



## TECHNICAL MEMORANDUM

---

**To:** Brian Rakvica (NDEP)

**From:** Ranajit Sahu (BRC)

**cc:** John J. Dodge, PG (DBS&A)  
Stephen J. Cullen, PG (DBS&A)

**Date:** June 23, 2009

**Subject: Technical Memorandum – Work Plan for Groundwater Sampling, BMI Common Areas (Eastside) Site, Clark County, Nevada (rev 1)**

---

### Introduction

Per the request of the NDEP, this Groundwater Monitoring Work Plan (GMWP) provides specific information and guidance for a round of groundwater sampling and analysis to be performed by Basic Remediation Company (BRC) at the Basic Management, Inc. (BMI) Common Areas (Eastside or ‘Site’) in Henderson, Nevada. The Eastside BMI Common Areas are located in Clark County, Nevada, approximately 13 miles southeast of Las Vegas, Nevada. This GMWP is focused on a portion of the BMI Common Areas known as the Eastside – consisting of approximately 2,320 acres.

This GMWP describes the scope of work to collect groundwater data to be used to complete the evaluation of the lateral and vertical extent of groundwater contamination beneath the Eastside. This effort began in 2004 with the collection of soil boring and groundwater data, and continued with five rounds of groundwater sampling and analysis in 2006, 2007, and 2008.

This GMWP includes wells that have been installed by BRC subsequent to the earlier groundwater monitoring events at the Site, including wells previously designated as the upgradient alluvial aquifer (Aa) wells, the Northeast Area wells, and the additional Shallow Zone, Middle Zone, and Deep Zone wells currently being installed per the NDEP-approved work plan for well installation (BRC, 2009a). Findings from the 2004 groundwater sampling event and the 2006/2007/2008 quarterly groundwater monitoring events have been used as a basis for

Page 2

developing this GMWP. This revised plan also addresses NDEP comments, dated April 30, 2009, to the draft sampling plan dated April 28, 2009 (Appendix A).

## **Background**

The Eastside BMI Common Areas consists of former used and unused wastewater effluent ponds (now dry) into which various wastewaters from the BMI Industrial Complex were discharged from the early 1940s through 1976, and portions of the system of conveyance ditches that were used to transport those wastewaters to the effluent ponds. The Eastside also includes municipal rapid infiltration basins and recently-active, lined ponds in the southwestern portion of the Upper Ponds that were constructed over the former ponds (also known as the TIMET active ponds or the Pabco Road ponds). In addition to the active and former effluent ponds and conveyance ditch segments, the Eastside also includes adjoining lands northeast of Boulder Highway, northwest of Lake Mead Drive, and south of the Las Vegas Wash. With the exception of a short segment that traverses Parcel 9 South, conveyance ditch segments to the west of Boulder Highway are not part of the Eastside Site.

## **Site Hydrogeology**

The uppermost water-bearing zone is unconfined and present primarily in alluvium (referred to as the Shallow Zone). At some locations on portions of the Site, Shallow Zone groundwater is first encountered in the uppermost portion of the Tertiary Muddy Creek Formation (TMCf). This unconfined Shallow Zone groundwater generally flows in a northerly direction toward Las Vegas Wash. The Shallow Zone groundwater is generally continuous across the Site, but there are areas where Shallow Zone wells are dry.

Below the Shallow Zone, deeper groundwater occurs in sporadically encountered lenses in the Middle Zone, designated between approximately 90 and 270 feet below grade. Deep Zone groundwater is generally continuous across the Site and is characterized with wells screened below 270 feet bgs to a maximum nominal depth of 400 ft bgs. Groundwater elevation data from the last several rounds of groundwater monitoring (2006, 2007, 2008) show that Deep Zone groundwater is confined, and the potentiometric surface of Deep Zone groundwater is oriented generally north towards Las Vegas Wash (MWH, 2008). NDEP produced a document in

Page 3

January 2009 entitled, Hydrogeologic and Lithologic Nomenclature Unification (NDEP 2009). The NDEP document defines the rationale behind the definitions of the Shallow, Middle, and Deep Zones at the Site and at adjacent properties. Separate NDEP-approved project documents provide information regarding area geology and hydrogeology, soils, history, and investigations completed to-date (e.g., BRC, 2006).

Existing non-BRC wells HMW-08, HMWWT-4, HMWWT-6, and TWI were previously designated as Middle Zone wells in prior sampling events. Based on their well screen intervals listed below, these wells have been re-designated as Shallow Zone wells:

- HMW-08: 17 to 37 feet below grade (fbg)
- HMWWT-4: 36 to 51 fbg
- HMWWT-6: 36 to 51 fbg
- TWI: 9 to 19 fbg

### **Previous Monitoring Events**

BRCA has completed five rounds of groundwater monitoring at the Site. Results from each of these monitoring events are presented and discussed in the following NDEP-approved reports:

- First Quarterly Groundwater Monitoring Report, April-June 2006, BMI Common Areas (Eastside), Clark County, Nevada.
- Second Quarterly Groundwater Monitoring Report, July-August 2006, BMI Common Areas (Eastside), Clark County, Nevada.
- Third Quarterly Groundwater Monitoring Report, October-November 2006, BMI Common Areas (Eastside), Clark County, Nevada.
- Fourth Quarterly/Annual Groundwater Monitoring Report, January-March 2007, BMI Common Areas (Eastside), Clark County, Nevada.
- Fifth Quarterly/Annual Groundwater Monitoring Report, April-July 2008, BMI Common Areas (Eastside), Clark County, Nevada.

Page 4

The Fifth Round event included utilizing 36 on-site BRC wells (previously installed during the 2004 Hydrogeological Characterization Investigation), 4 BRC replacement wells (MCF-06A-R, MCF-08B-R, AA-23R, and MCF-23A-R), 35 newly installed BRC wells (installed between June and August 2007, and March and August 2008), and 33 non-BRC wells totaling 108 wells utilized for chemical analyses. Four BRC wells (AA-11, AA-14, AA-15, AA-19) and 43 non-BRC wells were used for groundwater level measurements only.

## **Objective**

Data from this proposed groundwater monitoring event will be used to update the CSM for the Eastside site and, along with previously collected data, be the basis for development of a groundwater Remedial Alternatives Study (RAS) for the Eastside. Under this GMWP, data will be reviewed and validated by BRC and/or its consultant, and a report will be prepared that summarizes the sampling event. The GWMP report will be the primary document where monitoring activities from all components of the proposed GMWP are summarized. This will be the first groundwater monitoring event to include the previously monitored wells and new wells installed since the fifth quarterly monitoring event.

Rather than sampling all existing wells for a broad suite of analytes, BRC believes that the existing dataset from the prior rounds of sampling need not be duplicated for some parameters. The existing data set was screened to identify wells where:

- Sampling was conducted less than four times previously;
- Analytical parameters are consistently not-detected (with acceptable detection limits);
- Parameters are consistently detected below Nevada Basic Comparison Levels (BCLs) or U.S. Environmental Protection Agency (U.S. EPA) Maximum Contaminant Levels (MCLs);
- Analytical parameters are relatively stable or consistently detected above MCLs or BCLs.

Page 5

A summary of the data screening is presented in Table 1 and Table 2. A summary of the sampling program for existing wells and new 2009 wells is presented in Table 3. New 2009 wells will be sampled for a broad suite consistent with the 5th round event (Table 3, Table 4).

## **Scope of Work**

The proposed scope of work consists of the following tasks:

- Field implementation;
- Data evaluation; and
- Reporting.

### **Task 1: Field Implementation**

The requirements for sample collection and analysis are established in the NDEP-approved BRC Quality Assurance Project Plan (QAPP; BRC and ERM 2009) and the Field Sampling and Standard Operating Procedures (FSSOP; BRC, ERM and MWH 2007), which are stand-alone NDEP-approved project documents.

#### Pre-Field Activities

The pre-field activities will be conducted in accordance with applicable standard operating procedures (SOPs; BRC, ERM and MWH 2007). The BRC QAPP (BRC and ERM 2009) and BRC Health and Safety Plan (BRC and MWH 2005) prepared for the BMI Common Areas will be used for this proposed scope of work. All work will be completed under the direction of a State of Nevada Certified Environmental Manager.

#### Water Level Measurements

Water level measurements provide a measure of water potential (hydraulic head) at specific geographic locations and depths beneath the Site. The primary purpose for measuring water levels in monitoring wells is to determine horizontal and vertical groundwater flow directions

Page 6

and gradients. These measurements, when converted to elevations relative to a standard datum (such as mean sea level or the North American Vertical Datum) and posted on a map, can be contoured to prepare potentiometric surface maps, and used to determine where and at what rate groundwater is moving.

Water levels will be measured in wells shown on Figure 1, Figure 2, and Figure 3 to provide water level data to determine groundwater gradients and flow directions. This water level measurement event will be conducted over a one to four day period, and will be coordinated to coincide with the other BMI Companies, if possible. Measurements within geographic areas will be collected in the shortest possible time so that the local hydraulic gradients in each zone and between zones can be assumed to have been made under comparable conditions. Water level measurements will be performed in accordance with procedures described in the project specific SOP-5 (Water Sampling and Field Measurements).

#### Water Quality Sampling and Analysis

Water quality samples will be collected from the monitoring wells specified on Figure 1, Figure 2, and Figure 3 and Table 3. As further discussed in detail below, monitoring will be completed in the selected wells to:

- Re-sample wells for parameters with high detection limits in prior analyses;
- Utilize new analytical methods to achieve lower detection limits where needed;
- Collect additional data to complete new cation-anion balance calculations and further analyze the CAB calculations completed with data from the prior five rounds of sampling data;
- Characterize offsite upgradient impacts and flow direction;
- Sample new 2009 wells;
- Further characterize evaporite deposits and total dissolved solids (TDS) in the Deep Zone.

Page 7

At any point, wells may be evaluated for removal from the monitoring program and will be considered on a case-by-case basis by the NDEP. This evaluation will include review of the detected analytes, appropriate detection limits, applicable water quality parameters, professional judgment and project goals. It is also possible that BRC will coordinate with the other companies in implementing this program so that duplication of effort is avoided.

As approved by the NDEP in a July 25, 2006 meeting between BRC and the NDEP, BRC will use the micro-purge and sampling methodology that were used for the previous Eastside groundwater monitoring program. BRC-owned wells have been or will be equipped with QED® Well Wizard (A-system and L-system) dedicated bladder pumps for the monitoring and sampling of wells for the groundwater monitoring. QED® MP10H high pressure micro-purge controllers will be used. The Well Wizard A-system was installed in all AA-wells (or shallow MCF-wells) due to their relative shallow well design (less than 100 feet deep). The L-system pumps were required in many of the MCF wells due to the depth of the wells. The L-system uses a drop-tube that attaches to the base of the pump and extends down to a specified intake depth within the well screen interval. This allows the pump to be located closer to the top of the well and still collect groundwater samples from across the screen interval located as deep as 380 feet btoc.

Generally, pump (sample) intakes were installed across the middle of the well screen intervals for saturated well screens (typically identified as MCF wells – confined aquifer), and approximately 1 to 3 feet from the bottom of the wells for non-saturated well screens (typically identified as AA wells – unconfined aquifer).

Where possible, non-BRC wells are proposed to be monitored and sampled using a QED® brand SamplePro portable bladder pump system. QED® MP10H high pressure micro-purge controllers will be used during the event. Due to circumstances previously identified during the prior quarterly monitoring events, several non-BRC wells will be monitored and sampled for groundwater during this event using the SamplePro portable pump system. The portable pump

Page 8

(sample) intakes are generally placed in the middle of the saturated well screen interval for groundwater monitoring and sampling collection.

Field quality control measures to be implemented during the quarterly groundwater sampling events will be performed according to BRC QAPP requirements and BRC SOPs. The required QC sample frequencies and field QC measures will include but are not limited to:

- Collection of 10% field duplicates, 5% equipment blanks, 5% trip blanks, and 10% matrix spike/matrix spike duplicate samples;
- Providing accurate, detailed field documentation; and
- Proper sample packaging and shipment.

SOPs specific to groundwater sampling and field analytical procedures are presented in SOP-5 and SOP-30.

#### Field Tasks to Evaluate Cation/Anion Balances

Several cation-anion balance (CAB) calculations completed with the prior monitoring event data exceed the 5 percent acceptable criteria detailed in Section 1030 E of the Standard Methods for the Examination of Water and Wastewater. As discussed below (see Analytical Program and Data Evaluation), a selected set of wells will be filtered in the field (for anions and metals) to collect “dissolved” samples to help evaluate the prior CAB calculations. The filtered data set will supplement the unfiltered “total” samples that will also be collected for each well. Field filtering will be completed in accordance with SOP-5 (Water Sampling and Field Measurements). It is suspected that field-filtering may help achieve a better CAB. Field-filtered (“dissolved”) samples will be collected from the following wells:

- AA-08
- AA-20
- AA-27
- AA-UW4
- AA-UW6
- DBMW-3
- DBMW-4
- DBMW-7
- MCF-05
- MCF-06A
- MCF-16A
- MCF-16C
- MCF-18A
- MCF-20A
- POD2

This list represents the group of wells from the 5th round event that failed the CAB with an acceptance criteria exceeding 10 percent.

In addition, alkalinity will be measured in the field at the same set of wells to help determine if this parameter is a factor in the CAB failures. Field alkalinity measurements will also be completed in accordance with SOP-5. It is suspected that alkalinity is not a major factor in the CAB. As discussed below (see Data Evaluation), the field alkalinity measurements will be compared to lab alkalinity measurements in the revised CAB calculations.

The field samples for the list of wells above will be collected and packaged separately for the metals and anion analyses (both “total” and “dissolved”). The samples will be isolated from the remaining Site samples (separate coolers, separate chain-of-custody forms, separate delivery) so that the laboratory data reports can be isolated for detailed review after the analyses are complete.

#### Waste Management

Purge water resulting from groundwater sampling will be disposed of in TIMET pond SW-12, pursuant to an NDEP-approved Temporary Authorization to Discharge (permit).

#### Well Maintenance and Inspections

The groundwater monitoring includes inspection and well maintenance activities that identify wells that ensure wells are properly maintained; and that, therefore, representative samples are collected from the monitoring wells. Every monitoring well scheduled for water level

Page 10

measurement or sampling will be inspected for deficiencies and problems. An inspection checklist will be completed, noting any deficiencies and problems, and will include the following information:

- Date, inspector's initials, well identification number; and
- Description of condition for security posts, well pad, security casing, and dedicated sampling components, if applicable;
- Gasket, lock, well casing, well head, flange bolt tightness; and
- Straightness of the well head.

In addition to the routine well inspection, each well total depth will be measured to determine if formation material surrounding the well has migrated into and accumulated inside the well casing. Wells that contain an accumulation of material that exceeds 20 percent of the screened interval will be considered for redevelopment.

Routine maintenance such as lubricating the well cap lock with graphite, replacing the lock, replacing the well gasket, replacing the well head bolts, and tapping out the bolt holes will be performed each water level monitoring event, as needed, for on-site (i.e., BRC owned) wells only. For all off-site wells requiring maintenance, the respective site owners will be notified.

All maintenance performed will be documented in a bound logbook. If well components are damaged and cannot be repaired on the spot (such as bent security posts or casing, or a cracked concrete well pad), the problem will be described and recommended for correction under a well maintenance task. These routine maintenance activities will be summarized in the groundwater monitoring report prepared to document the sampling event.

#### Analytical Program

The proposed analytical suites for this groundwater monitoring event are listed below and detailed in Tables 3 and 4:

- Field measurements (using air-tight flow-through cell): oxidation-reduction potential (ORP), dissolved oxygen (DO), pH, temperature, specific conductivity, and alkalinity;
- Water quality parameters (alkalinity (field and laboratory measured), bicarbonate alkalinity, carbonate alkalinity, hydroxide alkalinity, hardness, total dissolved solids, and total suspended solids);
- General chemistry parameters (ammonia, iodide, pH, total inorganic carbon, total Kjeldahl nitrogen [TKN], and total organic carbon);
- Anions (including perchlorate) (unfiltered) plus a second duplicate set of filtered samples for select wells (see well list above);
- Metals (including arsenic) (unfiltered) plus a second duplicate set of filtered samples for select wells (see well list above);
- Select radionuclides (thorium-228, thorium-230, thorium-232, uranium-233/234, uranium-235/236, uranium-238, radium-226, and radium-228);
- Organochlorine pesticides; and
- Volatile organic compounds (VOCs).

Groundwater samples from each well selected for water quality sampling will be analyzed for the parameters listed above according to Table 3 and Table 4. New 2009 wells (Table 3) will be sampled for the parameters listed above to be consistent with the 5th round event.

In addition to the above proposed analytical program listed above, the following stable isotope analyses will be completed in select wells to support the CSM:

- Delta  $^{18}\text{O}$  (del O) (stable isotopes of oxygen (ratio of  $^{18}\text{O}$  to  $^{16}\text{O}$ )); and
- Delta  $^2\text{H}$  (del H) (stable isotopes of hydrogen (ratio of deuterium ( $^2\text{H}$ ) to protium ( $^1\text{H}$ ))).

Stable isotopes samples will be collected from the following Deep Zone wells:

- MCF-02A;
- MCF-06A-R;
- MCF-18A;
- MCF-29A;
- MCF-30A; and
- MCF-31A.

As shown in the boring logs for wells MCF-06A-R and MCF-18A, these wells are located where an evaporitic deposit is present in the Deep Zone. The evaporitic deposit is identified by the abundance of gypsum in the logged soils at depth. As a result, del O and del H data from wells MCF-06A-R and MCF-18A should be similar to existing data from well MCF-20A (isotopically heavy).

Deep Zone well MCF-02A is not located within the evaporitic deposit, and in addition, the concentration of total dissolved solids (TDS) in this well was relatively low at 540 milligrams per liter (mg/L) in the fifth sampling round. The data from MCF-02A is thus anticipated to be isotopically distinct (relatively light) from MCF-06A-R, MCF-18A, and MCF-20A. The proposed del O and del H data from the Deep Zone wells will be used to evaluate the origin of the Deep Zone TDS at the Eastside area.

The proposed monitoring program for new 2009 wells will follow the analytical method specifications presented in the Fifth Round Groundwater Monitoring Work Plan (Revision 0) prepared March 20, 2008 (BRC, 2008b) (Table 3, Table 4).

As noted in the NDEP-approved March 25, 2009 technical memorandum entitled, "Resolution of Various Analytical Program Issues," arsenic will be analyzed using collision cell methodology for reduced detection limits (BRC, 2009c). Similarly, perchlorate will be analyzed using liquid chromatography/mass spectrometry (LC/MS) instead of ion chromatography so that reduced detection limits can be achieved. The analyses will be completed in accordance with the NDEP-approved QAPP (BRC, 2009).

## **Task 2: Data Evaluation**

Measurement data will be consistently assessed and documented to determine whether objectives were met. The review will assess data quality and identify potential limitations on data use. The data quality review process provides information on overall method performance and data usability. The BRC QAPP defines the basis for assessing the elements of data quality. Laboratory data and data quality review reporting procedures and formats are also addressed in the BRC QAPP.

Once the data are collected, BRC will subject the data to validation per procedures agreed to previously with the NDEP and consistent with the BRC QAPP (BRC and ERM 2009c) and SOP-40. Only those data determined by the QA/QC review to be suitable for use will be considered for the site data set. A separate Data Validation Summary Report will be prepared and submitted to NDEP for the monitoring event.

The data collected from this sampling round will also be used to calculate a revised CAB. The field-filtered (“dissolved”) and non-filtered (“total”) metals and anion data will be used to calculate separate balances to try and determine if field-filtering has been a factor in the past CAB failures. Field and laboratory alkalinity measurements will also be used to calculate separate CABs to evaluate the potential effect of field measurements for this parameter. In addition, the separate laboratory reports for the selected list of wells will be reviewed in detail to try and determine if any analytical procedures are a factor in the CAB failures. Revised Piper and Stiff diagrams will be created using the new data if appropriate. As in prior events, the laboratory will also be completing their own CAB calculations to determine if metals analyses need to be re-run so a balanced CAB can be completed. The results of these CAB evaluation tasks will be presented in the sampling report.

### **Task 3: Reporting**

A sampling report will be prepared to document the groundwater monitoring activities at the Site. The purpose of the groundwater monitoring report is to present the analytical results with an evaluation of current groundwater conditions at the Site.

Section 1.0 of the report will present introduction information pertaining to the project history and hydrogeology, purpose and scope, and report organization. Section 2.0 will summarize the monitoring event activities including well measurements, sample collection, decontamination procedures, management of investigation-derived waste, and the analytical program. Section 3.0 will present the groundwater monitoring data including; groundwater conditions and analytical results. The results of the CAB evalauation tasks will also be presented. An electronic (PDF) copy of the report, well hydrographs, isoconcentration trend graphs, and isoconcentration maps will be included as appendices.

BRCA currently maintains a comprehensive project database for all Site data. All new data collected pursuant to this GMWP will be incorporated into the project database. Each laboratory will provide the analytical data in electronic format for storage in the project analytical database. The Data Manager (currently ERM) will amend the project database with each new set of data provided by the laboratory, perform accuracy checks between the hardcopy and electronic data reports, and maintain any data qualifiers resulting from data validation activities.

### **Schedule**

Once final approval of the GMWP is received from NDEP, field implementation activities can commence within one month. However, BRCA will collect the data at the next synchronized quarterly event previously agreed to by all of the BMI companies. BRCA will provide NDEP with at least one week notice prior to the initiation of field activities at the Site. It is anticipated that this quarterly monitoring can be completed within four weeks, depending on field conditions. The groundwater samples will be submitted to the laboratories and placed on a standard turn around time, which is 28 days for the complete analyte list. A report will be completed within one month after the final data are received from the laboratory and validated. Report submittal is

Page 15

subject to change based upon length of time required to conduct each sampling event and the time required to receive the analytical data from the laboratory.

## References

Basic Remediation Company (BRC) and MWH. 2005. BRC Health and Safety Plan, BMI Common Areas, Clark County, Nevada. October.

Basic Remediation Company (BRC), Environmental Resources Management (ERM), and Daniel B. Stephens & Associates, Inc. (DBS&A). 2006. Closure plan, BMI Common Areas, Prepared for Basic Remediation Company (BRC), Henderson, Nevada. August 2006.

Basic Remediation Company (BRC), ERM, and MWH. 2007. BRC Field Sampling and Standard Operating Procedures, BMI Common Areas, Clark County, Nevada. August.

Basic Remediation Company (BRC). 2008. Fifth Round Groundwater Monitoring Work Plan, BMI Common Areas (Eastside), BMI Complex, Henderson, Nevada (Revision 0), March 20.

Basic Remediation Company (BRC). 2009a. Work Plan for Monitoring Well Installation, BMI Common Areas, Eastside, March 4.

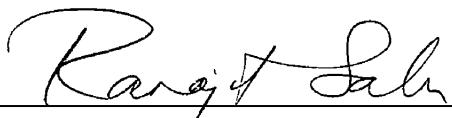
Basic Remediation Company (BRC). 2009b. Technical Memorandum – Resolution of Various Analytical Program Issues, BMI Common Areas (Eastside) Site, Clark County, Nevada

Basic Remediation Company (BRC) and ERM. 2009c. BRC Quality Assurance Project Plan (QAPP). May.

MWH, 2008. Fifth round groundwater monitoring report, April - July 2008, BMI Common Areas (Eastside), Clark County, Henderson, Nevada. Prepared for Basic Remediation Company (BRC), Henderson, Nevada. December 2008.

Nevada Division of Environmental Protection (NDEP). 2009. Hydrogeologic and Lithologic Nomenclature Unification, January 6.

I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and to the best of my knowledge comply with all applicable federal, state and local statutes, regulations and ordinances. I hereby certify that all laboratory analytical data was generated by a laboratory certified by the NDEP for each constituent and media presented herein.



6/23/09

---

Dr. Ranajit Sahu, C.E.M. (No. EM-1699, Exp. 10/07/2009)      Date  
BRC Project Manager

## **Attachments**

Table 1 - Summary of Existing Groundwater Data

Table 2 - Summary of Parameter Screening and Wells Selected for Sampling - 2009 Event

Table 3 - Summary of Sampling Program - 2009 Event

Table 4 – Analytical Specifications - 2009 Event

Figure 1 - Shallow Zone Monitoring Well Locations

Figure 2 - Middle Zone Monitoring Well Locations

Figure 3 - Deep Zone Monitoring Well Locations

Appendix A - Response to Comments

## **Tables**

**Table 1**  
**Summary of Existing Groundwater Data**  
**BMI Common Areas - Eastside**

Well	Perchlorate					Well	Arsenic						
	No. of Sampling Events	No. of Detects	No. of Detects > Compare	Min. Detect	Max. Detect		No. of Sampling Events	No. of Detects	No. of Detects > Compare	Min. Detect	Max. Detect	No. of SQL > Compare	
AA-01	5	5	5	1170	1630	2	AA-01	5	4	4	66.3	78.3	3
AA-07	5	5	5	405	509	1	AA-07	5	5	5	64.5	75.8	3
AA-08	5	5	5	2790	5240	4	AA-08	5	4	4	46.2	67.6	5
AA-09	5	5	5	6470	7470	4	AA-09	5	4	4	57.7	97.7	5
AA-10	5	5	5	2220	3430	3	AA-10	5	1	1	37.3	37.3	5
AA-13	5	5	3	10.1	37.8	0	AA-13	5	4	4	39.7	54.4	4
AA-18	5	5	5	100	109	0	AA-18	5	5	5	28.1	40.3	2
AA-19	1	1	1	1610	1610	0	AA-19	1	1	1	69	69	1
AA-20	5	5	5	5100	7180	4	AA-20	5	5	5	84.7	125	5
AA-21	5	5	5	64.2	74.4	0	AA-21	5	4	4	73.7	96.9	5
AA-22	5	4	3	11.2	94.2	0	AA-22	5	1	1	22.2	22.2	5
AA-23R	1	1	1	682	682	1	AA-23R	1	0	0	--	--	1
AA-26	5	5	5	18.5	31.8	0	AA-26	5	3	3	35.3	48.9	5
AA-27	5	5	5	247	266	1	AA-27	5	2	2	38.7	42.5	4
AA-UW1	1	1	1	697	697	1	AA-UW1	1	1	1	69.8	69.8	1
AA-UW2	1	1	1	108	108	1	AA-UW2	1	0	0	--	--	1
AA-UW3	1	1	1	80.2	80.2	0	AA-UW3	1	0	0	--	--	0
AA-UW4	1	1	1	90	90	0	AA-UW4	1	0	0	--	--	1
AA-UW5	1	1	1	57.5	57.5	0	AA-UW5	1	0	0	--	--	1
AA-UW6	1	1	1	65.1	65.1	0	AA-UW6	1	1	1	102	102	1
BEC-6	5	5	5	14400	18400	5	BEC-6	5	2	2	34.9	37.4	4
BEC-9	5	5	5	518	1070	1	BEC-9	5	4	4	56.1	89.9	5
COH-1	2	0	0	--	--	1	COH-1	2	0	0	--	--	2
COH-2	2	0	0	--	--	1	COH-2	2	0	0	--	--	2
COH-2A	2	2	2	8330	8700	2	COH-2A	2	0	0	--	--	2
DBMW-1	1	1	1	8020	8020	1	DBMW-1	1	0	0	--	--	1
DBMW-10	1	1	1	552	552	1	DBMW-10	1	1	1	40.7	40.7	1
DBMW-11	1	1	1	490	490	1	DBMW-11	1	0	0	--	--	1
DBMW-12	1	1	1	18800	18800	1	DBMW-12	1	0	0	--	--	1
DBMW-13	1	1	1	10600	10600	1	DBMW-13	1	0	0	--	--	1
DBMW-14	1	1	1	14300	14300	1	DBMW-14	1	1	1	104	104	1
DBMW-15	1	1	1	1490	1490	1	DBMW-15	1	1	1	160	160	1
DBMW-16	1	1	0	13.6	13.6	0	DBMW-16	1	0	0	--	--	1
DBMW-17	1	1	0	10.3	10.3	0	DBMW-17	1	0	0	--	--	1
DBMW-19	1	1	1	1530	1530	1	DBMW-19	1	0	0	--	--	1
DBMW-2	1	1	1	5560	5560	1	DBMW-2	1	1	1	38.7	38.7	1
DBMW-20	1	1	1	2140	2140	1	DBMW-20	1	0	0	--	--	1
DBMW-22	1	1	1	243	243	1	DBMW-22	1	1	1	26.9	26.9	1
DBMW-3	1	1	1	6400	6400	1	DBMW-3	1	1	1	49.7	49.7	1
DBMW-4	1	1	1	4230	4230	1	DBMW-4	1	0	0	--	--	1
DBMW-5	1	1	1	3330	3330	1	DBMW-5	1	0	0	--	--	1
DBMW-6	1	1	1	1970	1970	1	DBMW-6	1	1	1	43.9	43.9	1
DBMW-7	1	1	1	2740	2740	1	DBMW-7	1	0	0	--	--	1
DBMW-8	1	1	1	3340	3340	1	DBMW-8	1	0	0	--	--	1
DBMW-9	1	1	1	3430	3430	1	DBMW-9	1	1	1	59.5	59.5	1
DM-1	5	5	5	56.4	225	0	DM-1	5	0	0	--	--	5
HMW-08	2	2	2	88.1	149	0	HMW-08	2	0	0	--	--	2
HMW-09	2	2	2	866	1670	1	HMW-09	2	1	1	60.2	60.2	2
HMWWT-6	2	2	2	78.8	96.1	1	HMWWT-6	2	2	2	20.2	29.4	2
MCF-01A	5	0	0	--	--	0	MCF-01A	5	0	0	--	--	5
MCF-01B	5	5	5	578	672	1	MCF-01B	5	5	5	68.9	82.7	5

**Table 1**  
**Summary of Existing Groundwater Data**  
**BMI Common Areas - Eastside**

Well	Perchlorate						Well	Arsenic					
	No. of Sampling Events	No. of Detects	No. of Detects > Compare	Min. Detect	Max. Detect	No. of SQL > Compare		No. of Sampling Events	No. of Detects	No. of Detects > Compare	Min. Detect	Max. Detect	No. of SQL > Compare
MCF-02A	5	0	0	--	--	0	MCF-02A	5	3	3	12.5	23.9	2
MCF-02B	5	0	0	--	--	0	MCF-02B	5	5	5	23.9	38.5	2
MCF-03A	5	0	0	--	--	0	MCF-03A	5	4	4	20.3	88.3	1
MCF-03B	5	5	5	67.7	93.3	1	MCF-03B	5	0	0	--	--	5
MCF-04	5	0	0	--	--	0	MCF-04	5	0	0	--	--	5
MCF-05	5	0	0	--	--	3	MCF-05	5	0	0	--	--	5
MCF-06A	5	0	0	--	--	2	MCF-06A	5	0	0	--	--	5
MCF-06B	5	5	5	3530	5680	4	MCF-06B	5	1	1	653	653	5
MCF-06C	5	5	5	2570	3620	1	MCF-06C	5	2	2	52.7	200	5
MCF-07	4	0	0	--	--	4	MCF-07	4	0	0	--	--	4
MCF-08A	5	0	0	--	--	2	MCF-08A	5	0	0	--	--	5
MCF-08B	4	0	0	--	--	1	MCF-08B	5	0	0	--	--	5
MCF-09A	5	0	0	--	--	0	MCF-09A	5	0	0	--	--	5
MCF-09B	5	1	1	70.3	70.3	0	MCF-09B	5	2	2	14.6	25	4
MCF-10A	5	1	0	2.38	2.38	0	MCF-10A	5	0	0	--	--	5
MCF-10B	5	1	0	1.1	1.1	0	MCF-10B	5	1	1	10.8	10.8	4
MCF-11	5	3	2	11.9	116	0	MCF-11	5	0	0	--	--	5
MCF-12A	5	0	0	--	--	0	MCF-12A	5	3	3	32.4	47.9	5
MCF-12B	5	5	5	2260	4130	3	MCF-12B	5	5	5	61.7	88.6	4
MCF-12C	5	5	5	325	711	1	MCF-12C	5	5	5	22.7	97.3	3
MCF-16A	5	0	0	--	--	2	MCF-16A	5	0	0	--	--	5
MCF-16B	5	0	0	--	--	2	MCF-16B	5	0	0	--	--	5
MCF-16C	5	5	5	10000	15900	4	MCF-16C	5	1	1	26.4	26.4	5
MCF-17A	1	0	0	--	--	1	MCF-17A	1	0	0	--	--	1
MCF-18A	1	0	0	--	--	1	MCF-18A	1	0	0	--	--	1
MCF-19A	1	0	0	--	--	1	MCF-19A	1	0	0	--	--	1
MCF-20A	1	0	0	--	--	1	MCF-20A	1	0	0	--	--	1
MCF-21A	1	0	0	--	--	1	MCF-21A	1	0	0	--	--	1
MCF-22A	1	0	0	--	--	0	MCF-22A	1	0	0	--	--	1
MCF-23A	1	0	0	--	--	1	MCF-23A	1	0	0	--	--	1
MCF-24A	1	0	0	--	--	1	MCF-24A	1	0	0	--	--	1
MCF-25A	1	0	0	--	--	0	MCF-25A	1	0	0	--	--	1
MCF-27	5	1	0	17.3	17.3	0	MCF-27	5	1	1	15.5	15.5	3
MW-01	4	4	4	222	268	0	MW-01	4	4	4	33	49.1	4
MW-03	5	5	5	30.3	315	0	MW-03	5	5	5	56.2	105	5
MW-04	2	2	2	9490	9850	2	MW-04	2	0	0	--	--	2
MW-13	2	2	2	432	2340	1	MW-13	2	1	1	39.8	39.8	2
MW-15	2	0	0	--	--	0	MW-15	2	1	1	90.4	90.4	2
PC-108	5	1	0	3.3	3.3	0	PC-108	5	5	5	93.8	134	5
PC-2	5	5	5	1140	7010	1	PC-2	5	5	5	51.1	91.3	5
PC-24	2	2	2	13500	17600	2	PC-24	2	0	0	--	--	2
PC-28	2	2	2	443000	523000	2	PC-28	2	2	2	262	274	2
PC-4	5	5	5	7270	12500	4	PC-4	5	2	2	56.5	57.5	5
PC-67	2	2	2	55000	90700	2	PC-67	2	0	0	--	--	2
PC-76	2	1	1	18.8	18.8	0	PC-76	2	1	1	10.9	10.9	1
PC-79	5	3	3	78.5	704	1	PC-79	5	5	5	64.1	90	5
PC-80	5	4	2	3.86	366	0	PC-80	5	5	5	81.8	105	5
PC-81	5	4	4	83.2	390	1	PC-81	5	4	4	138	200	5
PC-88	1	1	1	11800	11800	1	PC-88	1	0	0	--	--	1
PC-90	3	3	3	6380	10400	3	PC-90	3	2	2	102	141	3
PC-94	5	5	5	1330	3790	1	PC-94	5	4	4	46.8	100	5
POD2	4	4	4	2850	6070	3	POD2	4	2	2	40.8	87.6	3
POD8	5	5	5	168	245	1	POD8	5	4	4	46.6	83.1	3
POU3	5	5	5	12100	31800	5	POU3	5	5	5	91.8	130	4
WMW5.58SD	2	0	0	--	--	1	WMW5.58SD	2	0	0	--	--	2
WMW5.58SI	2	2	2	684	890	1	WMW5.58SI	2	0	0	--	--	2
WMW5.58SS	2	2	2	26	32.2	0	WMW5.58SS	2	0	0	--	--	2

**Table 1**  
**Summary of Existing Groundwater Data**  
**BMI Common Areas - Eastside**

Well	Hexavalent Chromium					Well	alpha-BHC						
	No. of Sampling Events	No. of Detects	No. of Detects > Compare	Min. Detect	Max. Detect		No. of Sampling Events	No. of Detects	No. of Detects > Compare	Min. Detect	Max. Detect	No. of SQL > Compare	
AA-01	5	1	0	0.064	0.064	0	AA-01	4	0	0	--	--	2
AA-07	5	3	0	0.014	0.016	0	AA-07	4	0	0	--	--	3
AA-08	5	0	0	--	--	0	AA-08	5	0	0	--	--	3
AA-09	5	5	2	0.085	0.11	0	AA-09	4	0	0	--	--	3
AA-10	5	4	0	0.02	0.034	0	AA-10	5	0	0	--	--	3
AA-13	5	1	1	0.15	0.15	0	AA-13	5	2	2	0.055	0.067	3
AA-18	5	2	0	0.008	0.015	0	AA-18	4	0	0	--	--	2
AA-19	1	1	0	0.079	0.079	0	AA-19	1	1	1	0.096	0.096	0
AA-20	5	5	0	0.074	0.098	0	AA-20	5	4	4	0.074	0.083	4
AA-21	5	2	0	0.004	0.004	0	AA-21	4	0	0	--	--	3
AA-22	5	2	0	0.006	0.007	0	AA-22	4	0	0	--	--	3
AA-23R	1	0	0	--	--	0	AA-23R	1	0	0	--	--	0
AA-26	5	5	0	0.016	0.027	0	AA-26	4	0	0	--	--	3
AA-27	5	5	1	0.023	0.26	0	AA-27	5	0	0	--	--	3
AA-UW1	1	0	0	--	--	0	AA-UW1	1	1	1	0.18	0.18	0
AA-UW2	1	0	0	--	--	0	AA-UW2	1	0	0	--	--	0
AA-UW3	1	1	0	0.025	0.025	0	AA-UW3	1	0	0	--	--	0
AA-UW4	1	0	0	--	--	0	AA-UW4	1	0	0	--	--	0
AA-UW5	1	0	0	--	--	0	AA-UW5	1	0	0	--	--	0
AA-UW6	1	0	0	--	--	0	AA-UW6	1	0	0	--	--	0
BEC-6	5	5	5	0.16	0.24	0	BEC-6	5	0	0	--	--	2
BEC-9	5	4	1	0.011	0.16	0	BEC-9	5	5	5	0.12	0.14	3
COH-1	2	0	0	--	--	0	COH-1	1	0	0	--	--	0
COH-2	2	0	0	--	--	0	COH-2	1	0	0	--	--	1
COH-2A	2	1	0	0.015	0.015	0	COH-2A	2	1	1	0.07	0.07	1
DBMW-1	1	1	0	0.051	0.051	0	DBMW-1	1	0	0	--	--	0
DBMW-10	1	0	0	--	--	0	DBMW-10	1	0	0	--	--	0
DBMW-11	1	1	0	0.065	0.065	0	DBMW-11	1	1	1	0.16	0.16	0
DBMW-12	1	1	0	0.055	0.055	0	DBMW-12	1	0	0	--	--	0
DBMW-13	1	1	0	0.043	0.043	0	DBMW-13	1	0	0	--	--	0
DBMW-14	1	1	0	0.053	0.053	0	DBMW-14	1	0	0	--	--	0
DBMW-15	1	0	0	--	--	0	DBMW-15	1	0	0	--	--	0
DBMW-16	1	1	0	0.03	0.03	0	DBMW-16	1	0	0	--	--	0
DBMW-17	1	0	0	--	--	0	DBMW-17	1	0	0	--	--	0
DBMW-19	1	1	0	0.033	0.033	0	DBMW-19	1	0	0	--	--	0
DBMW-2	1	1	0	0.037	0.037	0	DBMW-2	1	0	0	--	--	0
DBMW-20	1	1	0	0.023	0.023	0	DBMW-20	1	0	0	--	--	0
DBMW-22	1	0	0	--	--	0	DBMW-22	1	0	0	--	--	0
DBMW-3	1	1	0	0.057	0.057	0	DBMW-3	1	0	0	--	--	0
DBMW-4	1	1	0	0.05	0.05	0	DBMW-4	1	0	0	--	--	0
DBMW-5	1	1	0	0.063	0.063	0	DBMW-5	1	1	1	0.099	0.099	0
DBMW-6	1	1	0	0.03	0.03	0	DBMW-6	1	1	1	0.095	0.095	0
DBMW-7	1	1	0	0.078	0.078	0	DBMW-7	1	1	1	0.082	0.082	0
DBMW-8	1	1	0	0.083	0.083	0	DBMW-8	1	1	1	0.074	0.074	0
DBMW-9	1	1	0	0.04	0.04	0	DBMW-9	1	1	1	0.12	0.12	0
DM-1	5	3	1	0.02	0.11	0	DM-1	4	0	0	--	--	3
HMW-08	2	1	0	0.037	0.037	0	HMW-08	1	0	0	--	--	0
HMW-09	2	1	0	0.016	0.016	0	HMW-09	1	0	0	--	--	0
HMWWT-6	2	1	0	0.011	0.011	0	HMWWT-6	1	0	0	--	--	0
MCF-01A	5	2	0	0.004	0.017	0	MCF-01A	4	0	0	--	--	3
MCF-01B	5	4	0	0.009	0.015	0	MCF-01B	4	0	0	--	--	3

**Table 1**  
**Summary of Existing Groundwater Data**  
**BMI Common Areas - Eastside**

Well	Hexavalent Chromium					Well	alpha-BHC					
	No. of Sampling Events	No. of Detects	No. of Detects > Compare	Min. Detect	Max. Detect		No. of Sampling Events	No. of Detects	No. of Detects > Compare	Min. Detect	Max. Detect	No. of SQL > Compare
	MCF-02A	5	4	0	0.021	0.032	0	MCF-02A	4	0	0	--
MCF-02B	5	4	0	0.016	0.028	0	MCF-02B	4	0	0	--	2
MCF-03A	5	4	0	0.024	0.033	0	MCF-03A	4	0	0	--	3
MCF-03B	5	4	0	0.013	0.023	0	MCF-03B	4	0	0	--	2
MCF-04	5	2	0	0.003	0.01	0	MCF-04	5	0	0	--	2
MCF-05	5	2	0	0.017	0.025	0	MCF-05	4	0	0	--	3
MCF-06A	5	2	0	0.003	0.004	0	MCF-06A	5	0	0	--	2
MCF-06B	5	5	2	0.049	0.221	0	MCF-06B	5	0	0	--	3
MCF-06C	5	5	0	0.053	0.098	0	MCF-06C	5	5	5	0.065	0.076
MCF-07	4	1	0	0.012	0.012	0	MCF-07	3	0	0	--	2
MCF-08A	5	2	0	0.006	0.033	0	MCF-08A	4	0	0	--	3
MCF-08B	5	1	0	0.017	0.017	0	MCF-08B	5	0	0	--	3
MCF-09A	5	1	0	0.021	0.021	0	MCF-09A	4	0	0	--	2
MCF-09B	5	3	0	0.011	0.012	0	MCF-09B	5	0	0	--	2
MCF-10A	5	3	0	0.003	0.015	0	MCF-10A	4	0	0	--	3
MCF-10B	5	1	0	0.003	0.003	0	MCF-10B	4	0	0	--	2
MCF-11	5	0	0	--	--	0	MCF-11	4	0	0	--	2
MCF-12A	5	0	0	--	--	0	MCF-12A	4	0	0	--	2
MCF-12B	5	5	0	0.02	0.029	0	MCF-12B	4	0	0	--	3
MCF-12C	5	2	0	0.012	0.017	0	MCF-12C	5	0	0	--	2
MCF-16A	5	4	0	0.014	0.044	0	MCF-16A	4	0	0	--	2
MCF-16B	5	3	0	0.021	0.074	0	MCF-16B	4	0	0	--	2
MCF-16C	5	5	4	0.073	0.25	0	MCF-16C	5	4	4	0.088	0.18
MCF-17A	1	0	0	--	--	0	MCF-17A	1	0	0	--	0
MCF-18A	1	0	0	--	--	0	MCF-18A	1	0	0	--	0
MCF-19A	1	0	0	--	--	0	MCF-19A	1	0	0	--	0
MCF-20A	1	0	0	--	--	0	MCF-20A	1	0	0	--	0
MCF-21A	1	1	0	0.028	0.028	0	MCF-21A	1	0	0	--	0
MCF-22A	1	0	0	--	--	0	MCF-22A	1	0	0	--	0
MCF-23A	1	0	0	--	--	0	MCF-23A	1	0	0	--	0
MCF-24A	1	0	0	--	--	0	MCF-24A	1	0	0	--	0
MCF-25A	1	0	0	--	--	0	MCF-25A	1	0	0	--	0
MCF-27	5	5	0	0.04	0.08	0	MCF-27	4	0	0	--	2
MW-01	4	4	0	0.01	0.015	0	MW-01	4	0	0	--	3
MW-03	5	1	0	0.005	0.005	0	MW-03	4	0	0	--	3
MW-04	2	2	0	0.045	0.046	0	MW-04	1	0	0	--	0
MW-13	2	1	0	0.027	0.027	0	MW-13	1	0	0	--	0
MW-15	2	0	0	--	--	0	MW-15	1	0	0	--	0
PC-108	5	2	0	0.016	0.016	0	PC-108	5	1	1	0.25	0.25
PC-2	5	3	1	0.014	0.21	0	PC-2	5	0	0	--	2
PC-24	2	2	1	0.1	0.15	0	PC-24	1	0	0	--	0
PC-28	2	2	2	0.82	1.3	1	PC-28	1	0	0	--	0
PC-4	5	5	1	0.077	0.11	0	PC-4	4	0	0	--	2
PC-67	2	2	2	0.55	0.96	0	PC-67	2	2	2	0.14	0.14
PC-76	2	1	0	0.02	0.02	0	PC-76	2	0	0	--	0
PC-79	5	1	0	0.012	0.012	0	PC-79	5	5	5	0.14	0.25
PC-80	5	1	0	0.014	0.014	0	PC-80	5	5	5	0.24	0.35
PC-81	5	0	0	--	--	0	PC-81	5	5	5	0.17	0.27
PC-88	1	0	0	--	--	0	PC-88	1	1	1	0.27	0.27
PC-90	3	1	0	0.01	0.01	0	PC-90	3	1	1	0.18	0.18
PC-94	5	5	0	0.009	0.032	0	PC-94	4	0	0	--	4
POD2	4	4	1	0.071	0.15	0	POD2	4	0	0	--	2
POD8	5	2	0	0.018	0.024	0	POD8	5	5	5	0.071	0.11
POU3	5	5	5	0.12	0.34	0	POU3	5	1	1	0.068	0.068
WMW5.58SD	2	1	0	0.03	0.03	0	WMW5.58SD	1	0	0	--	0
WMW5.58SI	2	0	0	--	--	0	WMW5.58SI	2	1	1	0.075	0.075
WMW5.58SS	2	0	0	--	--	0	WMW5.58SS	1	0	0	--	1

**Table 1**  
**Summary of Existing Groundwater Data**  
**BMI Common Areas - Eastside**

Well	beta-BHC					Well	Chloroform						
	No. of Sampling Events	No. of Detects	No. of Detects > Compare	Min. Detect	Max. Detect		No. of Sampling Events	No. of Detects	No. of Detects > Compare	Min. Detect	Max. Detect	No. of SQL > Compare	
AA-01	4	0	0	--	--	0	AA-01	5	5	5	3.2	7.9	0
AA-07	4	0	0	--	--	0	AA-07	5	5	5	30	34	0
AA-08	5	5	5	0.82	0.94	0	AA-08	5	5	5	0.24	2.3	0
AA-09	4	0	0	--	--	0	AA-09	5	5	5	85	120	0
AA-10	5	5	5	0.22	0.31	0	AA-10	5	5	5	2	3.5	0
AA-13	5	4	4	0.051	0.077	0	AA-13	5	5	5	0.5	1	0
AA-18	4	0	0	--	--	0	AA-18	5	5	5	7.2	8.3	0
AA-19	1	0	0	--	--	0	AA-19	1	1	1	33	33	0
AA-20	5	0	0	--	--	0	AA-20	5	5	5	87	100	0
AA-21	4	0	0	--	--	0	AA-21	5	5	5	0.53	0.99	0
AA-22	4	0	0	--	--	0	AA-22	5	2	2	0.31	0.65	0
AA-23R	1	0	0	--	--	0	AA-23R	1	1	1	6.7	6.7	0
AA-26	4	0	0	--	--	0	AA-26	5	5	5	0.38	1	0
AA-27	5	0	0	--	--	0	AA-27	5	5	5	1.4	2	0
AA-UW1	1	0	0	--	--	0	AA-UW1	1	1	1	1.1	1.1	0
AA-UW2	1	0	0	--	--	0	AA-UW2	1	1	1	1.2	1.2	0
AA-UW3	1	0	0	--	--	0	AA-UW3	1	1	1	3.6	3.6	0
AA-UW4	1	0	0	--	--	0	AA-UW4	1	1	1	2.6	2.6	0
AA-UW5	1	0	0	--	--	0	AA-UW5	1	1	1	1.9	1.9	0
AA-UW6	1	0	0	--	--	0	AA-UW6	1	1	1	0.44	0.44	0
BEC-6	5	0	0	--	--	0	BEC-6	5	5	5	330	440	0
BEC-9	5	5	5	0.062	0.099	0	BEC-9	5	5	5	23	40	0
COH-1	1	0	0	--	--	0	COH-1	2	0	0	--	--	0
COH-2	1	0	0	--	--	0	COH-2	2	0	0	--	--	0
COH-2A	2	2	2	0.14	0.16	0	COH-2A	2	2	2	0.71	1	0
DBMW-1	1	0	0	--	--	0	DBMW-1	1	1	1	58	58	0
DBMW-10	1	0	0	--	--	0	DBMW-10	1	1	1	33	33	0
DBMW-11	1	0	0	--	--	0	DBMW-11	1	1	1	410	410	0
DBMW-12	1	0	0	--	--	0	DBMW-12	1	1	1	640	640	0
DBMW-13	1	0	0	--	--	0	DBMW-13	1	1	1	220	220	0
DBMW-14	1	0	0	--	--	0	DBMW-14	1	1	1	99	99	0
DBMW-15	1	0	0	--	--	0	DBMW-15	1	1	1	29	29	0
DBMW-16	1	0	0	--	--	0	DBMW-16	1	0	0	--	--	0
DBMW-17	1	0	0	--	--	0	DBMW-17	1	1	1	0.47	0.47	0
DBMW-19	1	0	0	--	--	0	DBMW-19	1	1	1	31	31	0
DBMW-2	1	0	0	--	--	0	DBMW-2	1	1	1	47	47	0
DBMW-20	1	0	0	--	--	0	DBMW-20	1	1	1	44	44	0
DBMW-22	1	0	0	--	--	0	DBMW-22	1	1	1	3	3	0
DBMW-3	1	0	0	--	--	0	DBMW-3	1	1	1	53	53	0
DBMW-4	1	0	0	--	--	0	DBMW-4	1	1	1	41	41	0
DBMW-5	1	0	0	--	--	0	DBMW-5	1	1	1	47	47	0
DBMW-6	1	0	0	--	--	0	DBMW-6	1	1	1	89	89	0
DBMW-7	1	0	0	--	--	0	DBMW-7	1	1	1	260	260	0
DBMW-8	1	0	0	--	--	0	DBMW-8	1	1	1	320	320	0
DBMW-9	1	0	0	--	--	0	DBMW-9	1	1	1	140	140	0
DM-1	4	0	0	--	--	0	DM-1	5	5	5	0.69	2.1	0
HMW-08	1	0	0	--	--	0	HMW-08	2	1	1	0.84	0.84	0
HMW-09	1	0	0	--	--	0	HMW-09	2	2	2	0.19	3.9	0
HMWWT-6	1	0	0	--	--	0	HMWWT-6	2	2	2	1.1	1.1	0
MCF-01A	4	0	0	--	--	0	MCF-01A	5	0	0	--	--	0
MCF-01B	4	0	0	--	--	0	MCF-01B	5	5	5	13	18	0

**Table 1**  
**Summary of Existing Groundwater Data**  
**BMI Common Areas - Eastside**

Well	beta-BHC					Well	Chloroform						
	No. of Sampling Events	No. of Detects	No. of Detects > Compare	Min. Detect	Max. Detect		No. of Sampling Events	No. of Detects	No. of Detects > Compare	Min. Detect	Max. Detect	No. of SQL > Compare	
MCF-02A	4	0	0	--	--	0	MCF-02A	5	1	1	0.19	0.19	0
MCF-02B	4	0	0	--	--	0	MCF-02B	5	0	0	--	--	0
MCF-03A	4	0	0	--	--	0	MCF-03A	5	0	0	--	--	0
MCF-03B	4	0	0	--	--	0	MCF-03B	5	5	5	1.9	2.7	0
MCF-04	5	0	0	--	--	0	MCF-04	5	0	0	--	--	0
MCF-05	4	0	0	--	--	0	MCF-05	5	0	0	--	--	0
MCF-06A	5	0	0	--	--	0	MCF-06A	5	0	0	--	--	0
MCF-06B	5	0	0	--	--	0	MCF-06B	5	5	5	66	120	0
MCF-06C	5	0	0	--	--	0	MCF-06C	5	5	5	270	310	0
MCF-07	3	0	0	--	--	0	MCF-07	4	0	0	--	--	0
MCF-08A	4	0	0	--	--	0	MCF-08A	5	0	0	--	--	0
MCF-08B	5	0	0	--	--	0	MCF-08B	5	0	0	--	--	0
MCF-09A	4	0	0	--	--	0	MCF-09A	5	0	0	--	--	0
MCF-09B	5	0	0	--	--	0	MCF-09B	5	2	2	0.2	0.24	0
MCF-10A	4	0	0	--	--	0	MCF-10A	5	0	0	--	--	0
MCF-10B	4	0	0	--	--	0	MCF-10B	5	0	0	--	--	0
MCF-11	4	0	0	--	--	0	MCF-11	5	4	4	0.26	1	0
MCF-12A	4	0	0	--	--	0	MCF-12A	5	1	0	0.16	0.16	0
MCF-12B	4	0	0	--	--	0	MCF-12B	5	5	5	2.8	4.3	0
MCF-12C	5	0	0	--	--	0	MCF-12C	5	0	0	--	--	0
MCF-16A	4	0	0	--	--	0	MCF-16A	5	1	1	1	1	0
MCF-16B	4	0	0	--	--	0	MCF-16B	5	3	3	0.17	1	0
MCF-16C	5	1	1	0.057	0.057	0	MCF-16C	5	5	5	210	310	0
MCF-17A	1	0	0	--	--	0	MCF-17A	1	0	0	--	--	0
MCF-18A	1	0	0	--	--	0	MCF-18A	1	1	1	1.2	1.2	0
MCF-19A	1	0	0	--	--	0	MCF-19A	1	0	0	--	--	0
MCF-20A	1	0	0	--	--	0	MCF-20A	1	0	0	--	--	0
MCF-21A	1	0	0	--	--	0	MCF-21A	1	0	0	--	--	0
MCF-22A	1	0	0	--	--	0	MCF-22A	1	0	0	--	--	0
MCF-23A	1	0	0	--	--	0	MCF-23A	1	0	0	--	--	0
MCF-24A	1	0	0	--	--	0	MCF-24A	1	0	0	--	--	0
MCF-25A	1	0	0	--	--	0	MCF-25A	1	0	0	--	--	0
MCF-27	4	0	0	--	--	0	MCF-27	5	1	1	1	1	0
MW-01	4	0	0	--	--	0	MW-01	4	4	4	1.1	1.3	0
MW-03	4	0	0	--	--	0	MW-03	5	5	5	0.62	18	0
MW-04	1	0	0	--	--	0	MW-04	2	2	2	250	290	0
MW-13	1	0	0	--	--	0	MW-13	2	2	2	10	53	0
MW-15	1	0	0	--	--	0	MW-15	2	2	0	0.13	0.15	0
PC-108	5	5	5	0.48	1.2	1	PC-108	5	0	0	--	--	0
PC-2	5	1	1	0.059	0.059	0	PC-2	5	5	5	14	40	0
PC-24	1	0	0	--	--	0	PC-24	2	2	2	870	880	0
PC-28	1	0	0	--	--	0	PC-28	2	2	2	240	320	0
PC-4	4	0	0	--	--	0	PC-4	5	5	5	91	140	0
PC-67	2	0	0	--	--	0	PC-67	2	2	2	1100	1400	0
PC-76	2	2	2	0.32	0.33	0	PC-76	2	1	1	0.53	0.53	0
PC-79	5	5	5	0.62	0.7	0	PC-79	5	1	0	0.09	0.09	0
PC-80	5	5	5	0.25	0.43	0	PC-80	5	0	0	--	--	0
PC-81	5	5	5	0.41	0.59	0	PC-81	5	0	0	--	--	0
PC-88	1	1	1	0.16	0.16	0	PC-88	1	1	1	0.26	0.26	0
PC-90	3	3	3	0.2	0.47	0	PC-90	3	2	2	0.42	1.1	0
PC-94	4	0	0	--	--	0	PC-94	5	5	5	1.3	5.2	0
POD2	4	0	0	--	--	0	POD2	4	4	4	58	98	0
POD8	5	4	4	0.069	0.094	0	POD8	5	5	5	0.87	1.4	0
POU3	5	0	0	--	--	0	POU3	5	5	5	450	1400	0
WMW5.58SD	1	0	0	--	--	0	WMW5.58SD	2	1	1	2.4	2.4	0
WMW5.58SI	2	2	2	0.075	0.1	0	WMW5.58SI	2	1	1	1	1	0
WMW5.58SS	1	0	0	--	--	0	WMW5.58SS	2	2	2	0.8	4.7	0

**Table 1**  
**Summary of Existing Groundwater Data**  
**BMI Common Areas - Eastside**

Well	PCE					Well	Radium-226						
	No. of Sampling Events	No. of Detects	No. of Detects > Compare	Min. Detect	Max. Detect		No. of Sampling Events	No. of Detects	No. of Detects > Compare	Min. Detect	Max. Detect	No. of SQL > Compare	
AA-01	5	5	5	42	84	0	AA-01	3	3	3	0.0584	0.438	0
AA-07	5	3	3	0.22	0.35	0	AA-07	4	4	4	0.571	1.51	0
AA-08	5	5	5	1.7	4.7	0	AA-08	3	3	3	0.0761	0.684	0
AA-09	5	5	5	2.7	19	0	AA-09	2	2	2	0.225	0.874	0
AA-10	5	4	4	0.3	0.61	0	AA-10	4	4	4	0.0802	0.239	0
AA-13	5	3	3	0.27	0.35	0	AA-13	3	3	3	0.303	0.812	0
AA-18	5	3	3	0.2	0.27	0	AA-18	4	4	4	0.197	0.51	0
AA-19	1	1	1	1.4	1.4	0	AA-19	1	1	1	1.51	1.51	0
AA-20	5	5	5	5.1	9.1	0	AA-20	4	4	4	0.521	1.55	0
AA-21	5	0	0	--	--	0	AA-21	3	3	3	0.0226	0.257	0
AA-22	5	0	0	--	--	0	AA-22	3	3	2	-0.0131	0.297	0
AA-23R	1	0	0	--	--	0	AA-23R	1	1	1	0.788	0.788	0
AA-26	5	0	0	--	--	0	AA-26	4	4	4	0.0851	0.351	0
AA-27	5	0	0	--	--	0	AA-27	3	3	3	0.0585	2.27	0
AA-UW1	1	1	1	24	24	0	AA-UW1	1	1	1	2.72	2.72	0
AA-UW2	1	0	0	--	--	0	AA-UW2	1	1	1	1.71	1.71	0
AA-UW3	1	0	0	--	--	0	AA-UW3	1	1	1	1.41	1.41	0
AA-UW4	1	0	0	--	--	0	AA-UW4	1	1	1	3.5	3.5	0
AA-UW5	1	1	1	0.45	0.45	0	AA-UW5	1	1	1	2.82	2.82	0
AA-UW6	1	0	0	--	--	0	AA-UW6	1	1	1	1.97	1.97	0
BEC-6	5	4	4	0.4	0.93	0	BEC-6	2	2	2	0.176	0.397	0
BEC-9	5	4	4	0.59	1.1	0	BEC-9	3	3	3	1.09	1.68	0
COH-1	2	0	0	--	--	0	COH-1	2	2	2	2.74	4.72	0
COH-2	2	0	0	--	--	0	COH-2	2	2	2	1.71	1.74	0
COH-2A	2	1	1	1.9	1.9	0	COH-2A	2	2	2	0.14	1.98	0
DBMW-1	1	0	0	--	--	0	DBMW-1	1	1	1	2.01	2.01	0
DBMW-10	1	0	0	--	--	0	DBMW-10	1	1	0	-0.0947	-0.0947	0
DBMW-11	1	0	0	--	--	0	DBMW-11	1	1	1	0.41	0.41	0
DBMW-12	1	0	0	--	--	0	DBMW-12	1	1	1	2.5	2.5	0
DBMW-13	1	0	0	--	--	0	DBMW-13	1	1	1	1.13	1.13	0
DBMW-14	1	0	0	--	--	0	DBMW-14	1	1	1	1.84	1.84	0
DBMW-15	1	0	0	--	--	0	DBMW-15	1	1	1	3.87	3.87	0
DBMW-16	1	0	0	--	--	0	DBMW-16	1	1	1	1.37	1.37	0
DBMW-17	1	0	0	--	--	0	DBMW-17	1	1	1	0.607	0.607	0
DBMW-19	1	1	1	0.82	0.82	0	DBMW-19	1	1	1	0.94	0.94	0
DBMW-2	1	0	0	--	--	0	DBMW-2	1	1	1	1.02	1.02	0
DBMW-20	1	0	0	--	--	0	DBMW-20	1	1	1	0.214	0.214	0
DBMW-22	1	0	0	--	--	0	DBMW-22	1	1	1	2.31	2.31	0
DBMW-3	1	0	0	--	--	0	DBMW-3	1	1	1	5.51	5.51	0
DBMW-4	1	1	1	1.1	1.1	0	DBMW-4	1	1	1	3.01	3.01	0
DBMW-5	1	1	1	0.68	0.68	0	DBMW-5	1	1	1	1.08	1.08	0
DBMW-6	1	1	1	0.23	0.23	0	DBMW-6	1	1	1	3.64	3.64	0
DBMW-7	1	1	1	0.47	0.47	0	DBMW-7	1	1	1	1.73	1.73	0
DBMW-8	1	1	1	0.48	0.48	0	DBMW-8	1	1	1	1.73	1.73	0
DBMW-9	1	0	0	--	--	0	DBMW-9	1	1	1	2.4	2.4	0
DM-1	5	0	0	--	--	0	DM-1	3	3	3	0.085	0.727	0
HMW-08	2	0	0	--	--	0	HMW-08	2	2	1	-0.045	1.13	0
HMW-09	2	1	1	0.19	0.19	0	HMW-09	2	2	2	0.0539	0.41	0
HMWWT-6	2	1	1	0.26	0.26	0	HMWWT-6	2	2	2	0.144	0.17	0
MCF-01A	5	0	0	--	--	0	MCF-01A	4	4	4	0.352	1.04	0
MCF-01B	5	5	5	18	21	0	MCF-01B	3	3	3	0.0645	0.803	0

**Table 1**  
**Summary of Existing Groundwater Data**  
**BMI Common Areas - Eastside**

Well	PCE					Well	Radium-226					
	No. of Sampling Events	No. of Detects	No. of Detects > Compare	Min. Detect	Max. Detect		No. of Sampling Events	No. of Detects	No. of Detects > Compare	Min. Detect	Max. Detect	No. of SQL > Compare
MCF-02A	5	0	0	--	--	0	MCF-02A	3	3	0.035	0.624	0
MCF-02B	5	0	0	--	--	0	MCF-02B	3	3	0.148	0.566	0
MCF-03A	5	0	0	--	--	0	MCF-03A	4	4	0.0176	0.407	0
MCF-03B	5	0	0	--	--	0	MCF-03B	3	3	0.0791	0.223	0
MCF-04	5	0	0	--	--	0	MCF-04	4	4	0.456	0.608	0
MCF-05	5	0	0	--	--	0	MCF-05	4	4	1.74	3.32	0
MCF-06A	5	0	0	--	--	0	MCF-06A	4	4	1.26	2.34	0
MCF-06B	5	0	0	--	--	0	MCF-06B	4	4	4.06	8.84	0
MCF-06C	5	4	4	1.8	2.3	0	MCF-06C	4	4	1.55	2.36	0
MCF-07	4	0	0	--	--	0	MCF-07	4	4	1.88	5.04	0
MCF-08A	5	0	0	--	--	0	MCF-08A	4	4	5.68	6.4	0
MCF-08B	5	0	0	--	--	0	MCF-08B	4	4	1.67	3.2	0
MCF-09A	5	0	0	--	--	0	MCF-09A	4	4	0.227	2.15	0
MCF-09B	5	0	0	--	--	0	MCF-09B	4	4	1.15	1.5	0
MCF-10A	5	1	1	1	1	0	MCF-10A	3	3	1.24	1.5	0
MCF-10B	5	0	0	--	--	0	MCF-10B	4	4	0.428	4.15	0
MCF-11	5	0	0	--	--	0	MCF-11	4	4	1	1.44	0
MCF-12A	5	0	0	--	--	0	MCF-12A	4	4	0.524	1.34	0
MCF-12B	5	0	0	--	--	0	MCF-12B	4	4	0.358	2.44	0
MCF-12C	5	0	0	--	--	0	MCF-12C	4	4	0.332	0.776	0
MCF-16A	5	0	0	--	--	0	MCF-16A	4	4	3.97	6.13	0
MCF-16B	5	0	0	--	--	0	MCF-16B	4	4	2.54	4.47	0
MCF-16C	5	4	4	0.72	1.2	0	MCF-16C	4	4	0.971	1.24	0
MCF-17A	1	0	0	--	--	0	MCF-17A	1	1	5.17	5.17	0
MCF-18A	1	0	0	--	--	0	MCF-18A	1	1	22.8	22.8	0
MCF-19A	1	0	0	--	--	0	MCF-19A	1	1	1.42	1.42	0
MCF-20A	1	0	0	--	--	0	MCF-20A	1	1	3.12	3.12	0
MCF-21A	1	0	0	--	--	0	MCF-21A	1	1	3.63	3.63	0
MCF-22A	1	0	0	--	--	0	MCF-22A	1	1	1.52	1.52	0
MCF-23A	1	0	0	--	--	0	MCF-23A	1	1	2.15	2.15	0
MCF-24A	1	0	0	--	--	0	MCF-24A	1	1	8.76	8.76	0
MCF-25A	1	0	0	--	--	0	MCF-25A	1	1	0.487	0.487	0
MCF-27	5	0	0	--	--	0	MCF-27	2	2	0.0864	0.393	0
MW-01	4	0	0	--	--	0	MW-01	2	2	-0.00748	0.109	0
MW-03	5	3	3	0.47	0.65	0	MW-03	4	4	0.336	1.34	0
MW-04	2	0	0	--	--	0	MW-04	2	2	2.56	3.27	0
MW-13	2	1	1	0.19	0.19	0	MW-13	2	2	0.00849	0.558	0
MW-15	2	2	2	6	9.2	0	MW-15	2	2	0.635	2.6	0
PC-108	5	0	0	--	--	0	PC-108	3	3	0.027	0.415	0
PC-2	5	0	0	--	--	0	PC-2	4	4	0.2	1	0
PC-24	2	2	2	1	1.8	0	PC-24	2	2	0.28	0.551	0
PC-28	2	1	1	0.48	0.48	0	PC-28	2	2	1.19	1.91	0
PC-4	5	4	4	1.7	2.3	0	PC-4	3	3	-0.0058	1.85	0
PC-67	2	2	2	18	18	0	PC-67	2	2	0.211	1.3	0
PC-76	2	0	0	--	--	0	PC-76	1	1	1	1	0
PC-79	5	4	4	0.73	3.5	0	PC-79	3	3	0.102	1.67	0
PC-80	5	3	3	0.22	0.48	0	PC-80	3	3	0.0733	0.61	0
PC-81	5	0	0	--	--	0	PC-81	3	3	-0.0248	0.543	0
PC-88	1	0	0	--	--	0	PC-88	1	1	0.677	0.677	0
PC-90	3	1	1	0.39	0.39	0	PC-90	3	3	0.0616	0.212	0
PC-94	5	4	4	0.53	0.88	0	PC-94	4	4	0.112	0.602	0
POD2	4	4	4	1.8	3.7	0	POD2	3	3	2.11	4.59	0
POD8	5	1	1	0.19	0.19	0	POD8	3	3	0.363	1	0
POU3	5	5	5	3.6	41	1	POU3	4	4	0.261	0.83	0
WMW5.58SD	2	0	0	--	--	0	WMW5.58SD	2	2	2.77	3.07	0
WMW5.58SI	2	1	1	0.26	0.26	0	WMW5.58SI	2	2	0.222	1	0
WMW5.58SS	2	0	0	--	--	0	WMW5.58SS	2	2	0.0373	0.385	0

**Table 1**  
**Summary of Existing Groundwater Data**  
**BMI Common Areas - Eastside**

Well	Radium-228					Well	TDS						
	No. of Sampling Events	No. of Detects	No. of Detects > Compare	Min. Detect	Max. Detect		No. of Sampling Events	No. of Detects	No. of Detects > Compare	Min. Detect	Max. Detect	No. of SQL > Compare	
AA-01	4	4	4	0.289	3	0	AA-01	5	5	5	3310	3930	0
AA-07	4	4	4	0.427	3	0	AA-07	5	5	5	1990	2250	0
AA-08	4	4	4	0.652	3	0	AA-08	5	5	5	4390	5150	0
AA-09	4	4	4	0.577	3	0	AA-09	5	5	5	5670	7610	0
AA-10	3	3	3	0.34	0.634	0	AA-10	5	5	5	4560	4880	0
AA-13	3	3	3	0.327	3	0	AA-13	5	5	5	2500	2760	0
AA-18	3	3	3	0.394	0.591	0	AA-18	5	5	5	1160	1330	0
AA-19	1	1	1	0.84	0.84	0	AA-19	1	1	1	4690	4690	0
AA-20	4	4	4	0.518	0.933	0	AA-20	5	5	5	5670	6160	0
AA-21	3	3	3	0.419	3	0	AA-21	5	5	5	4550	6510	0
AA-22	4	4	4	0.345	0.963	0	AA-22	5	5	5	2180	3120	0
AA-23R	1	1	1	0.684	0.684	0	AA-23R	1	1	1	4260	4260	0
AA-26	4	4	3	0.0118	3	0	AA-26	5	5	5	2030	2520	0
AA-27	4	4	4	0.284	0.956	0	AA-27	5	5	5	4080	4570	0
AA-UW1	1	1	1	1	1	0	AA-UW1	1	1	1	4310	4310	0
AA-UW2	1	1	1	1.36	1.36	0	AA-UW2	1	1	1	4460	4460	0
AA-UW3	1	1	1	0.53	0.53	0	AA-UW3	1	1	1	4880	4880	0
AA-UW4	1	1	1	1.04	1.04	0	AA-UW4	1	1	1	7000	7000	0
AA-UW5	1	1	1	0.498	0.498	0	AA-UW5	1	1	1	1830	1830	0
AA-UW6	1	1	1	0.45	0.45	0	AA-UW6	1	1	1	5850	5850	0
BEC-6	4	4	4	0.479	3	0	BEC-6	5	5	5	4510	5900	0
BEC-9	4	4	4	0.658	3	0	BEC-9	5	5	5	5120	6160	0
COH-1	2	2	2	2.54	3.22	0	COH-1	2	2	2	104000	114000	0
COH-2	2	2	2	2.01	2.11	0	COH-2	2	2	2	101000	105000	0
COH-2A	2	2	2	0.518	0.733	0	COH-2A	2	2	2	6900	6950	0
DBMW-1	1	1	1	1.25	1.25	0	DBMW-1	1	1	1	6180	6180	0
DBMW-10	1	1	1	0.181	0.181	0	DBMW-10	1	1	1	1760	1760	0
DBMW-11	1	1	1	1.05	1.05	0	DBMW-11	1	1	1	7250	7250	0
DBMW-12	1	1	1	1.44	1.44	0	DBMW-12	1	1	1	9780	9780	0
DBMW-13	1	1	1	0.794	0.794	0	DBMW-13	1	1	1	5890	5890	0
DBMW-14	1	1	1	0.763	0.763	0	DBMW-14	1	1	1	5680	5680	0
DBMW-15	1	1	1	0.356	0.356	0	DBMW-15	1	1	1	4170	4170	0
DBMW-16	1	1	1	0.267	0.267	0	DBMW-16	1	1	1	900	900	0
DBMW-17	1	1	1	0.198	0.198	0	DBMW-17	1	1	1	1790	1790	0
DBMW-19	1	1	1	0.521	0.521	0	DBMW-19	1	1	1	4780	4780	0
DBMW-2	1	1	1	1.16	1.16	0	DBMW-2	1	1	1	6600	6600	0
DBMW-20	1	1	1	0.915	0.915	0	DBMW-20	1	1	1	5580	5580	0
DBMW-22	1	1	1	1.31	1.31	0	DBMW-22	1	1	1	3720	3720	0
DBMW-3	1	1	1	0.758	0.758	0	DBMW-3	1	1	1	6590	6590	0
DBMW-4	1	1	1	0.61	0.61	0	DBMW-4	1	1	1	6740	6740	0
DBMW-5	1	1	1	0.378	0.378	0	DBMW-5	1	1	1	8000	8000	0
DBMW-6	1	1	1	0.746	0.746	0	DBMW-6	1	1	1	6520	6520	0
DBMW-7	1	1	1	1.25	1.25	0	DBMW-7	1	1	1	6030	6030	0
DBMW-8	1	1	1	0.407	0.407	0	DBMW-8	1	1	1	5860	5860	0
DBMW-9	1	1	1	0.769	0.769	0	DBMW-9	1	1	1	3700	3700	0
DM-1	4	4	4	0.185	0.728	0	DM-1	5	5	5	3580	4740	0
HMW-08	2	2	2	0.204	0.345	0	HMW-08	2	2	2	2880	3580	0
HMW-09	2	2	2	0.869	2.44	0	HMW-09	2	2	2	3710	3760	0
HMWWT-6	2	2	2	0.17	3	0	HMWWT-6	2	2	2	1570	1820	0
MCF-01A	4	4	4	0.387	1.17	0	MCF-01A	5	5	5	3570	4490	0
MCF-01B	3	3	3	0.0943	0.412	0	MCF-01B	5	5	5	1830	2070	0

**Table 1**  
**Summary of Existing Groundwater Data**  
**BMI Common Areas - Eastside**

Well	Radium-228					Well	TDS						
	No. of Sampling Events	No. of Detects	No. of Detects > Compare	Min. Detect	Max. Detect		No. of Sampling Events	No. of Detects	No. of Detects > Compare	Min. Detect	Max. Detect		
	MCF-02A	3	3	3	0.356	0.45	0	MCF-02A	5	5	3	492	623
MCF-02B	3	3	3	0.0986	3	0	MCF-02B	5	5	5	620	766	0
MCF-03A	4	4	4	0.264	0.602	0	MCF-03A	5	5	5	627	694	0
MCF-03B	3	3	3	0.341	3	0	MCF-03B	5	5	5	2450	2970	0
MCF-04	3	3	3	3	6.81	0	MCF-04	5	5	5	4580	5380	0
MCF-05	4	4	4	1.45	1.68	0	MCF-05	5	5	5	47600	171000	0
MCF-06A	4	4	4	2.28	3.7	0	MCF-06A	5	5	5	185000	215000	0
MCF-06B	4	4	4	2.06	3.3	0	MCF-06B	5	5	5	31400	48800	0
MCF-06C	4	4	4	0.399	3	0	MCF-06C	5	5	5	6280	47600	0
MCF-07	4	4	4	4.23	5.67	0	MCF-07	4	4	4	174000	197000	0
MCF-08A	4	4	4	5.74	9.6	0	MCF-08A	5	5	5	110000	116000	0
MCF-08B	4	4	4	0.824	3	0	MCF-08B	5	5	5	26200	46500	0
MCF-09A	3	3	3	0.449	0.556	0	MCF-09A	5	4	4	24800	30700	0
MCF-09B	4	4	4	0.528	3	0	MCF-09B	5	5	5	3390	3970	0
MCF-10A	4	4	4	0.528	1.77	0	MCF-10A	5	5	5	5400	8080	0
MCF-10B	4	4	4	0.376	0.868	0	MCF-10B	5	5	5	2030	2150	0
MCF-11	4	4	4	0.205	0.499	0	MCF-11	5	5	5	3250	3520	0
MCF-12A	4	4	4	0.766	1.23	0	MCF-12A	5	5	5	5900	7580	0
MCF-12B	4	4	4	0.366	3	0	MCF-12B	5	5	5	2520	2840	0
MCF-12C	4	4	4	0.248	0.911	0	MCF-12C	5	5	5	1690	2100	0
MCF-16A	4	4	4	3.23	9.91	0	MCF-16A	5	5	5	81800	88300	0
MCF-16B	4	4	4	2.96	4.9	0	MCF-16B	5	5	5	64800	74400	0
MCF-16C	4	4	4	0.762	3	0	MCF-16C	5	5	5	6480	16000	0
MCF-17A	1	1	1	4.52	4.52	0	MCF-17A	1	1	1	85600	85600	0
MCF-18A	1	1	1	13.7	13.7	0	MCF-18A	1	1	1	157000	157000	0
MCF-19A	1	1	1	2.22	2.22	0	MCF-19A	1	1	1	161000	161000	0
MCF-20A	1	1	1	3.19	3.19	0	MCF-20A	1	1	1	183000	183000	0
MCF-21A	1	1	1	6.51	6.51	0	MCF-21A	1	1	1	153000	153000	0
MCF-22A	1	1	1	0.697	0.697	0	MCF-22A	1	1	1	3370	3370	0
MCF-23A	1	1	1	2.93	2.93	0	MCF-23A	1	1	1	105000	105000	0
MCF-24A	1	1	1	5.19	5.19	0	MCF-24A	1	1	1	101000	101000	0
MCF-25A	1	1	1	1	1	0	MCF-25A	1	1	1	5090	5090	0
MCF-27	4	4	4	0.337	3	0	MCF-27	5	5	5	968	1460	0
MW-01	2	2	2	0.31	0.414	0	MW-01	4	4	4	3120	3460	0
MW-03	3	3	3	0.334	1.11	0	MW-03	5	5	5	4660	4820	0
MW-04	2	2	2	1.16	1.93	0	MW-04	2	2	2	13300	14000	0
MW-13	2	2	2	0.438	0.538	0	MW-13	2	2	2	2520	4860	0
MW-15	2	2	2	0.524	0.887	0	MW-15	2	2	2	4400	6740	0
PC-108	4	4	4	0.435	0.724	0	PC-108	5	5	5	2220	2810	0
PC-2	3	3	3	0.839	1.03	0	PC-2	5	5	5	4070	5870	0
PC-24	2	2	2	0.924	1.05	0	PC-24	2	2	2	12700	13100	0
PC-28	2	2	2	0.794	3	0	PC-28	2	2	2	7370	7480	0
PC-4	4	4	4	0.608	3	0	PC-4	5	5	5	6660	8400	0
PC-67	2	2	2	0.537	0.591	0	PC-67	2	2	2	12600	14000	0
PC-76	1	1	1	0.416	0.416	0	PC-76	1	1	1	6340	6340	0
PC-79	3	3	3	0.754	3	0	PC-79	5	5	5	2740	3070	0
PC-80	4	4	4	0.461	3	0	PC-80	5	5	5	1950	2270	0
PC-81	4	4	4	0.356	3	0	PC-81	5	5	5	2520	3820	0
PC-88	1	1	1	1.21	1.21	0	PC-88	1	1	1	4360	4360	0
PC-90	3	3	3	0.782	3	0	PC-90	3	3	3	4810	6600	0
PC-94	3	3	3	0.0601	2.84	0	PC-94	5	5	5	3770	4680	0
POD2	4	4	4	0.369	1.03	0	POD2	4	4	4	5010	6170	0
POD8	4	4	4	0.333	3	0	POD8	5	5	5	3670	4140	0
POU3	4	4	4	0.461	3	0	POU3	5	5	5	5650	9690	0
WMW5.58SD	2	2	2	3.98	4.04	0	WMW5.58SD	2	2	2	152000	195000	0
WMW5.58SI	2	2	2	0.486	2.61	0	WMW5.58SI	2	2	2	2300	2300	0
WMW5.58SS	2	2	1	-0.0108	0.325	0	WMW5.58SS	2	2	2	1460	1720	0

No. of Detects > Compare = Number of times an analyte was detected in a well and that the detection(s) exceeded the lower of its MCL or BCL (except for arsenic where only its MCL was used for comparison purposes).  
No. of SQL > Compare = Number of times the analyte sample quantitation limit (SQL) exceeded the lower of its MCL or BCL (except for arsenic where only its MCL was used for comparison purposes).

**Table 2**  
**Summary of Parameter Screening and Wells Selected for Sampling - 2009 Event**  
**Existing Wells**  
**BMI Common Areas - Eastside**

Perchlorate	Arsenic		Chromium (VI)		OCPs		VOCs		Radionuclides		TDS		<b>Zone</b>
	Well	Monitor?	Well	Monitor?	Well	Monitor?	Well	Monitor?	Well	Monitor?	Well	Monitor?	
AA-01	YES	AA-01	YES	AA-01	NO	AA-01	NO	AA-01	NO	AA-01	YES	AA-01	NO Shallow
AA-07	NO	AA-07	YES	AA-07	NO	AA-07	NO	AA-07	YES	AA-07	YES	AA-07	NO Shallow
AA-08	YES	AA-08	YES	AA-08	NO	AA-08	YES	AA-08	NO	AA-08	YES	AA-08	NO Shallow
AA-09	YES	AA-09	YES	AA-09	YES	AA-09	NO	AA-09	NO	AA-09	YES	AA-09	NO Shallow
AA-10	YES	AA-10	YES	AA-10	NO	AA-10	YES	AA-10	NO	AA-10	NO	AA-10	NO Shallow
AA-13	YES	AA-13	YES	AA-13	YES	AA-13	YES	AA-13	YES	AA-13	YES	AA-13	NO Shallow
AA-18	NO	AA-18	NO	AA-18	NO	AA-18	NO	AA-18	YES	AA-18	NO	AA-18	NO Shallow
AA-19	NO	AA-19	NO	AA-19	NO	AA-19	NO	AA-19	NO	AA-19	NO	AA-19	NO Shallow
AA-20	YES	AA-20	YES	AA-20	YES	AA-20	YES	AA-20	NO	AA-20	NO	AA-20	NO Shallow
AA-21	NO	AA-21	YES	AA-21	NO	AA-21	NO	AA-21	NO	AA-21	YES	AA-21	NO Shallow
AA-22	YES	AA-22	YES	AA-22	NO	AA-22	NO	AA-22	YES	AA-22	NO	AA-22	NO Shallow
AA-23R	YES	AA-23R	YES	AA-23R	YES	AA-23R	YES	AA-23R	YES	AA-23R	YES	AA-23R	YES Shallow
AA-26	YES	AA-26	YES	AA-26	NO	AA-26	NO	AA-26	NO	AA-26	YES	AA-26	NO Shallow
AA-27	NO	AA-27	YES	AA-27	YES	AA-27	YES	AA-27	NO	AA-27	YES	AA-27	NO Shallow
AA-UW1	YES	AA-UW1	YES	AA-UW1	YES	AA-UW1	YES	AA-UW1	YES	AA-UW1	YES	AA-UW1	YES Shallow
AA-UW2	YES	AA-UW2	YES	AA-UW2	YES	AA-UW2	YES	AA-UW2	YES	AA-UW2	YES	AA-UW2	YES Shallow
AA-UW3	YES	AA-UW3	YES	AA-UW3	YES	AA-UW3	YES	AA-UW3	YES	AA-UW3	YES	AA-UW3	YES Shallow
AA-UW4	YES	AA-UW4	YES	AA-UW4	YES	AA-UW4	YES	AA-UW4	YES	AA-UW4	YES	AA-UW4	YES Shallow
AA-UW5	YES	AA-UW5	YES	AA-UW5	YES	AA-UW5	YES	AA-UW5	YES	AA-UW5	YES	AA-UW5	YES Shallow
AA-UW6	YES	AA-UW6	YES	AA-UW6	YES	AA-UW6	YES	AA-UW6	YES	AA-UW6	YES	AA-UW6	YES Shallow
BEC-6	YES	BEC-6	YES	BEC-6	NO	BEC-6	NO	BEC-6	NO	BEC-6	YES	BEC-6	NO Middle
BEC-9	NO	BEC-9	YES	BEC-9	YES	BEC-9	YES	BEC-9	NO	BEC-9	YES	BEC-9	NO Middle
COH-1	YES	COH-1	YES	COH-1	YES	COH-1	NO	COH-1	YES	COH-1	YES	COH-1	YES Middle
COH-2	YES	COH-2	YES	COH-2	YES	COH-2	NO	COH-2	YES	COH-2	YES	COH-2	YES Middle
COH-2A	YES	COH-2A	YES	COH-2A	YES	COH-2A	YES	COH-2A	YES	COH-2A	YES	COH-2A	YES Shallow
DBMW-1	YES	DBMW-1	YES	DBMW-1	YES	DBMW-1	YES	DBMW-1	YES	DBMW-1	YES	DBMW-1	YES Shallow
DBMW-10	YES	DBMW-10	YES	DBMW-10	YES	DBMW-10	YES	DBMW-10	YES	DBMW-10	YES	DBMW-10	YES Shallow
DBMW-11	YES	DBMW-11	YES	DBMW-11	YES	DBMW-11	YES	DBMW-11	YES	DBMW-11	YES	DBMW-11	YES Shallow
DBMW-12	YES	DBMW-12	YES	DBMW-12	YES	DBMW-12	YES	DBMW-12	YES	DBMW-12	YES	DBMW-12	YES Shallow
DBMW-13	YES	DBMW-13	YES	DBMW-13	YES	DBMW-13	YES	DBMW-13	YES	DBMW-13	YES	DBMW-13	YES Shallow
DBMW-14	YES	DBMW-14	YES	DBMW-14	YES	DBMW-14	YES	DBMW-14	YES	DBMW-14	YES	DBMW-14	YES Shallow
DBMW-15	YES	DBMW-15	YES	DBMW-15	YES	DBMW-15	YES	DBMW-15	YES	DBMW-15	YES	DBMW-15	YES Shallow
DBMW-16	YES	DBMW-16	YES	DBMW-16	YES	DBMW-16	YES	DBMW-16	YES	DBMW-16	YES	DBMW-16	YES Shallow
DBMW-17	YES	DBMW-17	YES	DBMW-17	YES	DBMW-17	YES	DBMW-17	YES	DBMW-17	YES	DBMW-17	YES Shallow
DBMW-18	YES	DBMW-18	YES	DBMW-18	YES	DBMW-18	YES	DBMW-18	YES	DBMW-18	YES	DBMW-18	YES Shallow
DBMW-19	YES	DBMW-19	YES	DBMW-19	YES	DBMW-19	YES	DBMW-19	YES	DBMW-19	YES	DBMW-19	YES Shallow
DBMW-2	YES	DBMW-2	YES	DBMW-2	YES	DBMW-2	YES	DBMW-2	YES	DBMW-2	YES	DBMW-2	YES Shallow
DBMW-20	YES	DBMW-20	YES	DBMW-20	YES	DBMW-20	YES	DBMW-20	YES	DBMW-20	YES	DBMW-20	YES Shallow
DBMW-22	YES	DBMW-22	YES	DBMW-22	YES	DBMW-22	YES	DBMW-22	YES	DBMW-22	YES	DBMW-22	YES Shallow
DBMW-3	YES	DBMW-3	YES	DBMW-3	YES	DBMW-3	YES	DBMW-3	YES	DBMW-3	YES	DBMW-3	YES Shallow
DBMW-4	YES	DBMW-4	YES	DBMW-4	YES	DBMW-4	YES	DBMW-4	YES	DBMW-4	YES	DBMW-4	YES Shallow
DBMW-5	YES	DBMW-5	YES	DBMW-5	YES	DBMW-5	YES	DBMW-5	YES	DBMW-5	YES	DBMW-5	YES Shallow
DBMW-6	YES	DBMW-6	YES	DBMW-6	YES	DBMW-6	YES	DBMW-6	YES	DBMW-6	YES	DBMW-6	YES Shallow
DBMW-7	YES	DBMW-7	YES	DBMW-7	YES	DBMW-7	YES	DBMW-7	YES	DBMW-7	YES	DBMW-7	YES Shallow
DBMW-8	YES	DBMW-8	YES	DBMW-8	YES	DBMW-8	YES	DBMW-8	YES	DBMW-8	YES	DBMW-8	YES Shallow
DBMW-9	YES	DBMW-9	YES	DBMW-9	YES	DBMW-9	YES	DBMW-9	YES	DBMW-9	YES	DBMW-9	YES Shallow
DM-1	NO	DM-1	YES	DM-1	YES	DM-1	NO	DM-1	NO	DM-1	NO	DM-1	NO Shallow
HMW-08	YES	HMW-08	YES	HMW-08	YES	HMW-08	NO	HMW-08	YES	HMW-08	YES	HMW-08	YES Middle
HMW-09	YES	HMW-09	YES	HMW-09	YES	HMW-09	NO	HMW-09	YES	HMW-09	YES	HMW-09	YES Shallow
HMWWT-6	YES	HMWWT-6	YES	HMWWT-6	YES	HMWWT-6	NO	HMWWT-6	YES	HMWWT-6	YES	HMWWT-6	YES Middle
MCF-01A	NO	MCF-01A	YES	MCF-01A	NO	MCF-01A	NO	MCF-01A	NO	MCF-01A	YES	MCF-01A	NO Deep
MCF-01B	NO	MCF-01B	YES	MCF-01B	NO	MCF-01B	NO	MCF-01B	NO	MCF-01B	YES	MCF-01B	NO Middle
MCF-02A	NO	MCF-02A	YES	MCF-02A	NO	MCF-02A	NO	MCF-02A	YES	MCF-02A	YES	MCF-02A	YES Deep
MCF-02B	NO	MCF-02B	NO	MCF-02B	NO	MCF-02B	NO	MCF-02B	NO	MCF-02B	YES	MCF-02B	NO Middle
MCF-03A	NO	MCF-03A	YES	MCF-03A	NO	MCF-03A	NO	MCF-03A	NO	MCF-03A	NO	MCF-03A	NO Deep

**Table 2**  
**Summary of Parameter Screening and Wells Selected for Sampling - 2009 Event**  
**Existing Wells**  
**BMI Common Areas - Eastside**

Perchlorate		Arsenic		Chromium (VI)		OCPs		VOCs		Radionuclides		TDS		<b>Zone</b>
Well	Monitor?	Well	Monitor?	Well	Monitor?	Well	Monitor?	Well	Monitor?	Well	Monitor?	Well	Monitor?	
MCF-03B	NO	MCF-03B	YES	MCF-03B	NO	MCF-03B	NO	MCF-03B	NO	MCF-03B	YES	MCF-03B	NO	Middle
MCF-04	NO	MCF-04	YES	MCF-04	NO	MCF-04	NO	MCF-04	NO	MCF-04	YES	MCF-04	NO	Deep
MCF-05	YES	MCF-05	YES	MCF-05	NO	MCF-05	NO	MCF-05	NO	MCF-05	YES	MCF-05	NO	Middle
MCF-06A	YES	MCF-06A	YES	MCF-06A	NO	MCF-06A	NO	MCF-06A	NO	MCF-06A	YES	MCF-06A	NO	Deep
MCF-06B	YES	MCF-06B	YES	MCF-06B	YES	MCF-06B	YES	MCF-06B	NO	MCF-06B	NO	MCF-06B	NO	Middle
MCF-06C	NO	MCF-06C	YES	MCF-06C	YES	MCF-06C	YES	MCF-06C	NO	MCF-06C	YES	MCF-06C	NO	Shallow
MCF-07	YES	MCF-07	YES	MCF-07	NO	MCF-07	NO	MCF-07	NO	MCF-07	NO	MCF-07	NO	Deep
MCF-08A	YES	MCF-08A	YES	MCF-08A	NO	MCF-08A	NO	MCF-08A	NO	MCF-08A	NO	MCF-08A	NO	Deep
MCF-08B	NO	MCF-08B	YES	MCF-08B	NO	MCF-08B	YES	MCF-08B	NO	MCF-08B	YES	MCF-08B	NO	Middle
MCF-09A	NO	MCF-09A	YES	MCF-09A	NO	MCF-09A	NO	MCF-09A	NO	MCF-09A	YES	MCF-09A	NO	Deep
MCF-09B	YES	MCF-09B	YES	MCF-09B	NO	MCF-09B	NO	MCF-09B	YES	MCF-09B	YES	MCF-09B	NO	Middle
MCF-10A	NO	MCF-10A	YES	MCF-10A	NO	MCF-10A	NO	MCF-10A	YES	MCF-10A	YES	MCF-10A	NO	Deep
MCF-10B	NO	MCF-10B	YES	MCF-10B	NO	MCF-10B	NO	MCF-10B	NO	MCF-10B	YES	MCF-10B	NO	Middle
MCF-11	YES	MCF-11	YES	MCF-11	NO	MCF-11	NO	MCF-11	YES	MCF-11	NO	MCF-11	NO	Middle
MCF-12A	NO	MCF-12A	YES	MCF-12A	NO	MCF-12A	NO	MCF-12A	NO	MCF-12A	NO	MCF-12A	NO	Deep
MCF-12B	YES	MCF-12B	YES	MCF-12B	NO	MCF-12B	NO	MCF-12B	NO	MCF-12B	YES	MCF-12B	NO	Shallow
MCF-12C	NO	MCF-12C	YES	MCF-12C	NO	MCF-12C	NO	MCF-12C	NO	MCF-12C	NO	MCF-12C	NO	Middle
MCF-16A	YES	MCF-16A	YES	MCF-16A	NO	MCF-16A	NO	MCF-16A	YES	MCF-16A	NO	MCF-16A	NO	Deep
MCF-16B	YES	MCF-16B	YES	MCF-16B	NO	MCF-16B	NO	MCF-16B	YES	MCF-16B	NO	MCF-16B	NO	Middle
MCF-16C	YES	MCF-16C	YES	MCF-16C	YES	MCF-16C	YES	MCF-16C	NO	MCF-16C	YES	MCF-16C	NO	Shallow
MCF-17A	YES	MCF-17A	YES	MCF-17A	YES	MCF-17A	YES	MCF-17A	YES	MCF-17A	YES	MCF-17A	YES	Deep
MCF-18A	YES	MCF-18A	YES	MCF-18A	YES	MCF-18A	YES	MCF-18A	YES	MCF-18A	YES	MCF-18A	YES	Deep
MCF-19A	YES	MCF-19A	YES	MCF-19A	YES	MCF-19A	YES	MCF-19A	YES	MCF-19A	YES	MCF-19A	YES	Deep
MCF-20A	YES	MCF-20A	YES	MCF-20A	YES	MCF-20A	YES	MCF-20A	YES	MCF-20A	YES	MCF-20A	YES	Deep
MCF-21A	YES	MCF-21A	YES	MCF-21A	YES	MCF-21A	YES	MCF-21A	YES	MCF-21A	YES	MCF-21A	YES	Deep
MCF-22A	YES	MCF-22A	YES	MCF-22A	YES	MCF-22A	YES	MCF-22A	YES	MCF-22A	YES	MCF-22A	YES	Deep
MCF-23A	YES	MCF-23A	YES	MCF-23A	YES	MCF-23A	YES	MCF-23A	YES	MCF-23A	YES	MCF-23A	YES	Deep
MCF-24A	YES	MCF-24A	YES	MCF-24A	YES	MCF-24A	YES	MCF-24A	YES	MCF-24A	YES	MCF-24A	YES	Deep
MCF-25A	YES	MCF-25A	YES	MCF-25A	YES	MCF-25A	YES	MCF-25A	YES	MCF-25A	YES	MCF-25A	YES	Deep
MCF-27	YES	MCF-27	YES	MCF-27	NO	MCF-27	NO	MCF-27	YES	MCF-27	YES	MCF-27	NO	Deep
MW-01	NO	MW-01	NO	MW-01	NO	MW-01	NO	MW-01	NO	MW-01	NO	MW-01	NO	Shallow
MW-03	YES	MW-03	YES	MW-03	NO	MW-03	NO	MW-03	YES	MW-03	YES	MW-03	NO	Shallow
MW-04	YES	MW-04	YES	MW-04	YES	MW-04	NO	MW-04	YES	MW-04	YES	MW-04	YES	Shallow
MW-13	YES	MW-13	YES	MW-13	YES	MW-13	NO	MW-13	YES	MW-13	YES	MW-13	YES	Shallow
MW-15	YES	MW-15	YES	MW-15	YES	MW-15	NO	MW-15	YES	MW-15	YES	MW-15	YES	Middle
PC-108	NO	PC-108	YES	PC-108	NO	PC-108	YES	PC-108	NO	PC-108	NO	PC-108	NO	Shallow
PC-2	NO	PC-2	YES	PC-2	YES	PC-2	YES	PC-2	NO	PC-2	NO	PC-2	NO	Shallow
PC-24	YES	PC-24	YES	PC-24	YES	PC-24	NO	PC-24	YES	PC-24	YES	PC-24	YES	Shallow
PC-28	YES	PC-28	YES	PC-28	YES	PC-28	NO	PC-28	YES	PC-28	YES	PC-28	YES	Shallow
PC-4	YES	PC-4	YES	PC-4	YES	PC-4	NO	PC-4	NO	PC-4	YES	PC-4	NO	Shallow
PC-67	YES	PC-67	YES	PC-67	YES	PC-67	YES	PC-67	YES	PC-67	YES	PC-67	YES	Shallow
PC-76	YES	PC-76	YES	PC-76	YES	PC-76	YES	PC-76	YES	PC-76	YES	PC-76	YES	Shallow
PC-79	YES	PC-79	YES	PC-79	NO	PC-79	NO	PC-79	NO	PC-79	YES	PC-79	NO	Shallow
PC-80	YES	PC-80	YES	PC-80	NO	PC-80	YES	PC-80	YES	PC-80	YES	PC-80	NO	Shallow
PC-81	NO	PC-81	YES	PC-81	NO	PC-81	YES	PC-81	NO	PC-81	YES	PC-81	NO	Shallow
PC-88	YES	PC-88	YES	PC-88	YES	PC-88	YES	PC-88	YES	PC-88	YES	PC-88	YES	Shallow
PC-90	YES	PC-90	YES	PC-90	YES	PC-90	YES	PC-90	YES	PC-90	YES	PC-90	YES	Shallow
PC-94	NO	PC-94	YES	PC-94	NO	PC-94	NO	PC-94	NO	PC-94	YES	PC-94	NO	Shallow
POD2	YES	POD2	YES	POD2	YES	POD2	NO	POD2	NO	POD2	YES	POD2	NO	Shallow
POD8	NO	POD8	YES	POD8	NO	POD8	YES	POD8	YES	POD8	YES	POD8	NO	Shallow
POU3	YES	POU3	YES	POU3	NO	POU3	YES	POU3	NO	POU3	YES	POU3	NO	Shallow
WMW5.58SD	YES	WMW5.58SD	YES	WMW5.58SD	YES	WMW5.58SD	NO	WMW5.58SD	YES	WMW5.58SD	YES	WMW5.58SD	YES	Middle
WMW5.58SI	YES	WMW5.58SI	YES	WMW5.58SI	YES	WMW5.58SI	YES	WMW5.58SI	YES	WMW5.58SI	YES	WMW5.58SI	YES	Middle
WMW5.58SS	YES	WMW5.58SS	YES	WMW5.58SS	YES	WMW5.58SS	NO	WMW5.58SS	YES	WMW5.58SS	YES	WMW5.58SS	YES	Shallow

Well/analyte proposed for sampling since either 1) analyte has been sampled less than 4 time previously; 2) detection limits exceed regulatory comparison values (BCLs or MCLs); and/or 3) results are variable.

Well/analyte not proposed for sampling since detections and detection limits are consistently below regulatory comparison values (BCLs or MCLs).

Well/analyte not proposed for sampling since detections consistently exceed regulatory comparison values (BCLs or MCLs).

Well/analyte not proposed for sampling; removed for the Eastside Fifth Round Groundwater Monitoring Event.

**Table 3**  
**Summary of Sampling Program - 2009 Event**  
**Existing Wells - Shallow Zone**  
**BMI Common Areas - Eastside**

Perchlorate	Arsenic	Chromium (VI)	Organochlorine Pesticides	Volatile Organic Compounds	Radionuclides	Total Dissolved Solids
AA-01	AA-01	AA-09	AA-08	AA-07	AA-01	AA-23R
AA-08	AA-07	AA-13	AA-10	AA-13	AA-07	AA-UW1
AA-09	AA-08	AA-20	AA-13	AA-18	AA-08	AA-UW2
AA-10	AA-09	AA-23R	AA-20	AA-22	AA-09	AA-UW3
AA-13	AA-10	AA-27	AA-23R	AA-23R	AA-13	AA-UW4
AA-20	AA-13	AA-UW1	AA-27	AA-UW1	AA-21	AA-UW5
AA-22	AA-20	AA-UW2	AA-UW1	AA-UW2	AA-23R	AA-UW6
AA-23R	AA-21	AA-UW3	AA-UW2	AA-UW3	AA-26	COH-2A
AA-26	AA-22	AA-UW4	AA-UW3	AA-UW4	AA-27	DBMW-1
AA-UW1	AA-23R	AA-UW5	AA-UW4	AA-UW5	AA-UW1	DBMW-10
AA-UW2	AA-26	AA-UW6	AA-UW5	AA-UW6	AA-UW2	DBMW-11
AA-UW3	AA-27	COH-2A	AA-UW6	COH-2A	AA-UW3	DBMW-12
AA-UW4	AA-UW1	DBMW-1	COH-2A	DBMW-1	AA-UW4	DBMW-13
AA-UW5	AA-UW2	DBMW-10	DBMW-1	DBMW-10	AA-UW5	DBMW-14
AA-UW6	AA-UW3	DBMW-11	DBMW-10	DBMW-11	AA-UW6	DBMW-15
COH-2A	AA-UW4	DBMW-12	DBMW-11	DBMW-12	COH-2A	DBMW-16
DBMW-1	AA-UW5	DBMW-13	DBMW-12	DBMW-13	DBMW-1	DBMW-17
DBMW-10	AA-UW6	DBMW-14	DBMW-13	DBMW-14	DBMW-10	DBMW-18
DBMW-11	COH-2A	DBMW-15	DBMW-14	DBMW-15	DBMW-11	DBMW-19
DBMW-12	DBMW-1	DBMW-16	DBMW-15	DBMW-16	DBMW-12	DBMW-2
DBMW-13	DBMW-10	DBMW-17	DBMW-16	DBMW-17	DBMW-13	DBMW-20
DBMW-14	DBMW-11	DBMW-18	DBMW-17	DBMW-18	DBMW-14	DBMW-22
DBMW-15	DBMW-12	DBMW-19	DBMW-18	DBMW-19	DBMW-15	DBMW-3
DBMW-16	DBMW-13	DBMW-2	DBMW-19	DBMW-2	DBMW-16	DBMW-4
DBMW-17	DBMW-14	DBMW-20	DBMW-2	DBMW-20	DBMW-17	DBMW-5
DBMW-18	DBMW-15	DBMW-22	DBMW-20	DBMW-22	DBMW-18	DBMW-6
DBMW-19	DBMW-16	DBMW-3	DBMW-22	DBMW-3	DBMW-19	DBMW-7
DBMW-2	DBMW-17	DBMW-4	DBMW-3	DBMW-4	DBMW-2	DBMW-8
DBMW-20	DBMW-18	DBMW-5	DBMW-4	DBMW-5	DBMW-20	DBMW-9
DBMW-22	DBMW-19	DBMW-6	DBMW-5	DBMW-6	DBMW-22	HMW-09
DBMW-3	DBMW-2	DBMW-7	DBMW-6	DBMW-7	DBMW-3	MW-04
DBMW-4	DBMW-20	DBMW-8	DBMW-7	DBMW-8	DBMW-4	MW-13
DBMW-5	DBMW-22	DBMW-9	DBMW-8	DBMW-9	DBMW-5	PC-24
DBMW-6	DBMW-3	DM-1	DBMW-9	HMW-09	DBMW-6	PC-28
DBMW-7	DBMW-4	HMW-09	MCF-06C	MW-03	DBMW-7	PC-67
DBMW-8	DBMW-5	MCF-06C	MCF-16C	MW-04	DBMW-8	PC-76
DBMW-9	DBMW-6	MCF-16C	PC-108	MW-13	DBMW-9	PC-88
HMW-09	DBMW-7	MW-04	PC-2	PC-24	HMW-09	PC-90
MCF-12B	DBMW-8	MW-13	PC-67	PC-28	MCF-06C	WMW5.58SS
MCF-16C	DBMW-9	PC-2	PC-76	PC-67	MCF-12B	
MW-04	DM-1	PC-24	PC-80	PC-76	MCF-16C	
MW-13	HMW-09	PC-28	PC-81	PC-80	MW-04	
PC-24	MCF-06C	PC-4	PC-88	PC-88	MW-13	
PC-28	MCF-12B	PC-67	PC-90	PC-90	PC-24	
PC-4	MCF-16C	PC-76	POD8	POD8	PC-28	
PC-67	MW-03	PC-88	POU3	WMW5.58SS	PC-4	
PC-76	MW-04	PC-90			PC-67	
PC-79	MW-13	POD2			PC-76	
PC-80	PC-108	WMW5.58SS			PC-79	
PC-88	PC-2				PC-80	
PC-90	PC-24				PC-81	
POD2	PC-28				PC-88	
POU3	PC-4				PC-90	
WMW5.58SS	PC-67				PC-94	
		PC-76			POD2	
		PC-79			POD8	
		PC-80			POU3	
		PC-81			WMW5.58SS	
		PC-88				
		PC-90				
		PC-94				
		POD2				
		POD8				
		POU3				
		WMW5.58SS				

Well/analyte proposed for sampling (see Table 2)

**Table 3**  
**Summary of Sampling Program - 2009 Event**  
**Existing Wells - Middle Zone**  
**BMI Common Areas - Eastside**

Perchlorate	Arsenic	Chromium (VI)	Organochlorine Pesticides	Volatile Organic	Radionuclides	Total Dissolved Solids
BEC-6	BEC-6	BEC-9	BEC-9	COH-1	BEC-6	COH-1
COH-1	BEC-9	COH-1	MCF-06B	COH-2	BEC-9	COH-2
COH-2	COH-1	COH-2	MCF-08B	HMW-08	COH-1	HMW-08
HMW-08	COH-2	HMW-08	WMW5.58SI	HMWWT-6	COH-2	HMWWT-6
HMWWT-6	HMW-08	HMWWT-6		MCF-09B	HMW-08	MW-15
MCF-05	HMWWT-6	MCF-06B		MCF-11	HMWWT-6	WMW5.58SD
MCF-06B	MCF-01B	MW-15		MCF-16B	MCF-01B	WMW5.58SI
MCF-09B	MCF-03B	WMW5.58SD		MW-15	MCF-02B	
MCF-11	MCF-05	WMW5.58SI		WMW5.58SD	MCF-03B	
MCF-16B	MCF-06B			WMW5.58SI	MCF-05	
MW-15	MCF-08B				MCF-08B	
WMW5.58SD	MCF-09B				MCF-09B	
WMW5.58SI	MCF-10B				MCF-10B	
	MCF-11				MW-15	
	MCF-12C				WMW5.58SD	
	MCF-16B				WMW5.58SI	
	MW-15					
	WMW5.58SD					
	WMW5.58SI					

[Light Green Box] Well/analyte proposed for sampling (see Table 2)

**Table 3**  
**Summary of Sampling Program - 2009 Event**  
**Existing Wells - Deep Zone**  
**BMI Common Areas - Eastside**

Perchlorate	Arsenic	Chromium (VI)	Organochlorine Pesticides	Volatile Organic Compounds	Radionuclides	Total Dissolved Solids	Stable Isotopes
MCF-06A-R	MCF-01A	MCF-17A	MCF-17A	MCF-2A	MCF-01A	MCF-02A	MCF-02A
MCF-07	MCF-02A	MCF-18A	MCF-18A	MCF-10A	MCF-02A	MCF-17A	MCF-06A-R
MCF-08A	MCF-03A	MCF-19A	MCF-19A	MCF-16A	MCF-04	MCF-18A	MCF-18A
MCF-16A	MCF-04	MCF-20A	MCF-20A	MCF-17A	MCF-06A-R	MCF-19A	
MCF-17A	MCF-06A-R	MCF-21A	MCF-21A	MCF-18A	MCF-09A	MCF-20A	
MCF-18A	MCF-07	MCF-22A	MCF-22A	MCF-19A	MCF-10A	MCF-21A	
MCF-19A	MCF-08A	MCF-23A	MCF-23A	MCF-20A	MCF-17A	MCF-22A	
MCF-20A	MCF-09A	MCF-24A	MCF-24A	MCF-21A	MCF-18A	MCF-23A	
MCF-21A	MCF-10A	MCF-25A	MCF-25A	MCF-22A	MCF-19A	MCF-24A	
MCF-22A	MCF-12A			MCF-23A	MCF-20A	MCF-25A	
MCF-23A	MCF-16A			MCF-24A	MCF-21A		
MCF-24A	MCF-17A			MCF-25A	MCF-22A		
MCF-25A	MCF-18A			MCF-27	MCF-23A		
MCF-27	MCF-19A				MCF-24A		
	MCF-20A				MCF-25A		
	MCF-21A				MCF-27		
	MCF-22A						
	MCF-23A						
	MCF-24A						
	MCF-25A						
	MCF-27						

[Light Green Box] Well/analyte proposed for sampling (see Table 2)

**Table 3**  
**Summary of Sampling Program - 2009 Event**  
**New 2009 Wells**  
**BMI Common Areas - Eastside**

Zone	Anions	General Chemistry Parameters	Metals	Radionuclides	Volatile Organic Compounds	Water Quality Parameters	Organochlorine Pesticides	Stable Isotopes
Shallow Zone (None installed)								
Middle Zone	MCF-24B	MCF-24B	MCF-24B	MCF-24B	MCF-24B	MCF-24B	MCF-24B	
	MCF-28B	MCF-28B	MCF-28B	MCF-28B	MCF-28B	MCF-28B	MCF-28B	
	MCF-29B	MCF-29B	MCF-29B	MCF-29B	MCF-29B	MCF-29B	MCF-29B	
	MCF-30B	MCF-30B	MCF-30B	MCF-30B	MCF-30B	MCF-30B	MCF-30B	
	MCF-31B	MCF-31B	MCF-31B	MCF-31B	MCF-31B	MCF-31B	MCF-31B	
	MCF-32B	MCF-32B	MCF-32B	MCF-32B	MCF-32B	MCF-32B	MCF-32B	
Deep Zone	MCF-28A	MCF-28A	MCF-28A	MCF-28A	MCF-28A	MCF-28A	MCF-28A	MCF-29A
	MCF-29A	MCF-29A	MCF-29A	MCF-29A	MCF-29A	MCF-29A	MCF-29A	MCF-30A
	MCF-30A	MCF-30A	MCF-30A	MCF-30A	MCF-30A	MCF-30A	MCF-30A	MCF-31A
	MCF-31A	MCF-31A	MCF-31A	MCF-31A	MCF-31A	MCF-31A	MCF-31A	
	MCF-32A	MCF-32A	MCF-32A	MCF-32A	MCF-32A	MCF-32A	MCF-32A	

  New 2009 well proposed for sampling.

**Table 4. Analytical Specifications**  
**2009 Groundwater Monitoring Event**  
**BMI Common Areas - Eastside**

Parameter of Interest	Analytical Method	Compound List	CAS Number	Laboratory Limits
Anions	EPA 300.0A	Bromide	24959-67-9	0.25 mg/L
		Bromine	7726-95-6	0.5 mg/L
		Chlorate	14866-68-3	0.5 mg/L
		Chloride	16887-00-6	0.2 mg/L
		Chlorine (soluble)	7782-50-5	0.5 mg/L
		Chlorite	14998-27-7	0.02 mg/L
		Fluoride	16984-48-8	0.1 mg/L
		Nitrate (as N)	14797-55-8	0.02 mg/L
		Nitrite (as N)	14797-65-0	0.02 mg/L
		Orthophosphate	14265-44-2	0.5 mg/L
		Sulfate	14808-79-8	0.5 mg/L
		Sulfite	14265-45-3	0.5 mg/L
	LC/MS SW846 6850	Perchlorate	14797-73-0	0.5 µg/L
General Chemistry Parameters	EPA 350.1	Ammonia (as N)	7664-41-7	50 µg/L
	EPA 9012A	Cyanide (Total)	57-12-5	5 µg/L
	EPA 300.0A	Iodine	7553-56-2	1 mg/L
	EPA 9040B	pH (water)	pH	NA pHUnits
	EPA 376.1/376.2	Sulfide	18496-25-8	1 mg/L
	EPA 9060	Total inorganic carbon	7440-44-0	1 mg/L
	EPA 351.2	Total Kjeldahl nitrogen (TKN)	TKN	0.1 mg/L
	EPA 9060	Total organic carbon (TOC)	7440-44-0	1 mg/L
Metals	EPA 6020/6010B  Note: use collision cell ICP/MS method for reduced detection limits where needed (i.e. Arsenic)	Aluminum	7429-90-5	30 µg/L
		Antimony	7440-36-0	5 µg/L
		Arsenic	7440-38-2	5 µg/L
		Barium	7440-39-3	2 µg/L
		Beryllium	7440-41-7	0.5 µg/L
		Boron	7440-42-8	50 µg/L
		Cadmium	7440-43-9	0.5 µg/L
		Calcium	7440-70-2	100 µg/L
		Chromium	7440-47-3	10 µg/L
		Cobalt	7440-48-4	2 µg/L
		Copper	7440-50-8	1 µg/L
		Iron	7439-89-6	50 µg/L
		Lead	7439-92-1	3 µg/L
		Lithium	1313-13-9	50 µg/L
		Magnesium	7439-95-4	50 µg/L
		Manganese	7439-96-5	2 µg/L
		Molybdenum	7439-98-7	5 µg/L
		Nickel	7440-02-0	5 µg/L
		Niobium	3/1/7440	25 µg/L
		Palladium	5/3/7440	0.5 µg/L
		Phosphorus	7723-14-0	20 µg/L
		Platinum	6/4/7440	1 µg/L
		Potassium	9/7/7440	100 µg/L
		Selenium	7782-49-2	5 µg/L
		Silicon	7440-21-3	250 µg/L
		Silver	7440-22-4	2 µg/L
		Sodium	7440-23-5	50 µg/L
		Strontium	7440-24-6	5 µg/L
		Sulfur	7704-34-9	2000 µg/L
		Thallium	7440-28-0	2 µg/L
		Tin	7440-31-5	2 µg/L
		Titanium	7440-32-6	2 µg/L
		Tungsten	7440-33-7	5 µg/L
		Uranium	7440-61-1	1 µg/L
		Vanadium	7440-62-2	10 µg/L
		Zinc	7440-66-6	10 µg/L
		Zirconium	7440-67-7	5 µg/L
	EPA 7196A	Chromium (VI)	18540-29-9	10 µg/L
	EPA 7470A	Mercury	7439-97-6	0.2 µg/L

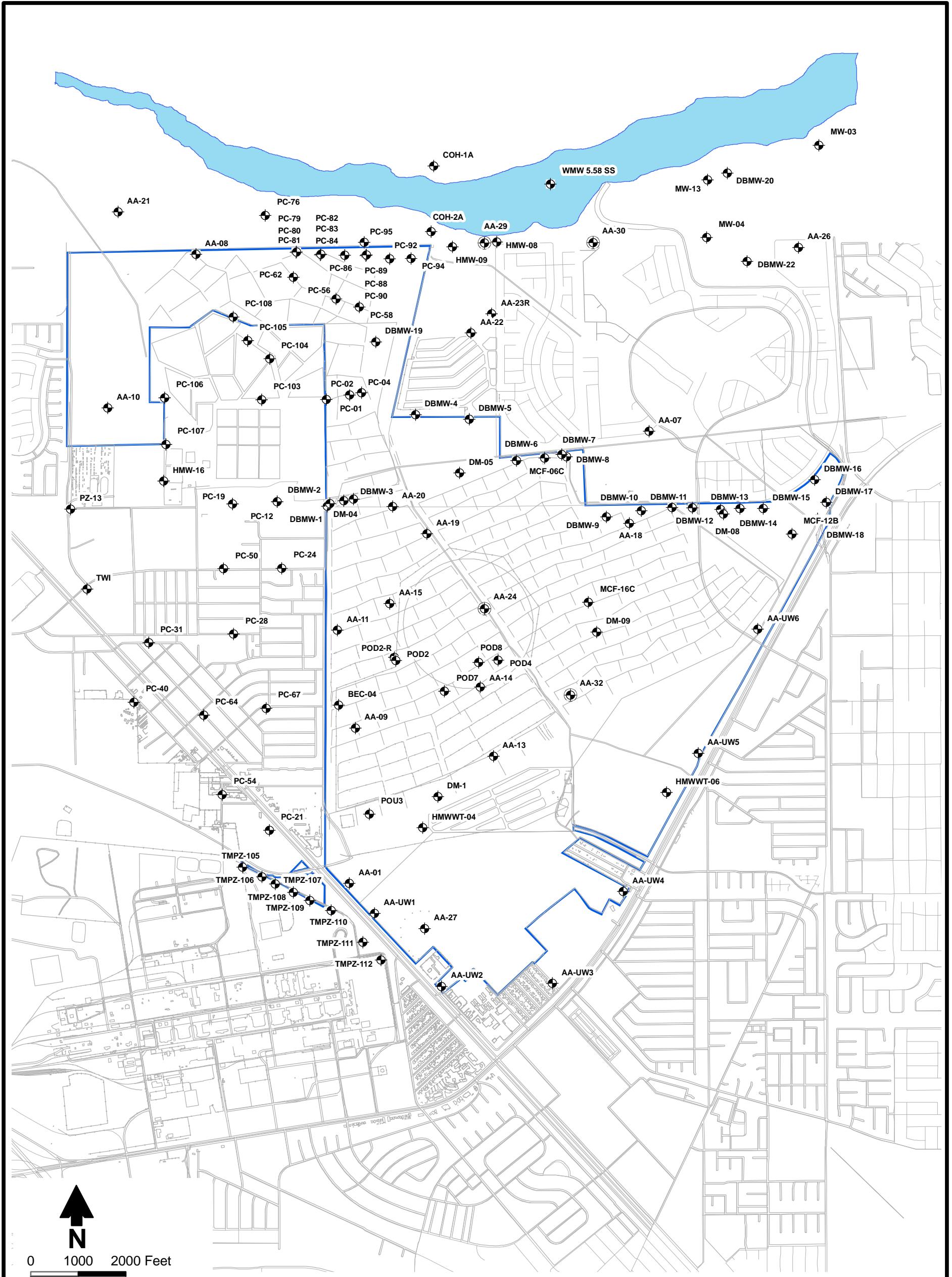
**Table 4. Analytical Specifications**  
**2009 Groundwater Monitoring Event**  
**BMI Common Areas - Eastside**

Parameter of Interest	Analytical Method	Compound List	CAS Number	Laboratory Limits
Radionuclides	HASL A-01-R (HASL 300 RC-5016 2 (Total Dissolution))	Thorium-232	7440-29-1	1 pCi/L
		Thorium-228	14274-82-9	1 pCi/L
		Thorium-230	14269-63-7	1 pCi/L
	HASL 300 RC-5016/5086 2 (Total Dissolution)	Uranium-233/234	13966-29-5	1 pCi/L
		Uranium 235/236	15117-96-1	1 pCi/L
		Uranium-238	7440-61-1	1 pCi/L
		Radium-226	13982-63-3	1 pCi/L
	EPA 903.1 (HASL 300 RC-5013/RC-50322)	Radium-228	15262-20-1	1 pCi/L
Volatile Organic Compounds	EPA 8260B (EPA 5030B)	1,1,1,2-Tetrachloroethane	630-20-6	1 µg/L
		1,1,1-Trichloroethane	71-55-6	1 µg/L
		1,1,2,2-Tetrachloroethane	79-34-5	1 µg/L
		1,1,2-Trichloroethane	79-00-5	1 µg/L
		1,1-Dichloroethane	75-34-3	1 µg/L
		1,1-Dichloroethene	75-35-4	1 µg/L
		1,1-Dichloropropene	563-58-6	1 µg/L
		1,2,3-Trichlorobenzene	87-61-6	1 µg/L
		1,2,3-Trichloropropane	96-18-4	1 µg/L
		1,2,4-Trichlorobenzene	120-82-1	1 µg/L
		1,2,4-Trimethylbenzene	95-63-6	1 µg/L
		1,2-Dichlorobenzene	95-50-1	1 µg/L
		1,2-Dichloroethane	107-06-2	1 µg/L
		1,2-Dichloroethene	540-59-0	2 µg/L
		1,2-Dichloropropane	78-87-5	1 µg/L
		1,3,5-Trichlorobenzene	108-70-3	5 µg/L
		1,3,5-Trimethylbenzene	108-67-8	1 µg/L
		1,3-Dichlorobenzene	541-73-1	1 µg/L
		1,3-Dichloropropene	542-75-6	1 µg/L
Volatile Organic Compounds (continued)	EPA 8260B (EPA 5030B)	1,3-Dichloropropane	142-28-9	1 µg/L
		1,4-Dichlorobenzene	106-46-7	1 µg/L
		2,2-Dichloropropane	594-20-7	1 µg/L
		2,2-Dimethylpentane	590-35-2	1 µg/L
		2,2,3-Trimethylbutane	464-06-2	1 µg/L
		2,3-Dimethylpentane	565-59-3	1 µg/L
		2,4-Dimethylpentane	108-08-7	1 µg/L
		2-Chlorotoluene	95-49-8	1 µg/L
		2-Hexanone	591-78-6	5 µg/L
		2-Methylhexane	591-76-4	1 µg/L
		2-Nitropropane	79-46-9	10 µg/L
		3,3-Dimethylpentane	562-49-2	1 µg/L
		3-Ethylpentane	617-78-7	10 µg/L
		3-Methylhexane	589-34-4	10 µg/L
		4-Chlorobenzene	108-90-7	1 µg/L
		4-Chlorotoluene	106-43-4	1 µg/L
		4-Methyl-2-pentanone (MIBK)	108-10-1	5 µg/L
		Acetone	67-64-1	2 µg/L
		Acetonitrile	75-05-8	10 µg/L
		Benzene	71-43-2	1 µg/L
		Bromobenzene	108-86-1	1 µg/L
		Bromodichloromethane	75-27-4	1 µg/L
		Bromoform	75-25-2	1 µg/L
		Bromomethane	74-83-9	2 µg/L
		Carbon disulfide	75-15-0	1 µg/L
		Carbon tetrachloride	56-23-5	1 µg/L
		Chlorobenzene	108-90-7	1 µg/L
		Chlorobromomethane	74-97-5	1 µg/L
		Chlorodibromomethane	124-48-1	1 µg/L
		Chloroethane	75-00-3	2 µg/L
		Chloroform	67-66-3	1 µg/L
		Chloromethane	74-87-3	2 µg/L
		cis-1,2-Dichloroethene	156-59-2	1 µg/L
		cis-1,3-Dichloropropene	10061-01-5	1 µg/L
		Cymene (Isopropyltoluene)	99-87-6	1 µg/L
		Dibromochloroethane	73506-94-2	1 µg/L
		Dibromochloromethane	124-48-1	1 µg/L
		Dibromochloropropane	96-12-8	1 µg/L

**Table 4. Analytical Specifications**  
**2009 Groundwater Monitoring Event**  
**BMI Common Areas - Eastside**

Parameter of Interest	Analytical Method	Compound List	CAS Number	Laboratory Limits
Volatile Organic Compounds (continued)	EPA 8260B (EPA 5030B)	Dibromomethane	74-95-3	1 µg/L
		Dichloromethane (Methylene chloride)	75-09-2	1 µg/L
		Dimethyldisulfide	624-92-0	5 µg/L
		Ethanol	64-17-5	250 µg/L
		Ethylbenzene	100-41-4	1 µg/L
		Freon-11 (Trichlorofluoromethane)	75-69-4	1 µg/L
		Freon-113 (1,1,2-Trifluoro-1,2,2-trichloroethane)	76-13-1	1 µg/L
		Freon-12 (Dichlorodifluoromethane)	75-71-8	2 µg/L
		Heptane	142-82-5	1 µg/L
		Isoheptane (same as 2-Methylhexane)	31394-54-4	TBD µg/L
		Isopropylbenzene	98-82-8	1 µg/L
		m,p-Xylene	mp-XYL	2 µg/L
		Methyl ethyl ketone (2-Butanone)	78-93-3	5 µg/L
		Methyl iodide	74-88-4	2 µg/L
		MTBE (Methyl tert-butyl ether)	1634-04-4	2 µg/L
		n-Butyl benzene	104-51-8	1 µg/L
		n-Propylbenzene	103-65-1	1 µg/L
		Nonanal	124-19-6	5 µg/L
		o-Xylene	95-47-6	1 µg/L
		sec-Butylbenzene	135-98-8	1 µg/L
		Styrene	100-42-5	1 µg/L
		tert-Butyl benzene	98-06-6	1 µg/L
		Tetrachloroethene	127-18-4	1 µg/L
		Toluene	108-88-3	1 µg/L
		trans-1,2-Dichloroethene	156-60-5	1 µg/L
		trans-1,3-Dichloropropene	10061-02-6	1 µg/L
		Trichloroethene	79-01-6	1 µg/L
		Vinyl acetate	108-05-4	2 µg/L
		Vinyl chloride	75-01-4	2 µg/L
		Xylenes (total)	1330-20-7	3 µg/L
		Tentatively Identified Compounds (TICs)		NA µg/L
Water Quality Parameters	EPA 120.1	Conductivity	COND	10 µohms /cm
	EPA 130.2	Hardness, total	Hardness	5 mg/L
	EPA 160.1	Total dissolved solids	TDS	5 mg/L
	EPA 160.2	Total suspended solids	TSS	5 mg/L
	EPA 310.1	Alkalinity, Total (as CaCO <sub>3</sub> )	ALK	5 mg/L
		Bicarbonate alkalinity	71-52-3	5 mg/L
		Carbonate alkalinity	3812-32-6	5 mg/L
		Hydroxide alkalinity	OH-ALK	5 mg/L
Isotopes	equilization	del O (18O/16O)	7782-44-7	0.01 ppt
	equilization	del H (2H/1H)	7782-44-7	0.01 ppt
Organochlorine Pesticides	EPA 8081A	2,4-DDD	53-19-0	0.05 µg/L
		2,4-DDE	3424-82-6	0.05 µg/L
		4,4-DDD	72-54-8	0.05 µg/L
		4,4-DDE	72-55-9	0.05 µg/L
		4,4-DDT	50-29-3	0.05 µg/L
		Aldrin	309-00-2	0.05 µg/L
		alpha-BHC	319-84-6	0.05 µg/L
		alpha-Chlordane	5103-71-9	0.05 µg/L
		beta-BHC	319-85-7	0.05 µg/L
		Chlordane	57-74-9	0.5 µg/L
		delta-BHC	319-86-8	0.05 µg/L
		Dieldrin	60-57-1	0.05 µg/L
		Endosulfan I	959-98-8	0.05 µg/L
		Endosulfan II	33213-65-9	0.05 µg/L
		Endosulfan sulfate	1031-07-8	0.05 µg/L
		Endrin	72-20-8	0.05 µg/L
		Endrin aldehyde	7421-93-4	0.05 µg/L
		Endrin ketone	53494-70-5	0.05 µg/L
		gamma-BHC (Lindane)	58-89-9	0.05 µg/L
		gamma-Chlordane	5103-74-2	0.05 µg/L
		Heptachlor	76-44-8	0.05 µg/L
		Heptachlor epoxide	1024-57-3	0.05 µg/L
		Methoxychlor	72-43-5	0.1 µg/L
		Toxaphene	8001-35-2	2 µg/L

## **Figures**



#### Explanation

- Monitoring well
- Shallow Zone well installed 2009  
Well locations are estimated pending final land survey

BMI Common Areas (Eastside)  
Henderson, Nevada

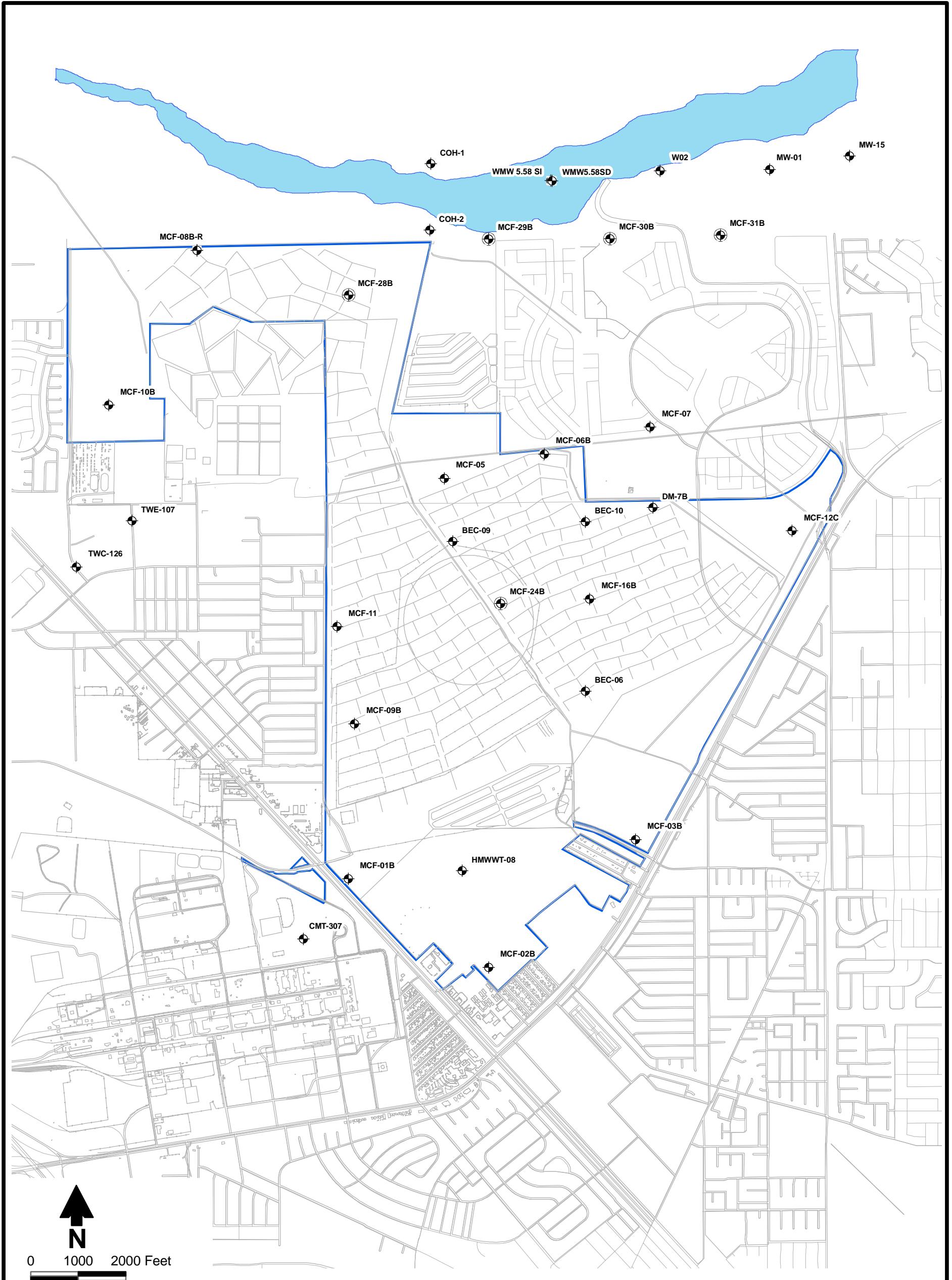
**FIGURE 1**  
**Shallow Zone**  
**Monitoring Well Locations**



Prepared by: DBS&A Date 06-19-09 S:/PROJECTS/BRC/ES09.0013\_BRC\_RTCS\_AND\_NDEP\_MTG/GIS/MXDS/WELL\_NAME.MXD 902020



Daniel B. Stephens & Associates, Inc.



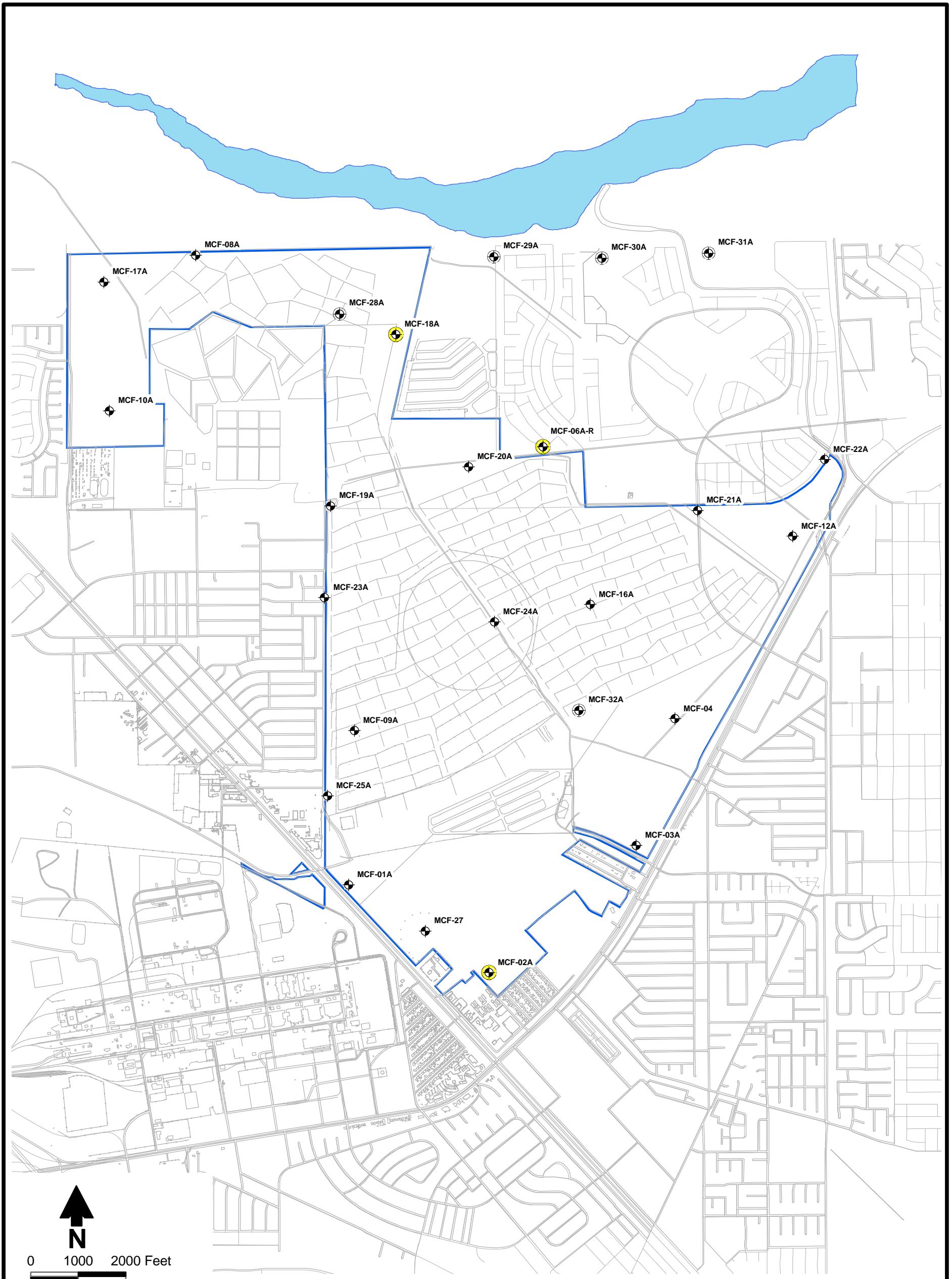
#### Explanation

- Monitoring well
- Middle Zone well installed 2009  
Well locations are estimated pending final land survey

BMI Common Areas (Eastside)  
Henderson, Nevada

**FIGURE 2**  
**Middle Zone**  
**Monitoring Well Locations**



**Explanation**

- Monitoring well
- Deep Zone well installed 2009  
Well locations are estimated pending final land survey
- Isotope Analysis

BMI Common Areas (Eastside)  
Henderson, Nevada

**FIGURE 3**  
**Deep Zone**  
**Monitoring Well Locations**



Daniel B. Stephens & Associates, Inc.

## **Appendix A**

**Responses to Nevada Division of Environmental Protection (NDEP) Comments, dated April 30, 2009, to *Technical Memorandum – Work Plan for Groundwater Sampling*,  
dated April 28, 2009  
NDEP Facility ID# H-000688**

1. Page 2, Site Hydrogeology, please refer to the NDEP's January 6, 2009 *Hydrogeologic and Lithologic Nomenclature Unification*.

**Response:** The January 6, 2009 nomenclature document has been included in the references section of the revised sampling plan and referenced in the Site Hydrogeology section.

2. Page 3, Site Hydrogeology, please insure that the re-designation of the four bulleted wells is addressed in the next quarterly update to the regional wells database.

**Response:** The re-designation will be included in the database update as requested.

3. Page 6, Water Quality Sampling and Analysis, NDEP does not concur with the list of analytes proposed by BRC in this Section. Additional comments are provided below. It appears that the discussion on this page is intended to be more generic than the discussion on page 9. NDEP will assume that the discussion on page 9 will dictate the analyses that are completed.

**Response:** The discussion on Page 6 is an overview of the specific analyses outlined on Page 9 and Tables 1 and 2. This has been clarified in the revised document.

4. Page 6, 2<sup>nd</sup> paragraph, 2<sup>nd</sup> sentence, please note that detection limits should not be a criterion for removing a well from the monitoring program.

**Response:** The text was intended to imply that a well could be removed from the program as long as, in part, detection limits have been appropriate during past sampling events. This has been clarified in the revised document.

5. Page 9, Well Maintenance and Inspections, paragraph at the top of the page, please note that there is an erroneous reference to the "fifth round groundwater monitoring report". NDEP expects that a new report will be generated to address the data collected by this work plan.

**Response:** The text has been revised accordingly.

6. Page 9, Analytical Program, please note that the list of analytes in this Section does not appear to agree with the list on Page 6 or Table 1. NDEP generally concurs with the proposal in this Section of the report; however, it lacks the necessary specificity. Tables 1 and 2 appear to provide the necessary specificity. NDEP has previously suggested that BRC consider measuring field alkalinity due to the continuing problems with the cation-anion balances. Please discuss this issue in the revised document.

**Response:** As noted in the response to Comment No.3, the discussion on Page 6 is an overview of the specific analyses outlined on Page 9 and Tables 1 and 2. This has been clarified in the revised document. The results of the cation-anion balances (CAB) completed for each of the five BRC groundwater sampling events have been reviewed in detail to try and determine why some analyses do not pass the balance criteria. The revised plan includes specific tasks that will be completed to help evaluate the CAB.

BRC's Piper and Stiff diagrams will be revised as needed based on new information concerning the CAB. Currently, no new information has been obtained to revised the CAB or the Piper and Stiff diagrams. The relatively high concentrations of chloride and sulfate dominate the CAB calculations. It appears that the acceptable analytical variability in the analysis of chloride or sulfate (over 5 percent) alone is large enough to cause a CAB failure. Missing cations or inaccurate alkalinity measurements do not appear to be a factor. The potential contribution to a revised CAB from these factors would be very small compared to how a revised sulfate or chloride concentration would revise the CAB. Also, the groundwater samples were not field-filtered before analysis, so suspended solids may be a factor in the CAB failures. Specific field and laboratory tasks outlined in the revised plan will be completed in the 2009 sampling event to evaluate the past CAB and TDS check failures. New CAB calculations and Piper and Stiff diagrams will be presented in the sampling report to NDEP using the new 2009 data. The details of the 2009 sampling event, and the procedures that will be followed to evaluate the past CAB failures (including field alkalinity measurements), are presented in the revised Eastside groundwater sampling plan.

7. Page 9, Analytical Program, 4<sup>th</sup> bullet, please note that "Ions" as listed in Table 2 would more correctly be listed as "Anions". Also, please note that ion balance is not an analytical suite.

**Response:** The revised document has been modified accordingly to clarify these issues.

8. Page 10, Analytical Program, please add wells MCF-29A, MCF-30A, and MCF-31A to the stable isotopes analyses program.

**Response:** The requested wells has been added to the analytical program.

9. Page 10, Analytical Program, last two paragraphs, the NDEP has the following comments:

a. As noted numerous times in the past, it is necessary to indicate the approval status of referenced documents.

**Response:** Comment noted. The revised document has been modified accordingly.

b. BRC should also be referencing the revised quality assurance project plan (QAPP) which should address the revised analytical methods proposed in the referenced "Resolution of Various Analytical Program Issues" document.

**Response:** Comment noted. The revised document has been modified accordingly.

10. Page 11, Data Evaluation, please also see NDEP Comment #7 above; cation-anion balance checks should be discussed in this section.

**Response:** The revised document has been modified accordingly.

11. Page 12, signature block and page 15, jurat, the document was not signed. Please note that Deliverables that are submitted without an executed jurat will be rejected without review in the future.

**Response:** Commented noted. BRC will sign future submittals for delivery to NDEP.

12. Table 1, the NDEP has the following comments:

- To provide a contemporaneous data set, it is requested that all wells shown on Figures 1 through 3 be sampled for all of the analytes listed on Tables 1 and 2.

**Response:** The new 2009 wells will be sampled for the broad suite of analytical parameters consistent with the 5th round event. For the remaining wells, however, BRC believes that the existing data set need not be duplicated where parameters are consistently not detected (with acceptable detection limits) over several rounds of sampling, or where parameter concentrations are consistently stable. BRC has screened the existing data set to determine which wells need to be sampled in 2009 to address data gaps. The screening process is outlined in the revised plan (see also response to Comment No.6).

- See additional comments below.

13. Table 2, the NDEP has the following comments:

- Regarding “Ions” and the cation-anion balance, it is necessary to discuss this matter with the laboratory prior to submitting samples for analyses. The last set of data (the fifth round sampling event) had very poor data quality and most cation-anion balances could not be completed. NDEP has addressed this matter with BRC through several separate comment letters. To achieve BRC’s proposed schedule for the development of a groundwater remedial alternatives study it is necessary to collect usable data at this time.

**Response:** BRC is currently working with the laboratory to evaluate the CAB calculations. In addition, BRC and the laboratory will plan ahead of the next round of sampling to isolate selected well samples so the laboratory reports can be separated for inspection. The results of the CAB evaluation will be included in future submittals to NDEP. Additional tasks to evaluate the past CAB failures are presented in the revised sampling plan (see also response to Comment No.12a and No.6).

- Please reference the analytical method for perchlorate.

**Response:** This information (LC/MS SW846 6850) has been included in the revised document.

c. pH in soil is listed, however, water pH is not listed. Please explain.

**Response:** The table has been edited to show pH of water.

d. Percent moisture is not applicable for a groundwater sample. Also, this is listed twice.

**Response:** This analysis has been deleted from the table.

e. Please verify that the represented laboratory limit is reflective of the “collision cell” method that is proposed. It appears that the limit is elevated.

**Response:** This “collision cell” reporting limit (5 ug/L) has been included in the revised document.

f. Please add organochlorine pesticides to the analyte list.

**Response:** OCPs were excluded from selected wells during the 5th round event based on low detection frequency. OCPs will be samples in the new wells, however. In addition, alpha-BHC and beta-BHC have been added to the 2009 event for select existing wells as detailed in the revised plan.