	17.58	3.609
3/03/2005 8:32	5.15	17.58	3.608
3/03/2005 8:32	5.2	17.58	3.608
3/03/2005 8:32	5.25	17.58	3.609
3/03/2005 8:32	5.3	17.58	3.609
3/03/2005 8:32	5.35	17.58	3.608
3/03/2005 8:32	5.4	17.58	3.609

Date Time	ET (min)	Celsius	Meters H2O
3/03/2005 8:32	5.45	17.58	3.609
3/03/2005 8:32	5.5	17.58	3.609
3/03/2005 8:32	5.55	17.58	3.609
3/03/2005 8:32	5.6	17.58	3.608
3/03/2005 8:32	5.65	17.58	3.609
3/03/2005 8:32	5.7	17.58	3.609
3/03/2005 8:32	5.75	17.58	3.609
3/03/2005 8:33	5.8	17.58	3.609
3/03/2005 8:33	5.85	17.58	3.609
3/03/2005 8:33	5.9	17.58	3.608
3/03/2005 8:33	5.95	17.58	3.609
3/03/2005 8:33	6	17.58	3.609
3/03/2005 8:33	6.05	17.58	3.609
3/03/2005 8:33	6.1	17.58	3.609
3/03/2005 8:33	6.15	17.58	3.609
3/03/2005 8:33	6.2	17.58	3.609
3/03/2005 8:33	6.25	17.58	3.609
3/03/2005 8:33	6.3	17.58	3.609
3/03/2005 8:33	6.35	17.58	3.609
3/03/2005 8:33	6.4	17.58	3.609
3/03/2005 8:33	6.45	17.58	3.609
3/03/2005 8:33	6.5	17.58	3.609
3/03/2005 8:33	6.55	17.58	3.609
3/03/2005 8:33	6.6	17.58	3.609
3/03/2005 8:33	6.65	17.58	3.609
3/03/2005 8:33	6.7	17.58	3.609
3/03/2005 8:33	6.75	17.58	3.609
3/03/2005 8:34	6.8	17.58	3.609
3/03/2005 8:34	6.85	17.58	3.609
3/03/2005 8:34	6.9	17.58	3.609
3/03/2005 8:34	6.95	17.58	3.609
3/03/2005 8:34	7	17.58	3.609
3/03/2005 8:34	7.05	17.58	3.609
3/03/2005 8:34	7.1	17.58	3.609
3/03/2005 8:34	7.15	17.58	3.609
3/03/2005 8:34	7.2	17.58	3.609
3/03/2005 8:34	7.25	17.58	3.609
3/03/2005 8:34	7.3	17.58	3.609
3/03/2005 8:34	7.35	17.57	3.609
3/03/2005 8:34	7.4	17.58	3.609
3/03/2005 8:34	7.45	17.57	3.609
3/03/2005 8:34	7.5	17.58	3.609
3/03/2005 8:34	7.55	17.58	3.609
3/03/2005 8:34	7.6	17.58	3.609
3/03/2005 8:34	7.65	17.58	3.609
3/03/2005 8:34	7.7	17.57	3.609
3/03/2005 8:34	7.75	17.58	3.609
3/03/2005 8:35	7.8	17.57	3.609
3/03/2005 8:35	7.85	17.57	3.609
3/03/2005 8:35	7.9	17.57	3.609
3/03/2005 8:35	7.95	17.57	3.609
3/03/2005 8:35	8	17.57	3.609
3/03/2005 8:35	8.05	17.57	3.609
3/03/2005 8:35	8.1	17.57	3.609
3/03/2005 8:35	8.15	17.57	3.609
3/03/2005 8:35	8.2	17.58	3.609
3/03/2005 8:35	8.25	17.57	3.609
3/03/2005 8:35	8.3	17.57	3.609
3/03/2005 8:35	8.35	17.57	3.609
3/03/2005 8:35	8.4	17.57	3.61
3/03/2005 8:35	8.45	17.57	3.609

RISING HEAD TEST - SUMMARY

LOCATION SALE

BORE: BH 23 TEST NO. 2

PIEZOMETER GEOMETRY

Screen length L:	4.00 m	
Radius of well casing r:	0.025 m	
Radius of well screen R:	0.075 m	
Time for water to rise/fall 37% of initial change T(o):	1320 secs or	22 mins

SLUG

Bail Vol.:	1.5 litre
Time removed:	13:36:46
Date:	3/03/2005

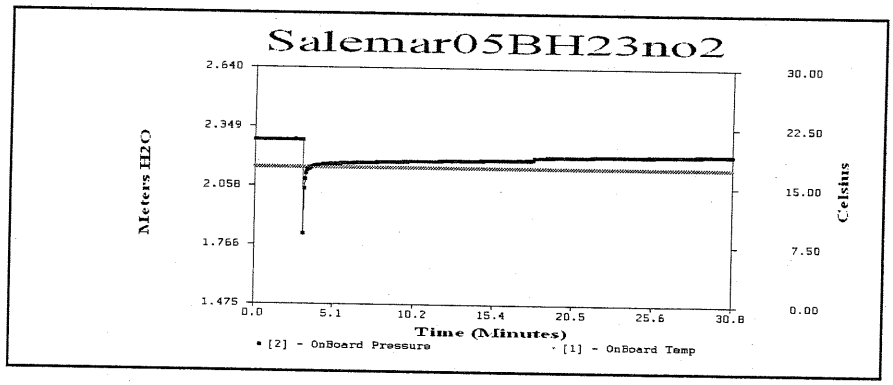
DATA LOGGER DETAILS

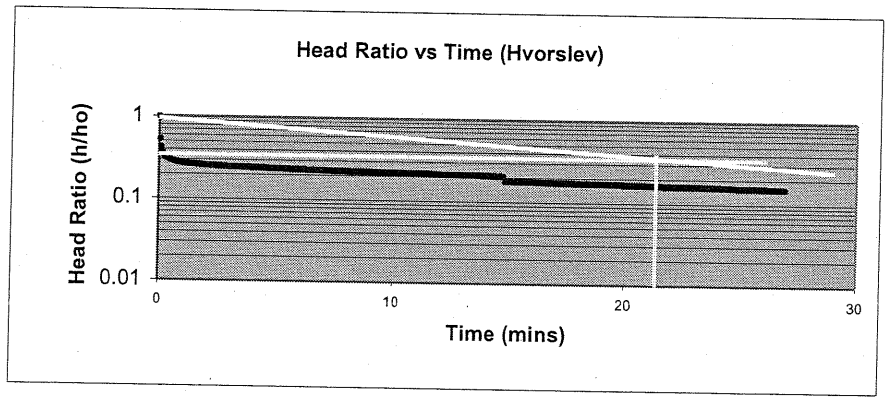
Data gathered using Linear testing

Time between data points:	0.05 Minutes.
Number of data samples:	616

HYDRAULIC CONDUCTIVITY

Hvorslev	0.000000 meters/sec
	0.02 meters/day
	7 meters/year





Date Time	ET (min)	Celsius	Meters H2O
3/03/2005 13:39	3.15	17.42	2.288
3/03/2005 13:39	3.2	17.42	1.827
3/03/2005 13:40	3.25	17.42	2.044
3/03/2005 13:40	3.3	17.42	2.094
3/03/2005 13:40	3.35	17.42	2.12
3/03/2005 13:40	3.4	17.42	2.132
3/03/2005 13:40	3.45	17.42	2.139
3/03/2005 13:40	3.5	17.42	2.144
3/03/2005 13:40	3.55	17.41	2.146
3/03/2005 13:40	3.6	17.41	2.149
3/03/2005 13:40	3.65	17.42	2.151
3/03/2005 13:40	3.7	17.41	2.153
3/03/2005 13:40	3.75	17.41	2.154
3/03/2005 13:40	3.8	17.42	2.156
3/03/2005 13:40	3.85	17.42	2.157
3/03/2005 13:40	3.9	17.41	2.159
3/03/2005 13:40	3.95	17.41	2.159
3/03/2005 13:40	4	17.41	2.16
3/03/2005 13:40	4.05	17.41	2.161
3/03/2005 13:40	4.1	17.41	2.161
3/03/2005 13:40	4.15	17.41	2.162
3/03/2005 13:40	4.2	17.41	2.163
3/03/2005 13:41	4.25	17.41	2.164
3/03/2005 13:41	4.3	17.41	2.164
3/03/2005 13:41	4.35	17.41	2.164
3/03/2005 13:41	4.4	17.41	2.165
3/03/2005 13:41	4.45	17.41	2.165
3/03/2005 13:41	4.5	17.41	2.166
3/03/2005 13:41	4.55	17.41	2.166
3/03/2005 13:41	4.6	17.41	2.167
3/03/2005 13:41	4.65	17.41	2.167
3/03/2005 13:41	4.7	17.41	2.167
3/03/2005 13:41	4.75	17.41	2.167
3/03/2005 13:41	4.8	17.41	2.167
3/03/2005 13:41	4.85	17.41	2.168
3/03/2005 13:41	4.9	17.41	2.168
3/03/2005 13:41	4.95	17.41	2.168
3/03/2005 13:41	5	17.41	2.169
3/03/2005 13:41	5.05	17.41	2.169
3/03/2005 13:41	5.1	17.41	2.169
3/03/2005 13:41	5.15	17.41	2.17
3/03/2005 13:41	5.2	17.41	2.17
3/03/2005 13:42	5.25	17.41	2.17
3/03/2005 13:42	5.3	17.41	2.171
3/03/2005 13:42	5.35	17.41	2.171
3/03/2005 13:42	5.4	17.41	2.171
3/03/2005 13:42	5.45	17.42	2.171
3/03/2005 13:42	5.5	17.41	2.171
3/03/2005 13:42	5.55	17.41	2.171
3/03/2005 13:42	5.6	17.41	2.172
3/03/2005 13:42	5.65	17.41	2.172
3/03/2005 13:42	5.7	17.41	2.172
3/03/2005 13:42	5.75	17.41	2.172
3/03/2005 13:42	5.8	17.41	2.172
3/03/2005 13:42	5.85	17.41	2.172
3/03/2005 13:42	5.9	17.41	2.173
3/03/2005 13:42	5.95	17.41	2.172
3/03/2005 13:42	6	17.41	2.173
3/03/2005 13:42	6.05	17.41	2.173
3/03/2005 13:42	6.1	17.41	2.173
3/03/2005 13:42	6.15	17.41	2.174
3/03/2005 13:42	6.2	17.41	2.174
3/03/2005 13:43	6.25	17.41	2.174
3/03/2005 13:43	6.3	17.41	2.174
3/03/2005 13:43	6.35	17.41	2.174
3/03/2005 13:43	6.4	17.41	2.174
3/03/2005 13:43	6.45	17.41	2.175
3/03/2005 13:43	6.5	17.41	2.175
3/03/2005 13:43	6.55	17.41	2.175
3/03/2005 13:43	6.6	17.41	2.176
3/03/2005 13:43	6.65	17.41	2.176
3/03/2005 13:43	6.7	17.41	2.176
3/03/2005 13:43	6.75	17.41	2.176
3/03/2005 13:43	6.8	17.41	2.176
3/03/2005 13:43	6.85	17.41	2.176
3/03/2005 13:43	6.9	17.41	2.176
3/03/2005 13:43	6.95	17.41	2.176
3/03/2005 13:43	7	17.41	2.176
3/03/2005 13:43	7.05	17.41	2.176
3/03/2005 13:43	7.1	17.41	2.177
3/03/2005 13:43	7.15	17.41	2.177
3/03/2005 13:43	7.2	17.41	2.177
3/03/2005 13:44	7.25	17.41	2.177
3/03/2005 13:44	7.3	17.41	2.177
3/03/2005 13:44	7.35	17.41	2.177
3/03/2005 13:44	7.4	17.41	2.177
3/03/2005 13:44	7.45	17.41	2.177
3/03/2005 13:44	7.5	17.41	2.177
3/03/2005 13:44	7.55	17.41	2.178
3/03/2005 13:44	7.6	17.41	2.177
3/03/2005 13:44	7.65	17.41	2.177
3/03/2005 13:44	7.7	17.41	2.177
3/03/2005 13:44	7.75	17.41	2.178
3/03/2005 13:44	7.8	17.41	2.178
3/03/2005 13:44	7.85	17.41	2.178
3/03/2005 13:44	7.9	17.41	2.179
3/03/2005 13:44	7.95	17.41	2.179
3/03/2005 13:44	8	17.41	2.179
3/03/2005 13:44	8.05	17.41	2.179
3/03/2005 13:44	8.1	17.41	2.179
3/03/2005 13:44	8.15	17.41	2.179
3/03/2005 13:44	8.2	17.41	2.179
3/03/2005 13:45	8.25	17.41	2.179
3/03/2005 13:45	8.3	17.41	2.179
3/03/2005 13:45	8.35	17.41	2.179
3/03/2005 13:45	8.4	17.41	2.18
3/03/2005 13:45	8.45	17.41	2.18
3/03/2005 13:45	8.5	17.41	2.18
3/03/2005 13:45	8.55	17.41	2.179
3/03/2005 13:45	8.6	17.41	2.18
3/03/2005 13:45	8.65	17.41	2.18
3/03/2005 13:45	8.7	17.41	2.18
3/03/2005 13:45	8.75	17.41	2.18
3/03/2005 13:45	8.8	17.41	2.18
3/03/2005 13:45	8.85	17.41	2.181
3/03/2005 13:45	8.9	17.41	2.181
3/03/2005 13:45	8.95	17.41	2.181
3/03/2005 13:45	9	17.41	2.181
3/03/2005 13:45	9.05	17.41	2.181
3/03/2005 13:45	9.1	17.41	2.181
3/03/2005 13:45	9.15	17.41	2.181
3/03/2005 13:45	9.2	17.41	2.181
3/03/2005 13:46	9.25	17.41	2.181
3/03/2005 13:46	9.3	17.42	2.181
3/03/2005 13:46	9.35	17.41	2.181
3/03/2005 13:46	9.4	17.42	2.181
3/03/2005 13:46	9.45	17.42	2.181
3/03/2005 13:46	9.5	17.42	2.181
3/03/2005 13:46	9.55	17.42	2.182
3/03/2005 13:46	9.6	17.42	2.182
3/03/2005 13:46	9.65	17.42	2.182
3/03/2005 13:46	9.7	17.42	2.182
3/03/2005 13:46	9.75	17.42	2.182

Date Time	ET (min)	Celsius	Meters H2O
3/03/2005 13:46	9.8	17.42	2.181
3/03/2005 13:46	9.85	17.42	2.182
3/03/2005 13:46	9.9	17.42	2.182
3/03/2005 13:46	9.95	17.42	2.182
3/03/2005 13:46	10	17.42	2.182
3/03/2005 13:46	10.05	17.42	2.182
3/03/2005 13:46	10.1	17.42	2.182
3/03/2005 13:46	10.15	17.42	2.182
3/03/2005 13:46	10.2	17.42	2.182
3/03/2005 13:47	10.25	17.42	2.183
3/03/2005 13:47	10.3	17.42	2.182
3/03/2005 13:47	10.35	17.42	2.183
3/03/2005 13:47	10.4	17.42	2.183
3/03/2005 13:47	10.45	17.42	2.183
3/03/2005 13:47	10.5	17.42	2.183
3/03/2005 13:47	10.55	17.42	2.183
3/03/2005 13:47	10.6	17.42	2.184
3/03/2005 13:47	10.65	17.42	2.184
3/03/2005 13:47	10.7	17.42	2.184
3/03/2005 13:47	10.75	17.42	2.184
3/03/2005 13:47	10.8	17.42	2.184
3/03/2005 13:47	10.85	17.42	2.184
3/03/2005 13:47	10.9	17.42	2.184
3/03/2005 13:47	10.95	17.42	2.184
3/03/2005 13:47	11	17.42	2.184
3/03/2005 13:47	11.05	17.42	2.184
3/03/2005 13:47	11.1	17.42	2.184
3/03/2005 13:47	11.15	17.42	2.184
3/03/2005 13:47	11.2	17.42	2.184
3/03/2005 13:48	11.25	17.42	2.184
3/03/2005 13:48	11.3	17.42	2.185
3/03/2005 13:48	11.35	17.42	2.184
3/03/2005 13:48	11.4	17.42	2.185
3/03/2005 13:48	11.45	17.42	2.185
3/03/2005 13:48	11.5	17.42	2.185
3/03/2005 13:48	11.55	17.42	2.185
3/03/2005 13:48	11.6	17.42	2.185
3/03/2005 13:48	11.65	17.42	2.185
3/03/2005 13:48	11.7	17.42	2.185
3/03/2005 13:48	11.75	17.42	2.185
3/03/2005 13:48	11.8	17.42	2.185
3/03/2005 13:48	11.85	17.42	2.185
3/03/2005 13:48	11.9	17.43	2.185
3/03/2005 13:48	11.95	17.43	2.185
3/03/2005 13:48	12	17.43	2.185
3/03/2005 13:48	12.05	17.42	2.185
3/03/2005 13:48	12.1	17.43	2.185
3/03/2005 13:48	12.15	17.43	2.185
3/03/2005 13:48	12.2	17.43	2.186
3/03/2005 13:49	12.25	17.43	2.185
3/03/2005 13:49	12.3	17.43	2.186
3/03/2005 13:49	12.35	17.43	2.186
3/03/2005 13:49	12.4	17.43	2.186
3/03/2005 13:49	12.45	17.43	2.186
3/03/2005 13:49	12.5	17.43	2.185
3/03/2005 13:49	12.55	17.43	2.186
3/03/2005 13:49	12.6	17.43	2.186
3/03/2005 13:49	12.65	17.43	2.186
3/03/2005 13:49	12.7	17.43	2.186
3/03/2005 13:49	12.75	17.43	2.186
3/03/2005 13:49	12.8	17.43	2.186
3/03/2005 13:49	12.85	17.43	2.187
3/03/2005 13:49	12.9	17.43	2.187
3/03/2005 13:49	12.95	17.43	2.187
3/03/2005 13:49	13	17.43	2.187
3/03/2005 13:49	13.05	17.43	2.187
3/03/2005 13:49	13.1	17.43	2.187
3/03/2005 13:49	13.15	17.43	2.187
3/03/2005 13:49	13.2	17.43	2.187
3/03/2005 13:50	13.25	17.43	2.187
3/03/2005 13:50	13.3	17.43	2.187
3/03/2005 13:50	13.35	17.43	2.187
3/03/2005 13:50	13.4	17.43	2.187
3/03/2005 13:50	13.45	17.43	2.187
3/03/2005 13:50	13.5	17.43	2.187
3/03/2005 13:50	13.55	17.43	2.187
3/03/2005 13:50	13.6	17.43	2.187
3/03/2005 13:50	13.65	17.43	2.188
3/03/2005 13:50	13.7	17.44	2.187
3/03/2005 13:50	13.75	17.44	2.188
3/03/2005 13:50	13.8	17.44	2.188
3/03/2005 13:50	13.85	17.44	2.188
3/03/2005 13:50	13.9	17.44	2.188
3/03/2005 13:50	13.95	17.44	2.188
3/03/2005 13:50	14	17.44	2.188
3/03/2005 13:50	14.05	17.44	2.188
3/03/2005 13:50	14.1	17.44	2.188
3/03/2005 13:50	14.15	17.44	2.188
3/03/2005 13:50	14.2	17.44	2.188
3/03/2005 13:51	14.25	17.44	2.188
3/03/2005 13:51	14.3	17.44	2.188
3/03/2005 13:51	14.35	17.44	2.188
3/03/2005 13:51	14.4	17.44	2.188
3/03/2005 13:51	14.45	17.44	2.188
3/03/2005 13:51	14.5	17.44	2.188
3/03/2005 13:51	14.55	17.44	2.188
3/03/2005 13:51	14.6	17.44	2.189
3/03/2005 13:51	14.65	17.44	2.188
3/03/2005 13:51	14.7	17.44	2.188
3/03/2005 13:51	14.75	17.44	2.188
3/03/2005 13:51	14.8	17.44	2.189
3/03/2005 13:51	14.85	17.44	2.189
3/03/2005 13:51	14.9	17.44	2.189
3/03/2005 13:51	14.95	17.44	2.189
3/03/2005 13:51	15	17.44	2.19
3/03/2005 13:51	15.05	17.44	2.189
3/03/2005 13:51	15.1	17.44	2.19
3/03/2005 13:51	15.15	17.44	2.19
3/03/2005 13:51	15.2	17.44	2.19
3/03/2005 13:52	15.25	17.44	2.19
3/03/2005 13:52	15.3	17.44	2.19
3/03/2005 13:52	15.35	17.44	2.19
3/03/2005 13:52	15.4	17.44	2.19
3/03/2005 13:52	15.45	17.44	2.19
3/03/2005 13:52	15.5	17.44	2.19
3/03/2005 13:52	15.55	17.44	2.19
3/03/2005 13:52	15.6	17.44	2.19
3/03/2005 13:52	15.65	17.44	2.19
3/03/2005 13:52	15.7	17.44	2.19
3/03/2005 13:52	15.75	17.44	2.19
3/03/2005 13:52	15.8	17.44	2.19
3/03/2005 13:52	15.85	17.44	2.19
3/03/2005 13:52	15.9	17.44	2.19
3/03/2005 13:52	15.95	17.44	2.19
3/03/2005 13:52	16	17.44	2.19
3/03/2005 13:52	16.05	17.44	2.19
3/03/2005 13:52	16.1	17.44	2.191
3/03/2005 13:52	16.15	17.44	2.191
3/03/2005 13:52	16.2	17.44	2.191
3/03/2005 13:53	16.25	17.44	2.191
3/03/2005 13:53	16.3	17.44	2.191
3/03/2005 13:53	16.35	17.44	2.191
3/03/2005 13:53	16.4	17.44	2.191

Date Time	ET (min)	Celsius	Meters H2O
3/03/2005 13:53	16.45	17.44	2.191
3/03/2005 13:53	16.5	17.44	2.191
3/03/2005 13:53	16.55	17.44	2.191
3/03/2005 13:53	16.6	17.44	2.191
3/03/2005 13:53	16.65	17.44	2.191
3/03/2005 13:53	16.7	17.44	2.191
3/03/2005 13:53	16.75	17.46	2.191
3/03/2005 13:53	16.8	17.46	2.191
3/03/2005 13:53	16.85	17.44	2.191
3/03/2005 13:53	16.9	17.46	2.191
3/03/2005 13:53	16.95	17.46	2.191
3/03/2005 13:53	17	17.46	2.191
3/03/2005 13:53	17.05	17.44	2.192
3/03/2005 13:53	17.1	17.46	2.192
3/03/2005 13:53	17.15	17.44	2.192
3/03/2005 13:53	17.2	17.46	2.192
3/03/2005 13:54	17.25	17.46	2.192
3/03/2005 13:54	17.3	17.46	2.191
3/03/2005 13:54	17.35	17.46	2.192
3/03/2005 13:54	17.4	17.46	2.192
3/03/2005 13:54	17.45	17.46	2.192
3/03/2005 13:54	17.5	17.46	2.192
3/03/2005 13:54	17.55	17.46	2.193
3/03/2005 13:54	17.6	17.46	2.192
3/03/2005 13:54	17.65	17.46	2.193
3/03/2005 13:54	17.7	17.46	2.193
3/03/2005 13:54	17.75	17.46	2.193
3/03/2005 13:54	17.8	17.46	2.193
3/03/2005 13:54	17.85	17.46	2.192
3/03/2005 13:54	17.9	17.46	2.193
3/03/2005 13:54	17.95	17.46	2.193
3/03/2005 13:54	18	17.46	2.193
3/03/2005 13:54	18.05	17.46	2.206
3/03/2005 13:54	18.1	17.46	2.205
3/03/2005 13:54	18.15	17.46	2.205
3/03/2005 13:54	18.2	17.46	2.206
3/03/2005 13:55	18.25	17.46	2.205
3/03/2005 13:55	18.3	17.46	2.205
3/03/2005 13:55	18.35	17.46	2.205
3/03/2005 13:55	18.4	17.46	2.206
3/03/2005 13:55	18.45	17.46	2.206
3/03/2005 13:55	18.5	17.46	2.206
3/03/2005 13:55	18.55	17.46	2.206
3/03/2005 13:55	18.6	17.46	2.205
3/03/2005 13:55	18.65	17.46	2.206
3/03/2005 13:55	18.7	17.46	2.206
3/03/2005 13:55	18.75	17.46	2.206
3/03/2005 13:55	18.8	17.46	2.206
3/03/2005 13:55	18.85	17.46	2.206
3/03/2005 13:55	18.9	17.46	2.206
3/03/2005 13:55	18.95	17.46	2.206
3/03/2005 13:55	19	17.46	2.206
3/03/2005 13:55	19.05	17.46	2.206
3/03/2005 13:55	19.1	17.46	2.206
3/03/2005 13:55	19.15	17.46	2.206
3/03/2005 13:55	19.2	17.46	2.206
3/03/2005 13:56	19.25	17.46	2.206
3/03/2005 13:56	19.3	17.46	2.206
3/03/2005 13:56	19.35	17.46	2.207
3/03/2005 13:56	19.4	17.46	2.206
3/03/2005 13:56	19.45	17.46	2.207
3/03/2005 13:56	19.5	17.46	2.207
3/03/2005 13:56	19.55	17.46	2.207
3/03/2005 13:56	19.6	17.46	2.207
3/03/2005 13:56	19.65	17.46	2.207
3/03/2005 13:56	19.7	17.46	2.207
3/03/2005 13:56	19.75	17.46	2.207
3/03/2005 13:56	19.8	17.46	2.208
3/03/2005 13:56	19.85	17.46	2.207
3/03/2005 13:56	19.9	17.46	2.207
3/03/2005 13:56	19.95	17.46	2.207
3/03/2005 13:56	20	17.46	2.208
3/03/2005 13:56	20.05	17.46	2.208
3/03/2005 13:56	20.1	17.46	2.207
3/03/2005 13:56	20.15	17.46	2.208
3/03/2005 13:56	20.2	17.46	2.208
3/03/2005 13:57	20.25	17.46	2.208
3/03/2005 13:57	20.3	17.46	2.208
3/03/2005 13:57	20.35	17.46	2.208
3/03/2005 13:57	20.4	17.46	2.208
3/03/2005 13:57	20.45	17.46	2.208
3/03/2005 13:57	20.5	17.46	2.208
3/03/2005 13:57	20.55	17.46	2.208
3/03/2005 13:57	20.6	17.46	2.208
3/03/2005 13:57	20.65	17.46	2.208
3/03/2005 13:57	20.7	17.46	2.208
3/03/2005 13:57	20.75	17.46	2.208
3/03/2005 13:57	20.8	17.46	2.208
3/03/2005 13:57	20.85	17.46	2.208
3/03/2005 13:57	20.9	17.46	2.208
3/03/2005 13:57	20.95	17.46	2.208
3/03/2005 13:57	21	17.46	2.208
3/03/2005 13:57	21.05	17.46	2.209
3/03/2005 13:57	21.1	17.46	2.209
3/03/2005 13:57	21.15	17.46	2.209
3/03/2005 13:57	21.2	17.46	2.209
3/03/2005 13:58	21.25	17.46	2.208
3/03/2005 13:58	21.3	17.46	2.209
3/03/2005 13:58	21.35	17.46	2.209
3/03/2005 13:58	21.4	17.46	2.209
3/03/2005 13:58	21.45	17.46	2.209
3/03/2005 13:58	21.5	17.47	2.209
3/03/2005 13:58	21.55	17.46	2.209
3/03/2005 13:58	21.6	17.47	2.208
3/03/2005 13:58	21.65	17.46	2.209
3/03/2005 13:58	21.7	17.47	2.209
3/03/2005 13:58	21.75	17.46	2.209
3/03/2005 13:58	21.8	17.47	2.209
3/03/2005 13:58	21.85	17.47	2.209
3/03/2005 13:58	21.9	17.46	2.209
3/03/2005 13:58	21.95	17.47	2.209
3/03/2005 13:58	22	17.47	2.209
3/03/2005 13:58	22.05	17.47	2.209
3/03/2005 13:58	22.1	17.47	2.209
3/03/2005 13:58	22.15	17.47	2.209
3/03/2005 13:58	22.2	17.47	2.209
3/03/2005 13:59	22.25	17.47	2.209
3/03/2005 13:59	22.3	17.46	2.209
3/03/2005 13:59	22.35	17.47	2.209
3/03/2005 13:59	22.4	17.47	2.209
3/03/2005 13:59	22.45	17.47	2.209
3/03/2005 13:59	22.5	17.46	2.21
3/03/2005 13:59	22.55	17.46	2.21
3/03/2005 13:59	22.6	17.47	2.21
3/03/2005 13:59	22.65	17.46	2.21
3/03/2005 13:59	22.7	17.47	2.21
3/03/2005 13:59	22.75	17.46	2.209
3/03/2005 13:59	22.8	17.46	2.21
3/03/2005 13:59	22.85	17.46	2.21
3/03/2005 13:59	22.9	17.47	2.21
3/03/2005 13:59	22.95	17.46	2.21
3/03/2005 13:59	23	17.47	2.21
3/03/2005 13:59	23.05	17.47	2.21

Date Time	ET (min)	Celsius	Meters H2O
3/03/2005 13:59	23.1	17.46	2.21
3/03/2005 13:59	23.15	17.46	2.211
3/03/2005 13:59	23.2	17.46	2.211
3/03/2005 14:00	23.25	17.46	2.211
3/03/2005 14:00	23.3	17.46	2.211
3/03/2005 14:00	23.35	17.46	2.211
3/03/2005 14:00	23.4	17.46	2.211
3/03/2005 14:00	23.45	17.46	2.211
3/03/2005 14:00	23.5	17.46	2.211
3/03/2005 14:00	23.55	17.46	2.211
3/03/2005 14:00	23.6	17.46	2.211
3/03/2005 14:00	23.65	17.46	2.211
3/03/2005 14:00	23.7	17.46	2.211
3/03/2005 14:00	23.75	17.46	2.211
3/03/2005 14:00	23.8	17.46	2.211
3/03/2005 14:00	23.85	17.46	2.211
3/03/2005 14:00	23.9	17.46	2.211
3/03/2005 14:00	23.95	17.46	2.211
3/03/2005 14:00	24	17.46	2.211
3/03/2005 14:00	24.05	17.46	2.211
3/03/2005 14:00	24.1	17.46	2.212
3/03/2005 14:00	24.15	17.46	2.212
3/03/2005 14:00	24.2	17.46	2.212
3/03/2005 14:01	24.25	17.46	2.211
3/03/2005 14:01	24.3	17.46	2.212
3/03/2005 14:01	24.35	17.46	2.212
3/03/2005 14:01	24.4	17.46	2.212
3/03/2005 14:01	24.45	17.46	2.211
3/03/2005 14:01	24.5	17.46	2.212
3/03/2005 14:01	24.55	17.46	2.212
3/03/2005 14:01	24.6	17.46	2.212
3/03/2005 14:01	24.65	17.46	2.212
3/03/2005 14:01	24.7	17.46	2.212
3/03/2005 14:01	24.75	17.46	2.212
3/03/2005 14:01	24.8	17.46	2.212
3/03/2005 14:01	24.85	17.46	2.213
3/03/2005 14:01	24.9	17.46	2.212
3/03/2005 14:01	24.95	17.46	2.213
3/03/2005 14:01	25	17.46	2.213
3/03/2005 14:01	25.05	17.46	2.213
3/03/2005 14:01	25.1	17.46	2.212
3/03/2005 14:01	25.15	17.46	2.213
3/03/2005 14:01	25.2	17.46	2.213
3/03/2005 14:02	25.25	17.46	2.213
3/03/2005 14:02	25.3	17.46	2.213
3/03/2005 14:02	25.35	17.46	2.213
3/03/2005 14:02	25.4	17.46	2.213
3/03/2005 14:02	25.45	17.46	2.213
3/03/2005 14:02	25.5	17.46	2.213
3/03/2005 14:02	25.55	17.46	2.213
3/03/2005 14:02	25.6	17.46	2.213
3/03/2005 14:02	25.65	17.46	2.213
3/03/2005 14:02	25.7	17.46	2.213
3/03/2005 14:02	25.75	17.46	2.213
3/03/2005 14:02	25.8	17.46	2.213
3/03/2005 14:02	25.85	17.46	2.213
3/03/2005 14:02	25.9	17.46	2.213
3/03/2005 14:02	25.95	17.46	2.213
3/03/2005 14:02	26	17.46	2.213
3/03/2005 14:02	26.05	17.46	2.213
3/03/2005 14:02	26.1	17.46	2.213
3/03/2005 14:02	26.15	17.46	2.214
3/03/2005 14:02	26.2	17.46	2.213
3/03/2005 14:03	26.25	17.46	2.213
3/03/2005 14:03	26.3	17.46	2.213
3/03/2005 14:03	26.35	17.46	2.214
3/03/2005 14:03	26.4	17.46	2.213
3/03/2005 14:03	26.45	17.46	2.213
3/03/2005 14:03	26.5	17.46	2.214
3/03/2005 14:03	26.55	17.46	2.214
3/03/2005 14:03	26.6	17.46	2.214
3/03/2005 14:03	26.65	17.46	2.214
3/03/2005 14:03	26.7	17.46	2.214
3/03/2005 14:03	26.75	17.46	2.214
3/03/2005 14:03	26.8	17.46	2.214
3/03/2005 14:03	26.85	17.46	2.214
3/03/2005 14:03	26.9	17.46	2.213
3/03/2005 14:03	26.95	17.46	2.214
3/03/2005 14:03	27	17.46	2.214
3/03/2005 14:03	27.05	17.46	2.214
3/03/2005 14:03	27.1	17.46	2.214
3/03/2005 14:03	27.15	17.46	2.214
3/03/2005 14:03	27.2	17.46	2.214
3/03/2005 14:04	27.25	17.46	2.214
3/03/2005 14:04	27.3	17.46	2.214
3/03/2005 14:04	27.35	17.46	2.215
3/03/2005 14:04	27.4	17.46	2.215
3/03/2005 14:04	27.45	17.46	2.215
3/03/2005 14:04	27.5	17.46	2.215
3/03/2005 14:04	27.55	17.46	2.215
3/03/2005 14:04	27.6	17.46	2.215
3/03/2005 14:04	27.65	17.44	2.215
3/03/2005 14:04	27.7	17.46	2.215
3/03/2005 14:04	27.75	17.46	2.215
3/03/2005 14:04	27.8	17.46	2.216
3/03/2005 14:04	27.85	17.46	2.215
3/03/2005 14:04	27.9	17.46	2.216
3/03/2005 14:04	27.95	17.46	2.215
3/03/2005 14:04	28	17.46	2.216
3/03/2005 14:04	28.05	17.46	2.216
3/03/2005 14:04	28.1	17.46	2.216
3/03/2005 14:04	28.15	17.46	2.216
3/03/2005 14:04	28.2	17.44	2.216
3/03/2005 14:05	28.25	17.46	2.216
3/03/2005 14:05	28.3	17.44	2.216
3/03/2005 14:05	28.35	17.44	2.216
3/03/2005 14:05	28.4	17.44	2.216
3/03/2005 14:05	28.45	17.44	2.216
3/03/2005 14:05	28.5	17.46	2.216
3/03/2005 14:05	28.55	17.44	2.216
3/03/2005 14:05	28.6	17.44	2.216
3/03/2005 14:05	28.65	17.44	2.216
3/03/2005 14:05	28.7	17.44	2.216
3/03/2005 14:05	28.75	17.44	2.216
3/03/2005 14:05	28.8	17.44	2.216
3/03/2005 14:05	28.85	17.44	2.216
3/03/2005 14:05	28.9	17.44	2.216
3/03/2005 14:05	28.95	17.44	2.216
3/03/2005 14:05	29	17.44	2.216
3/03/2005 14:05	29.05	17.44	2.217
3/03/2005 14:05	29.1	17.44	2.216
3/03/2005 14:05	29.15	17.44	2.217
3/03/2005 14:05	29.2	17.44	2.216
3/03/2005 14:06	29.25	17.44	2.216
3/03/2005 14:06	29.3	17.44	2.217
3/03/2005 14:06	29.35	17.44	2.217
3/03/2005 14:06	29.4	17.44	2.217
3/03/2005 14:06	29.45	17.44	2.217
3/03/2005 14:06	29.5	17.44	2.217
3/03/2005 14:06	29.55	17.44	2.217
3/03/2005 14:06	29.6	17.44	2.217
3/03/2005 14:06	29.65	17.44	2.217
3/03/2005 14:06	29.7	17.44	2.217
3/03/2005 14:06	29.75	17.44	2.217
3/03/2005 14:06	29.8	17.44	2.217
3/03/2005 14:06	29.85	17.44	2.217
3/03/2005 14:06	29.9	17.44	2.217
3/03/2005 14:06	29.95	17.44	2.217
3/03/2005 14:06	30	17.44	2.218
3/03/2005 14:06	30.05	17.44	2.218
3/03/2005 14:06	30.1	17.44	2.218
3/03/2005 14:06	30.15	17.44	2.218

RISING HEAD TEST - SUMMARY

LOCATION SALE

BORE: BH 29 TEST NO. 1

PIEZOMETER GEOMETRY

Screen length L:	3.50 m	
Radius of well casing r:	0.025 m	
Radius of well screen R:	0.075 m	
Time for water to fall 37% of initial change T(o):	1380 secs or	23 mins

SLUG

Bail Vol.:	1.5 litre
Time removed:	16:46:38
Date:	2/03/2005

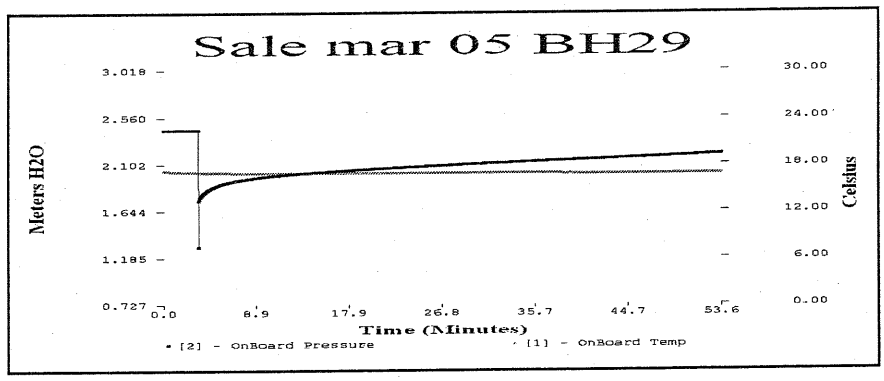
DATA LOGGER DETAILS

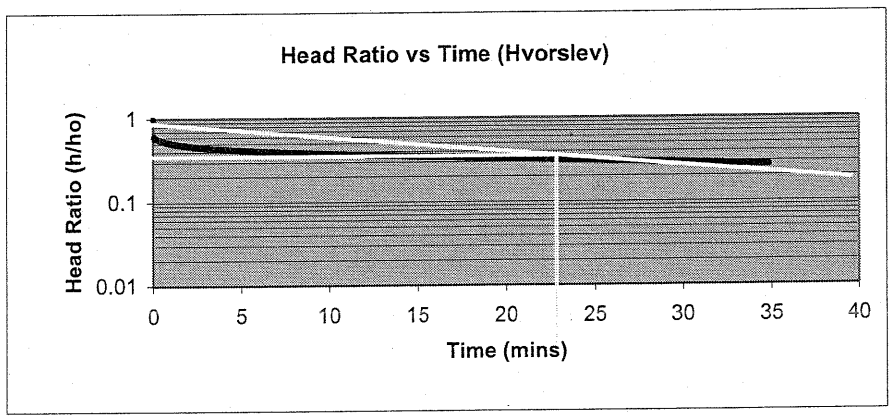
Data gathered using Linear testing

Time between data points:	0.05 Minutes.
Number of data samples:	1073

HYDRAULIC CONDUCTIVITY

Hvorslev	0.000000 meters/sec
	0.02 meters/day
	8 meters/year





Sale: Rising Head Test - Raw Data BH 28

Date Time	ET (min)	Celsius	Meters H2O
3/02/2005 16:49	3.3	17.03	2.444
3/02/2005 16:49	3.35	17.03	2.444
3/02/2005 16:50	3.4	17.03	1.3
3/02/2005 16:50	3.45	17.01	1.749
3/02/2005 16:50	3.5	17.01	1.763
3/02/2005 16:50	3.55	17.01	1.775
3/02/2005 16:50	3.6	17.01	1.785
3/02/2005 16:50	3.65	17.01	1.791
3/02/2005 16:50	3.7	17.01	1.798
3/02/2005 16:50	3.75	17.01	1.804
3/02/2005 16:50	3.8	17.01	1.81
3/02/2005 16:50	3.85	17.01	1.815
3/02/2005 16:50	3.9	17.01	1.82
3/02/2005 16:50	3.95	17	1.825
3/02/2005 16:50	4	17	1.829
3/02/2005 16:50	4.05	17	1.833
3/02/2005 16:50	4.1	17	1.837
3/02/2005 16:50	4.15	17	1.841
3/02/2005 16:50	4.2	17	1.845
3/02/2005 16:50	4.25	17	1.849
3/02/2005 16:50	4.3	17	1.853
3/02/2005 16:50	4.35	17	1.855
3/02/2005 16:51	4.4	17	1.858
3/02/2005 16:51	4.45	17	1.862
3/02/2005 16:51	4.5	16.99	1.865
3/02/2005 16:51	4.55	16.99	1.867
3/02/2005 16:51	4.6	16.99	1.869
3/02/2005 16:51	4.65	16.99	1.872
3/02/2005 16:51	4.7	16.99	1.874
3/02/2005 16:51	4.75	16.99	1.877
3/02/2005 16:51	4.8	16.99	1.879
3/02/2005 16:51	4.85	16.99	1.882
3/02/2005 16:51	4.9	16.99	1.884
3/02/2005 16:51	4.95	16.99	1.887
3/02/2005 16:51	5	16.99	1.889
3/02/2005 16:51	5.05	16.99	1.89
3/02/2005 16:51	5.1	16.98	1.892
3/02/2005 16:51	5.15	16.98	1.894
3/02/2005 16:51	5.2	16.98	1.896
3/02/2005 16:51	5.25	16.98	1.898
3/02/2005 16:51	5.3	16.98	1.9
3/02/2005 16:51	5.35	16.98	1.902
3/02/2005 16:52	5.4	16.98	1.904
3/02/2005 16:52	5.45	16.98	1.905
3/02/2005 16:52	5.5	16.98	1.907
3/02/2005 16:52	5.55	16.98	1.908
3/02/2005 16:52	5.6	16.98	1.91
3/02/2005 16:52	5.65	16.98	1.912
3/02/2005 16:52	5.7	16.98	1.914
3/02/2005 16:52	5.75	16.98	1.915
3/02/2005 16:52	5.8	16.98	1.917
3/02/2005 16:52	5.85	16.98	1.918
3/02/2005 16:52	5.9	16.96	1.919
3/02/2005 16:52	5.95	16.96	1.921
3/02/2005 16:52	6	16.96	1.922
3/02/2005 16:52	6.05	16.96	1.923
3/02/2005 16:52	6.1	16.96	1.924
3/02/2005 16:52	6.15	16.96	1.926
3/02/2005 16:52	6.2	16.96	1.927
3/02/2005 16:52	6.25	16.96	1.929
3/02/2005 16:52	6.3	16.96	1.929
3/02/2005 16:52	6.35	16.96	1.931
3/02/2005 16:53	6.4	16.96	1.932
3/02/2005 16:53	6.45	16.96	1.933
3/02/2005 16:53	6.5	16.96	1.934
3/02/2005 16:53	6.55	16.96	1.935
3/02/2005 16:53	6.6	16.95	1.936
3/02/2005 16:53	6.65	16.96	1.937
3/02/2005 16:53	6.7	16.95	1.939
3/02/2005 16:53	6.75	16.95	1.94
3/02/2005 16:53	6.8	16.95	1.941
3/02/2005 16:53	6.85	16.95	1.942
3/02/2005 16:53	6.9	16.95	1.943
3/02/2005 16:53	6.95	16.95	1.943
3/02/2005 16:53	7	16.95	1.945
3/02/2005 16:53	7.05	16.95	1.945
3/02/2005 16:53	7.1	16.95	1.946
3/02/2005 16:53	7.15	16.95	1.947
3/02/2005 16:53	7.2	16.95	1.948
3/02/2005 16:53	7.25	16.95	1.95
3/02/2005 16:53	7.3	16.95	1.95
3/02/2005 16:53	7.35	16.95	1.951
3/02/2005 16:54	7.4	16.95	1.951
3/02/2005 16:54	7.45	16.95	1.953
3/02/2005 16:54	7.5	16.95	1.953
3/02/2005 16:54	7.55	16.94	1.954
3/02/2005 16:54	7.6	16.95	1.955
3/02/2005 16:54	7.65	16.94	1.956
3/02/2005 16:54	7.7	16.94	1.957
3/02/2005 16:54	7.75	16.94	1.958
3/02/2005 16:54	7.8	16.94	1.958
3/02/2005 16:54	7.85	16.94	1.959
3/02/2005 16:54	7.9	16.94	1.96
3/02/2005 16:54	7.95	16.94	1.96
3/02/2005 16:54	8	16.94	1.961
3/02/2005 16:54	8.05	16.94	1.962
3/02/2005 16:54	8.1	16.94	1.963
3/02/2005 16:54	8.15	16.94	1.963
3/02/2005 16:54	8.2	16.94	1.964
3/02/2005 16:54	8.25	16.94	1.965
3/02/2005 16:54	8.3	16.94	1.965
3/02/2005 16:54	8.35	16.94	1.966
3/02/2005 16:55	8.4	16.94	1.967
3/02/2005 16:55	8.45	16.93	1.967
3/02/2005 16:55	8.5	16.94	1.968
3/02/2005 16:55	8.55	16.93	1.969
3/02/2005 16:55	8.6	16.93	1.97
3/02/2005 16:55	8.65	16.93	1.97
3/02/2005 16:55	8.7	16.93	1.971
3/02/2005 16:55	8.75	16.93	1.972
3/02/2005 16:55	8.8	16.93	1.972
3/02/2005 16:55	8.85	16.93	1.973
3/02/2005 16:55	8.9	16.93	1.974
3/02/2005 16:55	8.95	16.93	1.974
3/02/2005 16:55	9	16.93	1.974
3/02/2005 16:55	9.05	16.93	1.974
3/02/2005 16:55	9.1	16.93	1.975
3/02/2005 16:55	9.15	16.93	1.976
3/02/2005 16:55	9.2	16.93	1.977
3/02/2005 16:55	9.25	16.93	1.977
3/02/2005 16:55	9.3	16.93	1.978
3/02/2005 16:55	9.35	16.93	1.978
3/02/2005 16:56	9.4	16.93	1.979
3/02/2005 16:56	9.45	16.93	1.979
3/02/2005 16:56	9.5	16.93	1.98
3/02/2005 16:56	9.55	16.93	1.981
3/02/2005 16:56	9.6	16.93	1.981
3/02/2005 16:56	9.65	16.91	1.982
3/02/2005 16:56	9.7	16.91	1.982
3/02/2005 16:56	9.75	16.93	1.983
3/02/2005 16:56	9.8	16.93	1.983

Date Time	ET (min)	Celsius	Meters H2O
3/02/2005 17:02	16	16.88	2.033
3/02/2005 17:02	16.05	16.88	2.033
3/02/2005 17:02	16.1	16.88	2.033
3/02/2005 17:02	16.15	16.88	2.033
3/02/2005 17:02	16.2	16.88	2.033
3/02/2005 17:02	16.25	16.88	2.034
3/02/2005 17:02	16.3	16.88	2.035
3/02/2005 17:02	16.35	16.88	2.035
3/02/2005 17:03	16.4	16.88	2.035
3/02/2005 17:03	16.45	16.88	2.036
3/02/2005 17:03	16.5	16.88	2.036
3/02/2005 17:03	16.55	16.88	2.036
3/02/2005 17:03	16.6	16.88	2.036
3/02/2005 17:03	16.65	16.88	2.036
3/02/2005 17:03	16.7	16.88	2.037
3/02/2005 17:03	16.75	16.88	2.037
3/02/2005 17:03	16.8	16.88	2.038
3/02/2005 17:03	16.85	16.88	2.038
3/02/2005 17:03	16.9	16.88	2.038
3/02/2005 17:03	16.95	16.88	2.038
3/02/2005 17:03	17	16.88	2.039
3/02/2005 17:03	17.05	16.88	2.039
3/02/2005 17:03	17.1	16.88	2.039
3/02/2005 17:03	17.15	16.88	2.04
3/02/2005 17:03	17.2	16.88	2.04
3/02/2005 17:03	17.25	16.86	2.041
3/02/2005 17:03	17.3	16.88	2.04
3/02/2005 17:03	17.35	16.88	2.041
3/02/2005 17:04	17.4	16.88	2.041
3/02/2005 17:04	17.45	16.86	2.042
3/02/2005 17:04	17.5	16.86	2.042
3/02/2005 17:04	17.55	16.88	2.041
3/02/2005 17:04	17.6	16.88	2.042
3/02/2005 17:04	17.65	16.86	2.043
3/02/2005 17:04	17.7	16.86	2.043
3/02/2005 17:04	17.75	16.86	2.043
3/02/2005 17:04	17.8	16.86	2.043
3/02/2005 17:04	17.85	16.86	2.044
3/02/2005 17:04	17.9	16.86	2.044
3/02/2005 17:04	17.95	16.86	2.044
3/02/2005 17:04	18	16.86	2.045
3/02/2005 17:04	18.05	16.86	2.045
3/02/2005 17:04	18.1	16.86	2.045
3/02/2005 17:04	18.15	16.86	2.045
3/02/2005 17:04	18.2	16.86	2.046
3/02/2005 17:04	18.25	16.86	2.046
3/02/2005 17:04	18.3	16.86	2.047
3/02/2005 17:04	18.35	16.86	2.047
3/02/2005 17:05	18.4	16.86	2.047
3/02/2005 17:05	18.45	16.86	2.047
3/02/2005 17:05	18.5	16.86	2.048
3/02/2005 17:05	18.55	16.86	2.048
3/02/2005 17:05	18.6	16.86	2.048
3/02/2005 17:05	18.65	16.86	2.048
3/02/2005 17:05	18.7	16.86	2.049
3/02/2005 17:05	18.75	16.86	2.049
3/02/2005 17:05	18.8	16.86	2.049
3/02/2005 17:05	18.85	16.86	2.049
3/02/2005 17:05	18.9	16.86	2.049
3/02/2005 17:05	18.95	16.86	2.05
3/02/2005 17:05	19	16.86	2.05
3/02/2005 17:05	19.05	16.86	2.05
3/02/2005 17:05	19.1	16.86	2.05
3/02/2005 17:05	19.15	16.86	2.05
3/02/2005 17:05	19.2	16.86	2.051
3/02/2005 17:05	19.25	16.86	2.052
3/02/2005 17:05	19.3	16.86	2.052
3/02/2005 17:05	19.35	16.86	2.052
3/02/2005 17:06	19.4	16.86	2.052
3/02/2005 17:06	19.45	16.86	2.052
3/02/2005 17:06	19.5	16.86	2.052
3/02/2005 17:06	19.55	16.86	2.053
3/02/2005 17:06	19.6	16.86	2.053
3/02/2005 17:06	19.65	16.86	2.054
3/02/2005 17:06	19.7	16.86	2.054
3/02/2005 17:06	19.75	16.86	2.055
3/02/2005 17:06	19.8	16.86	2.055
3/02/2005 17:06	19.85	16.86	2.055
3/02/2005 17:06	19.9	16.86	2.055
3/02/2005 17:06	19.95	16.86	2.055
3/02/2005 17:06	20	16.86	2.055
3/02/2005 17:06	20.05	16.86	2.056
3/02/2005 17:06	20.1	16.86	2.056
3/02/2005 17:06	20.15	16.86	2.057
3/02/2005 17:06	20.2	16.86	2.057
3/02/2005 17:06	20.25	16.86	2.057
3/02/2005 17:06	20.3	16.86	2.057
3/02/2005 17:06	20.35	16.86	2.057
3/02/2005 17:07	20.4	16.86	2.057
3/02/2005 17:07	20.45	16.86	2.058
3/02/2005 17:07	20.5	16.86	2.058
3/02/2005 17:07	20.55	16.86	2.058
3/02/2005 17:07	20.6	16.86	2.059
3/02/2005 17:07	20.65	16.86	2.059
3/02/2005 17:07	20.7	16.86	2.059
3/02/2005 17:07	20.75	16.86	2.059
3/02/2005 17:07	20.8	16.86	2.06
3/02/2005 17:07	20.85	16.86	2.06
3/02/2005 17:07	20.9	16.86	2.06
3/02/2005 17:07	20.95	16.86	2.06
3/02/2005 17:07	21	16.86	2.06
3/02/2005 17:07	21.05	16.86	2.06
3/02/2005 17:07	21.1	16.86	2.061
3/02/2005 17:07	21.15	16.86	2.061
3/02/2005 17:07	21.2	16.86	2.062
3/02/2005 17:07	21.25	16.86	2.062
3/02/2005 17:07	21.3	16.86	2.062
3/02/2005 17:07	21.35	16.86	2.062
3/02/2005 17:08	21.4	16.86	2.062
3/02/2005 17:08	21.45	16.85	2.063
3/02/2005 17:08	21.5	16.86	2.063
3/02/2005 17:08	21.55	16.85	2.064
3/02/2005 17:08	21.6	16.86	2.063
3/02/2005 17:08	21.65	16.85	2.064
3/02/2005 17:08	21.7	16.86	2.064
3/02/2005 17:08	21.75	16.86	2.064
3/02/2005 17:08	21.8	16.85	2.065
3/02/2005 17:08	21.85	16.85	2.065
3/02/2005 17:08	21.9	16.85	2.065
3/02/2005 17:08	21.95	16.85	2.065
3/02/2005 17:08	22	16.86	2.065
3/02/2005 17:08	22.05	16.85	2.065
3/02/2005 17:08	22.1	16.85	2.066
3/02/2005 17:08	22.15	16.85	2.066
3/02/2005 17:08	22.2	16.85	2.067
3/02/2005 17:08	22.25	16.85	2.067
3/02/2005 17:08	22.3	16.86	2.067
3/02/2005 17:08	22.35	16.85	2.067
3/02/2005 17:09	22.4	16.85	2.067
3/02/2005 17:09	22.45	16.85	2.068
3/02/2005 17:09	22.5	16.85	2.068

Date Time	ET (min)	Celsius	Meters H2O
3/02/2005 17:15	28.7	16.84	2.097
3/02/2005 17:15	28.75	16.84	2.097
3/02/2005 17:15	28.8	16.85	2.098
3/02/2005 17:15	28.85	16.84	2.098
3/02/2005 17:15	28.9	16.84	2.099
3/02/2005 17:15	28.95	16.84	2.099
3/02/2005 17:15	29	16.84	2.098
3/02/2005 17:15	29.05	16.84	2.099
3/02/2005 17:15	29.1	16.84	2.099
3/02/2005 17:15	29.15	16.84	2.099
3/02/2005 17:15	29.2	16.84	2.099
3/02/2005 17:15	29.25	16.85	2.1
3/02/2005 17:15	29.3	16.85	2.1
3/02/2005 17:15	29.35	16.84	2.1
3/02/2005 17:16	29.4	16.84	2.101
3/02/2005 17:16	29.45	16.84	2.101
3/02/2005 17:16	29.5	16.84	2.101
3/02/2005 17:16	29.55	16.84	2.101
3/02/2005 17:16	29.6	16.84	2.101
3/02/2005 17:16	29.65	16.84	2.101
3/02/2005 17:16	29.7	16.84	2.102
3/02/2005 17:16	29.75	16.84	2.102
3/02/2005 17:16	29.8	16.84	2.102
3/02/2005 17:16	29.85	16.84	2.102
3/02/2005 17:16	29.9	16.84	2.102
3/02/2005 17:16	29.95	16.84	2.103
3/02/2005 17:16	30	16.84	2.103
3/02/2005 17:16	30.05	16.84	2.103
3/02/2005 17:16	30.1	16.84	2.103
3/02/2005 17:16	30.15	16.84	2.104
3/02/2005 17:16	30.2	16.84	2.104
3/02/2005 17:16	30.25	16.84	2.104
3/02/2005 17:16	30.3	16.84	2.104
3/02/2005 17:16	30.35	16.84	2.104
3/02/2005 17:17	30.4	16.84	2.104
3/02/2005 17:17	30.45	16.84	2.105
3/02/2005 17:17	30.5	16.84	2.105
3/02/2005 17:17	30.55	16.84	2.105
3/02/2005 17:17	30.6	16.84	2.106
3/02/2005 17:17	30.65	16.84	2.106
3/02/2005 17:17	30.7	16.84	2.106
3/02/2005 17:17	30.75	16.84	2.106
3/02/2005 17:17	30.8	16.84	2.106
3/02/2005 17:17	30.85	16.84	2.107
3/02/2005 17:17	30.9	16.84	2.107
3/02/2005 17:17	30.95	16.84	2.107
3/02/2005 17:17	31	16.84	2.107
3/02/2005 17:17	31.05	16.84	2.108
3/02/2005 17:17	31.1	16.84	2.108
3/02/2005 17:17	31.15	16.84	2.108
3/02/2005 17:17	31.2	16.84	2.108
3/02/2005 17:17	31.25	16.84	2.109
3/02/2005 17:17	31.3	16.84	2.109
3/02/2005 17:17	31.35	16.84	2.109
3/02/2005 17:18	31.4	16.84	2.109
3/02/2005 17:18	31.45	16.84	2.109
3/02/2005 17:18	31.5	16.84	2.11
3/02/2005 17:18	31.55	16.84	2.11
3/02/2005 17:18	31.6	16.84	2.111
3/02/2005 17:18	31.65	16.84	2.111
3/02/2005 17:18	31.7	16.84	2.111
3/02/2005 17:18	31.75	16.84	2.111
3/02/2005 17:18	31.8	16.84	2.111
3/02/2005 17:18	31.85	16.84	2.111
3/02/2005 17:18	31.9	16.84	2.111
3/02/2005 17:18	31.95	16.84	2.111
3/02/2005 17:18	32	16.84	2.111
3/02/2005 17:18	32.05	16.84	2.112
3/02/2005 17:18	32.1	16.84	2.112
3/02/2005 17:18	32.15	16.84	2.112
3/02/2005 17:18	32.2	16.84	2.112
3/02/2005 17:18	32.25	16.84	2.112
3/02/2005 17:18	32.3	16.84	2.112
3/02/2005 17:18	32.35	16.84	2.113
3/02/2005 17:19	32.4	16.84	2.113
3/02/2005 17:19	32.45	16.84	2.113
3/02/2005 17:19	32.5	16.84	2.113
3/02/2005 17:19	32.55	16.84	2.114
3/02/2005 17:19	32.6	16.84	2.114
3/02/2005 17:19	32.65	16.84	2.114
3/02/2005 17:19	32.7	16.84	2.114
3/02/2005 17:19	32.75	16.84	2.114
3/02/2005 17:19	32.8	16.84	2.115
3/02/2005 17:19	32.85	16.84	2.115
3/02/2005 17:19	32.9	16.84	2.115
3/02/2005 17:19	32.95	16.84	2.116
3/02/2005 17:19	33	16.84	2.116
3/02/2005 17:19	33.05	16.84	2.116
3/02/2005 17:19	33.1	16.84	2.116
3/02/2005 17:19	33.15	16.84	2.116
3/02/2005 17:19	33.2	16.84	2.116
3/02/2005 17:19	33.25	16.84	2.116
3/02/2005 17:19	33.3	16.84	2.117
3/02/2005 17:19	33.35	16.84	2.117
3/02/2005 17:20	33.4	16.84	2.117
3/02/2005 17:20	33.45	16.84	2.117
3/02/2005 17:20	33.5	16.84	2.118
3/02/2005 17:20	33.55	16.84	2.118
3/02/2005 17:20	33.6	16.84	2.118
3/02/2005 17:20	33.65	16.84	2.118
3/02/2005 17:20	33.7	16.84	2.119
3/02/2005 17:20	33.75	16.84	2.119
3/02/2005 17:20	33.8	16.84	2.119
3/02/2005 17:20	33.85	16.84	2.119
3/02/2005 17:20	33.9	16.84	2.119
3/02/2005 17:20	33.95	16.84	2.119
3/02/2005 17:20	34	16.84	2.119
3/02/2005 17:20	34.05	16.84	2.12
3/02/2005 17:20	34.1	16.84	2.12
3/02/2005 17:20	34.15	16.84	2.12
3/02/2005 17:20	34.2	16.84	2.121
3/02/2005 17:20	34.25	16.84	2.121
3/02/2005 17:20	34.3	16.84	2.121
3/02/2005 17:20	34.35	16.84	2.121
3/02/2005 17:21	34.4	16.84	2.122
3/02/2005 17:21	34.45	16.84	2.122
3/02/2005 17:21	34.5	16.84	2.122
3/02/2005 17:21	34.55	16.84	2.122
3/02/2005 17:21	34.6	16.84	2.122
3/02/2005 17:21	34.65	16.84	2.122
3/02/2005 17:21	34.7	16.84	2.122
3/02/2005 17:21	34.75	16.84	2.122
3/02/2005 17:21	34.8	16.84	2.123
3/02/2005 17:21	34.85	16.84	2.123
3/02/2005 17:21	34.9	16.84	2.124
3/02/2005 17:21	34.95	16.84	2.124
3/02/2005 17:21	35	16.84	2.124
3/02/2005 17:21	35.05	16.84	2.124
3/02/2005 17:21	35.1	16.84	2.124
3/02/2005 17:21	35.15	16.84	2.125
3/02/2005 17:21	35.2	16.84	2.125

Date	ET (min)	Celsius	Meters H2O
########	41.4	16.83	2.149
########	41.45	16.83	2.149
########	41.5	16.83	2.149
########	41.55	16.83	2.149
########	41.6	16.83	2.149
########	41.65	16.83	2.149
########	41.7	16.83	2.15
########	41.75	16.83	2.15
########	41.8	16.83	2.15
########	41.85	16.83	2.15
########	41.9	16.83	2.151
########	41.95	16.83	2.151
########	42	16.83	2.151
########	42.05	16.83	2.151
########	42.1	16.83	2.151
########	42.15	16.83	2.151
########	42.2	16.83	2.151
########	42.25	16.83	2.151
########	42.3	16.83	2.152
########	42.35	16.83	2.152
########	42.4	16.83	2.153
########	42.45	16.83	2.153
########	42.5	16.83	2.153
########	42.55	16.83	2.153
########	42.6	16.83	2.153
########	42.65	16.83	2.153
########	42.7	16.83	2.154
########	42.75	16.83	2.154
########	42.8	16.83	2.154
########	42.85	16.83	2.154
########	42.9	16.83	2.154
########	42.95	16.83	2.154
########	43	16.83	2.154
########	43.05	16.83	2.154
########	43.1	16.83	2.155
########	43.15	16.83	2.155
########	43.2	16.83	2.156
########	43.25	16.83	2.155
########	43.3	16.83	2.156
########	43.35	16.83	2.156
########	43.4	16.83	2.156
########	43.45	16.83	2.156
########	43.5	16.83	2.156
########	43.55	16.83	2.156
########	43.6	16.83	2.157
########	43.65	16.83	2.158
########	43.7	16.83	2.158
########	43.75	16.83	2.158
########	43.8	16.83	2.158
########	43.85	16.83	2.158
########	43.9	16.83	2.158
########	43.95	16.83	2.158
########	44	16.83	2.158
########	44.05	16.83	2.158
########	44.1	16.83	2.159
########	44.15	16.83	2.159
########	44.2	16.83	2.159
########	44.25	16.83	2.159
########	44.3	16.83	2.16
########	44.35	16.83	2.16
########	44.4	16.83	2.16
########	44.45	16.83	2.16
########	44.5	16.83	2.16
########	44.55	16.83	2.161
########	44.6	16.83	2.161
########	44.65	16.83	2.161
########	44.7	16.83	2.161
########	44.75	16.83	2.161
########	44.8	16.83	2.161
########	44.85	16.83	2.161
########	44.9	16.83	2.162
########	44.95	16.83	2.162
########	45	16.83	2.163
########	45.05	16.83	2.163
########	45.1	16.83	2.163
########	45.15	16.83	2.163
########	45.2	16.83	2.163
########	45.25	16.83	2.163
########	45.3	16.83	2.163
########	45.35	16.83	2.163
########	45.4	16.83	2.164
########	45.45	16.83	2.164
########	45.5	16.83	2.164
########	45.55	16.83	2.164
########	45.6	16.83	2.164
########	45.65	16.83	2.164
########	45.7	16.83	2.164
########	45.75	16.83	2.165
########	45.8	16.83	2.165
########	45.85	16.83	2.165
########	45.9	16.83	2.166
########	45.95	16.83	2.166
########	46	16.83	2.166
########	46.05	16.83	2.166
########	46.1	16.83	2.166
########	46.15	16.83	2.167
########	46.2	16.83	2.166
########	46.25	16.83	2.167
########	46.3	16.83	2.167
########	46.35	16.83	2.167
########	46.4	16.83	2.167
########	46.45	16.83	2.168
########	46.5	16.83	2.168
########	46.55	16.83	2.168
########	46.6	16.83	2.168
########	46.65	16.83	2.168
########	46.7	16.83	2.168
########	46.75	16.83	2.168
########	46.8	16.83	2.169
########	46.85	16.83	2.169
########	46.9	16.83	2.169
########	46.95	16.83	2.169
########	47	16.83	2.169
########	47.05	16.83	2.169
########	47.1	16.83	2.17
########	47.15	16.83	2.169
########	47.2	16.83	2.17
########	47.25	16.83	2.171
########	47.3	16.83	2.171
########	47.35	16.83	2.171
########	47.4	16.83	2.171
########	47.45	16.83	2.171
########	47.5	16.83	2.171
########	47.55	16.83	2.171
########	47.6	16.83	2.171
########	47.65	16.83	2.172
########	47.7	16.83	2.172
########	47.75	16.83	2.172
########	47.8	16.83	2.173
########	47.85	16.79756	2.186472
########	47.9	16.7974	2.186727

3/02/2005 16:56	9.85	16.91	1.984
3/02/2005 16:56	9.9	16.91	1.984
3/02/2005 16:56	9.95	16.91	1.985
3/02/2005 16:56	10	16.91	1.986
3/02/2005 16:56	10.05	16.91	1.986
3/02/2005 16:56	10.1	16.91	1.986
3/02/2005 16:56	10.15	16.91	1.987
3/02/2005 16:56	10.2	16.91	1.987
3/02/2005 16:56	10.25	16.91	1.988
3/02/2005 16:56	10.3	16.91	1.988
3/02/2005 16:56	10.35	16.91	1.989
3/02/2005 16:57	10.4	16.91	1.989
3/02/2005 16:57	10.45	16.91	1.99
3/02/2005 16:57	10.5	16.91	1.99
3/02/2005 16:57	10.55	16.91	1.991
3/02/2005 16:57	10.6	16.91	1.991
3/02/2005 16:57	10.65	16.91	1.992
3/02/2005 16:57	10.7	16.91	1.992
3/02/2005 16:57	10.75	16.91	1.992
3/02/2005 16:57	10.8	16.91	1.993
3/02/2005 16:57	10.85	16.91	1.994
3/02/2005 16:57	10.9	16.91	1.994
3/02/2005 16:57	10.95	16.91	1.994
3/02/2005 16:57	11	16.91	1.995
3/02/2005 16:57	11.05	16.91	1.996
3/02/2005 16:57	11.1	16.91	1.996
3/02/2005 16:57	11.15	16.9	1.996
3/02/2005 16:57	11.2	16.91	1.997
3/02/2005 16:57	11.25	16.91	1.997
3/02/2005 16:57	11.3	16.9	1.998
3/02/2005 16:57	11.35	16.9	1.999
3/02/2005 16:58	11.4	16.91	1.999
3/02/2005 16:58	11.45	16.9	1.999
3/02/2005 16:58	11.5	16.9	2
3/02/2005 16:58	11.55	16.9	2
3/02/2005 16:58	11.6	16.9	2.001
3/02/2005 16:58	11.65	16.9	2.001
3/02/2005 16:58	11.7	16.9	2.001
3/02/2005 16:58	11.75	16.9	2.002
3/02/2005 16:58	11.8	16.9	2.002
3/02/2005 16:58	11.85	16.9	2.003
3/02/2005 16:58	11.9	16.9	2.003
3/02/2005 16:58	11.95	16.9	2.003
3/02/2005 16:58	12	16.9	2.004
3/02/2005 16:58	12.05	16.9	2.004
3/02/2005 16:58	12.1	16.9	2.005
3/02/2005 16:58	12.15	16.9	2.006
3/02/2005 16:58	12.2	16.9	2.006
3/02/2005 16:58	12.25	16.9	2.006
3/02/2005 16:58	12.3	16.9	2.007
3/02/2005 16:58	12.35	16.9	2.007
3/02/2005 16:59	12.4	16.9	2.008
3/02/2005 16:59	12.45	16.9	2.007
3/02/2005 16:59	12.5	16.9	2.008
3/02/2005 16:59	12.55	16.9	2.008
3/02/2005 16:59	12.6	16.9	2.009
3/02/2005 16:59	12.65	16.9	2.009
3/02/2005 16:59	12.7	16.9	2.01
3/02/2005 16:59	12.75	16.89	2.01
3/02/2005 16:59	12.8	16.89	2.011
3/02/2005 16:59	12.85	16.89	2.011
3/02/2005 16:59	12.9	16.89	2.011
3/02/2005 16:59	12.95	16.89	2.011
3/02/2005 16:59	13	16.89	2.013
3/02/2005 16:59	13.05	16.9	2.013
3/02/2005 16:59	13.1	16.89	2.013
3/02/2005 16:59	13.15	16.89	2.013
3/02/2005 16:59	13.2	16.89	2.014
3/02/2005 16:59	13.25	16.89	2.014
3/02/2005 16:59	13.3	16.89	2.015
3/02/2005 16:59	13.35	16.89	2.015
3/02/2005 17:00	13.4	16.89	2.015
3/02/2005 17:00	13.45	16.89	2.016
3/02/2005 17:00	13.5	16.89	2.016
3/02/2005 17:00	13.55	16.89	2.016
3/02/2005 17:00	13.6	16.89	2.016
3/02/2005 17:00	13.65	16.89	2.017
3/02/2005 17:00	13.7	16.89	2.017
3/02/2005 17:00	13.75	16.89	2.018
3/02/2005 17:00	13.8	16.89	2.018
3/02/2005 17:00	13.85	16.89	2.018
3/02/2005 17:00	13.9	16.89	2.019
3/02/2005 17:00	13.95	16.89	2.019
3/02/2005 17:00	14	16.89	2.02
3/02/2005 17:00	14.05	16.89	2.02
3/02/2005 17:00	14.1	16.89	2.02
3/02/2005 17:00	14.15	16.89	2.02
3/02/2005 17:00	14.2	16.89	2.02
3/02/2005 17:00	14.25	16.89	2.021
3/02/2005 17:00	14.3	16.89	2.021
3/02/2005 17:00	14.35	16.89	2.022
3/02/2005 17:01	14.4	16.89	2.022
3/02/2005 17:01	14.45	16.89	2.023
3/02/2005 17:01	14.5	16.89	2.023
3/02/2005 17:01	14.55	16.89	2.023
3/02/2005 17:01	14.6	16.88	2.023
3/02/2005 17:01	14.65	16.89	2.024
3/02/2005 17:01	14.7	16.89	2.024
3/02/2005 17:01	14.75	16.89	2.025
3/02/2005 17:01	14.8	16.88	2.025
3/02/2005 17:01	14.85	16.88	2.025
3/02/2005 17:01	14.9	16.88	2.025
3/02/2005 17:01	14.95	16.89	2.026
3/02/2005 17:01	15	16.88	2.026
3/02/2005 17:01	15.05	16.88	2.026
3/02/2005 17:01	15.1	16.88	2.026
3/02/2005 17:01	15.15	16.88	2.027
3/02/2005 17:01	15.2	16.88	2.027
3/02/2005 17:01	15.25	16.88	2.028
3/02/2005 17:01	15.3	16.88	2.028
3/02/2005 17:01	15.35	16.88	2.028
3/02/2005 17:02	15.4	16.88	2.028
3/02/2005 17:02	15.45	16.88	2.029
3/02/2005 17:02	15.5	16.88	2.03
3/02/2005 17:02	15.55	16.88	2.03
3/02/2005 17:02	15.6	16.88	2.03
3/02/2005 17:02	15.65	16.88	2.03
3/02/2005 17:02	15.7	16.88	2.03
3/02/2005 17:02	15.75	16.88	2.031
3/02/2005 17:02	15.8	16.88	2.031
3/02/2005 17:02	15.85	16.88	2.031
3/02/2005 17:02	15.9	16.88	2.032
3/02/2005 17:02	15.95	16.88	2.032
3/02/2005 17:09	22.55	16.85	2.069
3/02/2005 17:09	22.6	16.85	2.069
3/02/2005 17:09	22.65	16.85	2.069
3/02/2005 17:09	22.7	16.85	2.069
3/02/2005 17:09	22.75	16.85	2.069
3/02/2005 17:09	22.8	16.85	2.07
3/02/2005 17:09	22.85	16.85	2.07
3/02/2005 17:09	22.9	16.85	2.07
3/02/2005 17:09	22.95	16.85	2.07
3/02/2005 17:09	23	16.85	2.07
3/02/2005 17:09	23.05	16.85	2.07
3/02/2005 17:09	23.1	16.85	2.071
3/02/2005 17:09	23.15	16.85	2.07
3/02/2005 17:09	23.2	16.85	2.072
3/02/2005 17:09	23.25	16.85	2.072
3/02/2005 17:09	23.3	16.85	2.072
3/02/2005 17:09	23.35	16.85	2.072
3/02/2005 17:10	23.4	16.85	2.072
3/02/2005 17:10	23.45	16.85	2.073
3/02/2005 17:10	23.5	16.85	2.073
3/02/2005 17:10	23.55	16.85	2.074
3/02/2005 17:10	23.6	16.85	2.074
3/02/2005 17:10	23.65	16.85	2.074
3/02/2005 17:10	23.7	16.85	2.074
3/02/2005 17:10	23.75	16.85	2.074
3/02/2005 17:10	23.8	16.85	2.074
3/02/2005 17:10	23.85	16.85	2.075
3/02/2005 17:10	23.9	16.85	2.075
3/02/2005 17:10	23.95	16.85	2.075
3/02/2005 17:10	24	16.85	2.075
3/02/2005 17:10	24.05	16.85	2.075
3/02/2005 17:10	24.1	16.85	2.076
3/02/2005 17:10	24.15	16.85	2.076
3/02/2005 17:10	24.2	16.85	2.077
3/02/2005 17:10	24.25	16.85	2.076
3/02/2005 17:10	24.3	16.85	2.077
3/02/2005 17:10	24.35	16.85	2.077
3/02/2005 17:11	24.4	16.85	2.077
3/02/2005 17:11	24.45	16.85	2.077
3/02/2005 17:11	24.5	16.85	2.078
3/02/2005 17:11	24.55	16.85	2.078
3/02/2005 17:11	24.6	16.85	2.078
3/02/2005 17:11	24.65	16.85	2.078
3/02/2005 17:11	24.7	16.85	2.079
3/02/2005 17:11	24.75	16.85	2.079
3/02/2005 17:11	24.8	16.85	2.079
3/02/2005 17:11	24.85	16.85	2.079
3/02/2005 17:11	24.9	16.85	2.08
3/02/2005 17:11	24.95	16.85	2.08
3/02/2005 17:11	25	16.85	2.08
3/02/2005 17:11	25.05	16.85	2.08
3/02/2005 17:11	25.1	16.85	2.08
3/02/2005 17:11	25.15	16.85	2.08
3/02/2005 17:11	25.2	16.85	2.081
3/02/2005 17:11	25.25	16.85	2.081
3/02/2005 17:11	25.3	16.85	2.081
3/02/2005 17:11	25.35	16.85	2.082
3/02/2005 17:12	25.4	16.85	2.082
3/02/2005 17:12	25.45	16.85	2.082
3/02/2005 17:12	25.5	16.85	2.082
3/02/2005 17:12	25.55	16.85	2.082
3/02/2005 17:12	25.6	16.85	2.083
3/02/2005 17:12	25.65	16.85	2.084
3/02/2005 17:12	25.7	16.85	2.083
3/02/2005 17:12	25.75	16.85	2.084
3/02/2005 17:12	25.8	16.85	2.084
3/02/2005 17:12	25.85	16.85	2.084
3/02/2005 17:12	25.9	16.85	2.084
3/02/2005 17:12	25.95	16.85	2.085
3/02/2005 17:12	26	16.85	2.085
3/02/2005 17:12	26.05	16.85	2.085
3/02/2005 17:12	26.1	16.85	2.085
3/02/2005 17:12	26.15	16.85	2.085
3/02/2005 17:12	26.2	16.85	2.086
3/02/2005 17:12	26.25	16.85	2.086
3/02/2005 17:12	26.3	16.85	2.086
3/02/2005 17:12	26.35	16.85	2.086
3/02/2005 17:13	26.4	16.85	2.087
3/02/2005 17:13	26.45	16.85	2.087
3/02/2005 17:13	26.5	16.85	2.087
3/02/2005 17:13	26.55	16.85	2.087
3/02/2005 17:13	26.6	16.85	2.087
3/02/2005 17:13	26.65	16.85	2.088
3/02/2005 17:13	26.7	16.85	2.088
3/02/2005 17:13	26.75	16.85	2.088
3/02/2005 17:13	26.8	16.85	2.088
3/02/2005 17:13	26.85	16.85	2.089
3/02/2005 17:13	26.9	16.85	2.089
3/02/2005 17:13	26.95	16.85	2.089
3/02/2005 17:13	27	16.85	2.089
3/02/2005 17:13	27.05	16.85	2.089
3/02/2005 17:13	27.1	16.85	2.09
3/02/2005 17:13	27.15	16.85	2.09
3/02/2005 17:13	27.2	16.85	2.09
3/02/2005 17:13	27.25	16.84	2.091
3/02/2005 17:13	27.3	16.85	2.09
3/02/2005 17:13	27.35	16.85	2.091
3/02/2005 17:14	27.4	16.85	2.091
3/02/2005 17:14	27.45	16.85	2.091
3/02/2005 17:14	27.5	16.85	2.091
3/02/2005 17:14	27.55	16.85	2.092
3/02/2005 17:14	27.6	16.85	2.092
3/02/2005 17:14	27.65	16.85	2.092
3/02/2005 17:14	27.7	16.84	2.092
3/02/2005 17:14	27.75	16.84	2.093
3/02/2005 17:14	27.8	16.85	2.093
3/02/2005 17:14	27.85	16.85	2.093
3/02/2005 17:14	27.9	16.85	2.094
3/02/2005 17:14	27.95	16.85	2.094
3/02/2005 17:14	28	16.84	2.094
3/02/2005 17:14	28.05	16.85	2.094
3/02/2005 17:14	28.1	16.85	2.094
3/02/2005 17:14	28.15	16.85	2.095
3/02/2005 17:14	28.2	16.85	2.095
3/02/2005 17:14	28.25	16.85	2.095
3/02/2005 17:14	28.3	16.85	2.095
3/02/2005 17:14	28.35	16.85	2.095
3/02/2005 17:15	28.4	16.84	2.096
3/02/2005 17:15	28.45	16.85	2.095
3/02/2005 17:15	28.5	16.84	2.096
3/02/2005 17:15	28.55	16.84	2.097
3/02/2005 17:15	28.6	16.84	2.097
3/02/2005 17:15	28.65	16.84	2.097
3/02/2005 17:21	35.25	16.84	2.125
3/02/2005 17:21	35.3	16.84	2.125
3/02/2005 17:21	35.35	16.84	2.125
3/02/2005 17:22	35.4	16.84	2.126
3/02/2005 17:22	35.45	16.84	2.126
3/02/2005 17:22	35.5	16.84	2.126
3/02/2005 17:22	35.55	16.84	2.126
3/02/2005 17:22	35.6	16.84	2.126
3/02/2005 17:22	35.65	16.84	2.126
3/02/2005 17:22	35.7	16.84	2.126
3/02/2005 17:22	35.75	16.84	2.127
3/02/2005 17:22	35.8	16.84	2.127
3/02/2005 17:22	35.85	16.84	2.127
3/02/2005 17:22	35.9	16.84	2.127
3/02/2005 17:22	35.95	16.84	2.128
3/02/2005 17:22	36	16.84	2.128
3/02/2005 17:22	36.05	16.84	2.128
3/02/2005 17:22	36.1	16.84	2.128
3/02/2005 17:22	36.15	16.84	2.129
3/02/2005 17:22	36.2	16.84	2.129
3/02/2005 17:22	36.25	16.84	2.129
3/02/2005 17:22	36.3	16.84	2.129
3/02/2005 17:22	36.35	16.84	2.129
3/02/2005 17:23	36.4	16.84	2.13
3/02/2005 17:23	36.45	16.84	2.13
3/02/2005 17:23	36.5	16.84	2.13
3/02/2005 17:23	36.55	16.84	2.13
3/02/2005 17:23	36.6	16.84	2.131
3/02/2005 17:23	36.65	16.84	2.131
3/02/2005 17:23	36.7	16.84	2.131
3/02/2005 17:23	36.75	16.84	2.131
3/02/2005 17:23	36.8	16.84	2.131
3/02/2005 17:23	36.85	16.84	2.131
3/02/2005 17:23	36.9	16.84	2.132
3/02/2005 17:23	36.95	16.84	2.132
3/02/2005 17:23	37	16.84	2.132
3/02/2005 17:23	37.05	16.84	2.132
3/02/2005 17:23	37.1	16.84	2.132
3/02/2005 17:23	37.15	16.84	2.132
3/02/2005 17:23	37.2	16.84	2.132
3/02/2005 17:23	37.25	16.84	2.133
3/02/2005 17:23	37.3	16.84	2.133
3/02/2005 17:23	37.35	16.84	2.133
3/02/2005 17:24	37.4	16.84	2.134
3/02/2005 17:24	37.45	16.84	2.134
3/02/2005 17:24	37.5	16.84	2.134
3/02/2005 17:24	37.55	16.83	2.134
3/02/2005 17:24	37.6	16.84	2.134
3/02/2005 17:24	37.65	16.84	2.134
3/02/2005 17:24	37.7	16.84	2.134
3/02/2005 17:24	37.75	16.84	2.135
3/02/2005 17:24	37.8	16.84	2.135
3/02/2005 17:24	37.85	16.84	2.135
3/02/2005 17:24	37.9	16.84	2.136
3/02/2005 17:24	37.95	16.84	2.135
3/02/2005 17:24	38	16.84	2.136
3/02/2005 17:24	38.05	16.84	2.136
3/02/2005 17:24	38.1	16.84	2.136
3/02/2005 17:24	38.15	16.84	2.136
3/02/2005 17:24	38.2	16.84	2.136
3/02/2005 17:24	38.25	16.84	2.137
3/02/2005 17:24	38.3	16.84	2.137
3/02/2005 17:24	38.35	16.84	2.137
3/02/2005 17:25	38.4	16.83	2.138
3/02/2005 17:25	38.45	16.84	2.137
3/02/2005 17:25	38.5	16.83	2.138
3/02/2005 17:25	38.55	16.83	2.138
3/02/2005 17:25	38.6	16.83	2.138
3/02/2005 17:25	38.65	16.83	2.139
3/02/2005 17:25	38.7	16.83	2.138
3/02/2005 17:25	38.75	16.83	2.139
3/02/2005 17:25	38.8	16.83	2.139
3/02/2005 17:25	38.85	16.83	2.139
3/02/2005 17:25	38.9	16.83	2.139
3/02/2005 17:25	38.95	16.83	2.139
3/02/2005 17:25	39	16.84	2.139
3/02/2005 17:25	39.05	16.84	2.14
3/02/2005 17:25	39.1	16.84	2.141
3/02/2005 17:25	39.15	16.84	2.141
3/02/2005 17:25	39.2	16.83	2.141
3/02/2005 17:25	39.25	16.84	2.141
3/02/2005 17:25	39.3	16.84	2.141
3/02/2005 17:25	39.35	16.83	2.141
3/02/2005 17:26	39.4	16.83	2.141
3/02/2005 17:26	39.45	16.84	2.141
3/02/2005 17:26	39.5	16.83	2.141
3/02/2005 17:26	39.55	16.83	2.142
3/02/2005 17:26	39.6	16.83	2.142
3/02/2005 17:26	39.65	16.84	2.142
3/02/2005 17:26	39.7	16.84	2.142
3/02/2005 17:26	39.75	16.84	2.143
3/02/2005 17:26	39.8	16.83	2.143
3/02/2005 17:26	39.85	16.83	2.143
3/02/2005 17:26	39.9	16.83	2.143
3/02/2005 17:26	39.95	16.83	2.143
3/02/2005 17:26	40	16.84	2.144
3/02/2005 17:26	40.05	16.83	2.144
3/02/2005 17:26	40.1	16.83	2.144
3/02/2005 17:26	40.15	16.83	2.144
3/02/2005 17:26	40.2	16.83	2.144
3/02/2005 17:26	40.25	16.83	2.144
3/02/2005 17:26	40.3	16.83	2.145
3/02/2005 17:26	40.35	16.83	2.145
3/02/2005 17:27	40.4	16.83	2.144
3/02/2005 17:27	40.45	16.83	2.145
3/02/2005 17:27	40.5	16.83	2.146
3/02/2005 17:27	40.55	16.83	2.146
3/02/2005 17:27	40.6	16.83	2.146
3/02/2005 17:27	40.65	16.83	2.146
3/02/2005 17:27	40.7	16.83	2.146
3/02/2005 17:27	40.75	16.83	2.146
3/02/2005 17:27	40.8	16.83	2.147
3/02/2005 17:27	40.85	16.83	2.147
3/02/2005 17:27	40.9	16.83	2.147
3/02/2005 17:27	40.95	16.83	2.147
3/02/2005 17:27	41	16.83	2.147
3/02/2005 17:27	41.05	16.83	2.148
3/02/2005 17:27	41.1	16.83	2.148
3/02/2005 17:27	41.15	16.83	2.148
3/02/2005 17:27	41.2	16.83	2.148
3/02/2005 17:27	41.25	16.83	2.148
3/02/2005 17:27	41.3	16.83	2.149
3/02/2005 17:27	41.35	16.83	2.148
########	47.95	16.79724	2.186981
########	48	16.79708	2.187235
########	48.05	16.79692	2.18749
########	48.1	16.83	2.174
########	48.15	16.83	2.174
########	48.2	16.83	2.174
########	48.25	16.83	2.174
########	48.3	16.83	2.175

Hyd Cond in m/day

monarc
ENVIRONMENTAL

		1999-2000	2000_2001	2001_2002	2002_2003	2003_2004	2004_2005
BH12		0.05					
BH 13						4.12	
BH 14		0.52					
BH15	t1	not calculated					
	t2	not calculated					
	t3	0.31					
BH16		0.12		0.07			
BH17			0.21				
BH18		1.90					
BH20							2.5
BH21			0.38 0.36				
BH22				2.41			
BH23							0.02
BH25					0.21		
BH28					2.77		
BH29							0.02

Sensitivity Analysis

			(col 1) K cm/sec	(col 2) K m/day	Hydraulic Gradient *0.0074*	Porosity (uncon-solidated)	Seepage Velocity m/day	**Seepage Velocity m/year**
BH 13 & 26	lo K / lo por	1-2	*5.79E-05*	0.05	*0.0074*	0.04	8.71E-03	**3**
	lo K / hi por	1-2	*5.79E-05*	0.05	*0.0074*	0.19	1.97E-03	**1**
	hi K / lo por	1-2	*5.79E-03*	5.00	*0.0074*	0.04	8.71E-01	**318**
	hi K / hi por	1-2	*5.79E-03*	5.00	*0.0074*	0.19	1.97E-01	**72**

Dpf (low) = *0.85*
Dpf (high) = *0.94*

Effective porosity (low) = *0.05*
Effective porosity (high) = *0.2*

APPENDIX 9: Natural Attenuation

Natural Attenuation at McMillan Street, Sale

1.0 Primary Lines of Evidence

The primary line of evidence used to argue that natural attenuation (NA) may be occurring is provided by observed reductions in plume geometry and observed reductions in concentrations of the constituents of concern at the site[1]. A shrinking or stable plume is evidence that the rate of attenuation equals or exceeds mass loading rate of contaminants into the groundwater.

Test results for BTEX at onsite bore locations BH10, BH11, BH12, BH14, BH16 and BH20 to BH23 were considered the most satisfactory data points for this analysis due to a sufficient time span of sampling dates in which to observe a trend. Results from these bores have therefore been examined using BTEX as the primary marker of contaminant distribution and as the primary line of evidence for the potential for natural attenuation to be occurring within the vicinity of the site.

The attached graphs of BTEX levels within each bore over the monitoring period (refer to Table 1: Sale, Summary of Groundwater Analyses (1996 – 2005) for a summary of all data) show a range of trends for the sampling event in March 2005: -

- Relatively stable levels in reported concentration levels of both individual BTEX species and their summations at BH10, BH11, BH14, BH16 and BH20
- A decrease in levels at BH12, BH21, BH22 and BH23.

Quality control and assurance indicates good reproducibility for BTEX between labs. Sample recovery method at all locations used a small down-hole electric pump.

The distribution of BTEX levels across the site appear to be similar to that observed for the previous years sampling event. With regard to plume geometry (refer also to APPENDIX 7: Contaminant Distributions for a contour plot showing the plume geometry for benzene concentrations for the March 2005 sampling event) it is noted that:

- BTEX concentrations for the 2005-sampling event at BH20, BH21, and BH22 are indicative of relatively stable plume geometry in the direction south of the former GMPS with marginal decreases in levels.
- The graphs for BTEX concentrations for locations west of the former GMPS at BH12, BH16 and BH23 are also indicative of a relatively stable plume geometry with a slight decrease at BH12 and BH23. Levels within the last three sampling events have also been consistently below detection limit at BH15.
- The westernmost bores; BH24 to B26, were installed in 2002 and have now been monitored for three successive sampling events. Levels have been generally stable with both benzene and xylene being consistently detected in BH25 while there is some indication of a xylene component in BH26.

[1] ASTM (1998) Standard Guide for Remediation of Groundwater by Natural Attenuation at Petroleum Release Sites,

2.0 Secondary Lines of Evidence

Geochemical indicators of naturally occurring degradation provide the secondary lines of evidence for natural attenuation process.[2]

Microorganisms in aquifers can use oxygen, nitrate, and sulphate to metabolise organic contaminants. Since replenishment of these materials is slow the metabolism results in depletion of the soluble electron acceptors. The metabolism in groundwater that has moved downgradient can therefore often be recognised by a reduction in the concentrations of electron acceptors (nitrate, sulphate and dissolved oxygen).

Micro organisms in aquifers can also metabolise organic compounds by reducing ferric iron in the aquifer matrix to water-soluble forms of ferrous iron. Thus the metabolism can be recognised by an increase in the concentrations of ferrous iron and manganese.[3] Similarly, methanogenic microbial systems in an anaerobic environment can degrade hydrocarbons (in this case acting as the electron acceptor) leading to increased levels of methane.

The measurement of some geochemical indicators as part of the groundwater sampling programmes was commenced in December 2000. The suite of tests initially performed was somewhat limited with respect to bore locations and analytes but expanded subsequently.

A summary of the complete data set of concentration measurements of the electron acceptors and reduction products is presented in Table 1: Sale, Summary of Groundwater, 1996 to 2005. Results for the 2005 sampling round are discussed below.

2.1 Background Conditions

Bore BH13 is considered upgradient of the site and provides a useful indication of baseline conditions in the area beyond the influence of microbial activity associated with the ex-GMPS.

2.2 Observations

For a graphical representation of the spatial distribution of dissolved oxygen (DO), nitrate, ferrous iron, manganese and methane concentrations using up to twenty test locations, refer to the figures attached at the rear of the report. While levels recorded in 2005 for each of the geochemical indicators is different to those recorded in 2004, a similar distribution to that recorded in 2004 has been recorded in 2005 for most of the indicators.

a) Dissolved oxygen (DO) concentrations

The March 2005 set of DO levels shows a defined contour pattern of lower values, consistent with the known locations of contaminated groundwater, in the area along the boundary south of BH10 and BH11. A minor peak contrary to the trend is noted south of this area around BH29 and may reflect the slow recharge rates noted in this bore which are possibly indicative of a high localised clay content.

Higher than background levels of DO are noted west of the site centred on BH16 where elevated (but attenuated) levels of some contaminants have been noted. This is similar to the trend noted in the previous years sampling event and is possibly correlated to the clayey gravel unit noted in BH16 but not within in bores immediately to the north and south (BH15

[2] ASTM (1998) Standard Guide for remediation of Groundwater by Natural Attenuation at Petroleum Release Sites,
[3] Contaminated Site Remediation: Challenges Posed By Urban and Industrial Contamination Ed. C. Johnson, CSIRO, March 1999

and BH23 respectively). Such levels would possibly assist in aerobic degradation of contaminants.

b) Nitrate concentrations

The marked depletion of nitrate concentrations downgradient of BH13, all show a trend in support of microbial activity in areas known to be affected by gasworks residuals.

c) Sulphate concentrations

Sulphate concentrations were not measured in 2005 due to a likely primary source of residuals along the south boundary of the ex-GMPS which would mask any effects that may reflect microbial processes.

c) Ferrous Iron and Manganese concentrations

Data points for ferrous iron show a higher than background trend in downgradient areas south of the ex-GMPS that are indicative of metabolic activity.

Manganese concentrations are similar to levels recorded in last years sampling event and indicate that the highest levels occur within the vicinity of BH11attenuating away from this location. A secondary peak is centred around BH29. The peak around BH11 is consistent with known sources of contamination, including a tar well located in the vicinity that was removed in May and November 2002.

d) Methane

The data points for methane shows higher levels near the south boundary of the site which are consistent with the known location of the offsite contaminant plume and consistent with the lower DO levels recorded in the area. Levels reduce in a downgradient direction to the south and west and are consistent with microbial activity in the known area of the offsite contaminant plume. Levels are generally less than those recorded from the previous years sampling event but maintain a similar distribution in the area south of the site.

A minor secondary peak is noted west of the site centred on BH25 near Flooding Canal. This may be affected by anaerobic conditions engendered by the canal: DO levels were also noted to reduce in the bores located close to the canal.

3.0 Conclusions

The primary line of evidence of natural attenuation processes occurring at the ex-GMPS, Sale has been previously demonstrated in the reported concentration reductions between 1996 and 2001.

More recent trends in BTEX (2002 –2004) however, have been indicative of a somewhat expanding benzene plume geometry west of the former GMPS at BH12, BH16 and BH23 relative to previous years. The increases are considered to reflect groundwater changes rather than any artefacts of the sampling process and may be evidence of recent remediation works that have resulted in the remobilisation of residual gasworks contamination. Results from the latest round of sampling indicate a stabilisation of benzene plume geometry with either relatively stable levels or a slight reduction in levels reported.

A secondary line of evidence that the plume area is subject to the influence of microbial activity has been examined in the form of correlation between the known spatial distribution of contaminants and the spatial concentration changes in the following geochemical indicators:

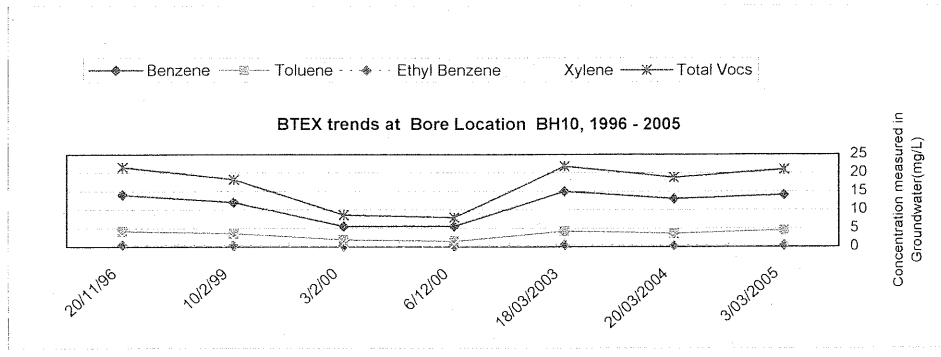
- dissolved oxygen;
- nitrate;
- methane; and

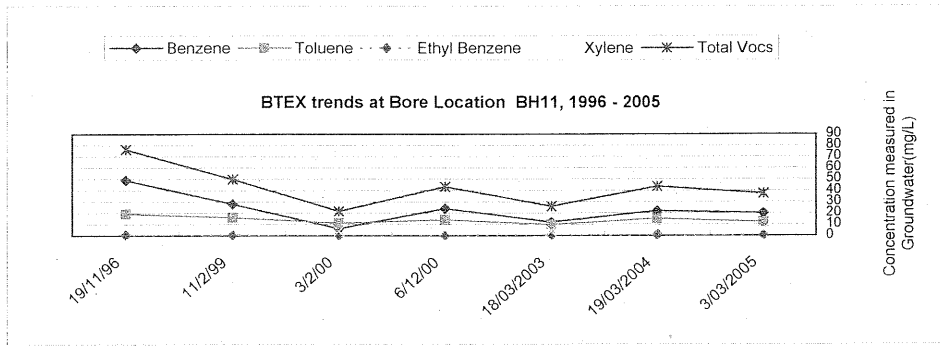
- the reduction product of ferrous iron and manganese.

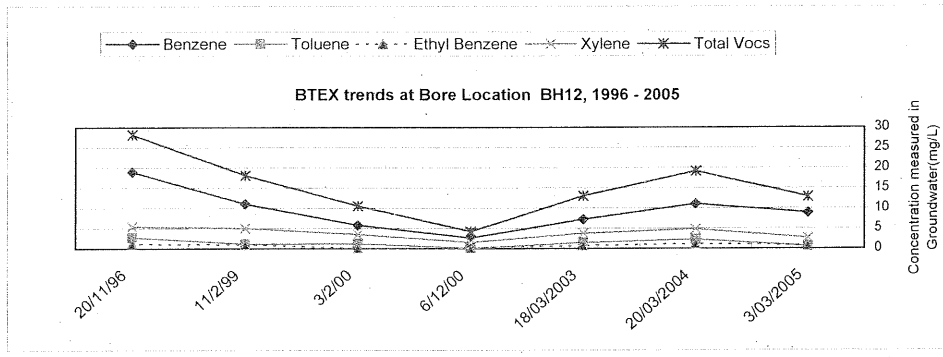
The data quality is considered good with respect to the areal coverage of the geochemical indicators and the correlation quality is considered good. It is recommended that monitoring of the NA indicators be continued and to provide supporting evidence that other remedial objectives are being met in the longer term.

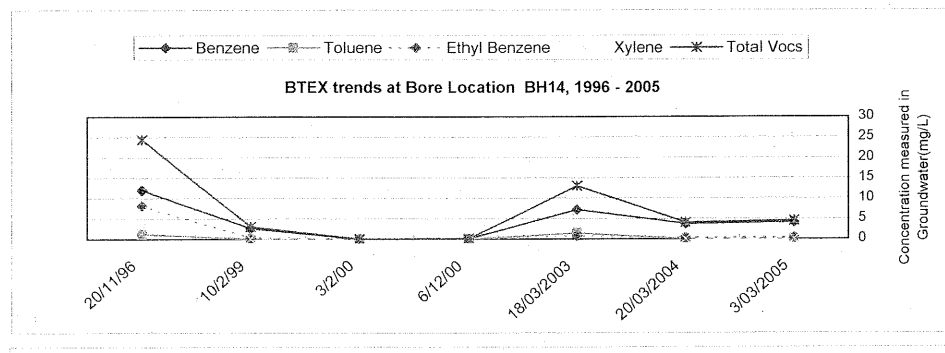
Sa-MNA_05.doc

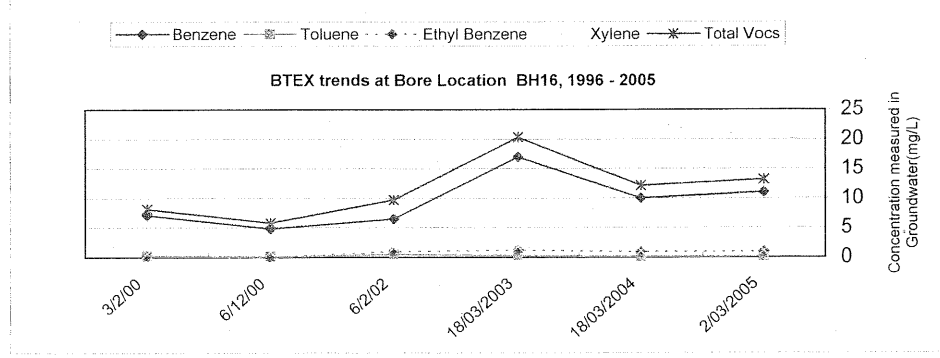
monarc

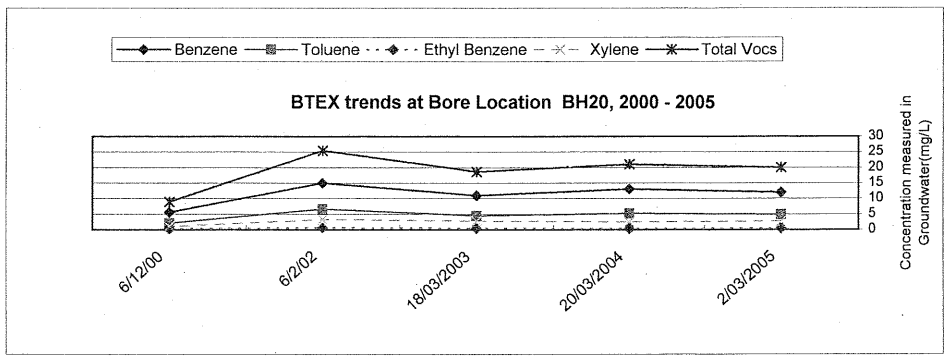

Benzene
Toluene
Ethyl Benzene
Xylene
Total Vocs
BTEX trends at Bore Location BH10, 1996 - 2005
Concentration measured in Groundwater(mg/L)
25
20
15
10
5
0
20/11/96
10/2/99
3/2/00
6/12/00
18/03/2003
20/03/2004
3/03/2005

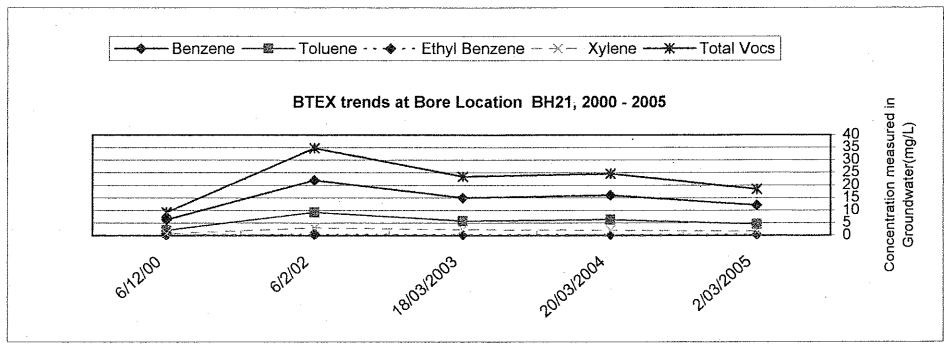

Benzene
Toluene
Ethyl Benzene
Xylene
Total Vocs
BTEX trends at Bore Location BH11, 1996 - 2005
Concentration measured in Groundwater(mg/L)
90
80
70
60
50
40
30
20
10
0
19/11/96
11/2/99
3/2/00
6/12/00
18/03/2003
19/03/2004
3/03/2005

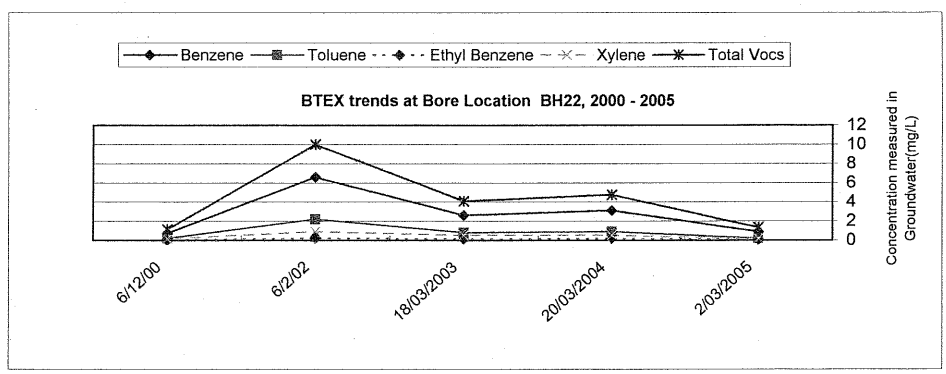

Benzene
Toluene
Ethyl Benzene
Xylene
Total Vocs
BTEX trends at Bore Location BH12, 1996 - 2005
Concentration measured in Groundwater(mg/L)
30
25
20
15
10
5
0
20/11/96
11/2/99
3/2/00
6/12/00
18/03/2003
20/03/2004
3/03/2005

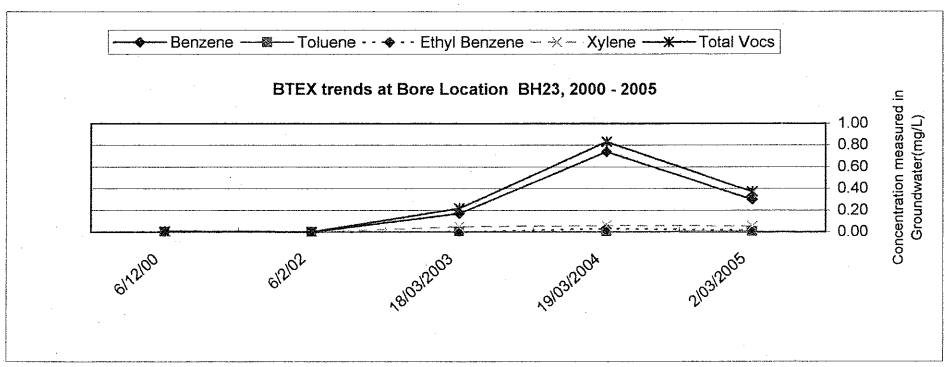

Benzene
Toluene
Ethyl Benzene
Xylene
Total Vocs
BTEX trends at Bore Location BH14, 1996 - 2005
Concentration measured in Groundwater(mg/L)
30
25
20
15
10
5
0
20/11/96
10/2/99
3/2/00
6/12/00
18/03/2003
20/03/2004
3/03/2005


Benzene
Toluene
Ethyl Benzene
Xylene
Total Vocs
BTEX trends at Bore Location BH16, 1996 - 2005
Concentration measured in Groundwater(mg/L)
25
20
15
10
5
0
3/2/00
6/12/00
6/2/02
18/03/2003
18/03/2004
2/03/2005


Benzene
Toluene
Ethyl Benzene
Xylene
Total Vocs
BTEX trends at Bore Location BH20, 2000 - 2005
Concentration measured in Groundwater(mg/L)
30
25
20
15
10
5
0
6/12/00
6/2/02
18/03/2003
20/03/2004
2/03/2005


Benzene
Toluene
Ethyl Benzene
Xylene
Total Vocs
BTEX trends at Bore Location BH21, 2000 - 2005
Concentration measured in Groundwater(mg/L)
40
35
30
25
20
15
10
5
0
6/12/00
6/2/02
18/03/2003
20/03/2004
2/03/2005

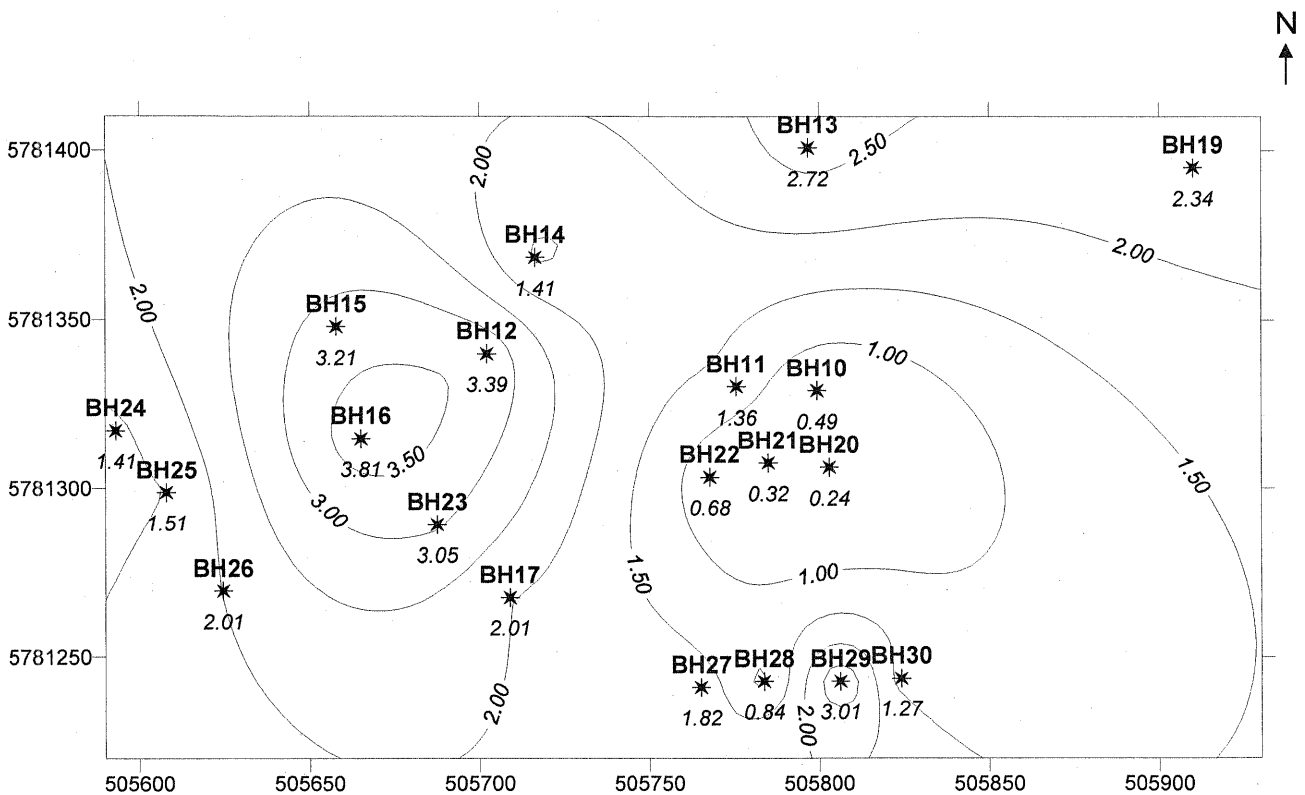

Benzene
Toluene
Ethyl Benzene
Xylene
Total Vocs
BTEX trends at Bore Location BH22, 2000 - 2005
Concentration measured in Groundwater(mg/L)
12
10
8
6
4
2
0
6/12/00
6/2/02
18/03/2003
20/03/2004
2/03/2005


Benzene
Toluene
Ethyl Benzene
Xylene
Total Vocs
BTEX trends at Bore Location BH23, 2000 - 2005
Concentration measured in Groundwater(mg/L)
1.00
0.80
0.60
0.40
0.20
0.00
6/12/00
6/2/02
18/03/2003
19/03/2004
2/03/2005

Sale: Dissolved Oxygen Concentrations

(Concentrations as of 3 March 2005)

monarc ENVIRONMENTAL

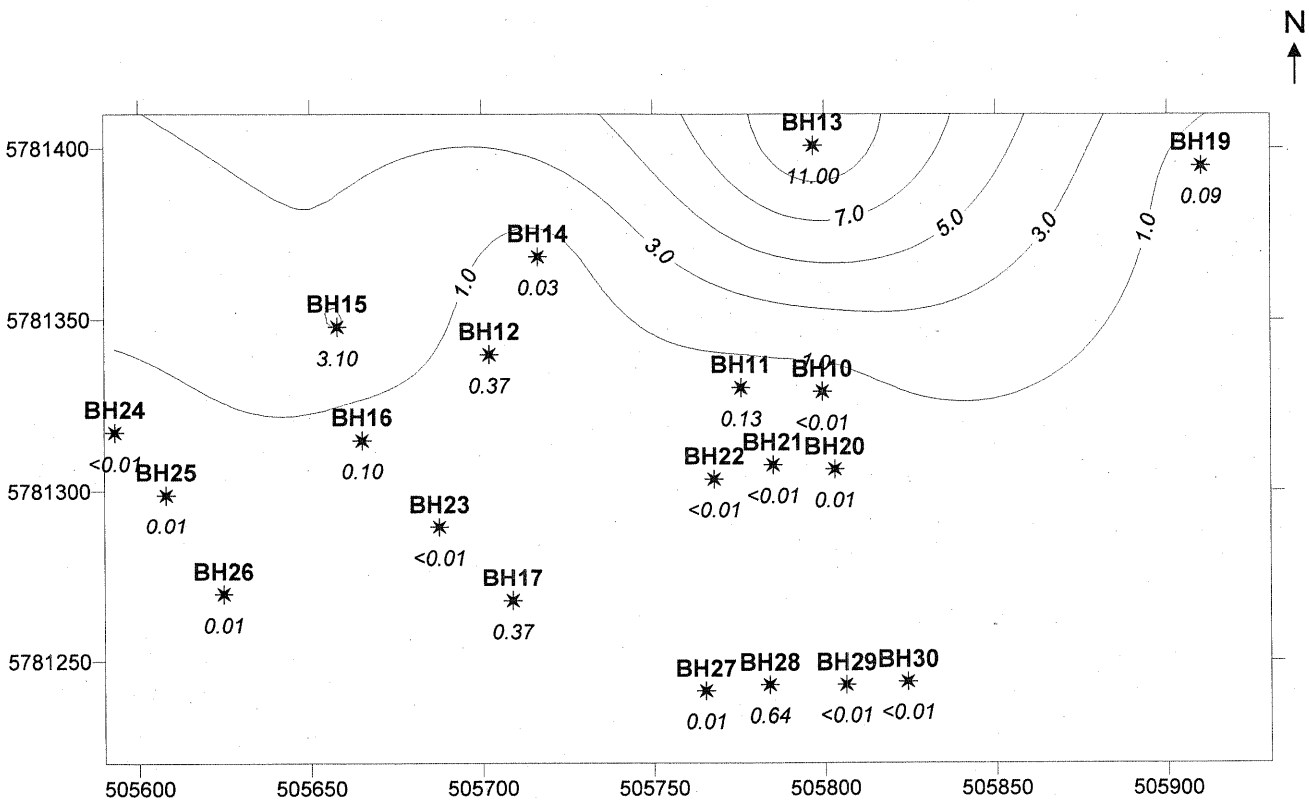


File: ORG453 DO V2.srf
Survey Date: 21 March 2003
Data: Sale data noBH18 020305
Contour Interval: 0.5mg/L

Sale: Nitrate Concentrations

(Concentrations as of 3 March 2005)

monarc ENVIRONMENTAL

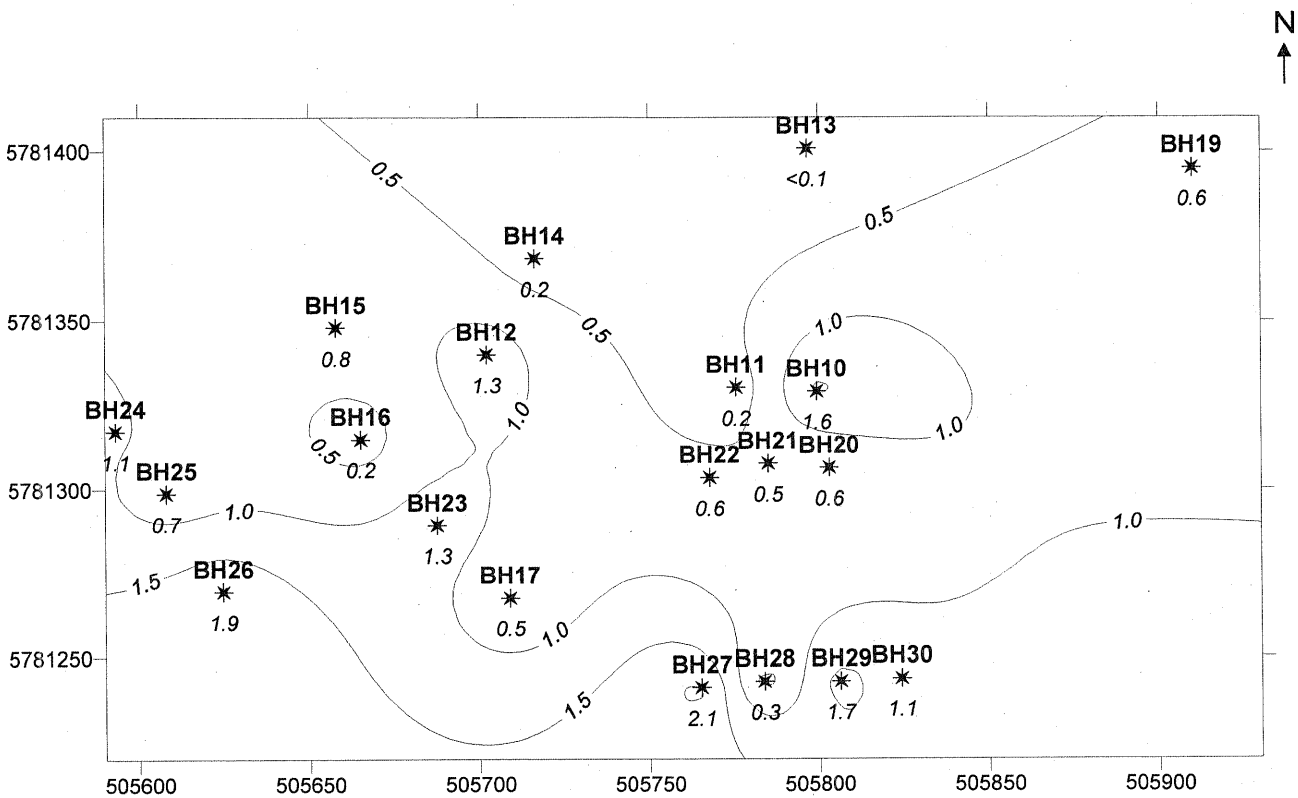


File: ORG453 nitrate V2.srf
Survey Date: 21 March 2003
Data: Sale data noBH18 020305
Contour Interval: 2mg/L

Sale: Ferrous Iron Concentrations

(Concentrations as of 3 March 2005)

monarc ENVIRONMENTAL



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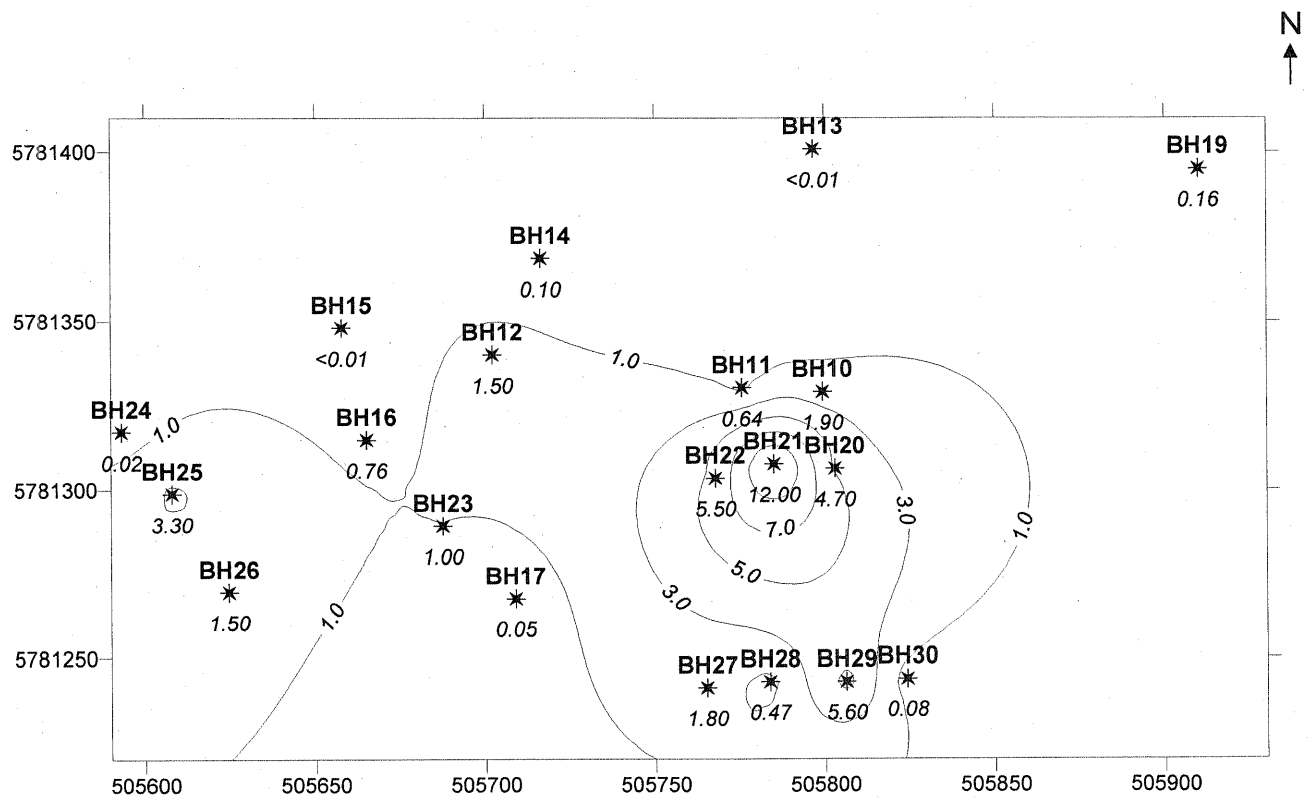
Survey Date: 21 March 2003
Data: Sale data noBH18 020305
Contour Interval: 0.5mg/L

Sale: Methane Concentrations

(Concentrations as of 3 March 2005)

monarc ENVIRONMENTAL

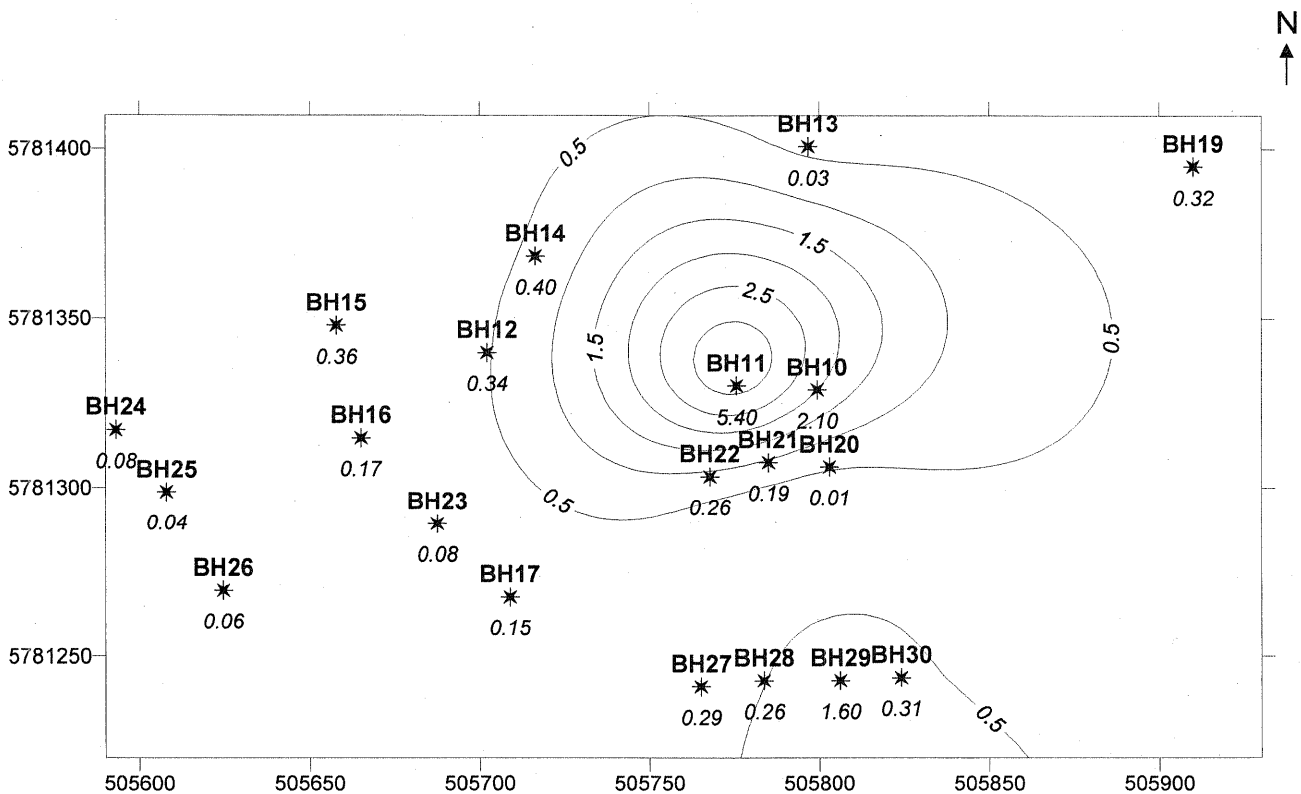


File: ORG453 methane V2.srf
Survey Date: 21 March 2003
Data: Sale data noBH18 020305
Contour Interval: 2mg/L

Sale: Manganese Concentrations

(Concentrations as of 3 March 2005)

monarc ENVIRONMENTAL



File: ORG453 manganese V2.srf
Survey Date: 21 March 2003
Data: Sale data noBH18 020305
Contour Interval: 0.5mg/L

APPENDIX 10: Impact on Beneficial Uses

Table 3: Freshwater Ecosystem Criteria

Table 4: Agriculture, Parks and Gardens Criteria

Table 5: Livestock Criteria

Table 6: Primary Recreation Contact Criteria

TABLE 3: SALE, SUMMARY OF GROUNDWATER ANALYSES in mg/l, (1996 - 2005) - FRESHWATER ECOSYSTEM BU

Sample Location	Lab	Sample Type	Sample Name	Sampling Date	Total Phenols	Phenol	Cresols	Total PAHs	Napthalene	Acenapthylene	Acenapthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo(a) anthracene	Chrysene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	B(a)P	Dibenzo(a,h)anthracene	Benzo(g,h,I) perylene	Indeno(1,2,3-c,d)pyrene	TPHs C6-C9	TPHs C10-C14	TPHs C15-C28	TPHs C29-C36	Total TPHs	Benzene	Toluene	Ethyl Benz.	Xylene	Total Vocs
BH10	WSL		BH10W	3/03/2005	36			3.9	3.6	0.15	0.012	0.031	0.031	0.004	0.003	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	14	31	5.4	<0.1	50.4	14	4.4	0.27	2.2	20.87
BH10	MGT		BH10W	20/03/2004	21.3	7.3	14	2	1.8	0.08	0.008	0.009	0.02	<0.005	0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	18	44	8.4	0.34	71.74	13	3.6	0.32	1.8	16.72
BH10	WSL		BH-10	18/03/2003	98			4	3.8	0.19	0.011	0.031	0.027	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	7.5	35	7.3	0.2	50	15	4.2	0.34	2.2	21.74
BH10	WSL		BH-10	6/2/02	31	31		3.4	3.2	0.14	0.011	0.044	0.034	0.007	0.004	0.004	<0.001	<0.001	<0.001	<0.001	0.0003	<0.001	<0.001	<0.001	34	54	11	0.2	99.2	18	4.8	0.28	2.3	25.38
BH10	WSL		SA-BH10W	6/12/00	11	11		4.7	4.4	0.22	0.012	0.031	0.033	0.006	0.004	0.003	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	5.5	27	5.6	<0.1	38.1	5.6	1.5	0.12	0.74	7.96
BH10	WSL		BH10W	3/2/00	62	62		4.3	4	0.19	0.014	0.045	0.046	0.011	0.005	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	11	57	8	<0.1	76	5.6	1.9	0.17	0.98	8.65
BH10	MGT		BH10W	10/2/99	15	15		2.7	2.6	<0.001	<0.001	<0.001	0.036	0.001	0.003	0.004	0.001	0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001	19	25	2	<0.1	46	12	3.6	0.3	2.3	18.2
BH10	MGT		BH10-W	20/11/96	160	160		17.3	9.8	1.1	3.5	0.31	0.82	0.27	0.39	0.34	0.18	0.13	0.082	<0.001	0.16	<0.001	0.043	0.081	22	57	31	4.2	114.2	14	4.2	0.42	2.9	21.52
BH11	WSL		BH11W	3/03/2005	31			8	7.6	0.3	0.021	0.052	0.058	0.015	0.007	0.006	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	30	51	9.7	<0.1	90.7	20	12	0.33	5.1	37.43
BH11	MGT		BH11W	19/03/2004	38	11	27	5.5	5	0.37	0.01	0.03	0.04	0.01	0.007	<0.0005	0.002	0.009	0.002	0.001	0.002	<0.0005	<0.0005	<0.0005	43	30	21	1.8	95.8	22	15	0.38	6.2	43.58
BH11	WSL		BH-11	18/03/2003	16			4.2	3.9	0.2	0.009	0.04	0.029	0.012	<0.003	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	12	23	5	0.2	40.2	12	9.7	0.26	3.9	25.86
BH11	WSL		BH-11	6/2/02	12	12		12	10	0.59	0.036	0.27	0.38	0.14	0.17	0.18	0.08	0.063	0.038	0.038	0.057	0.008	0.027	0.024	130	170	51	3.5	354.5	35	22	0.55	6.1	63.65
BH11	WSL		SA-BH11W	6/12/00	12	12		21	17	1.1	0.1	0.47	1	0.31	0.47	0.42	0.19	0.16	0.073	0.073	0.11	0.01	0.052	0.047	99	140	40	2.1	281.1	24	14	0.35	4.9	43.25
BH11	WSL		BH11W	3/2/00	26	26		11	10	0.44	0.02	0.069	0.06	0.058	0.005	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	33	84	19	<0.1	136	6.3	11	0.3	4.1	21.7
BH11	MGT		BH11W	11/2/99	18	18		3.8	3.7	<0.001	<0.001	<0.001	0.028	0.002	0.006	0.006	0.002	0.002	0.002	0.001	0.006	<0.001	0.002	0.002	65	39	4.9	<0.1	108.9	45	<0.1	0.44	7.3	52.74
BH11	WSL	Ext. Dup.	BH11W(B)	11/2/99	53	53		2.8	2.5	0.17	0.017	0.064	0.042	0.018	0.004	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	61	81	22	0.9	164.9	28	16	0.43	5.3	49.73
BH11	MGT		BH11-W	19/11/96	330	330		20.8	16	1	2.5	0.26	0.38	0.12	0.18	0.11	0.08	0.035	0.038	0.018	0.06	<0.001	0.005	0.035	80	110	39	5.8	234.8	49	19	0.49	7.8	76.29
BH11	MGT	Blind. Dup.	BH15-W	19/11/96	330	330		19.1	15	0.82	2	0.2	0.31	0.1	0.14	0.09	0.055	0.023	0.035	0.014	0.055	<0.001	<0.001	0.028	85	120	40	6	251	49	19	0.49	7.9	76.39
BH12	WSL		BH12W	3/03/2005	2.6			1.8	1.8	0.023	0.007	0.002	0.007	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	11	8.7	1.6	<0.1	21.3	8.9	0.57	0.77	2.6	12.84
BH12	MGT		BH12W	20/03/2004	0.98	0.22	0.76	0.55	0.53	0.007	0.003	<0.0005	0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	20	5	2.3	0.15	27.45	11	2.2	1.1	4.8	19.1
BH12	WSL		BH-12	18/03/2003	2.9			0.62	0.6	0.011	0.002	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	4.7	4.8	1.1	0.2	10.8	7.2	1.4	0.69	3.7	12.99
BH12	WSL		BH-12	6/2/02	0.32	0.32		0.47	0.46	0.006	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010	<0.001	<0.001	<0.001	12	5.6	1.4	<0.1	19	4.9	0.34	0.76	2.7	8.7
BH12	WSL		SA-BH12W	6/12/00	0.31	0.31		0.68	0.66	0.009	0.003	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	9.2	4.1	1	<0.1	14.3	2.6	0.11	<0.001	1.5	4.21
BH12	WSL		BH12W	3/2/00	2.7	2.7		0.84	0.83	0.003	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	6.1	5.9	0.7	<0.1	12.7	5.8	1.2	0.031	3.5	10.531
BH12	MGT		BH12W	11/2/99	0.46	0.46		0.04	0.023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	18	3.5	0.6	<0.1	22.1	11	1.1	0.98	5	18.08
BH12	MGT		BH12-W	20/11/96	10	10		<0.002	<0.0001	<0.0001	<0.0001	<0.0001	0.0009	0.0007	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	32	13	0.9	<0.1	45.9	19	2.7	1.1	5.4	28.2
BH12	WSL	Ext. Dup.	BH12-W (B)	20/11/96	5.3	5.3		0.6	0.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	8.7	8.1	1.3	<0.1	18.1	18	2.7	1.2	5.4	27.3
BH13	WSL		BH13W	1/03/2005	0.054			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	MGT		BH13W	18/03/2004	<0.0007	<0.0002	<0.0005	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	WSL		BH-13	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	WSL		BH-13	6/2/02	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0014	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	WSL		SA-BH13W	6/12/00	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	WSL		BH13W	3/2/00	0.005	0.005		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	MGT		BH13W	10/2/99	<0.01	<0.01		<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	MGT		BH13-W	19/11/96	<0.02	<0.02		<0.002	<0.0001	<0.0001	<0.0001	0.0002	0.0008	<0.0001	0.0003	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH14	WSL		BH14W	3/03/2005	0.05			0.02	0.012	0.001	0.006	0.004	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	2.6	0.8	0.3	<0.1	3.9	4.1	0.007	0.36	0.019	4.486
BH14	MGT		BH14W	20/03/2004	<0.0115	0.011	<0.0005	0.024	0.008	0.002	0.005	0.005	0.001	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	4.4	1.5	1	<0.1	6.9	3.7	0.012	0.3	0.02	4.032
BH14	WSL		BH14	18/03/2003	<0.001			0.14	0.11	0.005	0.008	0.007	0.006	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	2.1	1.5	0.6	<0.1	4.2	7.2	1.4	0.69	3.7	12.99
BH14	WSL		BH-14B	6/2/02	0.085	0.085		0.2	0.18	0.002	0.004	0.004	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	11	3.4	0.6	<0.1	15	2.7	0.1	0.49	0.69	3.98
BH14	MGT		BH-14	6/2/02	0.08	0.08			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	2.7	0.24	0.19	<0.1	3.13	2.9	0.11	0.52	0.99	4.52
BH14	WSL		.BH-24(int)	6/2/02	0.085	0.085		0.2	0.19	0.002	0.004	0.004	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	9.7	3.1	0.6	<0.1	13.4	2.7	0.11	0.46	0.9	4.17
BH14	WSL		SA-BH14W	6/12/00	0.018	0.018		0.03	0.017	0.001	0.004	0.003	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	0.8	0.4	0.2	<0.1	1.4	0.086	<0.001	<0.001	0.006	0.094
BH14	MGT	Ext. Dup.	SA-BH14W(B)	6/12/00	<0.01	<0.01		<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.12	0.21	0.13	<0.1	0.46	<0.001	<0.001	0.002	0.01	0.012
BH14	WSL		BH14W	3/2/00	0.063	0.063		0.02	0.002	0.002	0.005	0.003	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	0.7	0.6	<0.1	1.3	0.005	0.003	<0.001	0.009	0.017
BH14	MGT		BH14W	10/2/99	0.14	0.14		0.02	0.006	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	3.2	0.53	0.3	<0.1	4.03	2.6	0.01	0.32	0.085	3.015
BH14	MGT	Blind. Dup.	BH15W	10/2/99	0.07	0.07		0.02	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	3.7	0.45	0.11	<0.1	4.26	3	0.014	0.37	0.096	3.48
BH14	MGT		BH14-W	20/11/96	0.6	0.6		<0.0062	<0.0001	<0.0001	<0.0001	0.0018	0.0041	<0.0001	0.0003	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	24	3.5	<0.1	<0.1	27.5	12	1.2	8.1	3.1	24.4
BH15	WSL		BH15W	2/03/2005	0.027			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH15	MGT		BH15W	18/03/2004	<0.0003	<0.0001	<0.0002	<0.002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH15	WSL		BH-15	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH15	WSL		BH-15	6/2/02	0.011	0.011		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00010	<0.001	<0.001	<0.001	0.5	0.2	0.2	<0.1	0.9	0.36	<0.002	0.004	<0.002	0.364
BH15	WSL		SA-BH15W	6/12/00	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH15	WSL		BH15W	3/2/00	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH16	WSL		BH16W	2/03/2005	0.2			1.3	1.2	0.012	0.007	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	10	5.4	1.3	<0.1	16.7	11	0.12	0.92	1.1	13.14
BH16	MGT		BH16W	18/03/2004	<0.025	0.005	<0.02	0.16	0.14	0.01	0.005	0.001	0.001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	12	3.4	1.7	<0.1	17.1	10	0.12	0.88	1.1	12.1
BH16	WSL		BH16W	18/03/2003	0.071			0.48	0.46	0.012	0.004	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	14	5	1.7	<0.1	20.7	17	0.3	1.2	1.8	20.3
BH16	WSL		BH-16	6/2/02	0.56	0.56		<0.001	1.5	0.015	0.004	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010	<0.001	<0.001	39	15	3.5	<0.1	57.5	6.5	0.49	1	1.7	9.69
BH16	WSL		SA-BH16W	6/12/00	0.36	0.36		2.2	2.1	0.016	0.005	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	22	8.6	2.1	<0.1	32.7	4.8	0.044	<0.001	0.92	5.764
BH16	WSL		BH16W	3/2/00	1.2	1.2		0.95	0.94	0.007	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	1.5	4.8	1.3	<0.1	7.6	7.1	0.2	0.23	0.63	8.16
BH16	WSL	Blind. Dup.	BH20W	3/2/00	1.1	1.1		1.1	1.1	0.008	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	2.3	6.6	1.8	<0.1	10.7	7.3	0.18	0.048	0.66	8.188
BH17	WSL		BH17W	2/03/2005	0.027			<0.01	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH17	MGT		BH17W	18/03/2004	<0.0003	<0.0001	<0.0002	0.001	0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH17	WSL		BH17	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH17	WSL		BH-17	6/2/02	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00005	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH17	WSL		SA-BH17W	6/12/00	0.001	0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH17	WSL		BH17W	3/2/00	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH18	WSL		BH18W	2/03/2005	0.023			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH18	MGT		BH18W	19/03/2004	<0.0003	<0.0001	<0.0002	<0.002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH18	WSL		BH18	18/03/2003	0.34			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH18	WSL		BH-18	6/2/02	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH18	WSL		SA-BH18W	6/12/00	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH18	WSL		BH18W	3/2/00	0.004	0.004		<0.01	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.003	0.006	<0.001	0.006	0.015
BH19	WSL		BH19W	1/03/2005	0.023			<0.01	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.2	0.1	0.2	<0.1	0.5	<0.001	<0.001	<0.001	<0.001	<0.004
BH19	MGT		BH19W	19/03/2004	<0.003	<0.001	<0.002	7.8	7.8	<0.001	<0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.34	0.05	0.23	<0.1	0.62	0.34	<0.001	<0.001	<0.001	0.34
BH19	WSL		BH19	18/03/2003	<0.001			<0.01	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.6	0.2	0.2	<0.1	1	0.77	0.002	0.002	0.003	0.777
BH19	WSL		BH-19	6/2/02	0.026	0.026		<0.01	0.006	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	1.6	0.4	0.3	<0.1	2.3	0.87	0.003	0.006	0.006	0.885
BH19	WSL		SA-BH19W	6/12/00	0.03	0.03		0.01	0.009	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	<0.1	0.4	0.3	<0.1	0.7	0.35	<0.001	0.007	0.004	0.361
BH19	WSL		BH19W	3/2/00	0.068	0.068		0.02	0.016	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.1	0.9	0.3	<0.1	1.3	0.003	<0.001	0.013	0.018	0.034
BH19	MGT	Ext. Dup.	BH19W(B)	3/2/00	<0.1	<0.1		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	0.31	0.42	<0.1	0.73	<0.001	0.002	0.003	0.004	0.009
BH20	WSL		BH20W	2/03/2005	3.3			4.3	4.2	0.066	0.011	0.017	0.004	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	17	36	5	<0.1	56	12	4.9	0.39	2.7	19.99
BH20	WSL	Blind. Dup.	QA-1	2/03/2005	5.4			4.8	4.7	0.065	0.011	0.018	0.004	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	27	47	7.1	<0.1	81.1	13	5.2	0.44	2.9	21.54
BH20	MGT	Ext. Dup.	QA-2	2/03/2005	8.1			4.6	4.5	0.03	0.006	0.006	0.006	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	20	30	4.4	<0.1	54.4	12	4.6	0.41	2.6	19.61
BH20	MGT		BH20W	20/03/2004	6.45	0.25	6.2	2.1	2	0.05	<0.02	<0.005	0.003	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	21	30	4.7	0.18	55.88	13	5.2	0.28	2.5	20.98
BH20	WSL	Ext. Dup.	BH20(B)IN	20/03/2004		5		5.4	5.3	0.061	0.013	0.021	0.005	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	14	41	6.2	0.1	61.3	20	8.1	0.51	4.1	33.71
BH20	MGT	Blind. Dup.	BH9W	20/03/2004		0.33		2.4	2.3	0.03	<0.01	0.007	0.003	<0.005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	23	37	8.4	0.22	68.62	14	5.8	0.31	2.4	22.51
BH20	WSL		BH20W	18/03/2003	2.2			6.6	6.5	0.044	0.005	0.009	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	9.4	32	4.8	0.1	46.3	11	4.5	0.37	2.8	18.67
BH20	WSL		BH-20	6/2/02	0.15	0.15		3.4	3.3	0.036	0.008	0.015	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	42	62	9.5	0.1	113.6	15	6.6	0.57	3.3	25.47
BH20	WSL		SA-BH20W	6/12/00	1.2	1.2		1.4	1.3	0.034	0.012	0.011	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	19	30	4.4	<0.1	53.4	5.6	2.1	0.19	1	8.89
BH20	WSL	Blind. Dup.	SA-BH24W	6/12/00	1	1		1.4	1.3	0.034	0.01	0.009	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	20	31	4.6	<0.1	55.6	5.5	2.1	0.19	1	8.79
BH21	WSL		BH21W	2/03/2005	4.1			1.6	1.6	0.011	0.003	0.003	<0.001	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	17	32	2.5	<0.1	51.5	12	4.5	0.21	1.7	18.41
BH21	MGT		BH21W	20/03/2004	4.96	0.06	4.9	1	0.96	0.01	<0.01	<0.001	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	25	27	3.3	<0.1	55.3	16	6.3	0.25	2	24.55
BH21	WSL		BH21W	18/03/2003	14			2	2	0.014	0.004	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	10	40	4.8	0.2	55	15	6.3	0.23	2.1	23.63
BH21	WSL	Blind. Dup.	BH9W	18/03/2003	19			1.8	1.7	0.02	0.002	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	10	38	5	0.5	53.5	14	5.6	0.26	2.3	22.16
BH21	MGT	Ext. Dup.	BH21W(B)	18/03/2003	0.94			1.81	1.8	0.01	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	23	24	2.3	<0.1	49.3	15	5.8	0.27	2.3	23.37
BH21	WSL		BH-21	6/2/02	27	27		2.1	2.1	0.02	0.002	0.006	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	60	85	8.3	<0.1	153.3	22	9.2	0.4	3.1	34.7
BH21	WSL		SA-BH21W	6/12/00	<0.001	<0.001		0.05	0.049	<0.001	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	24	37	3.2	<0.1	64.2	6.2	2.1	0.1	0.74	9.14
BH22	WSL		BH22W	2/03/2005	0.24			0.57	0.56	0.005	0.003	0.001	<0.001	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	2.3	3.7	0.9	<0.1	6.9	0.89	0.2	0.072	0.18	1.342
BH22	MGT		BH22W	20/03/2004	0.839	0.009	0.83	0.19	0.16	0.01	0.004	0.003	0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	4.8	7.1	3.1	0.18	15.18	3.1	0.91	0.17	0.55	4.73
BH22	WSL		BH22W	18/03/2003	21			1.3	1.3	0.008	0.002	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.9	4.8	1.8	<0.1	7.5	2.8	0.81	0.13	0.55	4.09
BH22	WSL		SA-BH22W	6/2/02	0.87	0.87		1.1	1.1	0.013	0.003	0.005	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	20	22	3.6	<0.1	45.6	6.8	2.2	0.24	0.94	9.98
BH22	WSL		SA-BH22W	6/12/00	0.007	0.007		0.09	0.076	0.003	0.004	0.003	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	5.8	8.4	1.4	<0.1	15.6	0.75	0.19	0.013	0.17	1.123
BH23	WSL		BH23W	2/03/2005	0.037			0.02	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.6	0.3	0.2	<0.1	1.1	0.3	0.002	0.014	0.054	0.37
BH23	MGT		BH23W	19/03/2004		<0.0002	<0.0005	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.83	0.07	<0.1	<0.1	0.9	0.74	<0.001	0.03	0.06	0.83
BH23	WSL		BH-23	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.17	<0.002	<0.002	0.046	0.216
BH23			BH-23	6/2/02	0.055	0.055		<0.01	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0003	<0.001	<0.001	<0.001	0.2	0.4	0.5	0.2	1.3	<0.001	<0.001	<0.001	<0.001	<0.004
BH23	WSL		SA-BH23W	6/12/00	0.02	0.02		<0.01	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	0.2	0.1	<0.1	<0.1	0.3	0.002	<0.001	<0.001	0.004	0.006
BH24	WSL		BH24W	2/03/2005	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH24	MGT		BH24W	18/03/2004	<0.0007	<0.0002	<0.0005	<0.005	<0.001	<0.001	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.001
BH24	WSL		BH-24	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	0.001	0.001
BH25	WSL		BH25W	2/03/2005	0.003			0.11	0.1	<0.001	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.6	0.9	0.4	<0.1	1.9	0.3	<0.001	<0.001	0.048	0.348
BH25	MGT		BH25W	18/03/2004	<0.0012	<0.001	<0.0002	0.005	<0.001	<0.0002	0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.54	0.05	0.13	<0.1	0.72	0.54	<0.001	<0.001	<0.001	0.54
BH25	WSL		BH-25	18/03/2003	<0.001			0.07	0.071	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	0.5	0.2	<0.1	0.7	0.2	<0.001	<0.001	0.035	0.235
BH26	WSL		BH26W	2/03/2005	<0.001			<0.01	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.2	0.1	<0.1	<0.1	0.3	<0.001	<0.001	0.004	0.009	0.013
BH26	MGT		BH26W	18/03/2004	<0.0012	<0.001	<0.0002	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	<0.05	0.17	<0.1	0.17	<0.001	<0.001	<0.001	<0.001	<0.001
BH26	WSL		BH-26	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.056	<0.001	<0.001	0.003	0.059
BH27	WSL		BH27W	2/03/2005	0.028			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH27	MGT		BH27W	19/03/2004	<0.0012	<0.001	<0.0002	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	0.05	0.18	<0.1	0.23	<0.001	<0.001	<0.001	<0.001	<0.001
BH27	WSL		BH-27	18/03/2003	0.041			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.002	0.001	<0.001	<0.001	0.003
BH28	WSL		BH28W	2/03/2005	<0.001			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH28	MGT		BH28W	19/03/2004	<0.0012	<0.001	<0.0002	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	≤0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH28	WSL		BH-28	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH29	WSL		BH29W	2/03/2005	<0.001			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH29	MGT		BH29W	19/03/2004	<0.0012	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	<0.05	0.1	<0.1	0.1	<0.001	<0.001	<0.001	<0.001	<0.001
BH29	WSL		BH-29	18/03/2003	0.25			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.001	0.002	<0.001	<0.001	0.003
BH30	WSL		BH30W	1/03/2005	<0.001			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH30	MGT		BH30W	19/03/2004	<0.0012	<0.001	<0.0002	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.001
BH30	WSL		BH-30	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.001	<0.001	<0.001	<0.001	0.001
BH31	MGT		BH31W	18/03/2004	109.6	9.6	100	6.2	4.7	0.49	0.1	0.16	0.4	0.08	0.07	0.07	0.04	0.02	0.02	0.02	0.03	<0.002	0.009	0.01	41	170	28	0.38	239.38	23	12	0.31	5.7	41.01
BH32	WSL		BH32W	3/03/2005	79			6.6	6.3	0.19	0.02	0.046	0.044	0.011	0.004	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	55	87	11	<0.5	153	25	16	0.43	6.4	47.83
Sample Location	Lab	Sample Type	Sample Name	Sampling Date	Total Phenols	Phenol	Cresols	Total PAHs	Napthalene	Acenapthylene	Acenapthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo(a) anthracene	Chrysene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	B(a)P	Dibenzo(a,h)anthracene	Benzo(g,h,I) perylene	Indeno(1,2,3-c,d)pyrene	TPHs C6-C9	TPHs C10-C14	TPHs C15-C28	TPHs C29-C36	Total TPHs	Benzene	Toluene	Ethyl Benz.	Xylene	Total Vocs

PROTECTED BENEFICIAL USES at Sale Depot

GROUNDWATER QUALITY OBJECTIVES (mg/l) for Segment B

	Total Phenols	Phenol	Cresols	Total PAHs	Napthalene	Acenapthylene	Acenapthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo(a) anthracene	Chrysene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	B(a)P	Dibenzo(a,h)anthracene	Benzo(g,h,I) perylene	Indeno(1,2,3-c,d)pyrene	TPHs C6-C9	TPHs C10-C14	TPHs C15-C28	TPHs C29-C36	Total TPHs	Benzene	Toluene	Ethyl Benz.	Xylene	Total Vocs
Criteria for Ecosystem Protection	0.32	0.32	-	0.003	0.016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	-	-	-	-	0.95	0.3	-	0.2	-
Criteria for Agricult. Water Supply (Irrigation)[6]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	-	-	-	-	-	-	-	-	-
Criteria for Livestock	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00001	-	-	-	0.6	-	-	-	-	0.01	0.7	0.3	0.5	-
Criteria for Primary Contact Recreation	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00001	-	-	-	0.6	-	-	-	-	0.01	0.7	0.3	0.5	-
Adopted Screening Criteria (minimum value)	0.002	-	-	0.003	0.016	-	-	-	-	-	-	-	-	-	-	-	0.00001	-	-	-	0.6	-	-	-	-	0.01	0.3	0.3	0.2	0

NOTES:
1: Taken from Australian Drinking Water Guidelines (ADWG) (NHMRC & NRMMC 2004)
2. Based on Dutch Intervention Values (2000) for groundwater in lieu of ANZECC/NHMRC (1992) or ANZECC/ARMCANZ (2000) for TPH (C10-C36)
3 ANZECC guidelines recommend ADWG 1996
4: The most conservative value has been selected where several are available for a variety of livestock
5: Guidelines expressed as nitrate have been converted to nitrate-N as follows: 1mg/L nitrate-N =4.43mg/L nitrate
6: Depending on sensitivity of crop
7: Italics denotes MDL is less than adopted screening criteria

TABLE 3: SALE, SUMMARY OF GROUNDWATER ANALYSES in mg/l, (1996 - 2005) - FRESHWATER ECOSYSTEM BU

Sample Location	Lab	Sample Type	Sample Name	Sampling Date	Total Cyanide	N as NH3	Arsenic	Cadmium	Copper	Iron	Nickel	Lead	Zinc	TDS (Field)	TDS (Lab)	DO Field	DO Lab	Fe 2+	Fe 3+	Nitrate	Nitrite	Sulphate	BOD	COD	Mn	Methane	pH (lab)	pH (field)
BH10	WSL		BH10W	3/03/2005	0.25	300								2805		0.49		1.6		<0.01					2.1	1.9		7.5
BH10	MGT		BH10W	20/03/2004	0.27	350								2750		1.07		1.6		0.15			14		1.8	6.6		7.35
BH10	WSL		BH-10	18/03/2003	0.28	380								2266		0.17		4.5		0.03					1.3	3.6		7.53
BH10	WSL		BH-10	6/2/02	1.5	650								2893		0.8												7.36
BH10	WSL		SA-BH10W	6/12/00	0.08	300																					7.6	
BH10	WSL		BH10W	3/2/00	0.33	400																						
BH10	MGT		BH10W	10/2/99		380									1900							330					7.27	
BH10	MGT		BH10-W	20/11/96	<0.01	570																						
BH11	WSL		BH11W	3/03/2005	0.03	1.6								2350		1.36		0.24		0.13					0.64			7.5
BH11	MGT		BH11W	19/03/2004	0.059	330	0.007	<0.0002	0.003			<0.001	<0.001	2365		0.81		1.8		<0.02			27	380	8.8			7.46
BH11	WSL		BH-11	18/03/2003	0.03	220								1875.5		0.07		6.1		1.7			42	160	0.62			6.95
BH11	WSL		BH-11	6/2/02	0.18	410								2552	1600	0.22		2.6		0.58		820			0.47			7.37
BH11	WSL		SA-BH11W	6/12/00	0.16	250											<0.1	1.8	<0.05	<0.10		530			0.77		7.5	
BH11	WSL		BH11W	3/2/00	0.17	310																						
BH11	MGT		BH11W	11/2/99		300														0.18					<0.05			
BH11	WSL	Ext. Dup.	BH11W(B)	11/2/99		290																						
BH11	MGT		BH11-W	19/11/96	<0.01	610									2300													
BH11	MGT	Blind. Dup.	BH15-W	19/11/96	<0.01	620																						
BH12	WSL		BH12W	3/03/2005	0.22	140								1755		3.39		1.3		0.37				94	0.34	1.5		7.6
BH12	MGT		BH12W	20/03/2004	0.27	170								1750		3.02		0.58		0.07				110	0.28	13		7.55
BH12	WSL		BH-12	18/03/2003	0.11	69								1749		2.52		4.1		3.9			21	54	0.48	2.4		7.27
BH12	WSL		BH-12	6/2/02	0.5	150	<0.001	<0.001	<0.01	0.12	<0.01	<0.01	<0.01	1980	1400	4.01		2.1		1.1		13				0.6		7.33
BH12	WSL		SA-BH12W	6/12/00	0.18	120											0.9	9.6	<0.05	<0.10		10				0.2	7.7	
BH12	WSL		BH12W	3/2/00	0.17	180																						
BH12	MGT		BH12W	11/2/99		130												<0.1	0.33			5.8	90					
BH12	MGT		BH12-W	20/11/96	<0.01	140																						
BH12	WSL	Ext. Dup.	BH12-W (B)	20/11/96	0.9	300																						
BH13	WSL		BH13W	1/03/2005	<0.01	0.2								1680		2.72		<0.10		11				2	0.03	<0.01		7
BH13	MGT		BH13W	18/03/2004	0.02	0.02								1485		0.2		0.23		10			<0.0005	11	0.022	<0.5		6.86
BH13	WSL		BH-13	18/03/2003	0.02	<0.1								1666.5		7		<0.1		9.2		57	<2	5	0.02	<0.005		4.02
BH13	WSL		BH-13	6/2/02	0.02	<0.1	<0.001	<0.001	<0.01	<0.05	<0.01	<0.01	<0.01	1897	1600	0.53		0.25		11		59				<0.01		6.91
BH13	WSL		SA-BH13W	6/12/00	0.02	0.4											1.7	0.39	<0.05	9		62				<0.01	8.1	
BH13	WSL		BH13W	3/2/00	0.03	0.2																						
BH13	MGT		BH13W	10/2/99		<0.05									1800			<0.1	0.12				1				7.23	
BH13	MGT		BH13-W	19/11/96	<0.01	<0.02									1700													
BH14	WSL		BH14W	3/03/2005	0.13	97								1940		1.41		0.22		0.03				19	0.4	0.1		7.6
BH14	MGT		BH14W	20/03/2004	0.074	110	0.012	<0.0002	0.002			<0.001	<0.001	1870		0.52		0.39		0.05			<0.0005	25	0.4	0.2		7.55
BH14	WSL		BH14	18/03/2003	0.08	120								2024		0.19		0.8		0.02			9	33	0.29	3.3		7.64
BH14	WSL		BH-14B	6/2/02	0.11	120	0.012	<0.001	<0.01	0.19	<0.01	<0.01	<0.01	1980	1500	0.44		1.1		0.04		38				1.7		7.64
BH14	MGT		BH-14	6/2/02	<0.05	140	<0.002	<0.002	<0.005	0.25	<0.005	<0.005	<0.005															
BH14	WSL		BH-24(int)	6/2/02	0.11	110	<0.001	<0.001	<0.01	<0.05	<0.01	<0.01	<0.01															
BH14	WSL		SA-BH14W	6/12/00	0.05	110																					7.9	
BH14	MGT	Ext. Dup.	SA-BH14W(B)	6/12/00	0.09	120																					7.59	
BH14	WSL		BH14W	3/2/00	0.09	150																						
BH14	MGT		BH14W	10/2/99		160									1700					0.29					<0.05		7.67	
BH14	MGT	Blind. Dup.	BH15W	10/2/99		160																						
BH14	MGT		BH14-W	20/11/96	<0.01	170																						
BH15	WSL		BH15W	2/03/2005	<0.01	2.7								1905		3.21		0.84		3.1					0.36	<0.01		7.4
BH15	MGT		BH15W	18/03/2004	0.005	2.1								1815		2.14		0.82		5.6			<0.0002		0.4	<0.1		6.84
BH15	WSL		BH-15	18/03/2003	<0.01	4.1								1820.5		4.01		<0.1		3.9					0.41	0.011		6.91
BH15	WSL		BH-15	6/2/02	0.05	9.1								1650	1600	3.99		0.2		0.47		75				0.03		7
BH15	WSL		SA-BH15W	6/12/00	<0.01	2.2																					7.6	
BH15	WSL		BH15W	3/2/00	0.01	8.1												<0.2	0.1	1		110			<0.05			
BH16	WSL		BH16W	2/03/2005	0.24	160								2150		3.81		0.23		0.1				65	0.17	0.76		8
BH16	MGT		BH16W	18/03/2004	0.11	170								2035		4.21		0.36		0.02			<0.02	89	0.15	7.6		7.92
BH16	WSL		BH16W	18/03/2003	0.18	180								2167		18.74		1.3		0.02			55	100	0.18	0.58		7.16
BH16	WSL		BH-16	6/2/02	0.27	160	<0.001	<0.001	<0.01	0.23	<0.01	<0.01	<0.01	2183.5	1500	2.46		0.32		1.3		4				1.4		7.82
BH16	WSL		SA-BH16W	6/12/00	0.37	160											0.1	4.3	<0.05	<0.10		13				0.47	8	
BH16	WSL		BH16W	3/2/00	0.3	160												<0.2	0.4	<0.1		210				<0.05		
BH16	WSL	Blind. Dup.	BH20W	3/2/00	0.32	180												0.4	<0.1	<0.1		210				<0.05		
BH17	WSL		BH17W	2/03/2005	0.05	27								1630		2.01		0.54		0.37					0.15	0.05		7.5
BH17	MGT		BH17W	18/03/2004	0.009	32								1155		0.58		0.63		0.02			<0.0002		0.14	1.8		6.95
BH17	WSL		BH17	18/03/2003	<0.01	29								1666.5		4.94		10		<0.01					0.11	0.14		6.95
BH17	WSL		BH-17	6/2/02	0.01	27								1628	1500	3.5		1.8		0.08		33				0.14		
BH17	WSL		SA-BH17W	6/12/00	0.02	40																					7.5	
BH17	WSL		BH17W	3/2/00	0.02	68												0.2	<0.1	<0.1		47				<0.05		
BH18	WSL		BH18W	2/03/2005	<0.01	0.4								1060		2.34										0.01		6.7
BH18	MGT		BH18W	19/03/2004	0.006	0.24								935		0.41		4.2		<0.02			<0.0002		0.23	0.18		6.58
BH18	WSL		BH18	18/03/2003	<0.01	4.6								1078		19		12		<0.01					0.25	0.3		6.39
BH18	WSL		BH-18	6/2/02	<0.01	0.3	<0.001	<0.001	<0.01	5.4	<0.01	<0.01	<0.01	1045		0.55												6.39
BH18	WSL		SA-BH18W	6/12/00	0.01	1																					7.2	
BH18	WSL		BH18W	3/2/00	0.01	0.8												<0.2	0.4	<0.1		38				<0.05		
BH19	WSL		BH19W	1/03/2005	<0.01	0.2								2060		2.34		0.63		0.09					0.32	0.16		7.3
BH19	MGT		BH19W	19/03/2004	0.026	40								1925		0.69		1.3		<0.02			<0.002		0.33	9.5		7.08
BH19	WSL		BH19	18/03/2003	0.03	33								1980		0.56		4		<0.01		54			0.4	0.73		6.15
BH19	WSL		BH-19	6/2/02	0.05	32	<0.001	<0.001	<0.01	0.09	<0.01	<3.01	<0.01	1996.5														7.2
BH19	WSL		SA-BH19W	6/12/00	0.06	33																					7.6	
BH19	WSL		BH19W	3/2/00	0.11	49												<0.2	0.3	<0.1		85				0.75		
BH19	MGT	Ext. Dup.	BH19W(B)	3/2/00	0.09	46												<0.2	0.22	18		100						
BH20	WSL		BH20W	2/03/2005	0.15	460								3650		0.24		0.56		0.01					0.01	4.7		8.4
BH20	WSL	Blind. Dup.	QA-1	2/03/2005	0.13	380												0.58		<0.01					0.02			
BH20	MGT	Ext. Dup.	QA-2	2/03/2005	0.056	670				0.08								0.09		<0.02					0.009			
BH20	MGT		BH20W	20/03/2004	0.2	620								2915		0.41		0.77		<0.02			6.2		0.01	41		8.05
BH20	WSL	Ext. Dup.	BH20(B)N	20/03/2004	0.21	380	<0.001	<0.001	<0.01			<3.01	<0.01					<0.1		<0.01				690	0.02			
BH20	MGT	Blind. Dup.	BH9W	20/03/2004	0.17	600												0.98		0.25			5.1		0.009	21		
BH20	WSL		BH20W	18/03/2003	0.19	430								3586		0.06		3.7		0.03					0.03	15		8.08
BH20	WSL		BH-20	6/2/02	0.21	670								4026	1800	0.37		1.8		0.94		100				5.1		8.07
BH20	WSL		SA-BH20W	6/12/00	0.16	450																					8.2	
BH20	WSL	Blind. Dup.	SA-BH24W	6/12/00	0.19	470																					8.1	
BH21	WSL		BH21W	2/03/2005	0.27	390								3595		0.32		0.53		<0.01				1200	0.19	12		8.6
BH21	MGT		BH21W	20/03/2004	0.25	520	0.013	<0.0002		0.001		<0.001	<0.001	2640		0.73		1.1		<0.02			4.9	380	0.17	25		8.31
BH21	WSL		BH21W	18/03/2003	0.28	390								3432		0		3.2		<0.01		71	270	280	0.18	5.2		8.35
BH21	WSL	Blind. Dup.	BH9W	18/03/2003	0.63	390														4.5					0.2	12		
BH21	MGT	Ext. Dup.	BH21W(B)	18/03/2003	0.1	600												7		<0.05		23			0.16	13		
BH21	WSL		BH-21	6/2/02	0.32	950	0.012	<0.001	<0.01	0.36	<0.01	<3.01	<0.01	4351.5	1400	0.18		3.1		1.2		140				4.8		8.49
BH21	WSL		SA-BH21W	6/12/00	<0.01	650											<0.1	28	<0.05	<0.10		20				3.1	8.4	
BH22	WSL		BH22W	2/03/2005	<0.01	95								980		0.68		0.64		0.01					0.26	5.5		7.4
BH22	MGT		BH22W	20/03/2004	0.076	160								1045		5.04		0.77		<0.02			0.83		0.2	9.9		7.46
BH22	WSL		BH22W	18/03/2003	0.09	110								1006.5		0.16		0.9		<0.01					<0.01	3.3		7.58
BH22	WSL		SA-BH22W	6/2/02	0.08	210								2381.5		0.46		1.4		0.38		28				3		7.49
BH22	WSL		SA-BH22W	6/12/00	0.59	170											<0.1	5.3	<0.05	<0.10		31				2.2	7.6	
BH23	WSL		BH23W	2/03/2005	0.08	94								1685		3.05		1.3		<0.01					0.08	1		7.2
BH23	MGT		BH23W	19/03/2004	0.068	99								1595		1.98		0.82		<0.02			<0.0005		0.077	29		6.94
BH23	WSL		BH-23	18/03/2003	0.1	100								1710.5		14.23		13		<0.01					0.08	4.7		6.91
BH23			BH-23	6/2/02	0.11	49								646.3	870	6.6		3.3		0.05		3				<0.01		6.85
BH23	WSL		SA-BH23W	6/12/00	0.19	62											3.8	14	<0.05	<0.10		<1				0.94	7.3	
BH24	WSL		BH24W	2/03/2005	<0.01	22								1520		1.41		1.1		<0.01					0.08	0.02		7.1
BH24	MGT		BH24W	18/03/2004	0.01	34								1375		1.18		5.3		<0.02			<0.0005		0.064	<0.5		6.69
BH24	WSL		BH-24	18/03/2003	0.02	44								1375		1.74		1.2		<0.01		48			0.05	0.29		7.04
BH25	WSL		BH25W	2/03/2005	0.02	75								1980		1.51		0.67		0.01				4	0.04	3.3		7.4
BH25	MGT		BH25W	18/03/2004	0.035	79								1540		1.43		0.77		<0.02			<0.0002	17	0.036	0.76		7.07
BH25	WSL		BH-25	18/03/2003	0.02	74								1699.5		1.64		5.3		0.02		<1	81	170	0.04	1.4		7.11
BH26	WSL		BH26W	2/03/2005	<0.01	55								1680		2.01		1.9		0.01				<2	0.06	1.5		7.1
BH26	MGT		BH26W	18/03/2004	0.003	65								1540		2.04		150		<0.02			<0.0002	15	0.061	9.5		6.81
BH26	WSL		BH-26	18/03/2003	<0.01	61								1485		1.12		0.6		<0.01		2	3	17	0.07	1.4		5.83
BH27	WSL		BH27W	2/03/2005	<0.01	3.6								1685		1.82		2.1		0.01				44	0.29	1.8		7.6
BH27	MGT		BH27W	19/03/2004	<0.005	0.87								1650		2.74		1.2		<0.02			<0.0002	55	0.36	7.6		7.05
BH27	WSL		BH-27	18/03/2003	<0.01	0.8								1573		0.56		1.9		<0.01		20	5	33	<0.01	0.96		6.89
BH28	WSL		BH28W	2/03/2005	<0.01	0.5								1220		0.84		0.33		0.64					0.26	0.47		6.9
BH28	MGT		BH28W	19/03/2004	0.006	0.6								1210		0.34		0.43		<0.02			<0.0002		0.28	7.7		6.87
BH28	WSL		BH-28	18/03/2003	<0.01	<0.1								1320		0.22		7.3		0.01		15			0.34	0.56		6.82
BH29	WSL		BH29W	2/03/2005	<0.01	17								2680		3.01		1.7		<0.01				31	1.6	5.6		7
BH29	MGT		BH29W	19/03/2004	0.006	4.1												5		<0.02			<0.0002	23	1.5	29		
BH29	WSL		BH-29	18/03/2003	<0.01	7.7								4328.5		0.73		2.6		<0.01		130	<2	17	0.9	5.7		6.81
BH30	WSL		BH30W	1/03/2005	<0.01	1.5								1755		1.27		1.1		<0.01					0.34	0.08		7
BH30	MGT		BH30W	19/03/2004	0.003	1.8								1760		0.31		8.3		<0.02			<0.0002		0.26	4.4		6.52
BH30	WSL		BH-30	18/03/2003	0.01	1.3								1633.5		0.18		9.1		<0.01		45			0.31	0.18		6.75
BH31	MGT		BH31W	18/03/2004	0.12	570																						
BH32	WSL		BH32W	3/03/2005	0.09	530								3525		0.81										1.3		7.7

Sample Location	Lab	Sample Type	Sample Name	Sampling Date	Total Cyanide	N as NH3	Arsenic	Cadmium	Copper	Iron	Nickel	Lead	Zinc	TDS (Field)	TDS (Lab)	DO Field	DO Lab	Fe 2+	Fe 3+	Nitrate	Nitrite	Sulphate	BOD	COD	Mn	Methane	pH (lab)	pH Field

PROTECTED BENEFICIAL USES at Sale Depot	GROUNDWATER QUALITY OBJECTIVES (mg/l) for Segment B																										
Criteria for Ecosystem Protection	0.007	0.9	0.003	0.00015	0.0014	1	0.011	0.0034	-	-	-	110	110	-		0.16		-	-	-	-	-	-	6.5	6.5
Criteria for Agricult. Water Supply (Irrigation) *	-	-	0.1	0.01	0.2	1	0.2	0.2	-	-	-	-	-	-		-		-	-	-	0.01	-	-	-	-
Criteria for Livestock	0.07	0.1	0.5	0.01	0.5	1	1.0	0.1	-	5000	-	85	85	-		30		1000	-	-	0.01	-	-	-	-
Criteria for Primary Contact Recreation	0.1	0.1	0.05	0.005	1.0	0.3	0.1	0.05	-	1000	-	80	80	-		10		400	-	-	0.07	-	5-9	5-9
Adopted Screening Criteria (minimum value)	0.007	0.1	0.003	0.00015	0.0014	0.3	0.011	0.0034	-	1000	0	80	80	-		0.16		400	-	-	0.01	-	6.5	6.5

as sample at 2009 UNS Bec cyanide

TABLE 4: SALE SUMMARY OF GROUNDWATER ANALYSES in mg/l, (1996 - 2005) - AGRICULTURE, PARKS AND GARDENS BU

Sample Location	Lab	Sample Type	Sample Name	Sampling Date	Total Phenols	Phenol	Cresols	Total PAHs	Napth-alene	Acenap-thylene	Acena-pthene	Fluorene	Phenanthrene	Anthra-cene	Fluora-nthene	Pyrene	Benzo(a) anthracene	Chrysene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	B(a)P	Dibenzo(a,h)anthracene	Benzo(g,h,l) perylene	Indeno(1,2,3-c,d)pyrene	TPHs C6-C9	TPHs C10-C14	TPHs C15-C28	TPHs C29-C36	Total TPHs	Benzene	Toluene	Ethyl Benz.	Xylene	Total Vocs
BH10	WSL		BH10W	3/03/2005	36			3.9	3.6	0.15	0.012	0.031	0.031	0.004	0.003	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	14	31	5.4	<0.1	50.4	14	4.4	0.27	2.2	20.87
BH10	MGT		BH10W	20/03/2004	21.3	7.3	14	2	1.8	0.08	0.008	0.009	0.02	<0.005	0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	19	44	8.4	0.34	71.74	13	3.6	0.32	1.8	18.72
BH10	WSL		BH-10	18/03/2003	98			4	3.8	0.19	0.011	0.031	0.027	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	7.5	35	7.3	0.2	50	15	4.2	0.34	2.2	21.74
BH10	WSL		BH-10	6/2/02	31	31		3.4	3.2	0.14	0.011	0.044	0.034	0.007	0.004	0.004	<0.001	<0.001	<0.001	<0.001	0.0003	<0.001	<0.001	<0.001	34	54	11	0.2	99.2	18	4.8	0.28	2.3	25.38
BH10	WSL		SA-BH10W	6/12/00	11	11		4.7	4.4	0.22	0.012	0.031	0.033	0.006	0.004	0.003	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	5.5	27	5.6	<0.1	38.1	5.6	1.5	0.12	0.74	7.96
BH10	WSL		BH10W	3/2/00	62	62		4.3	4	0.19	0.014	0.045	0.046	0.011	0.006	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	11	57	8	<0.1	76	5.6	1.9	0.17	0.98	8.65
BH10	MGT		BH10W	10/2/99	15	15		2.7	2.6	<0.001	<0.001	<0.001	0.036	0.001	0.003	0.004	0.001	0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001	19	25	2	<0.1	46	12	3.6	0.3	2.3	18.2
BH10	MGT		BH10-W	20/11/96	160	160		17.3	9.8	1.1	3.5	0.31	0.82	0.27	0.39	0.34	0.18	0.13	0.082	<0.001	0.16	<0.001	0.043	0.081	22	57	31	4.2	114.2	14	4.2	0.42	2.9	21.52
BH11	WSL		BH11W	3/03/2005	31			8	7.6	0.3	0.021	0.052	0.058	0.015	0.007	0.006	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	30	51	9.7	<0.1	90.7	20	12	0.33	5.1	37.43
BH11	MGT		BH11W	19/03/2004	38	11	27	5.5	5	0.37	0.01	0.03	0.04	0.01	0.007	<0.0005	0.002	0.009	0.002	0.001	0.002	<0.0005	<0.0005	<0.0005	43	30	21	1.8	95.8	22	15	0.38	6.2	43.58
BH11	WSL		BH-11	18/03/2003	18			4.2	3.9	0.2	0.009	0.04	0.029	0.012	<0.003	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	12	23	5	0.2	40.2	12	9.7	0.26	3.9	25.86
BH11	WSL		BH-11	6/2/02	12	12		12	10	0.59	0.036	0.27	0.38	0.14	0.17	0.18	0.08	0.063	0.038	0.038	0.057	0.008	0.027	0.024	130	170	51	3.5	354.5	35	22	0.55	6.1	63.65
BH11	WSL		SA-BH11W	6/12/00	12	12		21	17	1.1	0.1	0.47	1	0.31	0.47	0.42	0.19	0.16	0.073	0.073	0.11	0.01	0.052	0.047	99	140	40	2.1	281.1	24	14	0.35	4.9	43.25
BH11	WSL		BH11W	3/2/00	26	26		11	10	0.44	0.02	0.069	0.06	0.058	0.005	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	33	84	19	<0.1	136	6.3	11	0.3	4.1	21.7
BH11	MGT		BH11W	11/2/99	18	18		3.8	3.7	<0.001	<0.001	<0.001	0.028	0.002	0.006	0.006	0.002	0.002	0.002	0.001	0.006	<0.001	0.002	0.002	65	39	4.9	<0.1	108.9	45	<0.1	0.44	7.3	52.74
BH11	WSL	Ext. Dup.	BH11W(B)	11/2/99	53	53		2.8	2.5	0.17	0.017	0.064	0.042	0.018	0.004	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	61	81	22	0.9	164.9	28	16	0.43	5.3	49.73
BH11	MGT		BH11-W	19/11/96	330	330		20.8	16	1	2.5	0.26	0.38	0.12	0.18	0.11	0.08	0.035	0.038	0.018	0.06	<0.001	0.005	0.035	80	110	39	5.8	234.8	49	19	0.49	7.8	76.29
BH11	MGT	Blind. Dup.	BH15-W	19/11/96	330	330		19.1	15	0.82	2	0.2	0.31	0.1	0.14	0.09	0.055	0.023	0.035	0.014	0.055	<0.001	<0.001	0.028	85	120	40	6	251	49	19	0.49	7.9	76.39
BH12	WSL		BH12W	3/03/2005	2.6			1.8	1.8	0.023	0.007	0.002	0.007	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	11	8.7	1.6	<0.1	21.3	8.9	0.57	0.77	2.6	12.84
BH12	MGT		BH12W	20/03/2004	0.98	0.22	0.76	0.55	0.53	0.007	0.003	<0.0005	0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	20	5	2.3	0.15	27.45	11	2.2	1.1	4.8	19.1
BH12	WSL		BH-12	18/03/2003	2.9			0.62	0.6	0.011	0.002	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	4.7	4.8	1.1	0.2	10.8	7.2	1.4	0.69	3.7	12.99
BH12	WSL		BH-12	6/2/02	0.32	0.32		0.47	0.46	0.006	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010	<0.001	<0.001	<0.001	12	5.6	1.4	<0.1	19	4.9	0.34	0.76	2.7	8.7
BH12	WSL		SA-BH12W	6/12/00	0.31	0.31		0.68	0.66	0.009	0.003	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	9.2	4.1	1	<0.1	14.3	2.6	0.11	<0.001	1.5	4.21
BH12	WSL		BH12W	3/2/00	2.7	2.7		0.84	0.83	0.003	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	6.1	5.9	0.7	<0.1	12.7	5.8	1.2	0.031	3.5	10.531
BH12	MGT		BH12W	11/2/99	0.46	0.46		0.04	0.023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	18	3.5	0.6	<0.1	22.1	11	1.1	0.98	5	18.08
BH12	MGT		BH12-W	20/11/96	10	10		<0.002	<0.0001	<0.0001	<0.0001	<0.0001	0.0009	0.0007	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	32	13	0.9	<0.1	45.9	19	2.7	1.1	5.4	28.2
BH12	WSL	Ext. Dup.	BH12-W (B)	20/11/96	5.3	5.3		0.6	0.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	8.7	8.1	1.3	<0.1	18.1	18	2.7	1.2	5.4	27.3
BH13	WSL		BH13W	1/03/2005	0.054			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	MGT		BH13W	18/03/2004	<0.0007	<0.0002	<0.0005	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	WSL		BH-13	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	WSL		BH-13	6/2/02	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0014	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	WSL		SA-BH13W	6/12/00	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	WSL		BH13W	3/2/00	0.005	0.005		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	MGT		BH13W	10/2/99	<0.01	<0.01		<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	MGT		BH13-W	19/11/96	<0.02	<0.02		<0.002	<0.0001	<0.0001	<0.0001	0.0002	0.0008	<0.0001	0.0003	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH14	WSL		BH14W	3/03/2005	0.05			0.02	0.012	0.001	0.006	0.004	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	2.8	0.8	0.3	<0.1	3.9	4.1	0.007	0.36	0.019	4.486
BH14	MGT		BH14W	20/03/2004	<0.0115	0.011	<0.0005	0.024	0.008	0.002	0.005	0.005	0.001	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	4.4	1.5	1	<0.1	6.9	3.7	0.012	0.3	0.02	4.032
BH14	WSL		BH14	18/03/2003	<0.001			0.14	0.11	0.005	0.008	0.007	0.006	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	2.1	1.5	0.6	<0.1	4.2	7.2	1.4	0.69	3.7	12.99
BH14	WSL		BH-14B	6/2/02	0.085	0.085		0.2	0.18	0.002	0.004	0.004	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	11	3.4	0.6	<0.1	15	2.7	0.1	0.49	0.69	3.98
BH14	MGT		BH-14	6/2/02	0.08	0.08			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	2.7	0.24	0.19	<0.1	3.13	2.9	0.11	0.52	0.99	4.52
BH14	WSL		BH-24(int)	6/2/02	0.085	0.085		0.2	0.19	0.002	0.004	0.004	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	9.7	3.1	0.6	<0.1	13.4	2.7	0.11	0.46	0.9	4.17
BH14	WSL		SA-BH14W	6/12/00	0.018	0.018		0.03	0.017	0.001	0.004	0.003	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	0.8	0.4	0.2	<0.1	1.4	0.088	<0.001	<0.001	0.006	0.094
BH14	MGT	Ext. Dup.	SA-BH14W(B)	6/12/00	<0.01	<0.01		<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.12	0.21	0.13	<0.1	0.46	<0.001	<0.001	0.002	0.01	0.012
BH14	WSL		BH14W	3/2/00	0.063	0.063		0.02	0.002	0.002	0.005	0.003	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	0.7	0.6	<0.1	1.3	0.005	0.003	<0.001	0.009	0.017
BH14	MGT		BH14W	10/2/99	0.14	0.14		0.02	0.006	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	3.2	0.53	0.3	<0.1	4.03	2.6	0.01	0.32	0.085	3.015
BH14	MGT	Blind. Dup.	BH15W	10/2/99	0.07	0.07		0.02	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	3.7	0.45	0.11	<0.1	4.26	3	0.014	0.37	0.096	3.48
BH14	MGT		BH14-W	20/11/96	0.6	0.6		<0.0062	<0.0001	<0.0001	<0.0001	0.0018	0.0041	<0.0001	0.0003	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	24	3.5	<0.1	<0.1	27.5	12	1.2	8.1	3.1	24.4
BH15	WSL		BH15W	2/03/2005	0.027			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH15	MGT		BH15W	18/03/2004	<0.0003	<0.0001	<0.0002	<0.002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH15	WSL		BH-15	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH15	WSL		BH-15	6/2/02	0.011	0.011		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00010	<0.001	<0.001	<0.001	0.5	0.2	0.2	<0.1	0.9	0.36	<0.002	0.004	<0.002	0.364
BH15	WSL		SA-BH15W	6/12/00	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH15	WSL		BH15W	3/2/00	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH16	WSL		BH16W	2/03/2005	0.2			1.3	1.2	0.012	0.007	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	10	5.4	1.3	<0.1	16.7	11	0.12	0.92	1.1	13.14
BH16	MGT		BH16W	18/03/2004	<0.025	0.005	<0.02	0.16	0.14	0.01	0.005	0.001	0.001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	12	3.4	1.7	<0.1	17.1	10	0.12	0.88	1.1	12.1
BH16	WSL		BH16W	18/03/2003	0.071			0.48	0.46	0.012	0.004	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	14	5	1.7	<0.1	20.7	17	0.3	1.2	1.8	20.3
BH16	WSL		BH-16	6/2/02	0.56	0.56		<0.001	1.5	0.015	0.004	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010	<0.001	<0.001	39	15	3.5	<0.1	57.5	6.5	0.49	1	1.7	9.69
BH16	WSL		SA-BH16W	6/12/00	0.36	0.36		2.2	2.1	0.016	0.005	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	22	8.6	2.1	<0.1	32.7	4.8	0.044	<0.001	0.92	5.764
BH16	WSL		BH16W	3/2/00	1.2	1.2		0.95	0.94	0.007	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	1.5	4.8	1.3	<0.1	7.6	7.1	0.2	0.23	0.63	8.16
BH16	WSL	Blind. Dup.	BH20W	3/2/00	1.1	1.1		1.1	1.1	0.008	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	2.3	6.6	1.8	<0.1	10.7	7.3	0.18	0.048	0.66	8.188
BH17	WSL		BH17W	2/03/2005	0.027			<0.01	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH17	MGT		BH17W	18/03/2004	<0.0003	<0.0001	<0.0002	0.001	0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH17	WSL		BH17	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH17	WSL		BH-17	6/2/02	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00005	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH17	WSL		SA-BH17W	6/12/00	0.001	0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH17	WSL		BH17W	3/2/00	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.002	<0.001	<0.001	0.003	0.005
BH18	WSL		BH18W	2/03/2005	0.023			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH18	MGT		BH18W	19/03/2004	<0.0003	<0.0001	<0.0002	<0.002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH18	WSL		BH18	18/03/2003	0.34			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH18	WSL		BH-18	6/2/02	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH18	WSL		SA-BH18W	6/12/00	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH18	WSL		BH18W	3/2/00	0.004	0.004		<0.01	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.003	0.006	<0.001	0.006	0.015
BH19	WSL		BH19W	1/03/2005	0.023			<0.01	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.2	0.1	0.2	<0.1	0.5	<0.001	<0.001	<0.001	<0.001	<0.004
BH19	MGT		BH19W	19/03/2004	<0.003	<0.001	<0.002	7.8	7.8	<0.001	<0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.34	0.05	0.23	<0.1	0.62	0.34	<0.001	<0.001	<0.001	0.34
BH19	WSL		BH19	18/03/2003	<0.001			<0.01	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.6	0.2	0.2	<0.1	1	0.77	0.002	0.002	0.003	0.777
BH19	WSL		BH-19	6/2/02	0.026	0.026		<0.01	0.006	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	1.6	0.4	0.3	<0.1	2.3	0.87	0.003	0.006	0.006	0.885
BH19	WSL		SA-BH19W	6/12/00	0.03	0.03		0.01	0.009	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	<0.1	0.4	0.3	<0.1	0.7	0.35	<0.001	0.007	0.004	0.361
BH19	WSL		BH19W	3/2/00	0.068	0.068		0.02	0.016	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.1	0.9	0.3	<0.1	1.3	0.003	<0.001	0.013	0.018	0.034
BH19	MGT	Ext. Dup.	BH19W(B)	3/2/00	<0.1	<0.1		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	0.31	0.42	<0.1	0.73	<0.001	0.002	0.003	0.004	0.009
BH20	WSL		BH20W	2/03/2005	3.3			4.3	4.2	0.066	0.011	0.017	0.004	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	17	36	5	<0.1	58	12	4.9	0.39	2.7	19.99
BH20	WSL	Blind. Dup.	QA-1	2/03/2005	5.4			4.8	4.7	0.065	0.011	0.018	0.004	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	27	47	7.1	<0.1	81.1	13	5.2	0.44	2.9	21.54
BH20	MGT	Ext. Dup.	QA-2	2/03/2005	8.1			4.6	4.5	0.03	0.006	0.006	0.006	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	20	30	4.4	<0.1	54.4	12	4.6	0.41	2.6	19.61
BH20	MGT		BH20W	20/03/2004	6.45	0.25	6.2	2.1	2	0.05	<0.02	<0.005	0.003	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	21	30	4.7	0.18	55.88	13	5.2	0.28	2.5	20.98
BH20	WSL	Ext. Dup.	BH20(B)IN	20/03/2004		5		5.4	5.3	0.061	0.013	0.021	0.005	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	14	41	6.2	0.1	61.3	20	9.1	0.51	4.1	33.71
BH20	MGT	Blind. Dup.	BH9W	20/03/2004		0.33		2.4	2.3	0.03	<0.01	0.007	0.003	<0.005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	23	37	8.4	0.22	68.62	14	5.8	0.31	2.4	22.51
BH20	WSL		BH20W	18/03/2003	2.2			6.6	6.5	0.044	0.005	0.009	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	9.4	32	4.8	0.1	46.3	11	4.5	0.37	2.8	18.67
BH20	WSL		BH-20	6/2/02	0.15	0.15		3.4	3.3	0.036	0.008	0.015	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	42	62	9.5	0.1	113.6	15	6.6	0.57	3.3	25.47
BH20	WSL		SA-BH20W	6/12/00	1.2	1.2		1.4	1.3	0.034	0.012	0.011	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	19	30	4.4	<0.1	53.4	5.6	2.1	0.19	1	8.89
BH20	WSL	Blind. Dup.	SA-BH24W	6/12/00	1	1		1.4	1.3	0.034	0.01	0.009	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	20	31	4.6	<0.1	55.6	5.5	2.1	0.19	1	8.79
BH21	WSL		BH21W	2/03/2005	4.1			1.6	1.6	0.011	0.003	0.003	<0.001	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	17	32	2.5	<0.1	51.5	12	4.5	0.21	1.7	18.41
BH21	MGT		BH21W	20/03/2004	4.96	0.06	4.9	1	0.96	0.01	<0.01	<0.001	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	25	27	3.3	<0.1	55.3	16	6.3	0.25	2	24.55
BH21	WSL		BH21W	18/03/2003	14			2	2	0.014	0.004	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	10	40	4.8	0.2	55	15	6.3	0.23	2.1	23.63
BH21	WSL	Blind. Dup.	BH9W	18/03/2003	19			1.8	1.7	0.02	0.002	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	10	38	5	0.5	53.5	14	5.6	0.26	2.3	22.16
BH21	MGT	Ext. Dup.	BH21W(B)	18/03/2003	0.94			1.81	1.8	0.01	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	23	24	2.3	<0.1	49.3	15	5.8	0.27	2.3	23.37
BH21	WSL		BH-21	6/2/02	27	27		2.1	2.1	0.02	0.002	0.006	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	60	85	8.3	<0.1	153.3	22	9.2	0.4	3.1	34.7
BH21	WSL		SA-BH21W	6/12/00	<0.001	<0.001		0.05	0.049	<0.001	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	24	37	3.2	<0.1	64.2	6.2	2.1	0.1	0.74	9.14
BH22	WSL		BH22W	2/03/2005	0.24			0.57	0.56	0.005	0.003	0.001	<0.001	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	2.3	3.7	0.9	<0.1	6.9	0.89	0.2	0.072	0.18	1.342
BH22	MGT		BH22W	20/03/2004	0.839	0.009	0.83	0.19	0.16	0.01	0.004	0.003	0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	4.8	7.1	3.1	0.18	15.18	3.1	0.91	0.17	0.55	4.73
BH22	WSL		BH22W	18/03/2003	21			1.3	1.3	0.008	0.002	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.9	4.8	1.8	<0.1	7.5	2.6	0.81	0.13	0.55	4.09
BH22	WSL		SA-BH22W	6/2/02	0.87	0.87		1.1	1.1	0.013	0.003	0.005	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	20	22	3.6	<0.1	45.6	6.6	2.2	0.24	0.94	9.98
BH22	WSL		SA-BH22W	6/12/00	0.007	0.007		0.09	0.076	0.003	0.004	0.003	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	5.8	8.4	1.4	<0.1	15.6	0.75	0.19	0.013	0.17	1.123
BH23	WSL		BH23W	2/03/2005	0.037			0.02	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.6	0.3	0.2	<0.1	1.1	0.3	0.002	0.014	0.054	0.37
BH23	MGT		BH23W	19/03/2004		<0.0002	<0.0005	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.83	0.07	<0.1	<0.1	0.9	0.74	<0.001	0.03	0.06	0.83
BH23	WSL		BH-23	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.17	<0.002	<0.002	0.046	0.216
BH23			BH-23	6/2/02	0.055	0.055		<0.01	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0003	<0.001	<0.001	<0.001	0.2	0.4	0.5	0.2	1.3	<0.001	<0.001	<0.001	<0.001	<0.004
BH23	WSL		SA-BH23W	6/12/00	0.02	0.02		<0.01	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	0.2	0.1	<0.1	<0.1	0.3	0.002	<0.001	<0.001	0.004	0.006
BH24	WSL		BH24W	2/03/2005	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH24	MGT		BH24W	18/03/2004	<0.0007	<0.0002	<0.0005	<0.005	<0.001	<0.001	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.001
BH24	WSL		BH-24	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	0.001	0.001
BH25	WSL		BH25W	2/03/2005	0.003			0.11	0.1	<0.001	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.6	0.9	0.4	<0.1	1.9	0.3	<0.001	<0.001	0.048	0.348
BH25	MGT		BH25W	18/03/2004	<0.0012	<0.001	<0.0002	0.005	<0.001	<0.0002	0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.54	0.05	0.13	<0.1	0.72	0.54	<0.001	<0.001	<0.001	0.54
BH25	WSL		BH-25	18/03/2003	<0.001			0.07	0.071	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	0.5	0.2	<0.1	0.7	0.2	<0.001	<0.001	0.035	0.235
BH26	WSL		BH26W	2/03/2005	<0.001			<0.01	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.2	0.1	<0.1	<0.1	0.3	<0.001	<0.001	0.004	0.009	0.013
BH26	MGT		BH26W	18/03/2004	<0.0012	<0.001	<0.0002	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	<0.05	0.17	<0.1	0.17	<0.001	<0.001	<0.001	<0.001	<0.001
BH26	WSL		BH-26	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.056	<0.001	<0.001	0.003	0.059
BH27	WSL		BH27W	2/03/2005	0.028			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH27	MGT		BH27W	19/03/2004	<0.0012	<0.001	<0.0002	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	0.05	0.18	<0.1	0.23	<0.001	<0.001	<0.001	<0.001	<0.001
BH27	WSL		BH-27	18/03/2003	0.041			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.002	0.001	<0.001	<0.001	0.003
BH28	WSL		BH28W	2/03/2005	<0.001			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH28	MGT		BH28W	19/03/2004	<0.0012	<0.001	<0.0002	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH28	WSL		BH-28	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH29	WSL		BH29W	2/03/2005	<0.001			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH29	MGT		BH29W	19/03/2004	<0.0012	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	<0.05	0.1	<0.1	0.1	<0.001	<0.001	<0.001	<0.001	<0.001
BH29	WSL		BH-29	18/03/2003	0.25			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.001	0.002	<0.001	<0.001	0.003
BH30	WSL		BH30W	1/03/2005	<0.001			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH30	MGT		BH30W	19/03/2004	<0.0012	<0.001	<0.0002	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.001
BH30	WSL		BH-30	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.001	<0.001	<0.001	<0.001	0.001
BH31	MGT		BH31W	18/03/2004	109.6	9.6	100	6.2	4.7	0.49	0.1	0.16	0.4	0.08	0.07	0.07	0.04	0.02	0.02	0.02	0.03	<0.002	0.009	0.01	41	170	28	0.38	239.38	23	12	0.31	5.7	41.01
BH32	WSL		BH32W	3/03/2005	79			6.6	6.3	0.19	0.02	0.046	0.044	0.011	0.004	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	55	87	11	<0.5	153	25	16	0.43	6.4	47.83
Sample Location	Lab	Sample Type	Sample Name	Sampling Date	Total Phenols	Phenol	Cresols	Total PAHs	Napth-alene	Acenap-thylene	Acena-pthene	Fluorene	Phenanthrene	Anthra-cene	Fluora-nthene	Pyrene	Benzo(a) anthracene	Chrysene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	B(a)P	Dibenzo(a,h)anthracene	Benzo(g,h,l) perylene	Indeno(1,2,3-c,d)pyrene	TPHs C6-C9	TPHs C10-C14	TPHs C15-C28	TPHs C29-C36	Total TPHs	Benzene	Toluene	Ethyl Benz.	Xylene	Total Vocs

PROTECTED BENEFICIAL USES at Sale Depot

GROUNDWATER QUALITY OBJECTIVES (mg/l) for Segment B

Criteria	Total Phenols	Phenol	Cresols	Total PAHs	Napth-alene	Acenap-thylene	Acena-pthene	Fluorene	Phenanthrene	Anthra-cene	Fluora-nthene	Pyrene	Benzo(a) anthracene	Chrysene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	B(a)P	Dibenzo(a,h)anthracene	Benzo(g,h,l) perylene	Indeno(1,2,3-c,d)pyrene	TPHs C6-C9	TPHs C10-C14	TPHs C15-C28	TPHs C29-C36	Total TPHs	Benzene	Toluene	Ethyl Benz.	Xylene	Total Vocs
Criteria for Ecosystem Protection	0.32	0.32	-	0.003	0.016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	-	-	-	-	0.95	0.3	-	0.2	-
Criteria for Agricult. Water Supply (Irrigation) [6]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	-	-	-	-	-	-	-	-	-
Criteria for Livestock	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00001	-	-	-	0.6	-	-	-	-	0.01	0.7	0.3	0.5	
Criteria for Primary Contact Recreation	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00001	-	-	-	0.6	-	-	-	-	0.01	0.7	0.3	0.5	-
Adopted Screening Criteria (minimum value)	0.002	-	-	0.003	0.016	-	-	-	-	-	-	-	-	-	-	-	0.00001	-	-	-	0.6	-	-	-	-	0.01	0.3	0.3	0.2	0

NOTES:
1: Taken from Australian Drinking Water Guidelines (ADWG) (NHMRC & NRMMC 2004)
2: Based on Dutch Intervention Values (2000) for groundwater in lieu of ANZECC/NHMRC (1992) or ANZECC/ARMCANZ (2000) for TPH (C10-C36)
3: ANZECC guidelines recommend ADWG 1996
4: The most conservative value has been selected where several are available for a variety of livestock
5: Guidelines expressed as nitrate have been converted to nitrate-N as follows: 1mg/L nitrate-N =4.43mg/L nitrate
6: Depending on sensitivity of crop
7: Italics denotes MDL is less than adopted screening criteria

TABLE 4: SALE SUMMARY OF GROUNDWATER ANALYSES in mg/l, (1996 - 2005) - AGRICULTURE, PARKS AND GARDEN

Sample Location	Lab	Sample Type	Sample Name	Sampling Date	Total Cyanide	N as NH3	Arsenic	Cadmium	Copper	Iron	Nickel	Lead	Zinc	TDS (Field)	TDS (Lab)	DO Field	DO Lab	Fe 2+	Fe 3+	Nitrate	Nitrite	Sulphate	BOD	COD	Mn	Methane	pH (lab)	pH (field)
BH10	WSL		BH10W	3/03/2005	0.25	390								2605		0.49		1.6		<0.01					2.1	1.9		7.5
BH10	MGT		BH10W	20/03/2004	0.27	350								2750		1.07		1.6		0.15			14		1.8	6.6		7.35
BH10	WSL		BH-10	18/03/2003	0.28	380								2266		0.17		4.5		0.03					1.3	3.6		7.53
BH10	WSL		BH-10	6/2/02	1.5	650								2893		0.8											7.6	7.36
BH10	WSL		SA-BH10W	6/12/00	0.08	300																						
BH10	WSL		BH10W	3/2/00	0.33	400																330				7.27		
BH10	MGT		BH10W	10/2/99		380									1900													
BH10	MGT		BH10-W	20/11/96	<0.01	570																						
BH11	WSL		BH11W	3/03/2005	0.08	1.6								2350		1.36		0.24		0.13				200	5.4	0.64		7.5
BH11	MGT		BH11W	19/03/2004	0.059	330	0.007	<0.0002	0.003			<0.001	<0.001	2365		0.81		1.8		<0.02			27	380	7.3	8.8		7.46
BH11	WSL		BH-11	18/03/2003	0.03	220								1875.5		0.07		6.1		1.7			42	160	8.1	0.62		6.95
BH11	WSL		BH-11	6/2/02	0.18	410								2552	1600	0.22		2.6		0.58		820				0.47		7.37
BH11	WSL		SA-BH11W	6/12/00	0.16	250											<0.1	1.8	<0.05	<0.10		530				0.77	7.5	
BH11	WSL		BH11W	3/2/00	0.17	310														0.18						<0.05		
BH11	MGT		BH11W	11/2/99		300																						
BH11	WSL	Ext. Dup.	BH11W(B)	11/2/99		290									2300													
BH11	MGT		BH11-W	19/11/96	<0.01	610																						
BH11	MGT	Blind. Dup.	BH15-W	19/11/96	<0.01	620																						
BH12	WSL		BH12W	3/03/2005	0.22	140								1755		3.39		1.3		0.37				94	0.34	1.5		7.6
BH12	MGT		BH12W	20/03/2004	0.27	170								1760		3.02		0.58		0.07				110	0.28	13		7.55
BH12	WSL		BH-12	18/03/2003	0.11	69								1749		2.52		4.1		3.9			21	54	0.48	2.4		7.27
BH12	WSL		BH-12	6/2/02	0.5	150	<0.001	<0.001	<0.01	0.12	<0.01	<0.01	<0.01	1980	1400	4.01		2.1		1.1		13				0.6		7.33
BH12	WSL		SA-BH12W	6/12/00	0.18	120											0.9	9.6	<0.05	<0.10		10				0.2	7.7	
BH12	WSL		BH12W	3/2/00	0.17	180												<0.1	0.33			5.8	90					
BH12	MGT		BH12W	11/2/99		130																						
BH12	MGT		BH12-W	20/11/96	<0.01	140																						
BH12	WSL	Ext. Dup.	BH12-W (B)	20/11/96	0.9	300																						
BH13	WSL		BH13W	1/03/2005	<0.01	0.2								1680		2.72		<0.10		11				2	0.03	<0.01		7
BH13	MGT		BH13W	18/03/2004	0.02	0.02								1485		0.2		0.23		10			<0.0005	11	0.022	<0.5		6.86
BH13	WSL		BH-13	18/03/2003	0.02	<0.1								1666.5		7		<0.1		9.2		57	<2	5	0.02	<0.005		4.62
BH13	WSL		BH-13	6/2/02	0.02	<0.1	<0.001	<0.001	<0.01	<0.05	<0.01	<0.01	<0.01	1897	1600	0.53		0.25		11		59				<0.01		6.91
BH13	WSL		SA-BH13W	6/12/00	0.02	0.4											1.7	0.39	<0.05	9		62				<0.01	8.1	
BH13	WSL		BH13W	3/2/00	0.03	0.2																						
BH13	MGT		BH13W	10/2/99		<0.05									1800			<0.1	0.12				1				7.23	
BH13	MGT		BH13-W	19/11/96	<0.01	<0.02									1700													
BH14	WSL		BH14W	3/03/2005	0.13	97								1940		1.41		0.22		0.03				19	0.4	0.1		7.6
BH14	MGT		BH14W	20/03/2004	0.074	110	0.012	<0.0002	0.002			<0.001	<0.001	1870		0.52		0.39		0.05			<0.0005	25	0.4	9.2		7.55
BH14	WSL		BH14	18/03/2003	0.08	120								2024		0.19		0.8		0.02			9	33	0.29	3.3		7.64
BH14	WSL		BH-14B	6/2/02	0.11	120	0.012	<0.001	<0.01	0.19	<0.01	<0.01	<0.01	1980	1500	0.44		1.1		0.04		38				1.7		7.64
BH14	MGT		BH-14	6/2/02	<0.05	140	<0.002	<0.002	<0.005	0.25	<0.005	<0.005	<0.005														7.9	
BH14	WSL		BH-24(ext)	6/2/02	0.11	110	<0.001	<0.001	<0.01	<0.05	<0.01	<0.01	<0.01														7.59	
BH14	WSL		SA-BH14W	6/12/00	0.05	110																						
BH14	MGT	Ext. Dup.	SA-BH14W(B)	6/12/00	0.09	120																						
BH14	WSL		BH14W	3/2/00	0.09	150									1700					0.29						<0.05	7.67	
BH14	MGT		BH14W	10/2/99		160																						
BH14	MGT	Blind. Dup.	BH15W	10/2/99		160																						
BH14	MGT		BH14-W	20/11/96	<0.01	170																						
BH15	WSL		BH15W	2/03/2005	<0.01	2.7								1905		3.21		0.84		3.1					0.36	<0.01		7.4
BH15	MGT		BH15W	18/03/2004	0.005	2.1								1815		2.14		0.82		5.6			<0.0002		0.4	<0.1		6.84
BH15	WSL		BH-15	18/03/2003	<0.01	4.1								1820.5		4.01		<0.1		3.9					0.41	0.011		6.91
BH15	WSL		BH-15	6/2/02	0.05	9.1								1650	1600	3.99		0.2		0.47		75				0.03		7
BH15	WSL		SA-BH15W	6/12/00	<0.01	2.2												<0.2	0.1	1		110				<0.05	7.6	
BH15	WSL		BH15W	3/2/00	0.01	8.1																						
BH16	WSL		BH16W	2/03/2005	0.24	160								2150		3.81		0.23		0.1				65	0.17	0.76		8
BH16	MGT		BH16W	18/03/2004	0.11	170								2035		4.21		0.36		0.02			<0.02	89	0.15	7.6		7.92
BH16	WSL		BH16W	18/03/2003	0.16	180								2167		18.74		1.3		0.02			55	100	0.18	0.58		7.16
BH16	WSL		BH-16	6/2/02	0.27	160	<0.001	<0.001	<0.01	0.23	<0.01	<0.01	<0.01	2183.5	1500	2.46		0.32		1.3		4				1.4		7.82
BH16	WSL		SA-BH16W	6/12/00	0.37	160											0.1	4.3	<0.05	<0.10		13				0.47	8	
BH16	WSL		BH16W	3/2/00	0.3	180												<0.2	0.4	<0.1		210				<0.05		
BH16	WSL	Blind. Dup.	BH20W	3/2/00	0.32	180												0.4	<0.1	<0.1		210				<0.05		
BH17	WSL		BH17W	2/03/2005	0.05	27								1630		2.01		0.54		0.37					0.15	0.05		7.5
BH17	MGT		BH17W	18/03/2004	0.009	32								1155		0.58		0.63		0.02			<0.0002		0.14	1.8		6.65
BH17	WSL		BH17	18/03/2003	<0.01	29								1666.5		4.94		10		<0.01					0.11	0.14		6.95
BH17	WSL		BH-17	6/2/02	0.01	27								1628	1500	3.5		1.8		0.08		33				0.14		
BH17	WSL		SA-BH17W	6/12/00	0.02	40																					7.5	
BH17	WSL		BH17W	3/2/00	0.02	68												0.2	<0.1	<0.1		47				<0.05		
BH18	WSL		BH18W	2/03/2005	<0.01	0.4								1060		2.34		0.63		0.09					0.32	0.16		7.3
BH18	MGT		BH18W	19/03/2004	0.006	0.24								935		0.41		1.3		<0.02			<0.002		0.33	9.5		7.08
BH18	WSL		BH18	18/03/2003	<0.01	4.6								1978		19		4		<0.01		54			0.4	0.73		6.16
BH18	WSL		BH-18	6/2/02	<0.01	0.3	<0.001	<0.001	<0.01	5.4	<0.01	<0.01	<0.01	1045		0.55											7.6	7.2
BH18	WSL		SA-BH18W	6/12/00	0.01	1												<0.2	0.4	<0.1		38				<0.05		
BH18	WSL		BH18W	3/2/00	0.01	0.8																						
BH19	WSL		BH19W	1/03/2005	<0.01	0.2								2060		2.34		0.53		0.09					0.32	0.16		7.3
BH19	MGT		BH19W	19/03/2004	0.026	40								1925		0.69		1.3		<0.02			<0.002		0.33	9.5		7.08
BH19	WSL		BH19	18/03/2003	0.03	33								1980		0.56		4		<0.01		54			0.4	0.73		6.16
BH19	WSL		BH-19	6/2/02	0.05	32	<0.001	<0.001	<0.01	0.09	<0.01	<0.01	<0.01	1996.5													7.6	7.2
BH19	WSL		SA-BH19W	6/12/00	0.06	33																						
BH19	WSL		BH19W	3/2/00	0.11	49												<0.2	0.3	<0.1		85				0.75		
BH19	MGT	Ext. Dup.	BH19W(B)	3/2/00	0.09	46												<0.2	0.22	18		100						
BH20	WSL		BH20W	2/03/2005	0.15	400								3650		0.24		0.56		0.01					0.01	4.7		8.4
BH20	WSL	Blind. Dup.	QA-1	2/03/2005	0.13	380												0.58		<0.01					0.02			
BH20	MGT	Ext. Dup.	QA-2	2/03/2005	0.056	670				0.08								0.09		<0.02					0.009			
BH20	MGT		BH20W	20/03/2004	0.2	620								2915		0.41		0.77		<0.02			6.2		0.01	41		8.05
BH20	WSL	Ext. Dup.	BH20(B)N	20/03/2004	0.21	380	<0.001	<0.001	<0.01			<0.01	<0.01					<0.1		<0.01				690	0.02			
BH20	MGT	Blind. Dup.	BH9W	20/03/2004	0.17	600												0.98		0.25			5.1		0.009	21		
BH20	WSL		BH20W	18/03/2003	0.19	430								3586		0.06		3.7		0.03					0.03	15		8.08
BH20	WSL		BH-20	6/2/02	0.21	670								4026	1800	0.37		1.8		0.94		100				5.1		8.07
BH20	WSL		SA-BH20W	6/12/00	0.16	450																					8.2	
BH20	WSL	Blind. Dup.	SA-BH24W	6/12/00	0.19	470																					8.1	
BH21	WSL		BH21W	2/03/2005	0.27	390								3595		0.32		0.53		<0.01				1200	0.19	12		8.6
BH21	MGT		BH21W	20/03/2004	0.25	520	0.013	<0.0002		0.001		<0.001	<0.001	2640		0.73		1.1		<0.02			4.9	380	0.17	25		8.31
BH21	WSL		BH21W	18/03/2003	0.28	390								3432		0		3.2		<0.01		71	270	280	0.16	5.2		8.35
BH21	WSL	Blind. Dup.	BH9W	18/03/2003	0.03	390														4.5					0.2	12		
BH21	MGT	Ext. Dup.	BH21W(B)	18/03/2003	0.1	600												7		<0.05		23			0.16	13		
BH21	WSL		BH-21	6/2/02	0.32	550	0.012	<0.001	<0.01	0.36	<0.01	<0.01	<0.01	4361.5	1400	0.18		3.1		1.2		140				4.8		8.49
BH21	WSL		SA-BH21W	6/12/00	<0.01	650											<0.1	28	<0.05	<0.10		20				3.1	8.4	
BH22	WSL		BH22W	2/03/2005	<0.01	95								980		0.68		0.64		0.01					0.26	5.5		7.4
BH22	MGT		BH22W	20/03/2004	0.076	190								1045		5.04		0.77		<0.02			0.83		0.2	9.9		7.46
BH22	WSL		BH22W	18/03/2003	0.09	110								1000.5		0.16		0.9		<0.01					<0.01	3.3		7.58
BH22	WSL		SA-BH22W	6/2/02	0.08	210								2381.5		0.46		1.4		0.38		28				3		7.49
BH22	WSL		SA-BH22W	6/12/00	0.59	170											<0.1	5.3	<0.05	<0.10		31				2.2	7.6	
BH23	WSL		BH23W	2/03/2005	0.08	94								1685		3.05		1.3		<0.01					0.08	1		7.2
BH23	MGT		BH23W	19/03/2004	0.068	99								1595		1.98		0.82		<0.02			<0.0005		0.077	29		6.94
BH23	WSL		BH-23	18/03/2003	0.1	100								1710.5		14.23		13		<0.01					0.08	4.7		6.91
BH23			BH-23	6/2/02	0.11	49								646.3	870	6.6		3.3		0.65		3				<0.01		6.85
BH23	WSL		SA-BH23W	6/12/00	0.19	62											3.8	14	<0.05	<0.10		<1				0.94	7.3	
BH24	WSL		BH24W	2/03/2005	<0.01	22								1520		1.41		1.1		<0.01					0.08	0.02		7.1
BH24	MGT		BH24W	18/03/2004	0.01	34								1375		1.18		5.3		<0.02			<0.0005		0.064	<0.5		6.69
BH24	WSL		BH-24	18/03/2003	0.02	44								1375		1.74		1.2		<0.01		48			0.05	0.29		7.04
BH25	WSL		BH25W	2/03/2005	0.02	75								1980		1.51		0.67		0.01				4	0.04	3.3		7.4
BH25	MGT		BH25W	18/03/2004	0.035	79								1540		1.43		0.77		<0.02			<0.0002	17	0.036	0.76		7.07
BH25	WSL		BH-25	18/03/2003	0.02	74								1699.5		1.64		5.3		0.02		<1	81	170	0.04	1.4		7.11
BH26	WSL		BH26W	2/03/2005	<0.01	55								1680		2.01		1.9		0.01				<2	0.06	1.5		7.1
BH26	MGT		BH26W	18/03/2004	0.009	65								1540		2.04		150		<0.02			<0.0002	15	0.061	9.5		6.81
BH26	WSL		BH-26	18/03/2003	<0.01	61								1485		1.12		0.6		<0.01		2	3	17	0.07	1.4		6.83
BH27	WSL		BH27W	2/03/2005	<0.01	3.6								1685		1.82		2.1		0.01				44	0.29	1.8		7.6
BH27	MGT		BH27W	19/03/2004	<0.005	0.87								1650		2.74		1.2		<0.02			<0.0002	55	0.35	7.6		7.05
BH27	WSL		BH-27	18/03/2003	<0.01	0.9								1573		0.56		1.9		<0.01		20	5	33	<0.01	0.96		6.89
BH28	WSL		BH28W	2/03/2005	<0.01	0.5								1220		0.84		0.33		0.04					0.25	0.47		6.9
BH28	MGT		BH28W	19/03/2004	0.006	0.6								1210		0.34		0.43		<0.02			<0.0002		0.28	7.7		6.87
BH28	WSL		BH-28	18/03/2003	<0.01	<0.1								1320		0.22		7.3		0.01		15			0.34	0.56		6.82
BH29	WSL		BH29W	2/03/2005	<0.01	17								2680		3.01		1.7		<0.01				31	1.6	5.6		7
BH29	MGT		BH29W	19/03/2004	0.006	4.1												5		<0.02			<0.0002	23	1.5	29		
BH29	WSL		BH-29	18/03/2003	<0.01	7.7								4328.5		0.73		2.6		<0.01		130	<2	17	0.9	5.7		6.81
BH30	WSL		BH30W	1/03/2005	<0.01	1.5								1755		1.27		1.1		<0.01					0.34	0.08		7
BH30	MGT		BH30W	19/03/2004	0.008	1.8								1760		0.31		8.3		<0.02			<0.0002		0.26	4.4		6.52
BH30	WSL		BH-30	18/03/2003	0.01	1.3								1633.5		0.18		9.1		<0.01		45			0.31	0.18		6.75
BH31	MGT		BH31W	18/03/2004	0.12	570																						
BH32	WSL		BH32W	3/03/2005	0.09	530								3525		0.81										1.3		7.7

Sample Location	Lab	Sample Type	Sample Name	Sampling Date	Total Cyanide	N as NH3	Arsenic	Cadmium	Copper	Iron	Nickel	Lead	Zinc	TDS (Field)	TDS (Lab)	DO Field	DO Lab	Fe 2+	Fe 3+	Nitrate	Nitrite	Sulphate	BOD	COD	Mn	Methane	pH (lab)	pH Field

PROTECTED BENEFICIAL USES at Sale Depot — GROUNDWATER QUALITY OBJECTIVES (mg/l) for Segment B

	Criteria for Ecosystem Protection	0.007	0.9	0.003	0.00015	0.0014	1	0.011	0.0034	-	-	-	-	110	110	-	-	0.16		-	-	-	-	-	6.5	6.5
2000	Criteria for Agricult. Water Supply (Irrigation) [1]	-	-	0.1	0.01	0.2	1	0.2	0.2	-	-	-	-	-	-	-	-	-		-	-	-	0.01	-	-	-
	Criteria for Livestock	0.07	0.1	0.5	0.01	0.5	-	1.0	0.1	-	3000			85	85	-	-	30		1000			0.01		-	-
	Criteria for Primary Contact Recreation	0.1	0.1	0.05	0.005	1.0	0.3	0.1	0.05	-	1000			80	80	-		10		400	-	-	0.07	-	5-9	5-9
	Adopted Screening Criteria (minimum value)	0.007	0.1	0.003	0.00015	0.0014	0.3	0.011	0.0034	-	1000		0	80	80	-		0.16		400	-	-	0.01	-	6.5	6.5

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TABLE 5: SALE, SUMMARY OF GROUNDWATER ANALYSES in mg/l, (1996 - 2005) - LIVESTOCK BU

Sample Location	Lab	Sample Type	Sample Name	Sampling Date	Total Phenols	Phenol	Cresols	Total PAHs	Napth-alene	Acenap-thylene	Acena-pthene	Fluorene	Phenanthrene	Anthra-cene	Fluora-nthene	Pyrene	Benzo(a) anthracene	Chrysene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	B(a)P	Dibenzo(a,h)anthracene	Benzo(g,h,i) perylene	Indeno(1,2,3-c,d)pyrene	TPHs C6-C9	TPHs C10-C14	TPHs C15-C28	TPHs C29-C36	Total TPHs	Benzene	Toluene	Ethyl Benz.	Xylene	Total Vocs
BH10	WSL		BH10W	3/03/2005	36			3.9	3.6	0.15	0.012	0.031	0.031	0.004	0.003	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	14	31	5.4	<0.1	50.4	14	4.4	0.27	2.2	20.87
BH10	MGT		BH10W	20/03/2004	21.3	7.3	14	2	1.8	0.08	0.008	0.009	0.02	<0.005	0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	19	44	8.4	0.34	71.74	13	3.6	0.32	1.8	18.72
BH10	WSL		BH-10	18/03/2003	98			4	3.8	0.19	0.011	0.031	0.027	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	7.5	35	7.3	0.2	50	15	4.2	0.34	2.2	21.74
BH10	WSL		BH-10	6/2/02	31	31		3.4	3.2	0.14	0.011	0.044	0.034	0.007	0.004	0.004	<0.001	<0.001	<0.001	<0.001	0.0003	<0.001	<0.001	<0.001	34	54	11	0.2	99.2	18	4.8	0.28	2.3	25.38
BH10	WSL		SA-BH10W	6/12/00	11	11		4.7	4.4	0.22	0.012	0.031	0.033	0.006	0.004	0.003	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	5.5	27	5.6	<0.1	38.1	5.6	1.5	0.12	0.74	7.96
BH10	WSL		BH10W	3/2/00	62	62		4.3	4	0.19	0.014	0.045	0.046	0.011	0.006	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	11	57	8	<0.1	76	5.6	1.9	0.17	0.98	8.65
BH10	MGT		BH10W	10/2/99	15	15		2.7	2.6	<0.001	<0.001	<0.001	0.036	0.001	0.003	0.004	0.001	0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001	19	25	2	<0.1	46	12	3.6	0.3	2.3	18.2
BH10	MGT		BH10-W	20/11/96	160	160		17.3	9.8	1.1	3.5	0.31	0.82	0.27	0.39	0.34	0.18	0.13	0.082	<0.001	0.16	<0.001	0.043	0.081	22	57	31	4.2	114.2	14	4.2	0.42	2.9	21.52
BH11	WSL		BH11W	3/03/2005	31			8	7.6	0.3	0.021	0.052	0.058	0.015	0.007	0.006	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	30	51	9.7	<0.1	90.7	20	12	0.33	5.1	37.43
BH11	MGT		BH11W	19/03/2004	38	11	27	5.5	5	0.37	0.01	0.03	0.04	0.01	0.007	<0.0005	0.002	0.009	0.002	0.001	0.002	<0.0005	<0.0005	<0.0005	43	30	21	1.8	95.8	22	15	0.38	6.2	43.58
BH11	WSL		BH-11	18/03/2003	18			4.2	3.9	0.2	0.009	0.04	0.029	0.012	<0.003	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	12	23	5	0.2	40.2	12	9.7	0.26	3.9	25.86
BH11	WSL		BH-11	6/2/02	12	12		12	10	0.59	0.036	0.27	0.38	0.14	0.17	0.18	0.08	0.063	0.038	0.038	0.057	0.008	0.027	0.024	130	170	51	3.5	354.5	35	22	0.55	6.1	63.65
BH11	WSL		SA-BH11W	6/12/00	12	12		21	17	1.1	0.1	0.47	1	0.31	0.47	0.42	0.19	0.16	0.073	0.073	0.11	0.01	0.052	0.047	99	140	40	2.1	281.1	24	14	0.35	4.9	43.25
BH11	WSL		BH11W	3/2/00	26	26		11	10	0.44	0.02	0.069	0.06	0.058	0.005	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	33	84	19	<0.1	136	6.3	11	0.3	4.1	21.7
BH11	MGT		BH11W	11/2/99	18	18		3.8	3.7	<0.001	<0.001	<0.001	0.028	0.002	0.006	0.006	0.002	0.002	0.002	0.001	0.006	<0.001	0.002	0.002	65	39	4.9	<0.1	108.9	45	<0.1	0.44	7.3	52.74
BH11	WSL	Ext. Dup.	BH11W(B)	11/2/99	53	53		2.8	2.5	0.17	0.017	0.064	0.042	0.018	0.004	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	61	81	22	0.9	164.9	28	16	0.43	5.3	49.73
BH11	MGT		BH11-W	19/11/96	330	330		20.8	16	1	2.5	0.26	0.38	0.12	0.18	0.11	0.08	0.035	0.038	0.018	0.06	<0.001	0.005	0.035	80	110	39	5.8	234.8	49	19	0.49	7.8	76.29
BH11	MGT	Blind. Dup.	BH15-W	19/11/96	330	330		19.1	15	0.82	2	0.2	0.31	0.1	0.14	0.09	0.055	0.023	0.035	0.014	0.055	<0.001	<0.001	0.028	85	120	40	6	251	49	19	0.49	7.9	76.39
BH12	WSL		BH12W	3/03/2005	2.6			1.8	1.8	0.023	0.007	0.002	0.007	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	11	8.7	1.6	<0.1	21.3	8.9	0.57	0.77	2.6	12.84
BH12	MGT		BH12W	20/03/2004	0.98	0.22	0.76	0.55	0.53	0.007	0.003	<0.0005	0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	20	5	2.3	0.15	27.45	11	2.2	1.1	4.8	19.1
BH12	WSL		BH-12	18/03/2003	2.9			0.62	0.6	0.011	0.002	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	4.7	4.8	1.1	0.2	10.8	7.2	1.4	0.69	3.7	12.99
BH12	WSL		BH-12	6/2/02	0.32	0.32		0.47	0.46	0.006	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010	<0.001	<0.001	<0.001	12	5.6	1.4	<0.1	19	4.9	0.34	0.76	2.7	8.7
BH12	WSL		SA-BH12W	6/12/00	0.31	0.31		0.68	0.66	0.009	0.003	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	9.2	4.1	1	<0.1	14.3	2.6	0.11	<0.001	1.5	4.21
BH12	WSL		BH12W	3/2/00	2.7	2.7		0.84	0.83	0.003	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	6.1	5.9	0.7	<0.1	12.7	5.8	1.2	0.031	3.5	10.531
BH12	MGT		BH12W	11/2/99	0.46	0.46		0.04	0.023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	18	3.5	0.6	<0.1	22.1	11	1.1	0.98	5	18.08
BH12	MGT		BH12-W	20/11/96	10	10		<0.002	<0.0001	<0.0001	<0.0001	<0.0001	0.0009	0.0007	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	32	13	0.9	<0.1	45.9	19	2.7	1.1	5.4	28.2
BH12	WSL	Ext. Dup.	BH12-W (B)	20/11/96	5.3	5.3		0.6	0.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	8.7	8.1	1.3	<0.1	18.1	18	2.7	1.2	5.4	27.3
BH13	WSL		BH13W	1/03/2005	0.054			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	MGT		BH13W	18/03/2004	<0.0007	<0.0002	<0.0005	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	WSL		BH-13	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	WSL		BH-13	6/2/02	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0014	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	WSL		SA-BH13W	6/12/00	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	WSL		BH13W	3/2/00	0.005	0.005		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	MGT		BH13W	10/2/99	<0.01	<0.01		<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	MGT		BH13-W	19/11/96	<0.02	<0.02		<0.002	<0.0001	<0.0001	<0.0001	0.0002	0.0008	<0.0001	0.0003	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH14	WSL		BH14W	3/03/2005	0.05			0.02	0.012	0.001	0.006	0.004	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	2.8	0.8	0.3	<0.1	3.9	4.1	0.007	0.36	0.019	4.486
BH14	MGT		BH14W	20/03/2004	<0.0115	0.011	<0.0005	0.024	0.008	0.002	0.005	0.005	0.001	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	4.4	1.5	1	<0.1	6.9	3.7	0.012	0.3	0.02	4.032
BH14	WSL		BH14	18/03/2003	<0.001			0.14	0.11	0.005	0.008	0.007	0.006	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	2.1	1.5	0.6	<0.1	4.2	7.2	1.4	0.69	3.7	12.99
BH14	WSL		BH-14B	6/2/02	0.085	0.085		0.2	0.18	0.002	0.004	0.004	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	11	3.4	0.6	<0.1	15	2.7	0.1	0.49	0.69	3.98
BH14	MGT		BH-14	6/2/02	0.08	0.08			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	2.7	0.24	0.19	<0.1	3.13	2.9	0.11	0.52	0.99	4.52
BH14	WSL		BH-24(int)	6/2/02	0.085	0.085		0.2	0.19	0.002	0.004	0.004	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	9.7	3.1	0.6	<0.1	13.4	2.7	0.11	0.46	0.9	4.17
BH14	WSL		SA-BH14W	6/12/00	0.018	0.018		0.03	0.017	0.001	0.004	0.003	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	0.8	0.4	0.2	<0.1	1.4	0.088	<0.001	<0.001	0.006	0.094
BH14	MGT	Ext. Dup.	SA-BH14W(B)	6/12/00	<0.01	<0.01		<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.12	0.21	0.13	<0.1	0.46	<0.001	<0.001	0.002	0.01	0.012
BH14	WSL		BH14W	3/2/00	0.063	0.063		0.02	0.002	0.002	0.005	0.003	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	0.7	0.6	<0.1	1.3	0.005	0.003	<0.001	0.009	0.017
BH14	MGT		BH14W	10/2/99	0.14	0.14		0.02	0.006	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	3.2	0.53	0.3	<0.1	4.03	2.6	0.01	0.32	0.085	3.015
BH14	MGT	Blind. Dup.	BH15W	10/2/99	0.07	0.07		0.02	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	3.7	0.45	0.11	<0.1	4.26	3	0.014	0.37	0.096	3.48
BH14	MGT		BH14-W	20/11/96	0.6	0.6		<0.0062	<0.0001	<0.0001	<0.0001	0.0018	0.0041	<0.0001	0.0003	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	24	3.5	<0.1	<0.1	27.5	12	1.2	8.1	3.1	24.4
BH15	WSL		BH15W	2/03/2005	0.027			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH15	MGT		BH15W	18/03/2004	<0.0003	<0.0001	<0.0002	<0.002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH15	WSL		BH-15	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH15	WSL		BH-15	6/2/02	0.011	0.011		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00010	<0.001	<0.001	<0.001	0.5	0.2	0.2	<0.1	0.9	0.36	<0.002	0.004	<0.002	0.364
BH15	WSL		SA-BH15W	6/12/00	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH15	WSL		BH15W	3/2/00	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH16	WSL		BH16W	2/03/2005	0.2			1.3	1.2	0.012	0.007	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	10	5.4	1.3	<0.1	16.7	11	0.12	0.92	1.1	13.14
BH16	MGT		BH16W	18/03/2004	<0.025	0.005	<0.02	0.16	0.14	0.01	0.005	0.001	0.001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	12	3.4	1.7	<0.1	17.1	10	0.12	0.88	1.1	12.1
BH16	WSL		BH16W	18/03/2003	0.071			0.48	0.46	0.012	0.004	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	14	5	1.7	<0.1	20.7	17	0.3	1.2	1.8	20.3
BH16	WSL		BH-16	6/2/02	0.56	0.56		<0.001	1.5	0.015	0.004	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010	<0.001	<0.001	39	15	3.5	<0.1	57.5	6.5	0.49	1	1.7	9.69
BH16	WSL		SA-BH16W	6/12/00	0.36	0.36		2.2	2.1	0.016	0.005	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	22	8.6	2.1	<0.1	32.7	4.8	0.044	<0.001	0.92	5.764
BH16	WSL		BH16W	3/2/00	1.2	1.2		0.95	0.94	0.007	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	1.5	4.8	1.3	<0.1	7.6	7.1	0.2	0.23	0.63	8.16
BH16	WSL	Blind. Dup.	BH20W	3/2/00	1.1	1.1		1.1	1.1	0.008	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	2.3	6.6	1.8	<0.1	10.7	7.3	0.18	0.048	0.66	8.188
BH17	WSL		BH17W	2/03/2005	0.027			<0.01	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH17	MGT		BH17W	18/03/2004	<0.0003	<0.0001	<0.0002	0.001	0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH17	WSL		BH17	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH17	WSL		BH-17	6/2/02	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00005	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH17	WSL		SA-BH17W	6/12/00	0.001	0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH17	WSL		BH17W	3/2/00	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.002	<0.001	<0.001	0.003	0.005
BH18	WSL		BH18W	2/03/2005	0.023			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH18	MGT		BH18W	19/03/2004	<0.0003	<0.0001	<0.0002	<0.002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH18	WSL		BH18	18/03/2003	0.34			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH18	WSL		BH-18	6/2/02	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH18	WSL		SA-BH18W	6/12/00	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH18	WSL		BH18W	3/2/00	0.004	0.004		<0.01	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.003	0.006	<0.001	0.006	0.015
BH19	WSL		BH19W	1/03/2005	0.023			<0.01	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.2	0.1	0.2	<0.1	0.5	<0.001	<0.001	<0.001	<0.001	<0.004
BH19	MGT		BH19W	19/03/2004	<0.003	<0.001	<0.002	7.8	7.8	<0.001	<0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.34	0.05	0.23	<0.1	0.62	0.34	<0.001	<0.001	<0.001	0.34
BH19	WSL		BH19	18/03/2003	<0.001			<0.01	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.6	0.2	0.2	<0.1	1	0.77	0.002	0.002	0.003	0.777
BH19	WSL		BH-19	6/2/02	0.026	0.026		<0.01	0.006	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	1.6	0.4	0.3	<0.1	2.3	0.87	0.003	0.006	0.006	0.885
BH19	WSL		SA-BH19W	6/12/00	0.03	0.03		0.01	0.009	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	<0.1	0.4	0.3	<0.1	0.7	0.35	<0.001	0.007	0.004	0.361
BH19	WSL		BH19W	3/2/00	0.068	0.068		0.02	0.016	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.1	0.9	0.3	<0.1	1.3	0.003	<0.001	0.013	0.018	0.034
BH19	MGT	Ext. Dup.	BH19W(B)	3/2/00	<0.1	<0.1		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	0.31	0.42	<0.1	0.73	<0.001	0.002	0.003	0.004	0.009
BH20	WSL		BH20W	2/03/2005	3.3			4.3	4.2	0.066	0.011	0.017	0.004	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	17	36	5	<0.1	58	12	4.9	0.39	2.7	19.99
BH20	WSL	Blind. Dup.	QA-1	2/03/2005	5.4			4.8	4.7	0.065	0.011	0.018	0.004	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	27	47	7.1	<0.1	81.1	13	5.2	0.44	2.9	21.54
BH20	MGT	Ext. Dup.	QA-2	2/03/2005	8.1			4.6	4.5	0.03	0.006	0.006	0.006	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	20	30	4.4	<0.1	54.4	12	4.6	0.41	2.6	19.61
BH20	MGT		BH20W	20/03/2004	6.45	0.25	6.2	2.1	2	0.05	<0.02	<0.005	0.003	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	21	30	4.7	0.18	55.88	13	5.2	0.28	2.5	20.98
BH20	WSL	Ext. Dup.	BH20(B)IN	20/03/2004		5		5.4	5.3	0.061	0.013	0.021	0.005	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	14	41	6.2	0.1	61.3	20	9.1	0.51	4.1	33.71
BH20	MGT	Blind. Dup.	BH9W	20/03/2004		0.33		2.4	2.3	0.03	<0.01	0.007	0.003	<0.005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	23	37	8.4	0.22	68.62	14	5.8	0.31	2.4	22.51
BH20	WSL		BH20W	18/03/2003	2.2			6.6	6.5	0.044	0.005	0.009	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	9.4	32	4.8	0.1	46.3	11	4.5	0.37	2.8	18.67
BH20	WSL		BH-20	6/2/02	0.15	0.15		3.4	3.3	0.036	0.008	0.015	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	42	62	9.5	0.1	113.6	15	6.6	0.57	3.3	25.47
BH20	WSL		SA-BH20W	6/12/00	1.2	1.2		1.4	1.3	0.034	0.012	0.011	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	19	30	4.4	<0.1	53.4	5.6	2.1	0.19	1	8.89
BH20	WSL	Blind. Dup.	SA-BH24W	6/12/00	1	1		1.4	1.3	0.034	0.01	0.009	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	20	31	4.6	<0.1	55.6	5.5	2.1	0.19	1	8.79
BH21	WSL		BH21W	2/03/2005	4.1			1.6	1.6	0.011	0.003	0.003	<0.001	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	17	32	2.5	<0.1	51.5	12	4.5	0.21	1.7	18.41
BH21	MGT		BH21W	20/03/2004	4.96	0.06	4.9	1	0.96	0.01	<0.01	<0.001	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	25	27	3.3	<0.1	55.3	16	6.3	0.25	2	24.55
BH21	WSL		BH21W	18/03/2003	14			2	2	0.014	0.004	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	10	40	4.8	0.2	55	15	6.3	0.23	2.1	23.63
BH21	WSL	Blind. Dup.	BH9W	18/03/2003	19			1.8	1.7	0.02	0.002	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	10	38	5	0.5	53.5	14	5.6	0.26	2.3	22.16
BH21	MGT	Ext. Dup.	BH21W(B)	18/03/2003	0.94			1.81	1.8	0.01	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	23	24	2.3	<0.1	49.3	15	5.8	0.27	2.3	23.37
BH21	WSL		BH-21	6/2/02	27	27		2.1	2.1	0.02	0.002	0.006	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	60	85	8.3	<0.1	153.3	22	9.2	0.4	3.1	34.7
BH21	WSL		SA-BH21W	6/12/00	<0.001	<0.001		0.05	0.049	<0.001	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	24	37	3.2	<0.1	64.2	6.2	2.1	0.1	0.74	9.14
BH22	WSL		BH22W	2/03/2005	0.24			0.57	0.56	0.005	0.003	0.001	<0.001	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	2.3	3.7	0.9	<0.1	6.9	0.89	0.2	0.072	0.18	1.342
BH22	MGT		BH22W	20/03/2004	0.839	0.009	0.83	0.19	0.16	0.01	0.004	0.003	0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	4.8	7.1	3.1	0.18	15.18	3.1	0.91	0.17	0.55	4.73
BH22	WSL		BH22W	18/03/2003	21			1.3	1.3	0.008	0.002	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.9	4.8	1.8	<0.1	7.5	2.6	0.81	0.13	0.55	4.09
BH22	WSL		SA-BH22W	6/2/02	0.87	0.87		1.1	1.1	0.013	0.003	0.005	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	20	22	3.6	<0.1	45.6	6.6	2.2	0.24	0.94	9.98
BH22	WSL		SA-BH22W	6/12/00	0.007	0.007		0.09	0.076	0.003	0.004	0.003	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	5.8	8.4	1.4	<0.1	15.6	0.75	0.19	0.013	0.17	1.123
BH23	WSL		BH23W	2/03/2005	0.037			0.02	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.6	0.3	0.2	<0.1	1.1	0.3	0.002	0.014	0.054	0.37
BH23	MGT		BH23W	19/03/2004		<0.0002	<0.0005	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.83	0.07	<0.1	<0.1	0.9	0.74	<0.001	0.03	0.06	0.83
BH23	WSL		BH-23	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.17	<0.002	<0.002	0.046	0.216
BH23			BH-23	6/2/02	0.055	0.055		<0.01	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0003	<0.001	<0.001	<0.001	0.2	0.4	0.5	0.2	1.3	<0.001	<0.001	<0.001	<0.001	<0.004
BH23	WSL		SA-BH23W	6/12/00	0.02	0.02		<0.01	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	0.2	0.1	<0.1	<0.1	0.3	0.002	<0.001	<0.001	0.004	0.006
BH24	WSL		BH24W	2/03/2005	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH24	MGT		BH24W	18/03/2004	<0.0007	<0.0002	<0.0005	<0.005	<0.001	<0.001	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.001
BH24	WSL		BH-24	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	0.001	0.001
BH25	WSL		BH25W	2/03/2005	0.003			0.11	0.1	<0.001	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.6	0.9	0.4	<0.1	1.9	0.3	<0.001	<0.001	0.048	0.348
BH25	MGT		BH25W	18/03/2004	<0.0012	<0.001	<0.0002	0.005	<0.001	<0.0002	0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.54	0.05	0.13	<0.1	0.72	0.54	<0.001	<0.001	<0.001	0.54
BH25	WSL		BH-25	18/03/2003	<0.001			0.07	0.071	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	0.5	0.2	<0.1	0.7	0.2	<0.001	<0.001	0.035	0.235
BH26	WSL		BH26W	2/03/2005	<0.001			<0.01	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.2	0.1	<0.1	<0.1	0.3	<0.001	<0.001	0.004	0.009	0.013
BH26	MGT		BH26W	18/03/2004	<0.0012	<0.001	<0.0002	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	<0.05	0.17	<0.1	0.17	<0.001	<0.001	<0.001	<0.001	<0.001
BH26	WSL		BH-26	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.056	<0.001	<0.001	0.003	0.059
BH27	WSL		BH27W	2/03/2005	0.028			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH27	MGT		BH27W	19/03/2004	<0.0012	<0.001	<0.0002	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	0.05	0.18	<0.1	0.23	<0.001	<0.001	<0.001	<0.001	<0.001
BH27	WSL		BH-27	18/03/2003	0.041			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.002	0.001	<0.001	<0.001	0.003
BH28	WSL		BH28W	2/03/2005	<0.001			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH28	MGT		BH28W	19/03/2004	<0.0012	<0.001	<0.0002	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH28	WSL		BH-28	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH29	WSL		BH29W	2/03/2005	<0.001			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH29	MGT		BH29W	19/03/2004	<0.0012	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	<0.05	0.1	<0.1	0.1	<0.001	<0.001	<0.001	<0.001	<0.001
BH29	WSL		BH-29	18/03/2003	0.25			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.001	0.002	<0.001	<0.001	0.003
BH30	WSL		BH30W	1/03/2005	<0.001			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH30	MGT		BH30W	19/03/2004	<0.0012	<0.001	<0.0002	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.001
BH30	WSL		BH-30	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.001	<0.001	<0.001	<0.001	0.001
BH31	MGT		BH31W	18/03/2004	109.6	9.6	100	6.2	4.7	0.49	0.1	0.16	0.4	0.08	0.07	0.07	0.04	0.02	0.02	0.02	0.03	<0.002	0.009	0.01	41	170	28	0.38	239.38	23	12	0.31	5.7	41.01
BH32	WSL		BH32W	3/03/2005	79			6.6	6.3	0.19	0.02	0.046	0.044	0.011	0.004	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	55	87	11	<0.5	153	25	16	0.43	6.4	47.83

PROTECTED BENEFICIAL USES at Sale Depot — GROUNDWATER QUALITY OBJECTIVES (mg/l) for Segment B

Criteria	Total Phenols	Phenol	Cresols	Total PAHs	Napth-alene	Acenap-thylene	Acena-pthene	Fluorene	Phenanthrene	Anthra-cene	Fluora-nthene	Pyrene	Benzo(a) anthracene	Chrysene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	B(a)P	Dibenzo(a,h)anthracene	Benzo(g,h,i) perylene	Indeno(1,2,3-c,d)pyrene	TPHs C6-C9	TPHs C10-C14	TPHs C15-C28	TPHs C29-C36	Total TPHs	Benzene	Toluene	Ethyl Benz.	Xylene	Total Vocs
Criteria for Ecosystem Protection	0.32	0.32	-	0.003	0.016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	-	-	-	-	0.95	0.3	-	0.2	-
Criteria for Agricult. Water Supply (Irrigation)[6]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	-	-	-	-	-	-	-	-	-
Criteria for Livestock	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00001	-	-	-	0.6	-	-	-	-	0.01	0.7	0.3	0.5	
Criteria for Primary Contact Recreation	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00001	-	-	-	0.6	-	-	-	-	0.01	0.7	0.3	0.5	-
Adopted Screening Criteria (minimum value)	0.002	-	-	0.003	0.016	-	-	-	-	-	-	-	-	-	-	-	0.00001	-	-	-	0.6	-	-	-	-	0.01	0.3	0.3	0.2	0

NOTES:
1: Taken from Australian Drinking Water Guidelines (ADWG) (NHMRC & NRMMC 2004)
2: Based on Dutch Intervention Values (2000) for groundwater in lieu of ANZECC/NHMRC (1992) or ANZECC/ARMCANZ (2000) for TPH (C10-C36)
3: ANZECC guidelines recommend ADWG 1996
4: The most conservative value has been selected where several are available for a variety of livestock
5: Guidelines expressed as nitrate have been converted to nitrate-N as follows: 1mg/L nitrate-N =4.43mg/L nitrate
6: Depending on sensitivity of crop
7: Italics denotes MDL is less than adopted screening criteria

TABLE 5: SALE, SUMMARY OF GROUNDWATER ANALYSES in mg/l, (1996 - 2005) - LIVESTOCK BU

Sample Location	Lab	Sample Type	Sample Name	Sampling Date	Total Cyanide	N as NH3	Arsenic	Cadmium	Copper	Iron	Nickel	Lead	Zinc	TDS (Field)	TDS (Lab)	DO Field	DO Lab	Fe 2+	Fe 3+	Nitrate	Nitrite	Sulphate	BOD	COD	Mn	Methane	pH (lab)	pH (field)
BH10	WSL		BH10W	3/03/2005	0.25	390								2805		0.49		1.6		<0.01					2.1	1.9		7.5
BH10	MGT		BH10W	20/03/2004	0.27	350								2750		1.07		1.6		0.15			14		1.8	6.6		7.35
BH10	WSL		BH-10	18/03/2003	0.28	380								2266		0.17		4.5		0.03					1.3	3.6		7.53
BH10	WSL		BH-10	6/2/02	1.5	650								2893		0.8												7.36
BH10	WSL		SA-BH10W	6/12/00	0.08	390																					7.6	
BH10	WSL		BH10W	3/2/00	0.33	400																						
BH10	MGT		BH10W	10/2/99		380									1900							330					7.27	
BH10	MGT		BH10-W	20/11/96	<0.01	570																						
BH11	WSL		BH11W	3/03/2005	0.08	1.6								2350		1.36		0.24		0.13						0.64		7.5
BH11	MGT		BH11W	19/03/2004	0.059	330	0.007	<0.0002	0.003			<0.001	<0.001	2365		0.81		1.8		<0.02			27	200	5.4	8.8		7.46
BH11	WSL		BH-11	18/03/2003	0.03	220								1875.5		0.07		6.1		1.7			42	160	8.1	0.62		6.95
BH11	WSL		BH-11	6/2/02	0.18	410								2552	1600	0.22		2.6		0.58		820				0.47		7.37
BH11	WSL		SA-BH11W	6/12/00	0.16	250											<0.1	1.8	<0.05	<0.10		530				0.77	7.5	
BH11	WSL		BH11W	3/2/00	0.17	310														0.18						<0.05		
BH11	MGT		BH11W	11/2/99		360																						
BH11	WSL	Ext. Dup.	BH11W(B)	11/2/99		290									2300													
BH11	MGT		BH11-W	19/11/96	<0.01	610																						
BH11	MGT	Blind. Dup.	BH15-W	19/11/96	<0.01	620																						
BH12	WSL		BH12W	3/03/2005	0.22	140								1755		3.39		1.3		0.37				94	0.34	1.5		7.6
BH12	MGT		BH12W	20/03/2004	0.27	170								1760		3.02		0.58		0.07				110	0.28	13		7.55
BH12	WSL		BH-12	18/03/2003	0.11	60								1749		2.52		4.1		3.9			21	54	0.48	2.4		7.27
BH12	WSL		BH-12	6/2/02	0.5	150	<0.001	<0.001	<0.01	0.12	<0.01	<0.01	<0.01	1980	1400	4.01		2.1		1.1		13				0.6		7.33
BH12	WSL		SA-BH12W	6/12/00	0.18	120											0.9	9.6	<0.05	<0.10		10				0.2	7.7	
BH12	WSL		BH12W	3/2/00	0.17	180																						
BH12	MGT		BH12W	11/2/99		130												<0.1	0.33			5.8	90					
BH12	MGT		BH12-W	20/11/96	<0.01	140																						
BH12	WSL	Ext. Dup.	BH12-W (B)	20/11/96	0.9	380																						
BH13	WSL		BH13W	1/03/2005	<0.01	0.2								1680		2.72		<0.10		11				2	0.03	<0.01		7
BH13	MGT		BH13W	18/03/2004	0.02	0.02								1485		0.2		0.23		10			<0.0005	11	0.022	<0.5		6.86
BH13	WSL		BH-13	18/03/2003	0.02	<0.1								1666.5		7		<0.1		9.2		57	<2	5	0.02	<0.005		4.02
BH13	WSL		BH-13	6/2/02	0.02	<0.1	<0.001	<0.001	<0.01	<0.05	<0.01	<0.01	<0.01	1897	1600	0.53		0.25		11		59				<0.01		6.91
BH13	WSL		SA-BH13W	6/12/00	0.02	0.4											1.7	0.39	<0.05	9		62				<0.01	8.1	
BH13	WSL		BH13W	3/2/00	0.03	0.2																						
BH13	MGT		BH13W	10/2/99		<0.05									1800			<0.1	0.12				1				7.23	
BH13	MGT		BH13-W	19/11/96	<0.01	<0.02									1700													
BH14	WSL		BH14W	3/03/2005	0.13	87								1940		1.41		0.22		0.03				19	0.4	0.1		7.6
BH14	MGT		BH14W	20/03/2004	0.074	110	0.012	<0.0002	0.002			<0.001	<0.001	1870		0.52		0.39		0.05			<0.0005	25	0.4	9.2		7.55
BH14	WSL		BH14	18/03/2003	0.08	120								2024		0.19		0.8		0.02			9	33	0.29	3.3		7.64
BH14	WSL		BH-14B	6/2/02	0.11	120	0.012	<0.001	<0.01	0.19	<0.01	<0.01	<0.01	1980	1500	0.44		1.1		0.04		38				1.7		7.64
BH14	MGT		BH-14	6/2/02	<0.05	140	<0.002	<0.002	<0.005	0.25	<0.005	<0.005	<0.005															
BH14	WSL		BH-24(int)	6/2/02	0.11	110	<0.001	<0.001	<0.01	<0.05	<0.01	<0.01	<0.01														7.9	
BH14	WSL		SA-BH14W	6/12/00	0.05	110																					7.59	
BH14	MGT	Ext. Dup.	SA-BH14W(B)	6/12/00	0.09	120																						
BH14	WSL		BH14W	3/2/00	0.09	150																						
BH14	MGT		BH14W	10/2/99		160									1700					0.29						<0.05	7.67	
BH14	MGT	Blind. Dup.	BH15W	10/2/99		160																						
BH14	MGT		BH14-W	20/11/96	<0.01	170																						
BH15	WSL		BH15W	2/03/2005	<0.01	2.7								1905		3.21		0.84		3.1					0.36	<0.01		7.4
BH15	MGT		BH15W	18/03/2004	0.005	2.1								1815		2.14		0.82		5.6			<0.0002		0.4	<0.1		6.84
BH15	WSL		BH-15	18/03/2003	<0.01	4.1								1820.5		4.01		<0.1		3.9					0.41	0.011		6.91
BH15	WSL		BH-15	6/2/02	0.05	9.1								1650	1600	3.99		0.2		0.47		75				0.03		7
BH15	WSL		SA-BH15W	6/12/00	<0.01	2.2												<0.2	0.1	1		110				<0.05	7.6	
BH15	WSL		BH15W	3/2/00	0.01	8.1																						
BH16	WSL		BH16W	2/03/2005	0.24	160								2150		3.81		0.23		0.1				65	0.17	0.76		8
BH16	MGT		BH16W	18/03/2004	0.11	170								2035		4.21		0.36		0.02			<0.02	89	0.15	7.8		7.92
BH16	WSL		BH16W	18/03/2003	0.18	180								2167		18.74		1.3		0.02			55	100	0.18	0.58		7.16
BH16	WSL		BH-16	6/2/02	0.27	160	<0.001	<0.001	<0.01	0.23	<0.01	<0.01	<0.01	2183.5	1500	2.46		0.32		1.3		4				1.4		7.82
BH16	WSL		SA-BH16W	6/12/00	0.37	160											0.1	4.3	<0.05	<0.10		13				0.47	8	
BH16	WSL		BH16W	3/2/00	0.3	180												<0.2	0.4	<0.1		210				<0.05		
BH16	WSL	Blind. Dup.	BH20W	3/2/00	0.32	180												0.4	<0.1	<0.1		210				<0.05		
BH17	WSL		BH17W	2/03/2005	0.05	27								1630		2.01		0.54		0.37					0.15	0.05		7.5
BH17	MGT		BH17W	18/03/2004	0.009	32								1155		0.58		0.63		0.02			<0.0002		0.14	1.8		6.95
BH17	WSL		BH17	18/03/2003	<0.01	29								1666.5		4.94		10		<0.01					0.11	0.14		6.95
BH17	WSL		BH-17	6/2/02	0.01	27								1628	1500	3.5		1.8		0.08		33				0.14		
BH17	WSL		SA-BH17W	6/12/00	0.02	40																					7.5	
BH17	WSL		BH17W	3/2/00	0.02	68												0.2	<0.1	<0.1		47				<0.05		
BH18	WSL		BH18W	2/03/2005	<0.01	0.4								1060		2.34										0.01		6.7
BH18	MGT		BH18W	19/03/2004	0.006	0.24								935		0.41		4.2		<0.02			<0.0002		0.23	0.18		6.58
BH18	WSL		BH18	18/03/2003	<0.01	4.6								1078		19		12		<0.01					0.25	0.3		6.39
BH18	WSL		BH-18	6/2/02	<0.01	0.3	<0.001	<0.001	<0.01	5.4	<0.01	<0.01	<0.01	1045		0.55												6.39
BH18	WSL		SA-BH18W	6/12/00	0.01	1																					7.2	
BH18	WSL		BH18W	3/2/00	0.01	0.8												<0.2	0.4	<0.1		38				<0.05		
BH19	WSL		BH19W	1/03/2005	<0.01	0.2								2060		2.34		0.63		0.09					0.32	0.16		7.3
BH19	MGT		BH19W	19/03/2004	0.026	40								1925		0.69		1.3		<0.02			<0.002		0.33	9.5		7.08
BH19	WSL		BH19	18/03/2003	0.03	33								1980		0.56		4		<0.01		54			0.4	0.73		6.16
BH19	WSL		BH-19	6/2/02	0.05	32	<0.001	<0.001	<0.01	0.09	<0.01	<0.01	<0.01	1996.5														7.2
BH19	WSL		SA-BH19W	6/12/00	0.06	33																					7.6	
BH19	WSL		BH19W	3/2/00	0.11	49												<0.2	0.3	<0.1		85				0.75		
BH19	MGT	Ext. Dup.	BH19W(B)	3/2/00	0.09	46												<0.2	0.22	18		100						
BH20	WSL		BH20W	2/03/2005	0.15	400								3650		0.24		0.56		0.01					0.01	4.7		8.4
BH20	WSL	Blind. Dup.	QA-1	2/03/2005	0.13	380												0.58		<0.01					0.02			
BH20	MGT	Ext. Dup.	QA-2	2/03/2005	0.055	670				0.08								0.09		<0.02					0.009			
BH20	MGT		BH20W	20/03/2004	0.2	620								2915		0.41		0.77		<0.02			6.2		0.01	41		8.05
BH20	WSL	Ext. Dup.	BH20(B)IN	20/03/2004	0.21	380	<0.001	<0.001	<0.01			<0.01	<0.01					<0.1		<0.01				690	0.02			
BH20	MGT	Blind. Dup.	BH9W	20/03/2004	0.17	600												0.98		0.25			5.1		0.009	21		
BH20	WSL		BH20W	18/03/2003	0.19	430								3586		0.06		3.7		0.03					0.03	15		8.08
BH20	WSL		BH-20	6/2/02	0.21	670								4026	1800	0.37		1.8		0.94		100				5.1		8.07
BH20	WSL		SA-BH20W	6/12/00	0.16	450																					8.2	
BH20	WSL	Blind. Dup.	SA-BH24W	6/12/00	0.19	470																					8.1	
BH21	WSL		BH21W	2/03/2005	0.27	390								3595		0.32		0.53		<0.01				1200	0.19	12		8.6
BH21	MGT		BH21W	20/03/2004	0.25	520	0.013	<0.0002		0.001		<0.001	<0.001	2640		0.73		1.1		<0.02			4.9	380	0.17	25		8.31
BH21	WSL		BH21W	18/03/2003	0.28	390								3432		0		3.2		<0.01		71	270	280	0.18	5.2		8.35
BH21	WSL	Blind. Dup.	BH9W	18/03/2003	0.03	390														4.5					0.2	12		
BH21	MGT	Ext. Dup.	BH21W(B)	18/03/2003	0.1	660												7		<0.05		23			0.16	13		
BH21	WSL		BH-21	6/2/02	0.32	950	0.012	<0.001	<0.01	0.36	<0.01	<0.01	<0.01	4361.5	1400	0.18		3.1		1.2		140				4.8		8.49
BH21	WSL		SA-BH21W	6/12/00	<0.01	650											<0.1	28	<0.05	<0.10		20				3.1	8.4	
BH22	WSL		BH22W	2/03/2005	<0.01	95								980		0.68		0.64		0.01					0.25	5.5		7.4
BH22	MGT		BH22W	20/03/2004	0.076	190								1045		5.04		0.77		<0.02			0.83		0.2	9.9		7.46
BH22	WSL		BH22W	18/03/2003	0.09	110								1006.5		0.16		0.9		<0.01					<0.01	3.3		7.58
BH22	WSL		SA-BH22W	6/2/02	0.08	210								2381.5		0.46		1.4		0.38		28				3		7.49
BH22	WSL		SA-BH22W	6/12/00	0.59	170											<0.1	5.3	<0.05	<0.10		31				2.2	7.6	
BH23	WSL		BH23W	2/03/2005	0.08	84								1685		3.05		1.3		<0.01					0.04	1		7.2
BH23	MGT		BH23W	19/03/2004	0.068	99								1595		1.98		0.82		<0.02			<0.0005		0.077	29		6.94
BH23	WSL		BH-23	18/03/2003	0.1	100								1710.5		14.23		13		<0.01					0.08	4.7		6.91
BH23			BH-23	6/2/02	0.11	49								646.3	870	6.6		3.3		0.65		3				<0.01		6.85
BH23	WSL		SA-BH23W	6/12/00	0.19	62											3.8	14	<0.05	<0.10		<1				0.94	7.3	
BH24	WSL		BH24W	2/03/2005	<0.01	22								1520		1.41		1.1		<0.01					0.08	0.02		7.1
BH24	MGT		BH24W	18/03/2004	0.01	34								1375		1.18		5.3		<0.02			<0.0005		0.064	<0.5		6.69
BH24	WSL		BH-24	18/03/2003	0.02	44								1375		1.74		1.2		<0.01		48			0.05	0.29		7.04
BH25	WSL		BH25W	2/03/2005	0.02	75								1980		1.51		0.67		0.01				4	0.04	3.3		7.4
BH25	MGT		BH25W	18/03/2004	0.035	79								1540		1.43		0.77		<0.02			<0.0002	17	0.036	0.76		7.07
BH25	WSL		BH-25	18/03/2003	0.02	74								1699.5		1.64		5.3		0.02		<1	81	170	0.04	1.4		7.11
BH26	WSL		BH26W	2/03/2005	<0.01	55								1680		2.01		1.9		0.01				<2	0.08	1.5		7.1
BH26	MGT		BH26W	18/03/2004	0.009	65								1540		2.04		150		<0.02			<0.0002	15	0.061	9.5		6.81
BH26	WSL		BH-26	18/03/2003	<0.01	61								1485		1.12		0.6		<0.01		2	3	17	0.07	1.4		6.83
BH27	WSL		BH27W	2/03/2005	<0.01	3.6								1685		1.82		2.1		0.01				44	0.28	1.8		7.6
BH27	MGT		BH27W	19/03/2004	<0.005	0.87								1650		2.74		1.2		<0.02			<0.0002	55	0.36	7.6		7.05
BH27	WSL		BH-27	18/03/2003	<0.01	0.9								1573		0.56		1.9		<0.01		20	5	33	<0.01	0.96		6.89
BH28	WSL		BH28W	2/03/2005	<0.01	0.5								1220		0.84		0.33		0.64					0.22	0.47		6.9
BH28	MGT		BH28W	19/03/2004	0.006	0.6								1210		0.34		0.43		<0.02			<0.0002		0.28	7.7		6.87
BH28	WSL		BH-28	18/03/2003	<0.01	<0.1								1320		0.22		7.3		0.01		15			0.34	0.56		6.82
BH29	WSL		BH29W	2/03/2005	<0.01	17								2680		3.01		1.7		<0.01				31	1.6	5.6		7
BH29	MGT		BH29W	19/03/2004	0.006	4.1												5		<0.02			<0.0002	23	1.5	29		
BH29	WSL		BH-29	18/03/2003	<0.01	7.7								4323.5		0.73		2.6		<0.01		130	<2	17	0.9	5.7		6.81
BH30	WSL		BH30W	1/03/2005	<0.01	1.5								1755		1.27		1.1		<0.01					0.34	0.08		7
BH30	MGT		BH30W	19/03/2004	0.008	1.8								1760		0.31		8.3		<0.02			<0.0002		0.26	4.4		6.52
BH30	WSL		BH-30	18/03/2003	0.01	1.3								1633.5		0.18		9.1		<0.01		45			0.31	0.18		6.75
BH31	MGT		BH31W	18/03/2004	0.12	570																						
BH32	WSL		BH32W	3/03/2005	0.09	530								3525		0.81										1.3		7.7

Sample Location	Lab	Sample Type	Sample Name	Sampling Date	Total Cyanide	N as NH3	Arsenic	Cadmium	Copper	Iron	Nickel	Lead	Zinc	TDS (Field)	TDS (Lab)	DO Field	DO Lab	Fe 2+	Fe 3+	Nitrate	Nitrite	Sulphate	BOD	COD	Mn	Methane	pH (lab)	pH Field

PROTECTED BENEFICIAL USES at Sale Depot	GROUNDWATER QUALITY OBJECTIVES (mg/l) for Segment B																										
Criteria for Ecosystem Protection	0.007	0.9	0.003	0.00015	0.0014	1	0.011	0.0034	-	-	-	110	110	-		0.16		-	-	-	-	-	6.5	6.5
Criteria for Agricult. Water Supply (Irrigation) [6]	-	-	0.1	0.01	0.2	1	0.2	0.2	-	-	-	-	-	-		-		-	-	-	-	0.01	-	-	-	-	-	-
Criteria for Livestock	0.07	0.1	0.5	0.01	0.5	1	1.0	0.1	-	5000	-	85	85	-		30		1000	-	-	-	0.01	-	-	-	-	-	-
Criteria for Primary Contact Recreation	0.1	0.1	0.05	0.005	1.0	0.3	0.1	0.05	-	1000		80	80	-		10		400	-	-	-	0.07	-	-	5-9	5-9		
Adopted Screening Criteria (minimum value)	0.007	0.1	0.003	0.00015	0.0014	0.3	0.011	0.0034	-	1000	0	80	80	-		0.16		400	-	-	-	0.01	-	-	6.5	6.5		

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TABLE 6: SALE, SUMMARY OF GROUNDWATER in mg/l, (1996 - 2005) - PRIMARY CONTACT RECREATIONAL BU

Sample Location	Lab	Sample Type	Sample Name	Sampling Date	Total Phenols	Phenol	Cresols	Total PAHs	Napthalene	Acenapthylene	Acenapthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo(a) anthracene	Chrysene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	B(a)P	Dibenzo(a,h)anthracene	Benzo(g,h,i) perylene	Indeno(1,2,3-c,d)pyrene	TPHs C6-C9	TPHs C10-C14	TPHs C15-C28	TPHs C29-C36	Total TPHs	Benzene	Toluene	Ethyl Benz.	Xylene	Total Vocs
BH10	WSL		BH10W	3/03/2005	36			3.9	3.6	0.15	0.012	0.031	0.031	0.004	0.003	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	14	31	5.4	<0.1	50.4	14	4.4	0.27	2.2	20.87
BH10	MGT		BH10W	20/03/2004	21.3	7.3	14	2	1.8	0.08	0.008	0.009	0.02	<0.005	0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	19	44	8.4	0.34	71.74	13	3.6	0.32	1.8	18.72
BH10	WSL		BH-10	18/03/2003	98			4	3.8	0.19	0.011	0.031	0.027	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	7.5	35	7.3	0.2	50	15	4.2	0.34	2.2	21.74
BH10	WSL		BH-10	6/2/02	31	31		3.4	3.2	0.14	0.011	0.044	0.034	0.007	0.004	0.004	<0.001	<0.001	<0.001	<0.001	0.0003	<0.001	<0.001	<0.001	34	54	11	0.2	99.2	18	4.8	0.28	2.3	25.38
BH10	WSL		SA-BH10W	6/12/00	11	11		4.7	4.4	0.22	0.012	0.031	0.033	0.006	0.004	0.003	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	5.5	27	5.6	<0.1	38.1	5.6	1.5	0.12	0.74	7.96
BH10	WSL		BH10W	3/2/00	62	62		4.3	4	0.19	0.014	0.045	0.046	0.011	0.006	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	11	57	8	<0.1	76	5.6	1.9	0.17	0.98	8.65
BH10	MGT		BH10W	10/2/99	15	15		2.7	2.6	<0.001	<0.001	<0.001	0.036	0.001	0.003	0.004	0.001	0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001	19	25	2	<0.1	46	12	3.6	0.3	2.3	18.2
BH10	MGT		BH10-W	20/11/96	160	160		17.3	9.8	1.1	3.5	0.31	0.82	0.27	0.39	0.34	0.18	0.13	0.082	<0.001	0.16	<0.001	0.043	0.081	22	57	31	4.2	114.2	14	4.2	0.42	2.9	21.52
BH11	WSL		BH11W	3/03/2005	31			8	7.6	0.3	0.021	0.052	0.058	0.015	0.007	0.006	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	30	51	9.7	<0.1	90.7	20	12	0.33	5.1	37.43
BH11	MGT		BH11W	19/03/2004	38	11	27	5.5	5	0.37	0.01	0.03	0.04	0.01	0.007	<0.0005	0.002	0.009	0.002	0.001	0.002	<0.0005	<0.0005	<0.0005	43	30	21	1.8	95.8	22	15	0.38	6.2	43.58
BH11	WSL		BH-11	18/03/2003	16			4.2	3.9	0.2	0.009	0.04	0.029	0.012	<0.003	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	12	23	5	0.2	40.2	12	9.7	0.26	3.9	25.86
BH11	WSL		BH-11	6/2/02	12	12		12	10	0.59	0.036	0.27	0.38	0.14	0.17	0.18	0.08	0.063	0.038	0.038	0.057	0.008	0.027	0.024	130	170	51	3.5	354.5	35	22	0.55	6.1	63.65
BH11	WSL		SA-BH11W	6/12/00	12	12		21	17	1.1	0.1	0.47	1	0.31	0.47	0.42	0.19	0.16	0.073	0.073	0.11	0.01	0.052	0.047	99	140	40	2.1	281.1	24	14	0.35	4.9	43.25
BH11	WSL		BH11W	3/2/00	26	26		11	10	0.44	0.02	0.069	0.06	0.058	0.005	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	33	84	19	<0.1	136	6.3	11	0.3	4.1	21.7
BH11	MGT		BH11W	11/2/99	18	18		3.8	3.7	<0.001	<0.001	<0.001	0.028	0.002	0.006	0.006	0.002	0.002	0.002	0.001	0.006	<0.001	0.002	0.002	65	39	4.9	<0.1	108.9	45	<0.1	0.44	7.3	52.74
BH11	WSL	Ext. Dup.	BH11W(B)	11/2/99	53	53		2.8	2.5	0.17	0.017	0.064	0.042	0.018	0.004	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	61	81	22	0.9	164.9	28	16	0.43	5.3	49.73
BH11	MGT		BH11-W	19/11/96	330	330		20.8	16	1	2.5	0.26	0.38	0.12	0.18	0.11	0.08	0.035	0.038	0.018	0.06	<0.001	0.005	0.035	80	110	39	5.8	234.8	49	19	0.49	7.8	76.29
BH11	MGT	Blind. Dup.	BH15-W	19/11/96	330	330		19.1	15	0.82	2	0.2	0.31	0.1	0.14	0.09	0.055	0.023	0.035	0.014	0.055	<0.001	<0.001	0.028	85	120	40	6	251	49	19	0.49	7.9	76.39
BH12	WSL		BH12W	3/03/2005	2.6			1.8	1.8	0.023	0.007	0.002	0.007	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	11	8.7	1.6	<0.1	21.3	8.9	0.57	0.77	2.6	12.84
BH12	MGT		BH12W	20/03/2004	0.98	0.22	0.76	0.55	0.53	0.007	0.003	<0.0005	0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	20	5	2.3	0.15	27.45	11	2.2	1.1	4.8	19.1
BH12	WSL		BH-12	18/03/2003	2.9			0.62	0.6	0.011	0.002	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	4.7	4.8	1.1	0.2	10.8	7.2	1.4	0.69	3.7	12.99
BH12	WSL		BH-12	6/2/02	0.32	0.32		0.47	0.46	0.006	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010	<0.001	<0.001	<0.001	12	5.6	1.4	<0.1	19	4.9	0.34	0.76	2.7	8.7
BH12	WSL		SA-BH12W	6/12/00	0.31	0.31		0.68	0.66	0.009	0.003	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	9.2	4.1	1	<0.1	14.3	2.6	0.11	<0.001	1.5	4.21
BH12	WSL		BH12W	3/2/00	2.7	2.7		0.84	0.83	0.003	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	6.1	5.9	0.7	<0.1	12.7	5.8	1.2	0.031	3.5	10.531
BH12	MGT		BH12W	11/2/99	0.46	0.46		0.04	0.023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	18	3.5	0.6	<0.1	22.1	11	1.1	0.98	5	18.08
BH12	MGT		BH12-W	20/11/96	10	10		<0.002	<0.0001	<0.0001	<0.0001	<0.0001	0.0009	0.0007	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	32	13	0.9	<0.1	45.9	19	2.7	1.1	5.4	28.2
BH12	WSL	Ext. Dup.	BH12-W (B)	20/11/96	5.3	5.3		0.6	0.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	8.7	8.1	1.3	<0.1	18.1	18	2.7	1.2	5.4	27.3
BH13	WSL		BH13W	1/03/2005	0.054			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	MGT		BH13W	18/03/2004	<0.0007	<0.0002	<0.0005	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	WSL		BH-13	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	WSL		BH-13	6/2/02	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0014	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	WSL		SA-BH13W	6/12/00	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	WSL		BH13W	3/2/00	0.005	0.005		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	MGT		BH13W	10/2/99	<0.01	<0.01		<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH13	MGT		BH13-W	19/11/96	<0.02	<0.02		<0.002	<0.0001	<0.0001	<0.0001	0.0002	0.0008	<0.0001	0.0003	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH14	WSL		BH14W	3/03/2005	0.05			0.02	0.012	0.001	0.006	0.004	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	2.8	0.8	0.3	<0.1	3.9	4.1	0.007	0.36	0.019	4.486
BH14	MGT		BH14W	20/03/2004	<0.0115	0.011	<0.0005	0.024	0.008	0.002	0.005	0.005	0.001	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	4.4	1.5	1	<0.1	6.9	3.7	0.012	0.3	0.02	4.032
BH14	WSL		BH14	18/03/2003	<0.001			0.14	0.11	0.005	0.008	0.007	0.006	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	2.1	1.5	0.6	<0.1	4.2	7.2	1.4	0.69	3.7	12.99
BH14	WSL		BH-14B	6/2/02	0.085	0.085		0.2	0.18	0.002	0.004	0.004	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	11	3.4	0.6	<0.1	15	2.7	0.1	0.49	0.69	3.98
BH14	MGT		BH-14	6/2/02	0.08	0.08			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	2.7	0.24	0.19	<0.1	3.13	2.9	0.11	0.52	0.99	4.52
BH14	WSL		BH-24(int)	6/2/02	0.085	0.085		0.2	0.19	0.002	0.004	0.004	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	9.7	3.1	0.6	<0.1	13.4	2.7	0.11	0.46	0.9	4.17
BH14	WSL		SA-BH14W	6/12/00	0.018	0.018		0.03	0.017	0.001	0.004	0.003	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	0.8	0.4	0.2	<0.1	1.4	0.088	<0.001	<0.001	0.006	0.094
BH14	MGT	Ext. Dup.	SA-BH14W(B)	6/12/00	<0.01	<0.01		<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.12	0.21	0.13	<0.1	0.46	<0.001	<0.001	0.002	0.01	0.012
BH14	WSL		BH14W	3/2/00	0.063	0.063		0.02	0.002	0.002	0.005	0.003	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	0.7	0.6	<0.1	1.3	0.005	0.003	<0.001	0.009	0.017
BH14	MGT		BH14W	10/2/99	0.14	0.14		0.02	0.006	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	3.2	0.53	0.3	<0.1	4.03	2.6	0.01	0.32	0.085	3.015
BH14	MGT	Blind. Dup.	BH15W	10/2/99	0.07	0.07		0.02	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	3.7	0.45	0.11	<0.1	4.26	3	0.014	0.37	0.096	3.48
BH14	MGT		BH14-W	20/11/96	0.6	0.6		<0.0062	<0.0001	<0.0001	<0.0001	0.0018	0.0041	<0.0001	0.0003	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	24	3.5	<0.1	<0.1	27.5	12	1.2	8.1	3.1	24.4
BH15	WSL		BH15W	2/03/2005	0.027			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH15	MGT		BH15W	18/03/2004	<0.0003	<0.0001	<0.0002	<0.002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH15	WSL		BH-15	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH15	WSL		BH-15	6/2/02	0.011	0.011		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00010	<0.001	<0.001	<0.001	0.5	0.2	0.2	<0.1	0.9	0.36	<0.002	0.004	<0.002	0.364
BH15	WSL		SA-BH15W	6/12/00	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH15	WSL		BH15W	3/2/00	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH16	WSL		BH16W	2/03/2005	0.2			1.3	1.2	0.012	0.007	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	10	5.4	1.3	<0.1	16.7	11	0.12	0.92	1.1	13.14
BH16	MGT		BH16W	18/03/2004	<0.025	0.005	<0.02	0.16	0.14	0.01	0.005	0.001	0.001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	12	3.4	1.7	<0.1	17.1	10	0.12	0.88	1.1	12.1
BH16	WSL		BH16W	18/03/2003	0.071			0.48	0.46	0.012	0.004	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	14	5	1.7	<0.1	20.7	17	0.3	1.2	1.8	20.3
BH16	WSL		BH-16	6/2/02	0.56	0.56		<0.001	1.5	0.015	0.004	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0010	<0.001	<0.001	39	15	3.5	<0.1	57.5	6.5	0.49	1	1.7	9.69
BH16	WSL		SA-BH16W	6/12/00	0.36	0.36		2.2	2.1	0.016	0.005	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	22	8.6	2.1	<0.1	32.7	4.8	0.044	<0.001	0.92	5.764
BH16	WSL		BH16W	3/2/00	1.2	1.2		0.95	0.94	0.007	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	1.5	4.8	1.3	<0.1	7.6	7.1	0.2	0.23	0.63	8.16
BH16	WSL	Blind. Dup.	BH20W	3/2/00	1.1	1.1		1.1	1.1	0.008	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	2.3	6.6	1.8	<0.1	10.7	7.3	0.18	0.048	0.66	8.188
BH17	WSL		BH17W	2/03/2005	0.027			<0.01	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH17	MGT		BH17W	18/03/2004	<0.0003	<0.0001	<0.0002	0.001	0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH17	WSL		BH17	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH17	WSL		BH-17	6/2/02	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00005	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH17	WSL		SA-BH17W	6/12/00	0.001	0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH17	WSL		BH17W	3/2/00	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.002	<0.001	<0.001	0.003	0.005
BH18	WSL		BH18W	2/03/2005	0.023			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH18	MGT		BH18W	19/03/2004	<0.0003	<0.0001	<0.0002	<0.002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH18	WSL		BH18	18/03/2003	0.34			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH18	WSL		BH-18	6/2/02	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH18	WSL		SA-BH18W	6/12/00	<0.001	<0.001		<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH18	WSL		BH18W	3/2/00	0.004	0.004		<0.01	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.003	0.006	<0.001	0.006	0.015
BH19	WSL		BH19W	1/03/2005	0.023			<0.01	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.2	0.1	0.2	<0.1	0.5	<0.001	<0.001	<0.001	<0.001	<0.004
BH19	MGT		BH19W	19/03/2004	<0.003	<0.001	<0.002	7.8	7.8	<0.001	<0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.34	0.05	0.23	<0.1	0.62	0.34	<0.001	<0.001	<0.001	0.34
BH19	WSL		BH19	18/03/2003	<0.001			<0.01	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.6	0.2	0.2	<0.1	1	0.77	0.002	0.002	0.003	0.777
BH19	WSL		BH-19	6/2/02	0.026	0.026		<0.01	0.006	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	1.6	0.4	0.3	<0.1	2.3	0.87	0.003	0.006	0.006	0.885
BH19	WSL		SA-BH19W	6/12/00	0.03	0.03		0.01	0.009	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	0.4	0.3	<0.1	0.7	0.35	<0.001	0.007	0.004	0.361
BH19	WSL		BH19W	3/2/00	0.068	0.068		0.02	0.016	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	0.1	0.9	0.3	<0.1	1.3	0.003	<0.001	0.013	0.018	0.034
BH19	MGT	Ext. Dup.	BH19W(B)	3/2/00	<0.1	<0.1		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	0.31	0.42	<0.1	0.73	<0.001	0.002	0.003	0.004	0.009
BH20	WSL		BH20W	2/03/2005	3.3			4.3	4.2	0.066	0.011	0.017	0.004	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	17	36	5	<0.1	58	12	4.9	0.39	2.7	19.99
BH20	WSL	Blind. Dup.	QA-1	2/03/2005	5.4			4.8	4.7	0.065	0.011	0.018	0.004	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	27	47	7.1	<0.1	81.1	13	5.2	0.44	2.9	21.54
BH20	MGT	Ext. Dup.	QA-2	2/03/2005	8.1			4.6	4.5	0.03	0.006	0.006	0.006	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	20	30	4.4	<0.1	54.4	12	4.6	0.41	2.6	19.61
BH20	MGT		BH20W	20/03/2004	6.45	0.25	6.2	2.1	2	0.05	<0.02	<0.005	0.003	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	21	30	4.7	0.18	55.88	13	5.2	0.28	2.5	20.98
BH20	WSL	Ext. Dup.	BH20(B)IN	20/03/2004		5		5.4	5.3	0.061	0.013	0.021	0.005	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	14	41	6.2	0.1	61.3	20	9.1	0.51	4.1	33.71
BH20	MGT	Blind. Dup.	BH9W	20/03/2004		0.33		2.4	2.3	0.03	<0.01	0.007	0.003	<0.005	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	23	37	8.4	0.22	68.62	14	5.8	0.31	2.4	22.51
BH20	WSL		BH20W	18/03/2003	2.2			6.6	6.5	0.044	0.005	0.009	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	9.4	32	4.8	0.1	46.3	11	4.5	0.37	2.8	18.67
BH20	WSL		BH-20	6/2/02	0.15	0.15		3.4	3.3	0.036	0.008	0.015	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	42	62	9.5	0.1	113.6	15	6.6	0.57	3.3	25.47
BH20	WSL		SA-BH20W	6/12/00	1.2	1.2		1.4	1.3	0.034	0.012	0.011	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	19	30	4.4	<0.1	53.4	5.6	2.1	0.19	1	8.89
BH20	WSL	Blind. Dup.	SA-BH24W	6/12/00	1	1		1.4	1.3	0.034	0.01	0.009	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	20	31	4.6	<0.1	55.6	5.5	2.1	0.19	1	8.79
BH21	WSL		BH21W	2/03/2005	4.1			1.6	1.6	0.011	0.003	0.003	<0.001	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	17	32	2.5	<0.1	51.5	12	4.5	0.21	1.7	18.41
BH21	MGT		BH21W	20/03/2004	4.96	0.06	4.9	1	0.96	0.01	<0.01	<0.001	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	25	27	3.3	<0.1	55.3	16	6.3	0.25	2	24.55
BH21	WSL		BH21W	18/03/2003	14			2	2	0.014	0.004	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	10	40	4.8	0.2	55	15	6.3	0.23	2.1	23.63
BH21	WSL	Blind. Dup.	BH9W	18/03/2003	19			1.8	1.7	0.02	0.002	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	10	38	5	0.5	53.5	14	5.6	0.26	2.3	22.16
BH21	MGT	Ext. Dup.	BH21W(B)	18/03/2003	0.94			1.81	1.8	0.01	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	23	24	2.3	<0.1	49.3	15	5.8	0.27	2.3	23.37
BH21	WSL		BH-21	6/2/02	27	27		2.1	2.1	0.02	0.002	0.006	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	60	85	8.3	<0.1	153.3	22	9.2	0.4	3.1	34.7
BH21	WSL		SA-BH21W	6/12/00	<0.001	<0.001		0.05	0.049	<0.001	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	24	37	3.2	<0.1	64.2	6.2	2.1	0.1	0.74	9.14
BH22	WSL		BH22W	2/03/2005	0.24			0.57	0.56	0.005	0.003	0.001	<0.001	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	2.3	3.7	0.9	<0.1	6.9	0.89	0.2	0.072	0.18	1.342
BH22	MGT		BH22W	20/03/2004	0.839	0.009	0.83	0.19	0.16	0.01	0.004	0.003	0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	4.8	7.1	3.1	0.18	15.18	3.1	0.91	0.17	0.55	4.73
BH22	WSL		BH22W	18/03/2003	21			1.3	1.3	0.008	0.002	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.9	4.8	1.8	<0.1	7.5	2.6	0.81	0.13	0.55	4.09
BH22	WSL		SA-BH22W	6/2/02	0.87	0.87		1.1	1.1	0.013	0.003	0.005	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	20	22	3.6	<0.1	45.6	6.6	2.2	0.24	0.94	9.98
BH22	WSL		SA-BH22W	6/12/00	0.007	0.007		0.09	0.076	0.003	0.004	0.003	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	5.8	8.4	1.4	<0.1	15.6	0.75	0.19	0.013	0.17	1.123
BH23	WSL		BH23W	2/03/2005	0.037			0.02	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.6	0.3	0.2	<0.1	1.1	0.3	0.002	0.014	0.054	0.37
BH23	MGT		BH23W	19/03/2004		<0.0002	<0.0005	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.83	0.07	<0.1	<0.1	0.9	0.74	<0.001	0.03	0.06	0.83
BH23	WSL		BH-23	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.17	<0.002	<0.002	0.046	0.216
BH23			BH-23	6/2/02	0.055	0.055		<0.01	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0003	<0.001	<0.001	<0.001	0.2	0.4	0.5	0.2	1.3	<0.001	<0.001	<0.001	<0.001	<0.004
BH23	WSL		SA-BH23W	6/12/00	0.02	0.02		<0.01	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00001	<0.001	<0.001	<0.001	0.2	0.1	<0.1	<0.1	0.3	0.002	<0.001	<0.001	0.004	0.006
BH24	WSL		BH24W	2/03/2005	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH24	MGT		BH24W	18/03/2004	<0.0007	<0.0002	<0.0005	<0.005	<0.001	<0.001	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.001
BH24	WSL		BH-24	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	0.001	0.001
BH25	WSL		BH25W	2/03/2005	0.003			0.11	0.1	<0.001	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.6	0.9	0.4	<0.1	1.9	0.3	<0.001	<0.001	0.048	0.348
BH25	MGT		BH25W	18/03/2004	<0.0012	<0.001	<0.0002	0.005	<0.001	<0.0002	0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.54	0.05	0.13	<0.1	0.72	0.54	<0.001	<0.001	<0.001	0.54
BH25	WSL		BH-25	18/03/2003	<0.001			0.07	0.071	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	0.5	0.2	<0.1	0.7	0.2	<0.001	<0.001	0.035	0.235
BH26	WSL		BH26W	2/03/2005	<0.001			<0.01	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.2	0.1	<0.1	<0.1	0.3	<0.001	<0.001	0.004	0.009	0.013
BH26	MGT		BH26W	18/03/2004	<0.0012	<0.001	<0.0002	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	<0.05	0.17	<0.1	0.17	<0.001	<0.001	<0.001	<0.001	<0.001
BH26	WSL		BH-26	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.056	<0.001	<0.001	0.003	0.059
BH27	WSL		BH27W	2/03/2005	0.028			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH27	MGT		BH27W	19/03/2004	<0.0012	<0.001	<0.0002	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	0.05	0.18	<0.1	0.23	<0.001	<0.001	<0.001	<0.001	<0.001
BH27	WSL		BH-27	18/03/2003	0.041			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.002	0.001	<0.001	<0.001	0.003
BH28	WSL		BH28W	2/03/2005	<0.001			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH28	MGT		BH28W	19/03/2004	<0.0012	<0.001	<0.0002	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.004
BH28	WSL		BH-28	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH29	WSL		BH29W	2/03/2005	<0.001			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH29	MGT		BH29W	19/03/2004	<0.0012	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	<0.05	0.1	<0.1	0.1	<0.001	<0.001	<0.001	<0.001	<0.001
BH29	WSL		BH-29	18/03/2003	0.25			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.001	0.002	<0.001	<0.001	0.003
BH30	WSL		BH30W	1/03/2005	<0.001			ND	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	<0.001	<0.001	<0.001	<0.001	<0.004
BH30	MGT		BH30W	19/03/2004	<0.0012	<0.001	<0.0002	<0.005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.02	<0.05	<0.1	<0.1	<0.27	<0.001	<0.001	<0.001	<0.001	<0.001
BH30	WSL		BH-30	18/03/2003	<0.001			<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.1	<0.1	<0.1	<0.4	0.001	<0.001	<0.001	<0.001	0.001
BH31	MGT		BH31W	18/03/2004	109.6	9.6	100	6.2	4.7	0.49	0.1	0.16	0.4	0.08	0.07	0.07	0.04	0.02	0.02	0.02	0.03	<0.002	0.009	0.01	41	170	28	0.38	239.38	23	12	0.31	5.7	41.01
BH32	WSL		BH32W	3/03/2005	79			6.6	6.3	0.19	0.02	0.046	0.044	0.011	0.004	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	55	87	11	<0.5	153	25	16	0.43	6.4	47.83
Sample Location	Lab	Sample Type	Sample Name	Sampling Date	Total Phenols	Phenol	Cresols	Total PAHs	Napthalene	Acenapthylene	Acenapthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo(a) anthracene	Chrysene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	B(a)P	Dibenzo(a,h)anthracene	Benzo(g,h,i) perylene	Indeno(1,2,3-c,d)pyrene	TPHs C6-C9	TPHs C10-C14	TPHs C15-C28	TPHs C29-C36	Total TPHs	Benzene	Toluene	Ethyl Benz.	Xylene	Total Vocs

PROTECTED BENEFICIAL USES at Sale Depot

GROUNDWATER QUALITY OBJECTIVES (mg/l) for Segment B

Criteria	Total Phenols	Phenol	Cresols	Total PAHs	Napthalene	Acenapthylene	Acenapthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo(a) anthracene	Chrysene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	B(a)P	Dibenzo(a,h)anthracene	Benzo(g,h,i) perylene	Indeno(1,2,3-c,d)pyrene	TPHs C6-C9	TPHs C10-C14	TPHs C15-C28	TPHs C29-C36	Total TPHs	Benzene	Toluene	Ethyl Benz.	Xylene	Total Vocs
Criteria for Ecosystem Protection	0.32	0.32	-	0.003	0.016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	-	-	-	-	0.95	0.3	-	0.2	-
Criteria for Agricult. Water Supply (Irrigation) [6]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	-	-	-	-	-	-	-	-	-
Criteria for Livestock	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00001	-	-	-	0.6	-	-	-	-	0.01	0.7	0.3	0.5	-
Criteria for Primary Contact Recreation	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00001	-	-	-	0.6	-	-	-	-	0.01	0.7	0.3	0.5	-
Adopted Screening Criteria (minimum value)	0.002	-	-	0.003	0.016	-	-	-	-	-	-	-	-	-	-	-	0.00001	-	-	-	0.6	-	-	-	-	0.01	0.3	0.3	0.2	0

NOTES:
1: Taken from Australian Drinking Water Guidelines (ADWG) (NHMRC & NRMMC 2004)
2: Based on Dutch Intervention Values (2000) for groundwater in lieu of ANZECC/NHMRC (1992) or ANZECC/ARMCANZ (2000) for TPH (C10-C36)
3: ANZECC guidelines recommend ADWG 1996
4: The most conservative value has been selected where several are available for a variety of livestock
5: Guidelines expressed as nitrate have been converted to nitrate-N as follows: 1mg/L nitrate-N =4.43mg/L nitrate
6: Depending on sensitivity of crop
7: Italics denotes MDL is less than adopted screening criteria

TABLE 6: SALE, SUMMARY OF GROUNDWATER in mg/l, (1996 - 2005) - PRIMARY CONTACT RECREATIONAL BU

Sample Location	Lab	Sample Type	Sample Name	Sampling Date	Total Cyanide	N as NH3	Arsenic	Cadmium	Copper	Iron	Nickel	Lead	Mercury	Zinc	TDS (Field)	TDS (Lab)	DO Field	DO Lab	Fe 2+	Fe 3+	Nitrate	Nitrite	Sulphate	BOD	COD	Mn	Methane	pH (lab)	pH (field)
BH10	WSL		BH10W	3/03/2005	0.25	350									2805		0.49		1.6		<0.01					2.1	1.9		7.5
BH10	MGT		BH10W	20/03/2004	0.27	350									2750		1.07		1.6		0.15			14		1.8	6.6		7.35
BH10	WSL		BH-10	18/03/2003	0.28	350									2266		0.17		4.5		0.03					1.3	3.6		7.53
BH10	WSL		BH-10	6/2/02	1.5	650									2893		0.8											7.6	7.36
BH10	WSL		SA-BH10W	6/12/00	0.08	300																							
BH10	WSL		BH10W	3/2/00	0.33	400																						7.27	
BH10	MGT		BH10W	10/2/99		380										1900							330						
BH10	MGT		BH10-W	20/11/96	<0.01	570																							
BH11	WSL		BH11W	3/03/2005	0.08	1.6									2350		1.36		0.24		0.13				200	5.4	0.64		7.5
BH11	MGT		BH11W	19/03/2004	0.059	330	0.007	<0.0002	0.003			<0.001	<0.001	<0.001	2355		0.81		1.8		<0.02			27	380	7.3	8.8		7.46
BH11	WSL		BH-11	18/03/2003	0.03	220									1875.5		0.07		6.1		1.7			42	160	8.1	0.62		6.95
BH11	WSL		BH-11	6/2/02	0.18	410									2552	1600	0.22		2.6		0.58		820				0.47		7.37
BH11	WSL		SA-BH11W	6/12/00	0.16	250												<0.1	1.8	<0.05	<0.10		530				0.77	7.5	
BH11	WSL		BH11W	3/2/00	0.17	310															0.18						<0.05		
BH11	MGT		BH11W	11/2/99		360																							
BH11	WSL	Ext. Dup.	BH11W(B)	11/2/99		290										2360													
BH11	MGT		BH11-W	19/11/96	<0.01	610																							
BH11	MGT	Blind. Dup.	BH15-W	19/11/96	<0.01	620																							
BH12	WSL		BH12W	3/03/2005	0.22	140									1755		3.39		1.3		0.37				94	0.34	1.5		7.6
BH12	MGT		BH12W	20/03/2004	0.27	170									1760		3.02		0.58		0.07				110	0.28	13		7.55
BH12	WSL		BH-12	18/03/2003	0.11	69									1749		2.52		4.1		3.9			21	54	0.48	2.4		7.27
BH12	WSL		BH-12	6/2/02	0.5	150	<0.001	<0.001	<0.01	0.12	<0.01	<0.01		<0.01	1980	1400	4.01		2.1		1.1		13				0.6		7.33
BH12	WSL		SA-BH12W	6/12/00	0.18	120												0.9	9.6	<0.05	<0.10		10				0.2	7.7	
BH12	WSL		BH12W	3/2/00	0.17	180																							
BH12	MGT		BH12W	11/2/99		130																							
BH12	MGT		BH12-W	20/11/96	<0.01	140													<0.1	0.33			5.8						
BH12	WSL	Ext. Dup.	BH12-W (B)	20/11/96	0.9	300																							
BH13	WSL		BH13W	1/03/2005	<0.01	0.2									1680		2.72		<0.10		11				2	0.03	<0.01		7
BH13	MGT		BH13W	18/03/2004	0.02	0.02									1485		0.2		0.23		10			<0.0005	11	0.022	<0.5		6.86
BH13	WSL		BH-13	18/03/2003	0.02	<0.1									1666.5		7		<0.1		9.2		57	<2	5	0.02	<0.005		4.62
BH13	WSL		BH-13	6/2/02	0.02	<0.1	<0.001	<0.001	<0.01	<0.05	<0.01	<0.01		<0.01	1897	1600	0.53		0.25		11		59				<0.01		6.91
BH13	WSL		SA-BH13W	6/12/00	0.02	0.4												1.7	0.39	<0.05	9		62				<0.01	8.1	
BH13	WSL		BH13W	3/2/00	0.03	0.2										1800								1				7.23	
BH13	MGT		BH13W	10/2/99		<0.05										1700			<0.1	0.12									
BH13	MGT		BH13-W	19/11/96	<0.01	<0.02																							
BH14	WSL		BH14W	3/03/2005	0.13	97									1940		1.41		0.22		0.03				19	0.4	0.1		7.6
BH14	MGT		BH14W	20/03/2004	0.074	110	0.012	<0.0002	0.002			<0.001	<0.001	<0.001	1870		0.52		0.39		0.05			<0.0005	25	0.4	9.2		7.55
BH14	WSL		BH14	18/03/2003	0.08	120									2024		0.19		0.8		0.02			9	33	0.29	3.3		7.64
BH14	WSL		BH-14B	6/2/02	0.11	120	0.012	<0.001	<0.01	0.19	<0.01	<0.01		<0.01	1980	1500	0.44		1.1		0.04		38				1.7		7.64
BH14	MGT		BH-14	6/2/02	<0.05	140	<0.002	<0.002	<0.005	0.25	<0.005	<0.005		<0.005															
BH14	WSL		BH-24(int)	6/2/02	0.11	110	<0.001	<0.001	<0.01	<0.05	<0.01	<0.01		<0.01														7.9	
BH14	WSL		SA-BH14W	6/12/00	0.05	110																						7.59	
BH14	MGT	Ext. Dup.	SA-BH14W(B)	6/12/00	0.09	120																							
BH14	WSL		BH14W	3/2/00	0.09	150																					<0.05	7.67	
BH14	MGT		BH14W	10/2/99		160										1700					0.29								
BH14	MGT	Blind. Dup.	BH15W	10/2/99		160																							
BH14	MGT		BH14-W	20/11/96	<0.01	170																							
BH15	WSL		BH15W	2/03/2005	<0.01	2.7									1005		3.21		0.84		3.1					0.36	<0.01		7.4
BH15	MGT		BH15W	18/03/2004	0.005	2.1									1815		2.14		0.82		5.6			<0.0002		0.4	<0.1		6.84
BH15	WSL		BH-15	18/03/2003	<0.01	4.1									1826.5		4.01		<0.1		3.9					0.41	0.011		6.91
BH15	WSL		BH-15	6/2/02	0.05	9.1									1650	1600	3.99		0.2		0.47		75				0.03	7.6	7
BH15	WSL		SA-BH15W	6/12/00	<0.01	2.2													<0.2	0.1	1		110				<0.05		
BH15	WSL		BH15W	3/2/00	0.01	9.1																							
BH16	WSL		BH16W	2/03/2005	0.24	160									2150		3.81		0.23		0.1				65	0.17	0.76		8
BH16	MGT		BH16W	18/03/2004	0.11	170									2035		4.21		0.36		0.02			<0.02	89	0.15	7.6		7.92
BH16	WSL		BH16W	18/03/2003	0.18	180									2167		18.74		1.3		0.02			55	100	0.18	0.58		7.16
BH16	WSL		BH-16	6/2/02	0.27	160	<0.001	<0.001	<0.01	0.23	<0.01	<0.01		<0.01	2183.5	1500	2.46		0.32		1.3		4				1.4		7.82
BH16	WSL		SA-BH16W	6/12/00	0.37	160												0.1	4.3	<0.05	<0.10		13				0.47	8	
BH16	WSL		BH16W	3/2/00	0.3	180													<0.2	0.4	<0.1		210				<0.05		
BH16	WSL	Blind. Dup.	BH20W	3/2/00	0.32	180													0.4	<0.1	<0.1		210				<0.05		
BH17	WSL		BH17W	2/03/2005	0.05	27									1630		2.01		0.54		0.37					0.15	0.05		7.5
BH17	MGT		BH17W	18/03/2004	0.009	32									1155		0.58		0.63		0.02			<0.0002		0.14	1.8		6.95
BH17	WSL		BH17	18/03/2003	<0.01	29									1666.5		4.94		10		<0.01					0.11	0.14		6.95
BH17	WSL		BH-17	6/2/02	0.01	27									1628	1500	3.5		1.8		0.08		33				0.14	7.5	
BH17	WSL		SA-BH17W	6/12/00	0.02	40													0.2	<0.1	<0.1		47				<0.05		
BH17	WSL		BH17W	3/2/00	0.02	68																							
BH18	WSL		BH18W	2/03/2005	<0.01	0.4									1080		2.34										0.01		6.7
BH18	MGT		BH18W	19/03/2004	0.006	0.24									935		0.41		4.2		<0.02			<0.0002		0.23	0.18		6.58
BH18	WSL		BH18	18/03/2003	<0.01	4.6									1078		19		12		<0.01					0.25	0.3		6.39
BH18	WSL		BH-18	6/2/02	<0.01	0.3	<0.001	<0.001	<0.01	5.4	<0.01	<0.01		<0.01	1945		0.55											7.2	6.39
BH18	WSL		SA-BH18W	6/12/00	0.01	1													<0.2	0.4	<0.1		38				<0.05		
BH18	WSL		BH18W	3/2/00	0.01	0.8																							
BH19	WSL		BH19W	1/03/2005	<0.01	0.2									2980		2.34		0.63		0.09					0.32	0.16		7.3
BH19	MGT		BH19W	19/03/2004	0.026	40									1925		0.69		1.3		<0.02			<0.002		0.33	9.5		7.08
BH19	WSL		BH19	18/03/2003	0.03	33									1980		0.56		4		<0.01		54			0.4	0.73		6.16
BH19	WSL		BH-19	6/2/02	0.05	32	<0.001	<0.001	<0.01	0.09	<0.01	<0.01		<0.01	1996.5													7.6	7.2
BH19	WSL		SA-BH19W	6/12/00	0.06	33																					0.75		
BH19	WSL		BH19W	3/2/00	0.11	49													<0.2	0.3	<0.1		85						
BH19	MGT	Ext. Dup.	BH19W(B)	3/2/00	0.09	46													<0.2	0.22	18		100						
BH20	WSL		BH20W	2/03/2005	0.15	400									3650		0.24		0.56		0.01					0.01	4.7		8.4
BH20	WSL	Blind. Dup.	QA-1	2/03/2005	0.13	380													0.58		<0.01					0.02			
BH20	MGT	Ext. Dup.	QA-2	2/03/2005	0.056	670				0.08									0.09		<0.02					0.059			
BH20	MGT		BH20W	20/03/2004	0.2	620									2915		0.41		0.77		<0.02			6.2		0.01	41		8.05
BH20	WSL	Ext. Dup.	BH20(B)IN	20/03/2004	0.21	350	<0.001	<0.001	<0.01			<0.01		<0.01					<0.1		<0.01				690	0.02			
BH20	MGT	Blind. Dup.	BH8W	20/03/2004	0.17	600													0.98		0.25			5.1		0.009	21		
BH20	WSL		BH20W	18/03/2003	0.19	430									3586		0.06		3.7		0.03					0.03	15		8.08
BH20	WSL		BH-20	6/2/02	0.21	670									4026	1800	0.37		1.8		0.94		100				5.1		8.07
BH20	WSL		SA-BH20W	6/12/00	0.16	450																						8.2	
BH20	WSL	Blind. Dup.	SA-BH24W	6/12/00	0.19	470																						8.1	
BH21	WSL		BH21W	2/03/2005	0.27	390									3595		0.32		0.53		<0.01				1200	0.19	12		8.6
BH21	MGT		BH21W	20/03/2004	0.25	520	0.013	<0.0002		0.001		<0.001	<0.001	<0.001	2640		0.73		1.1		<0.02			4.9	380	0.17	25		8.31
BH21	WSL		BH21W	18/03/2003	0.23	395									3432		0		3.2		<0.01		71	270	280	0.18	5.2		8.35
BH21	WSL	Blind. Dup.	BH8W	18/03/2003	0.03	390															4.5					0.2	12		
BH21	MGT	Ext. Dup.	BH21W(B)	18/03/2003	0.1	600													7		<0.05		23			0.16	13		
BH21	WSL		BH-21	6/2/02	0.32	950	0.012	<0.001	<0.01	0.36	<0.01	<0.01		<0.01	4361.5	1400	0.18		3.1		1.2		140				4.8		8.49
BH21	WSL		SA-BH21W	6/12/00	<0.01	650												<0.1	28	<0.05	<0.10		20				3.1	8.4	
BH22	WSL		BH22W	2/03/2005	<0.01	95									980		0.68		0.64		0.01					0.25	5.5		7.4
BH22	MGT		BH22W	20/03/2004	0.076	190									1045		5.04		0.77		<0.02			0.83		0.2	9.9		7.46
BH22	WSL		BH22W	18/03/2003	0.09	110									1066.5		0.16		0.9		<0.01					<0.01	3.3		7.58
BH22	WSL		SA-BH22W	6/2/02	0.08	210									2381.5		0.46		1.4		0.38		28				3		7.49
BH22	WSL		SA-BH22W	6/12/00	0.59	170												<0.1	5.3	<0.05	<0.10		31				2.2	7.6	
BH23	WSL		BH23W	2/03/2005	0.08	94									1685		3.05		1.3		<0.01					0.68	1		7.2
BH23	MGT		BH23W	19/03/2004	0.068	99									1595		1.68		0.82		<0.02			<0.0005		0.077	29		6.94
BH23	WSL		BH-23	18/03/2003	0.1	100									1710.5		14.23		13		<0.01					0.08	4.7		6.91
BH23			BH-23	6/2/02	0.11	40									646.3	870	6.6		3.3		0.65		3				<0.01		6.85
BH23	WSL		SA-BH23W	6/12/00	0.19	62												3.8	14	<0.05	<0.10		<1				0.94	7.3	
BH24	WSL		BH24W	2/03/2005	<0.01	22									1520		1.41		1.1		<0.01					0.08	0.02		7.1
BH24	MGT		BH24W	18/03/2004	0.01	34									1375		1.18		5.3		<0.02			<0.0005		0.064	<0.5		6.69
BH24	WSL		BH-24	18/03/2003	0.02	44									1375		1.74		1.2		<0.01		48				0.05		7.04
BH25	WSL		BH25W	2/03/2005	0.02	75									1980		1.51		0.67		0.01				4	0.04	3.3		7.4
BH25	MGT		BH25W	18/03/2004	0.035	79									1540		1.43		0.77		<0.02			<0.0002	17	0.036	0.76		7.07
BH25	WSL		BH-25	18/03/2003	0.02	74									1699.5		1.64		5.3		0.02		<1	81	170	0.04	1.4		7.11
BH26	WSL		BH26W	2/03/2005	<0.01	55									1680		2.01		1.9		0.01				<2	0.06	1.5		7.1
BH26	MGT		BH26W	18/03/2004	0.009	65									1540		2.04		150		<0.02			<0.0002	15	0.061	9.5		6.81
BH26	WSL		BH-26	18/03/2003	<0.01	61									1485		1.12		0.8		<0.01		2	3	17	0.07	1.4		6.83
BH27	WSL		BH27W	2/03/2005	<0.01	3.6									1685		1.82		2.1		0.01				44	0.29	1.8		7.6
BH27	MGT		BH27W	19/03/2004	<0.005	0.87									1650		2.74		1.2		<0.02			<0.0002	55	0.36	7.6		7.05
BH27	WSL		BH-27	18/03/2003	<0.01	0.9									1673		0.56		1.9		<0.01		20	5	33	<0.01	0.96		6.89
BH28	WSL		BH28W	2/03/2005	<0.01	0.5									1220		0.84		0.33		0.64					0.26	0.47		6.9
BH28	MGT		BH28W	19/03/2004	0.006	0.6									1210		0.34		0.43		<0.02			<0.0002		0.28	7.7		6.87
BH28	WSL		BH-28	18/03/2003	<0.01	<0.1									1320		0.22		7.3		0.01		15			0.34	0.56		6.82
BH29	WSL		BH29W	2/03/2005	<0.01	17									2680		3.01		1.7		<0.01				31	1.6	5.6		7
BH29	MGT		BH29W	19/03/2004	0.006	4.1													5		<0.02			<0.0002	23	1.5	29		
BH29	WSL		BH-29	18/03/2003	<0.01	7.7									4328.5		0.73		2.6		<0.01		130	<2	17	0.9	5.7		6.81
BH30	WSL		BH30W	1/03/2005	<0.01	1.5									1755		1.27		1.1		<0.01					0.34	0.08		7
BH30	MGT		BH30W	19/03/2004	0.008	1.8									1760		0.31		8.3		<0.02			<0.0002		0.26	4.4		6.52
BH30	WSL		BH-30	18/03/2003	0.01	1.3									1633.5		0.18		9.1		<0.01		45			0.31	0.18		6.75
BH31	MGT		BH31W	18/03/2004	0.12	570																							
BH32	WSL		BH32W	3/03/2005	0.09	530									3525		0.81										1.3		7.7

Sample Location	Lab	Sample Type	Sample Name	Sampling Date	Total Cyanide	N as NH3	Arsenic	Cadmium	Copper	Iron	Nickel	Lead	Mercury	Zinc	TDS (Field)	TDS (Lab)	DO Field	DO Lab	Fe 2+	Fe 3+	Nitrate	Nitrite	Sulphate	BOD	COD	Mn	Methane	pH (lab)	pH Field

PROTECTED BENEFICIAL USES at Sale Depot — GROUNDWATER QUALITY OBJECTIVES (mg/l) for Segment B

Criteria for Ecosystem Protection	0.007	0.9	0.003	0.00015	0.0014	1	0.011	0.0034	0.0006	-	-	-	110	110	-	0.16	-	-	-	-	-	0.01	-	-	6.5	6.5
Criteria for Agricult. Water Supply (Irrigation)	-	-	0.1	0.01	0.2	1	0.2	0.2	0.002	-	-	-	-	-	-	-	-	-	-	-	-	0.01	-	-	-	-
Criteria for Livestock	0.07	0.1	0.5	0.01	0.5	-	1.0	0.1	0.002	-	3000	-	85	85	-	90	1000	-	-	-	-	0.01	-	-	-	-
Criteria for Primary Contact Recreation	0.1	0.1	0.05	0.005	1.0	0.3	0.1	0.05	0.001	-	1000	-	80	80	-	10	400	-	-	0.07	-	5-9	5-9
Adopted Screening Criteria (minimum value)	0.007	0.1	0.003	0.00015	0.0014	0.3	0.011	0.0034	0.0006	-	1000	0	80	80	-	0.16	400	-	-	0.01	-	6.5	6.5