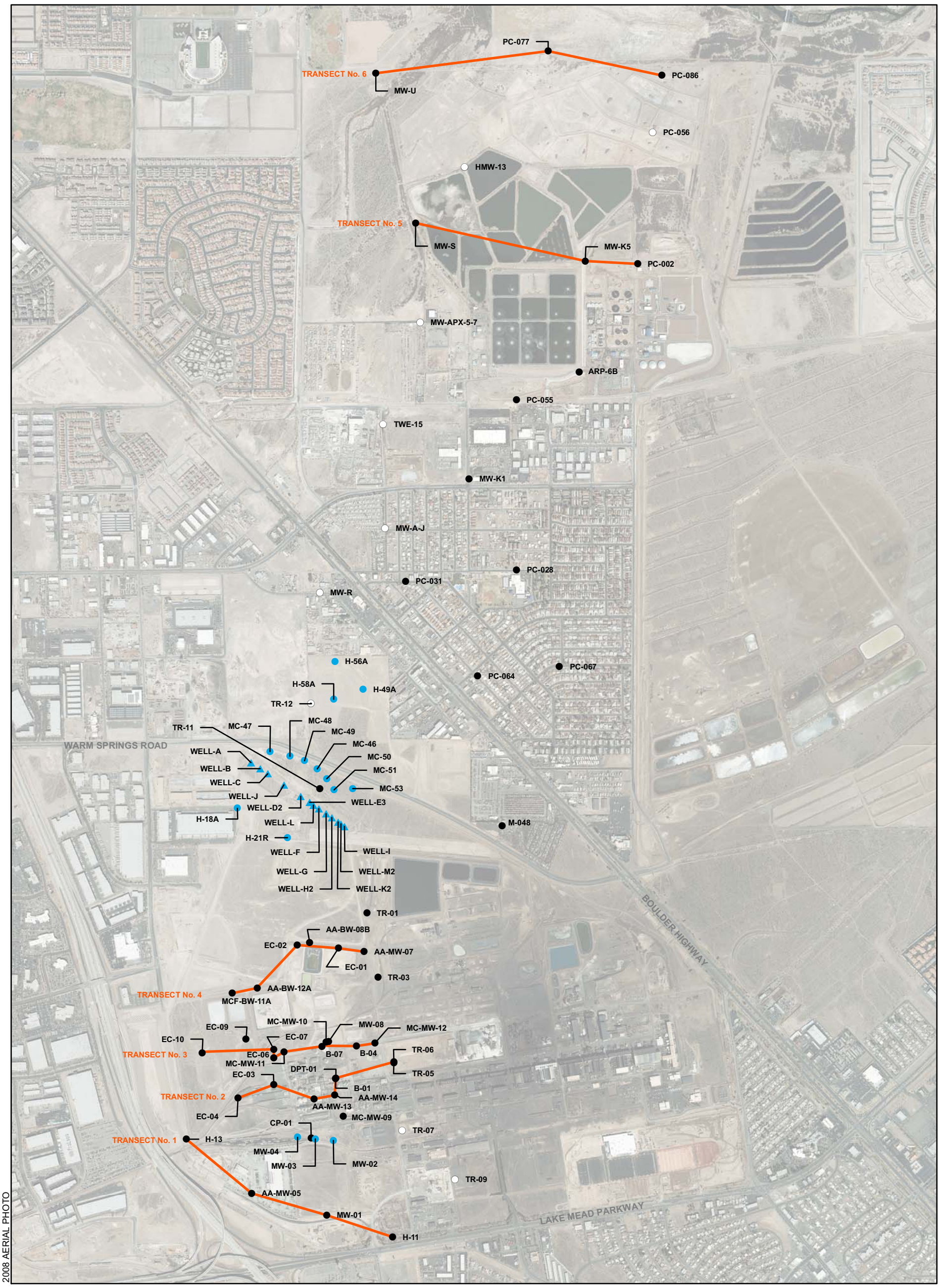

EXPLANATION

GROUNDWATER MONITORING PROGRAM LOCATION

- ● **H-11** MONITOR WELL IDENTIFIER
  GROUNDWATER QUALITY AND WATER LEVEL MONITORING LOCATION
- ○ **MW-A-J** MONITOR WELL IDENTIFIER
  WATER LEVEL MONITORING LOCATION

ROUTINE GROUNDWATER MONITORING LOCATION

- ● **MC-47** MONITOR WELL IDENTIFIER
  CONSENT ORDER WELLS / TRANSECT WELLS / CLOSED POND WELLS
- ▲ **WELL-A** MONITOR WELL IDENTIFIER
  EXTRACTION WELL
- TRANSECT

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

GROUNDWATER MONITORING PROGRAM STUDY AREA

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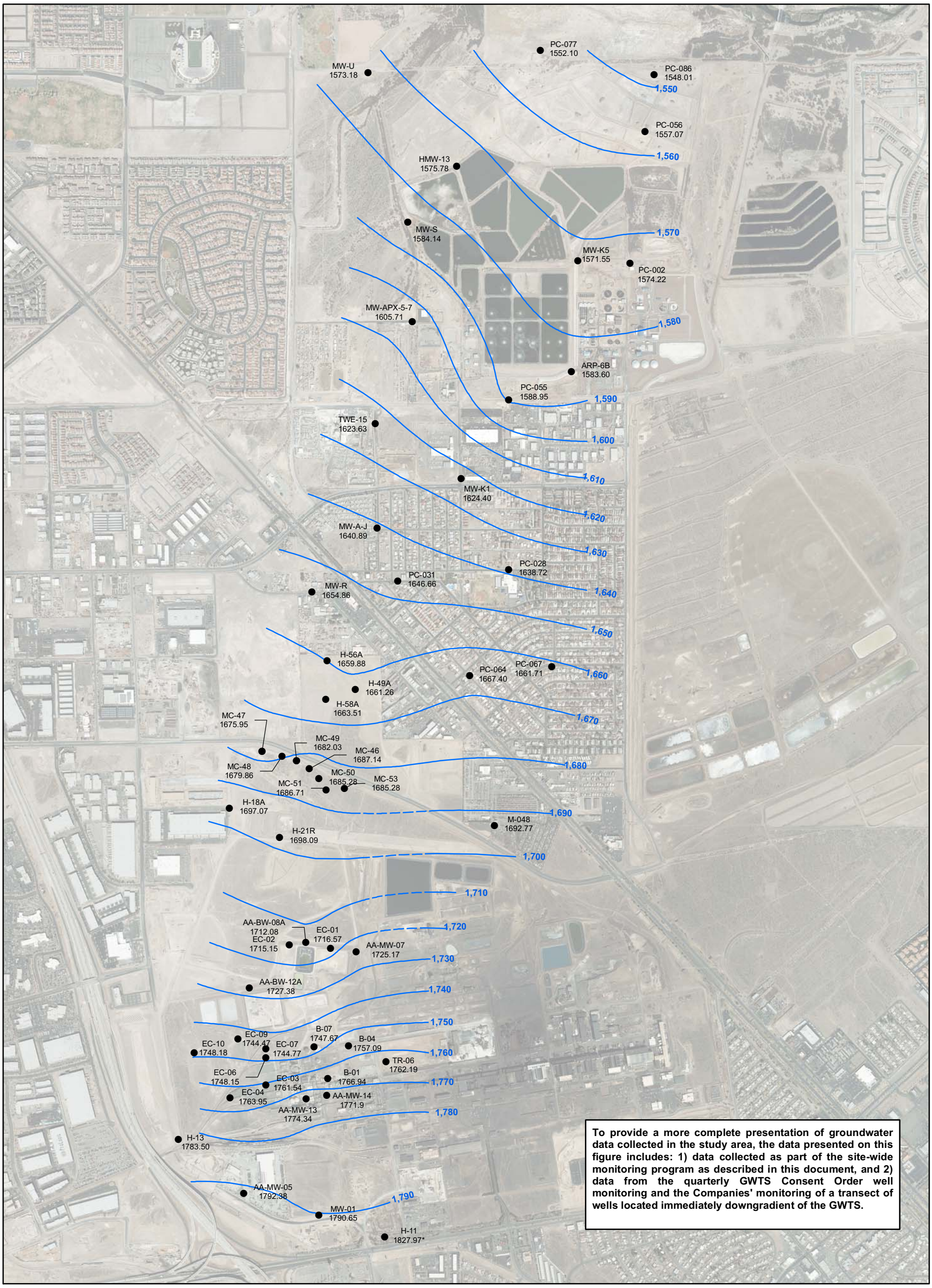
FIGURE 1

PREP BY JWM REV BY BRW RPT NO 1012.03 StudyArea.mxd



To provide a more complete presentation of groundwater data collected in the study area, the data presented on this figure includes: 1) data collected as part of the site-wide monitoring program as described in this document, and 2) data from the quarterly GWTS Consent Order well monitoring and the Companies' monitoring of a transect of wells located immediately downgradient of the GWTS.

EXPLANATION

● **H-13** **1793.50** MONITOR WELL IDENTIFIER
WATER LEVEL ELEVATION
IN FEET ABOVE MEAN SEA LEVEL

1,790 APPROXIMATE CONTOUR LINE OF EQUAL WATER LEVEL ELEVATION IN FEET ABOVE MEAN SEA LEVEL (DASHED WHERE INFERRED OR UNCERTAIN)

* = anomalous measurement, not used in contouring

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

WATER LEVELS
SHALLOW ZONE
THIRD QUARTER 2008

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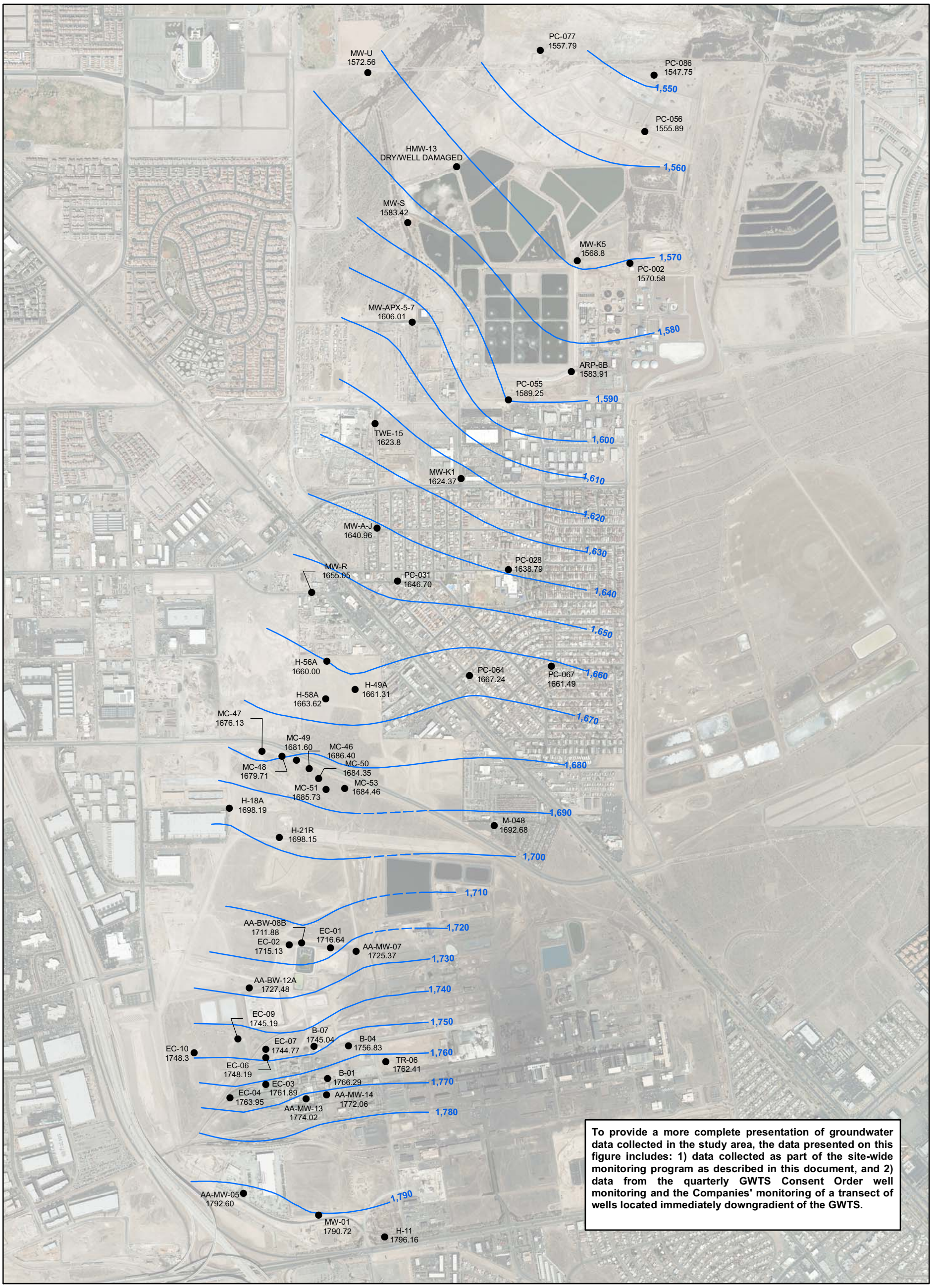
FIGURE 2

PREP BY RGW REV BY BRW RPT NO 1012.13

WLs-Shallow_Jul08.mxd



To provide a more complete presentation of groundwater data collected in the study area, the data presented on this figure includes: 1) data collected as part of the site-wide monitoring program as described in this document, and 2) data from the quarterly GWTS Consent Order well monitoring and the Companies' monitoring of a transect of wells located immediately downgradient of the GWTS.

EXPLANATION

● **H-11** MONITOR WELL IDENTIFIER
1796.16 WATER LEVEL ELEVATION IN FEET ABOVE MEAN SEA LEVEL

1,790 APPROXIMATE CONTOUR LINE OF EQUAL WATER LEVEL ELEVATION IN FEET ABOVE MEAN SEA LEVEL (DASHED WHERE INFERRED OR UNCERTAIN)

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

WATER LEVELS
SHALLOW ZONE
FOURTH QUARTER 2008

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FIGURE 3

PREP BY RGW REV BY BRW RPT NO 1012.13 WLs-Shallow_Oct08.mxd

EXPLANATION

● **CP-01 1791.40** MONITOR WELL IDENTIFIER
WATER LEVEL ELEVATION IN FEET ABOVE MEAN SEA LEVEL

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

WATER LEVELS
FINE-GRAINED
UPPER MUDDY CREEK FORMATION
THIRD QUARTER 2008

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FIGURE 4

PREP BY RGW REV BY BRW RPT NO 1012.03 | WLs-2ndWB_Jul08.mxd

2008 AERIAL PHOTO

EXPLANATION

● **CP-01** **1790.76** MONITOR WELL IDENTIFIER
WATER LEVEL ELEVATION IN FEET ABOVE MEAN SEA LEVEL

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

WATER LEVELS
FINE-GRAINED
UPPER MUDDY CREEK FORMATION
FOURTH QUARTER 2008

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FIGURE 5

PREP BY RGW REV BY BRW RPT NO 1012.13 | WLs-2ndWB_Oct08.mxd

EXPLANATION

● **TR-11 1726.35** MONITOR WELL IDENTIFIER
WATER LEVEL ELEVATION IN FEET ABOVE MEAN SEA LEVEL

NOTES:

* = anomalous measurement, not used
UTM = Unable to measure

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

WATER LEVELS
COARSE-GRAINED
UPPER MUDDY CREEK FORMATION
THIRD QUARTER 2008

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FIGURE 6

PREP BY RGW REV BY BRW RPT NO 1012.13 | WLs-3rdWB_Jul08.mxd

EXPLANATION

● **TR-09 1811.24** MONITOR WELL IDENTIFIER
WATER LEVEL ELEVATION IN FEET ABOVE MEAN SEA LEVEL

NOTES:
* = anomalous measurement, not used
UTM = Unable to measure

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

WATER LEVELS
COARSE-GRAINED
UPPER MUDDY CREEK FORMATION
FOURTH QUARTER 2008

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FIGURE 7

PREP BY RGW REV BY BRW RPT NO 1012.13 | WLs-3rdWB_Oct08.mxd

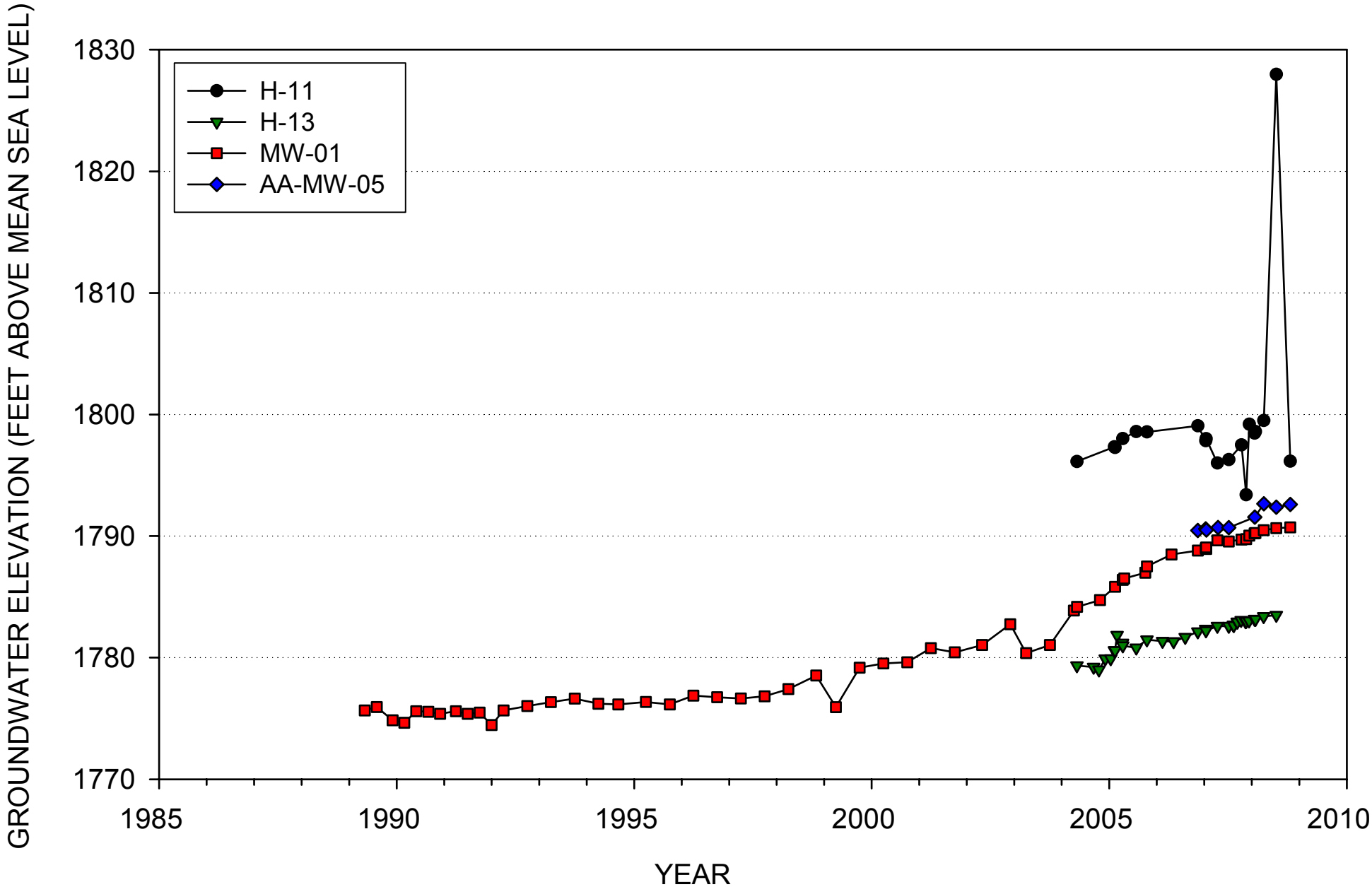

FIGURE 8. WATER LEVEL HYDROGRAPHS - SHALLOW ZONE MONITOR WELLS - TRANSECT NO. 1

Note:
The 11/19/2007 and 10/23/2008 water level measurements for H-11 are suspected mis-measurements.

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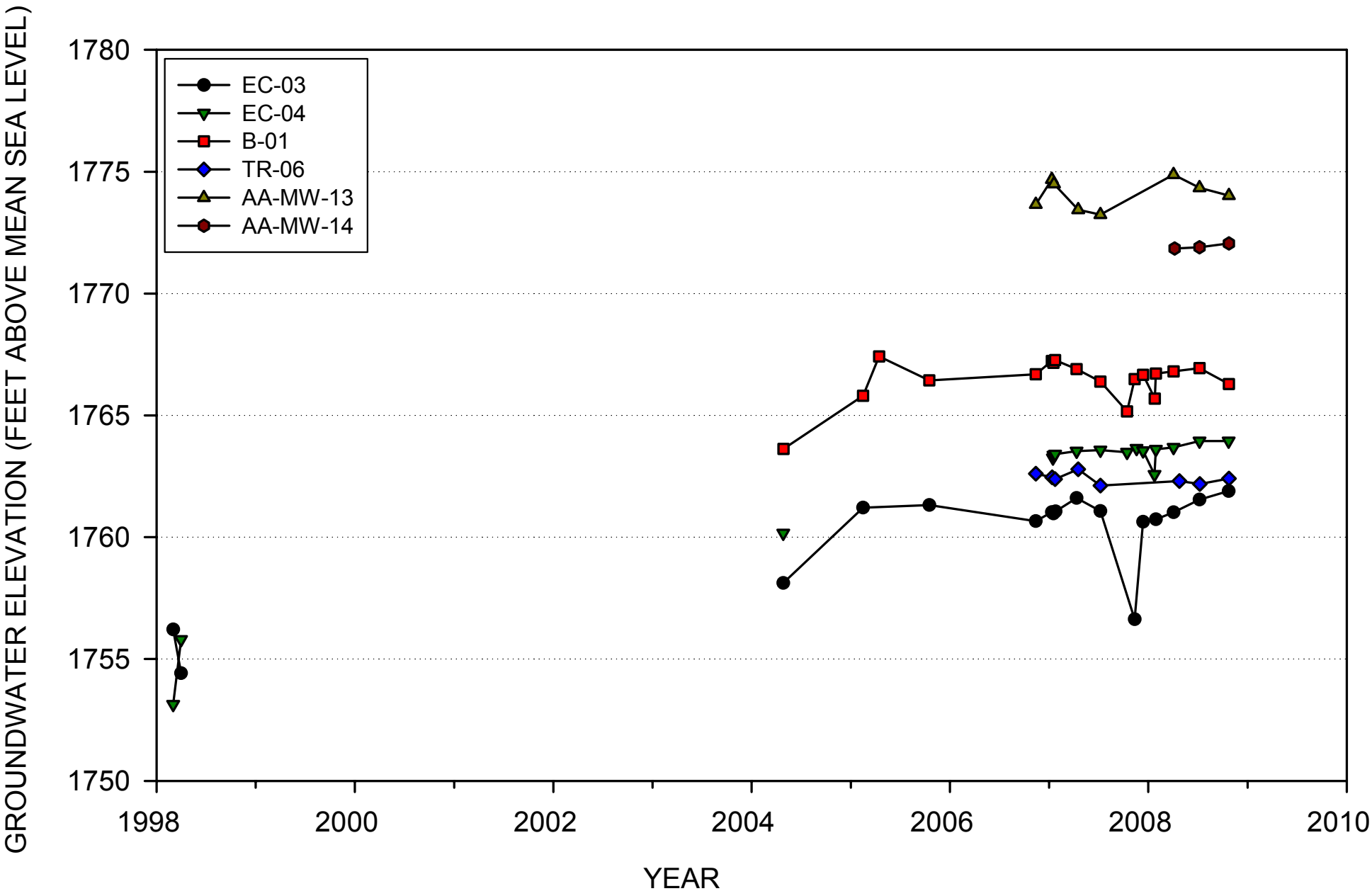

FIGURE 9. WATER LEVEL HYDROGRAPHS - SHALLOW ZONE MONITOR WELLS - TRANSECT NO. 2

HARGIS + ASSOCIATES, INC.

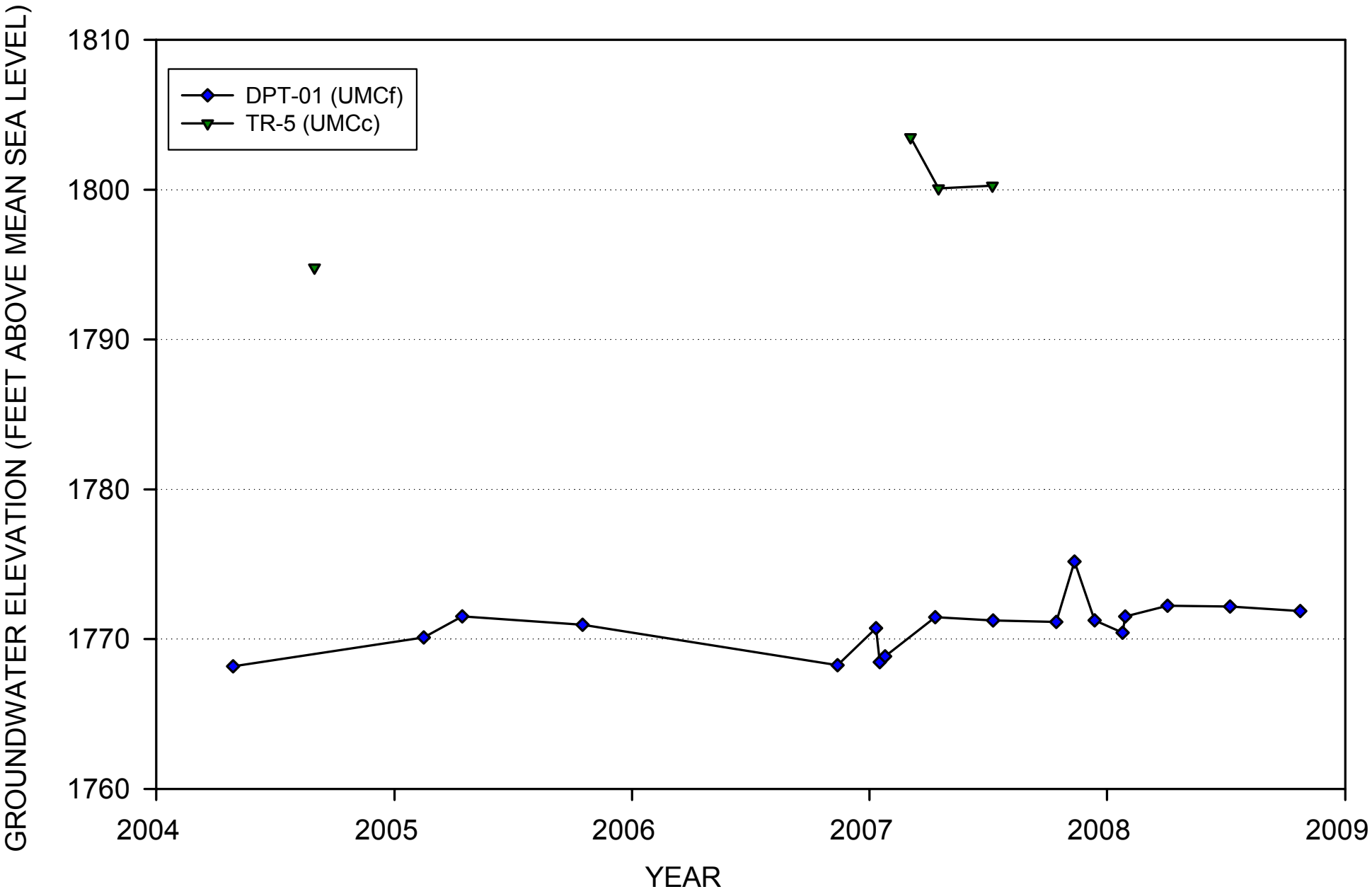

FIGURE 10. WATER LEVEL HYDROGRAPHS - UPPER MUDDY CREEK MONITOR WELLS - TRANSECT NO. 2

UMCf = fine grained Upper Muddy Creek formation
UMCc = coarse grained Upper Muddy Creek formation

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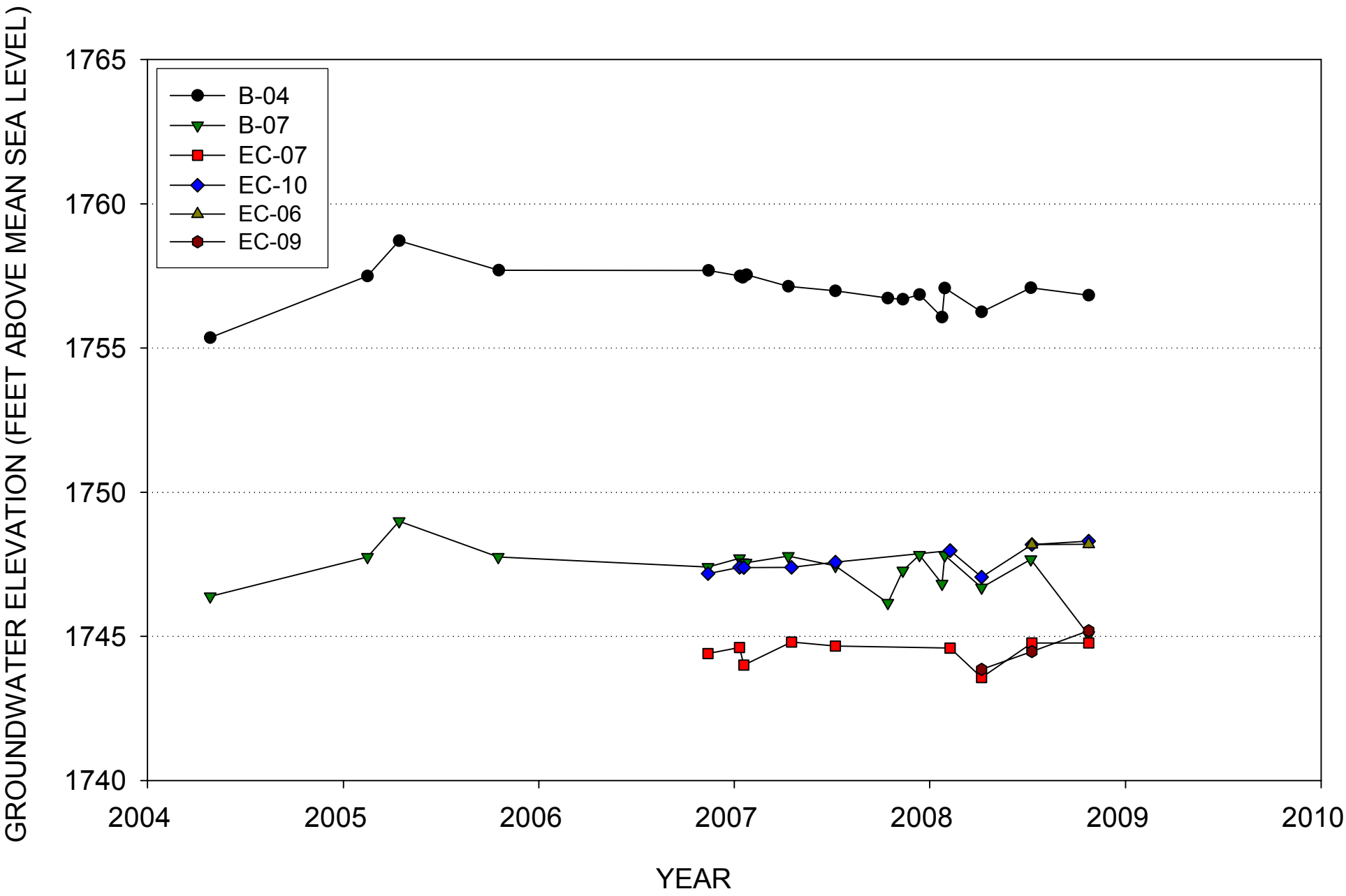


FIGURE 11. WATER LEVEL HYDROGRAPHS - SHALLOW ZONE MONITOR WELLS - TRANSECT NO. 3

HARGIS + ASSOCIATES, INC.

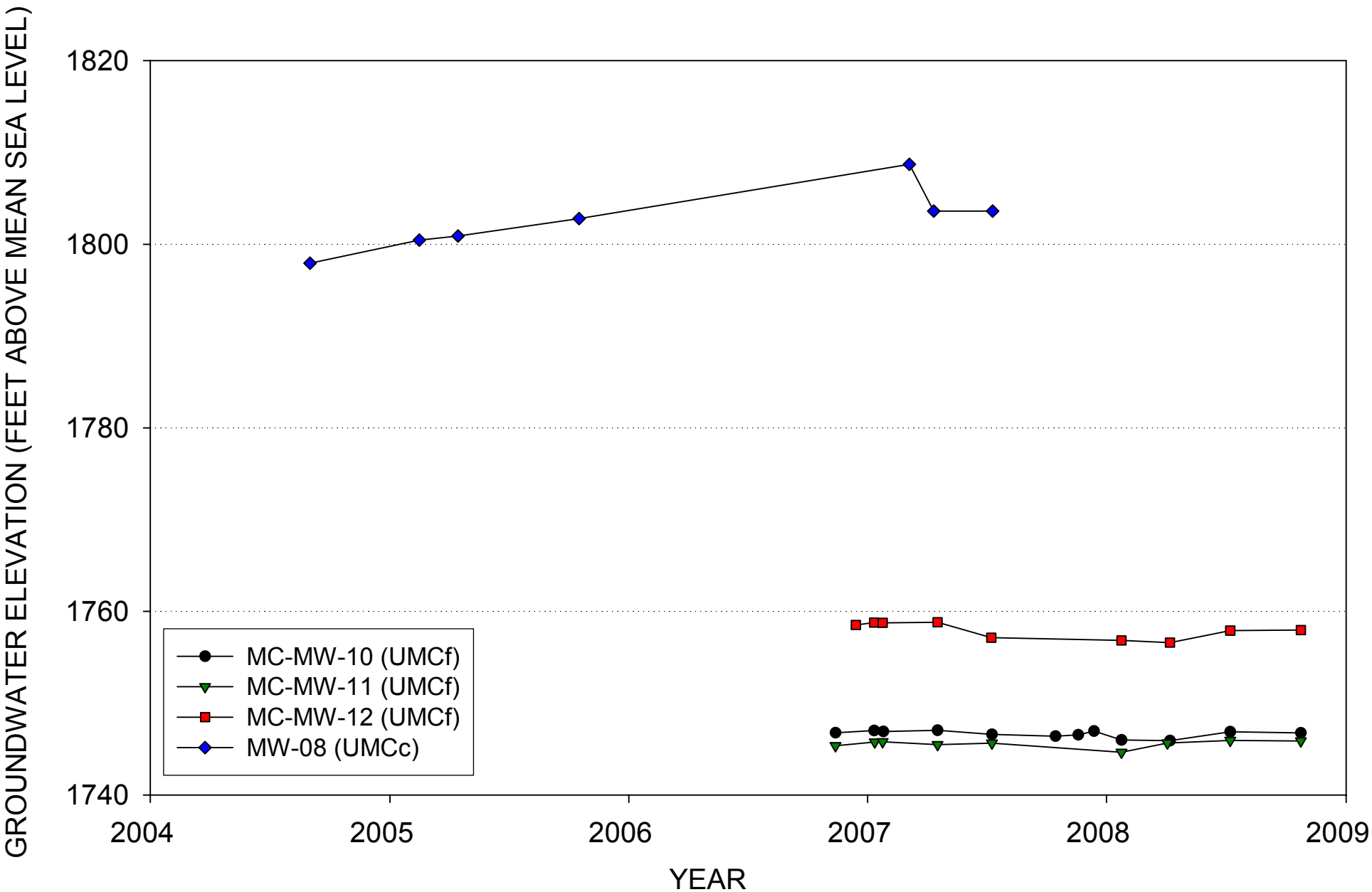


FIGURE 12. WATER LEVEL HYDROGRAPHS - UPPER MUDDY CREEK MONITOR WELLS - TRANSECT NO. 3

HARGIS + ASSOCIATES, INC.

UMCf = fine grained Upper Muddy Creek formation

UMCc = coarse grained Upper Muddy Creek formation

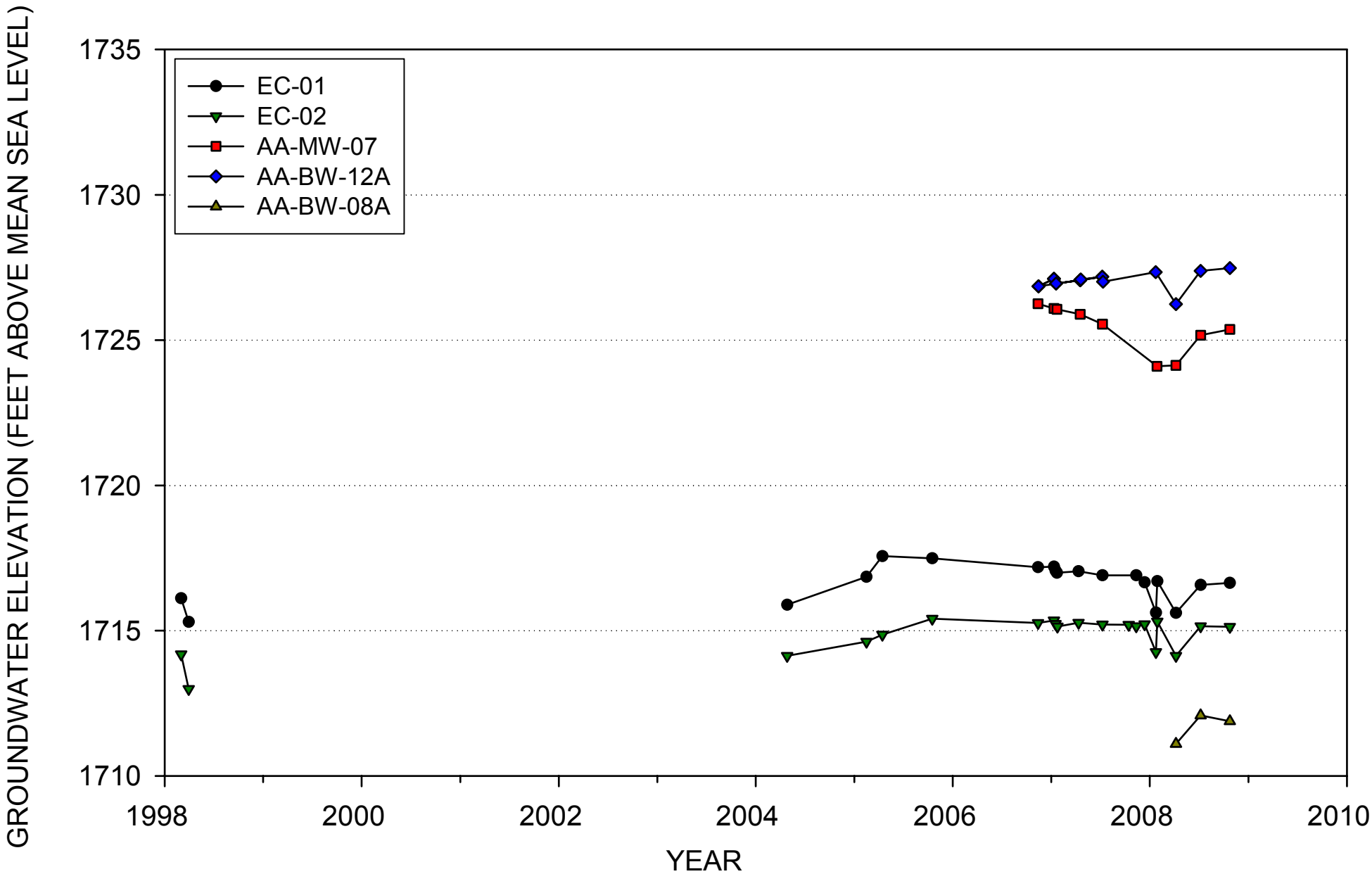


FIGURE 13. WATER LEVEL HYDROGRAPHS - SHALLOW ZONE MONITOR WELLS - TRANSECT NO. 4

HARGIS + ASSOCIATES, INC.

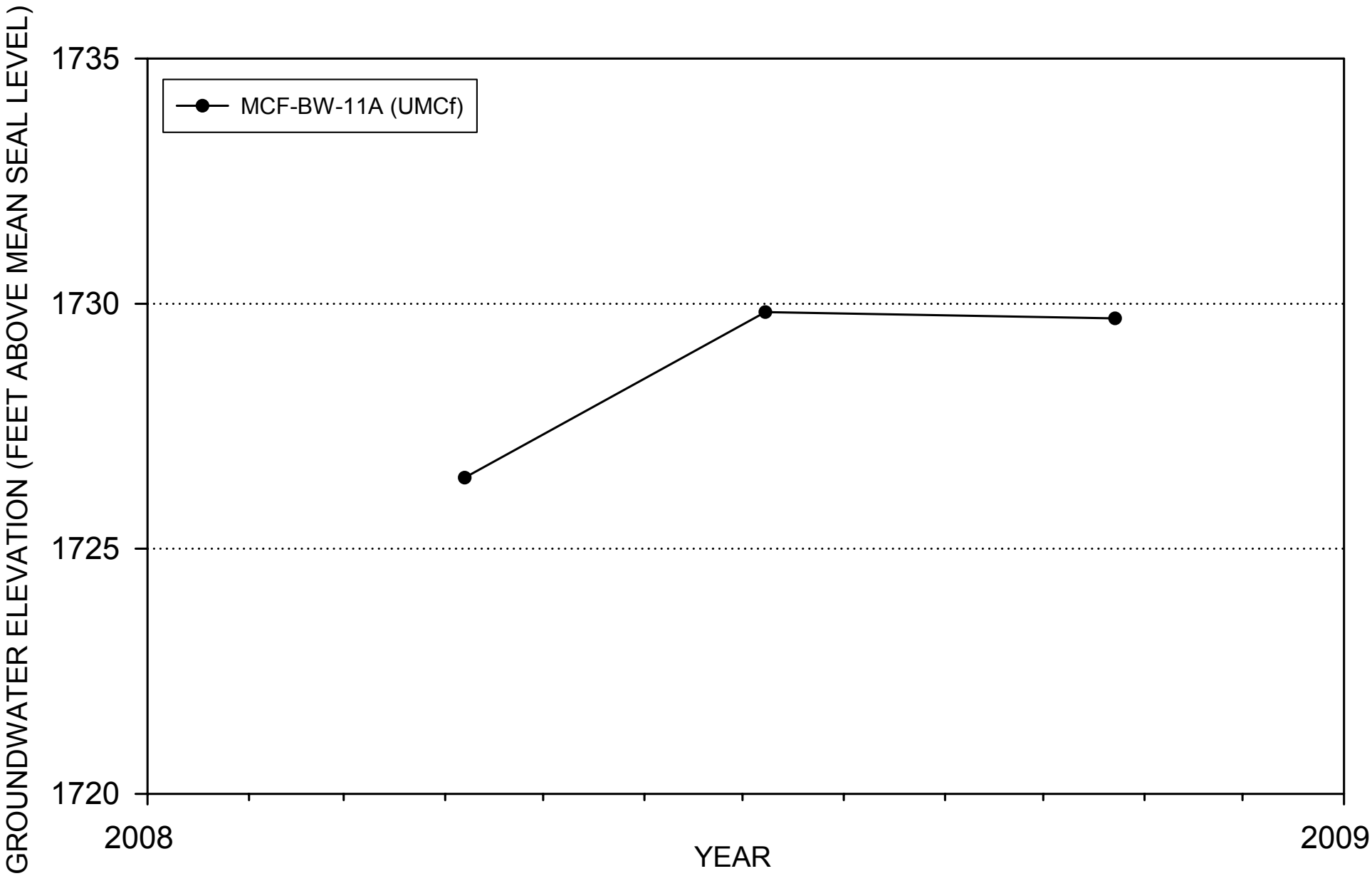


FIGURE 14. WATER LEVEL HYDROGRAPHS - UPPER MUDDY CREEK MONITOR WELLS - TRANSECT NO. 4

HARGIS + ASSOCIATES, INC.

UMCf = fine grained Upper Muddy Creek formation

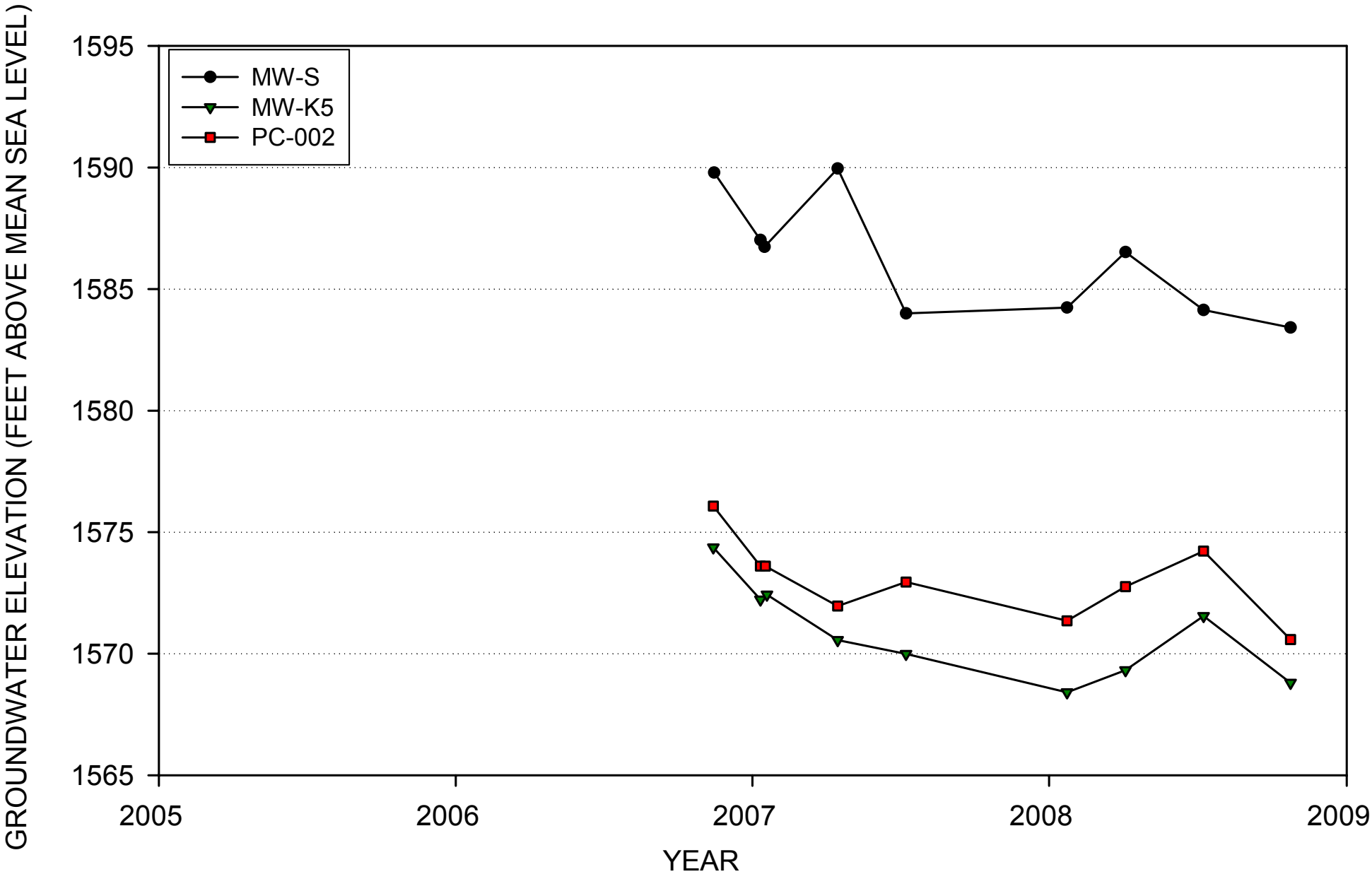


FIGURE 15. WATER LEVEL HYDROGRAPHS - SHALLOW ZONE MONITOR WELLS - TRANSECT NO. 5

HARGIS + ASSOCIATES, INC.

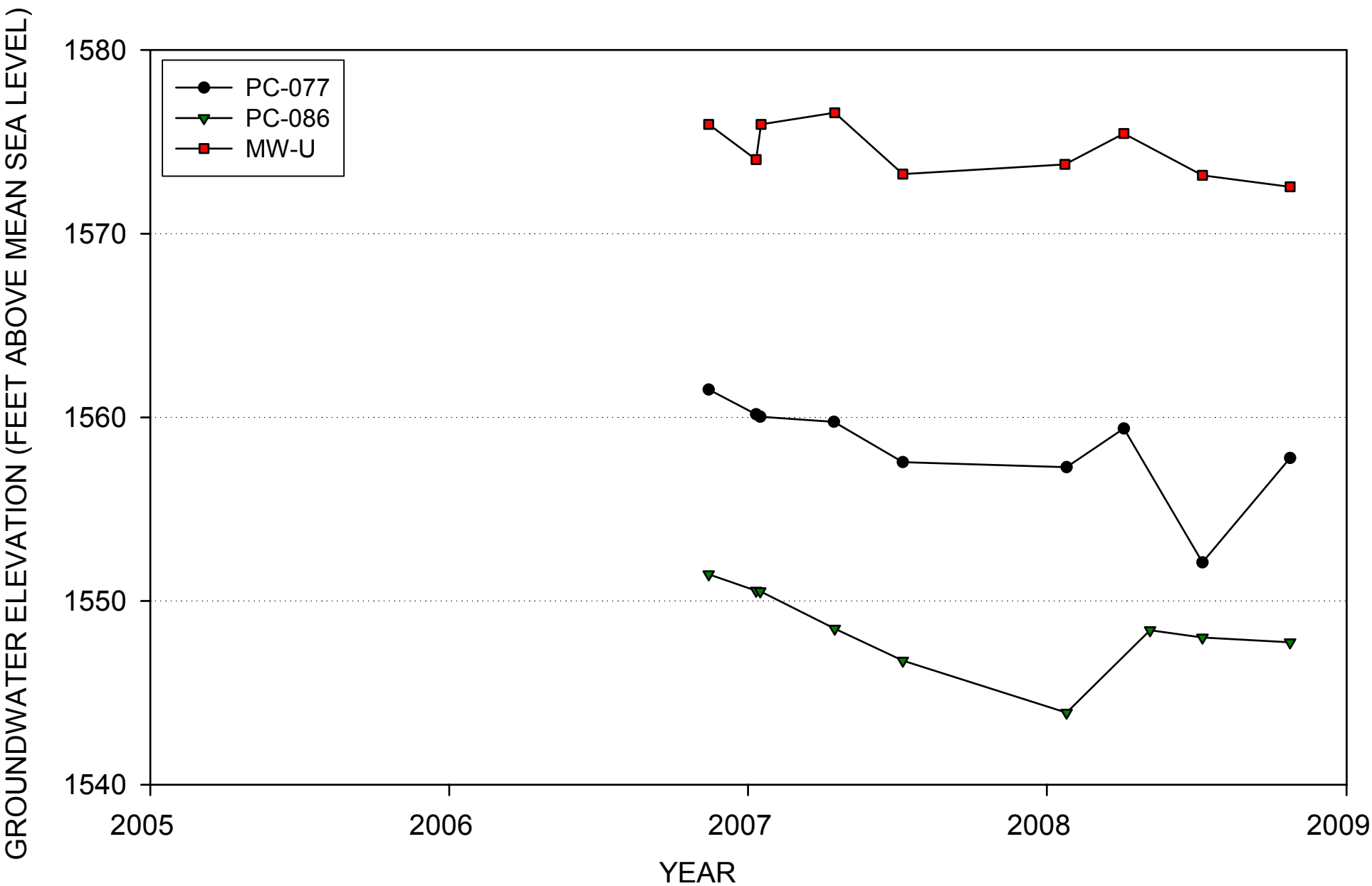
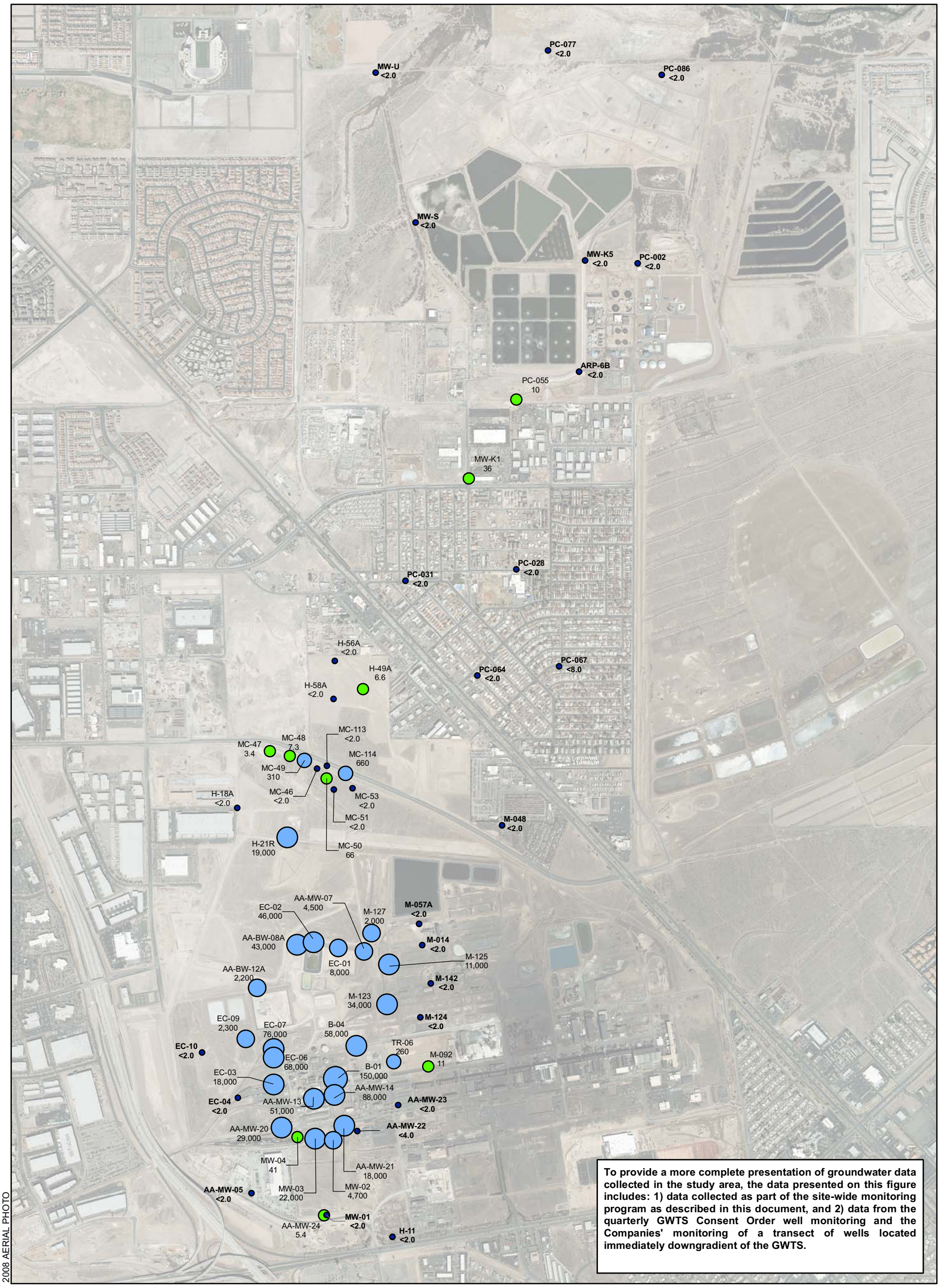


FIGURE 16. WATER LEVEL HYDROGRAPHS - SHALLOW ZONE MONITOR WELLS - TRANSECT NO. 6

HARGIS + ASSOCIATES, INC.



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EXPLANATION

CHLOROBENZENE CONCENTRATION
EPA METHOD: 8260B

- NON-DETECTABLE AT THE REPORTING LIMIT
- < 100 ug/l (MAXIMUM CONTAMINANT LEVEL)
- 100 - 1,000 ug/l
- 1,000 - 10,000 ug/l
- 10,000 - 100,000 ug/l
- > 100,000 ug/l

H-11 MONITOR WELL IDENTIFIER
<2.0 CONCENTRATION IN MICROGRAMS PER LITER FOURTH QUARTER 2008
< LESS THAN; COMPOUND WAS NOT DETECTED AT OR ABOVE THE REPORTED DETECTION LIMIT
ug/l MICROGRAMS PER LITER

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

CHLOROBENZENE
SHALLOW ZONE
FOURTH QUARTER 2008

HARGIS + ASSOCIATES, INC.
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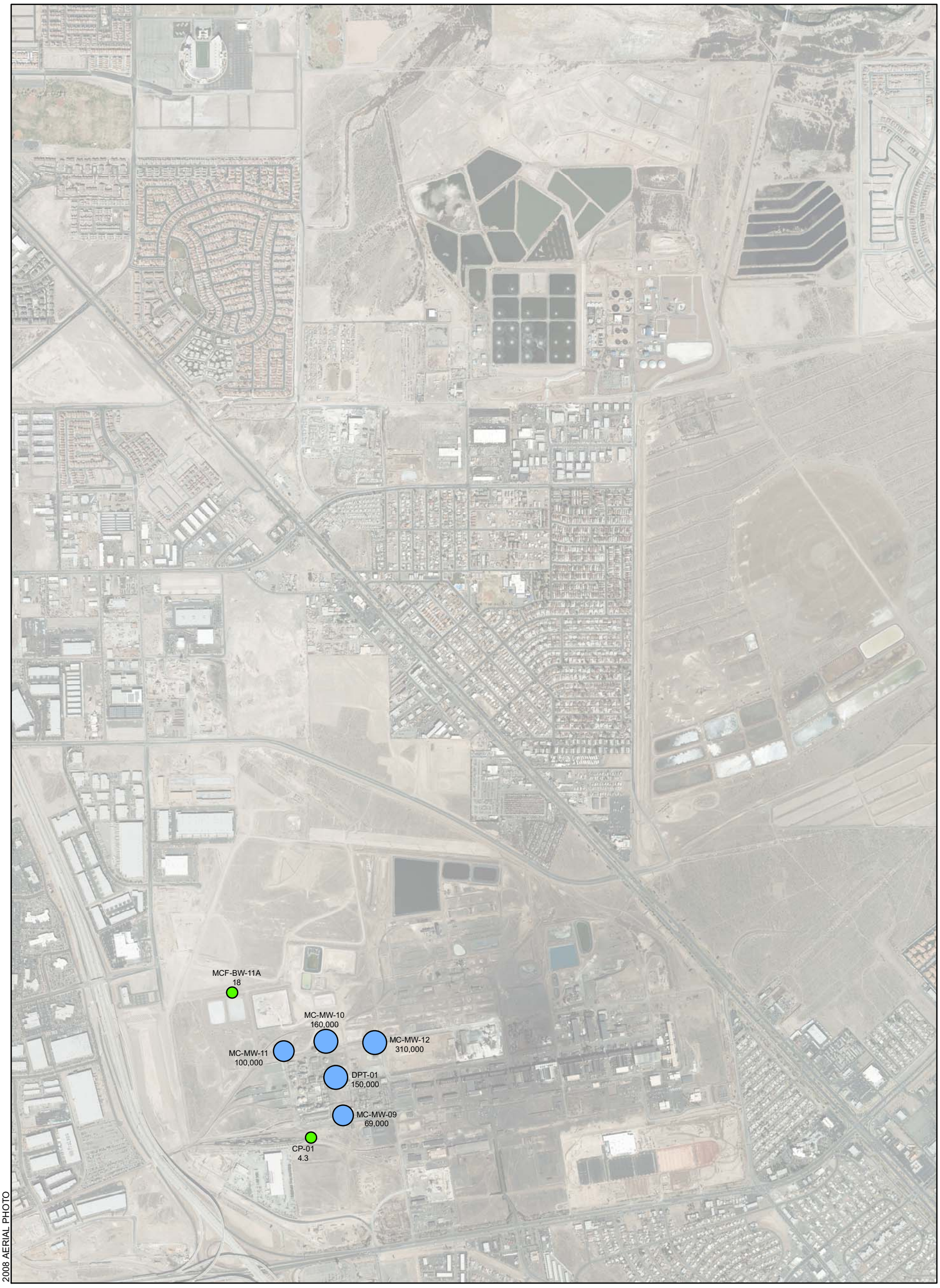
FIGURE 17

PREP BY JWM REV BY BRW RPT NO 1012.13 CBZ-Shallow.mxd



EXPLANATION

CHLOROBENZENE CONCENTRATION
EPA METHOD: 8260B

- NON-DETECTABLE AT THE REPORTING LIMIT
- < 100 ug/l (MAXIMUM CONTAMINANT LEVEL)
- 100 - 1,000 ug/l
- 1,000 - 10,000 ug/l
- 10,000 - 100,000 ug/l
- > 100,000 ug/l

CP-01 4.3 — MONITOR WELL IDENTIFIER; CONCENTRATION IN MICROGRAMS PER LITER FOURTH QUARTER 2008

< — LESS THAN; COMPOUND WAS NOT DETECTED AT OR ABOVE THE REPORTED DETECTION LIMIT

ug/l — MICROGRAMS PER LITER

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

CHLOROBENZENE
FINE-GRAINED
UPPER MUDDY CREEK FORMATION
FOURTH QUARTER 2008

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FIGURE 18

PREP BY JWM REV BY BRW RPT NO 1012.13 CBZ-2ndWB.mxd

EXPLANATION

CHLOROBENZENE CONCENTRATION
EPA METHOD: 8260B

- NON-DETECTABLE AT THE REPORTING LIMIT
- < 100 ug/l (MAXIMUM CONTAMINANT LEVEL)
- 100 - 1,000 ug/l
- 1,000 - 10,000 ug/l
- 10,000 - 100,000 ug/l
- > 100,000 ug/l

TR-05 MONITOR WELL IDENTIFIER
<2.0 CONCENTRATION IN MICROGRAMS PER LITER FOURTH QUARTER

< LESS THAN; COMPOUND WAS NOT DETECTED AT OR ABOVE THE REPORTED DETECTION LIMIT

ug/l MICROGRAMS PER LITER

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

CHLOROBENZENE
COARSE-GRAINED
UPPER MUDDY CREEK FORMATION
FOURTH QUARTER 2008

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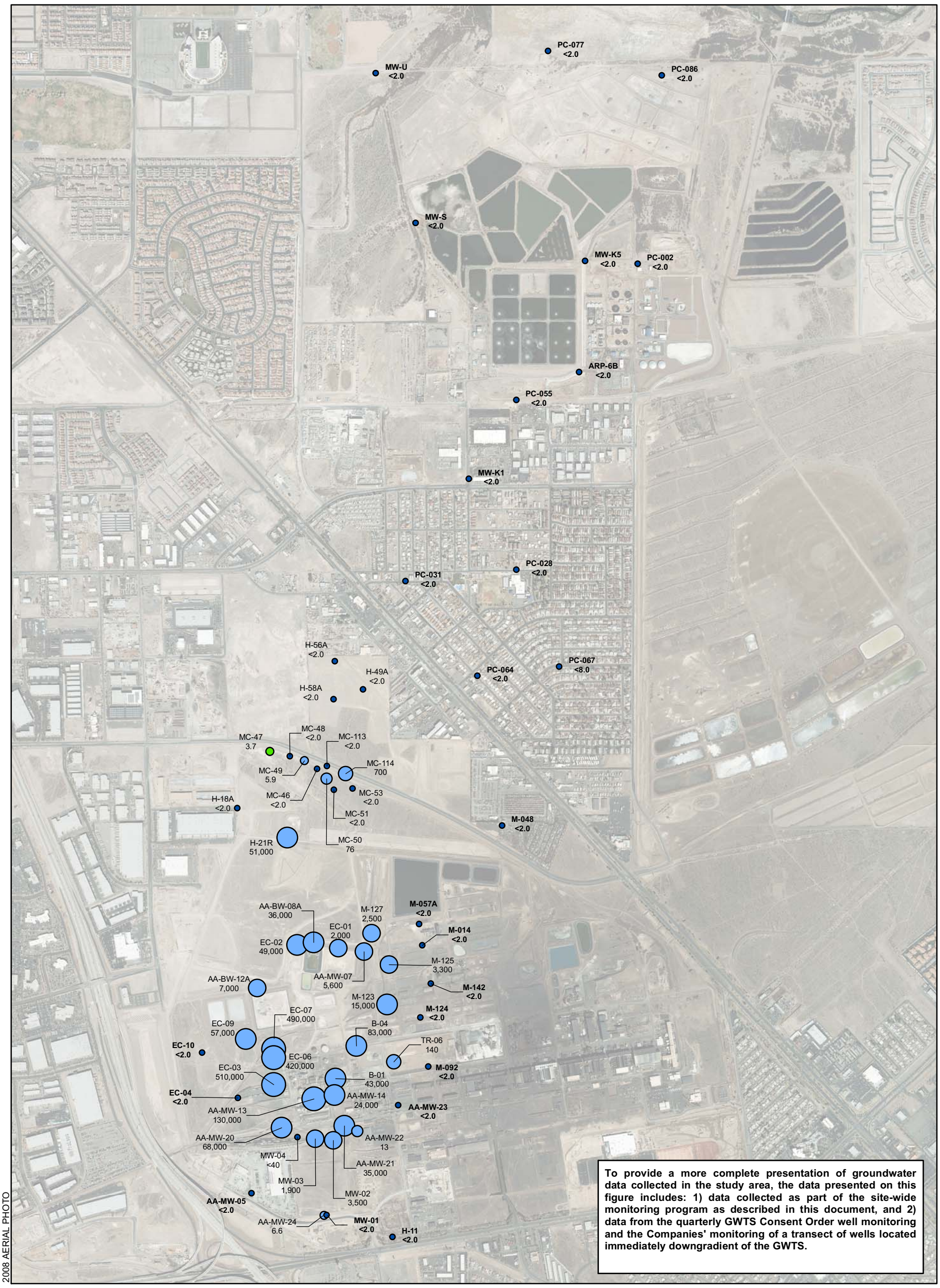
FIGURE 19

PREP BY JWM REV BY BRW RPT NO 1012.13 CBZ-3rdWB.mxd



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EXPLANATION

BENZENE CONCENTRATION
EPA METHOD: 8260B

- NON-DETECTABLE AT THE REPORTING LIMIT
- <5 ug/l (MAXIMUM CONTAMINANT LEVEL)
- 5.0 - 10 ug/l
- 10 - 100 ug/l
- 100 - 1,000 ug/l
- 1,000 - 10,000 ug/l
- 10,000 - 100,000 ug/l
- > 100,000 ug/l

H-11 <2.0 — MONITOR WELL; CONCENTRATION IN MICROGRAMS PER LITER FOURTH QUARTER 2008

< — LESS THAN; COMPOUND WAS NOT DETECTED AT OR ABOVE THE REPORTED DETECTION LIMIT

ug/l — MICROGRAMS PER LITER

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

BENZENE
SHALLOW ZONE
FOURTH QUARTER 2008

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FIGURE 20

PREP BY JWM REV BY BRW RPT NO 1012.13 Benzene-Shallow.mxd

EXPLANATION

BENZENE CONCENTRATION
EPA METHOD: 8260B

- NON-DETECTABLE AT THE REPORTING LIMIT
- <5 ug/l (MAXIMUM CONTAMINANT LEVEL)
- 5.0 - 10 ug/l
- 10 - 100 ug/l
- 100 - 1,000 ug/l
- 1,000 - 10,000 ug/l
- 10,000 - 100,000 ug/l
- > 100,000 ug/l

CP-01 MONITOR WELL IDENTIFIER
<2.0 CONCENTRATION IN MICROGRAMS PER LITER FOURTH QUARTER 2008

< LESS THAN; COMPOUND WAS NOT DETECTED AT OR ABOVE THE REPORTED DETECTION LIMIT

ug/l MICROGRAMS PER LITER

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

BENZENE
FINE-GRAINED
UPPER MUDDY CREEK FORMATION
FOURTH QUARTER 2008

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FIGURE 21

PREP BY JWM REV BY BRW RPT NO 1012.13 Benzene-2ndWB.mxd

EXPLANATION

BENZENE CONCENTRATION
EPA METHOD: 8260B

- NON-DETECTABLE AT THE REPORTING LIMIT
- <5 ug/l (MAXIMUM CONTAMINANT LEVEL)
- 5.0 - 10 ug/l
- 10 - 100 ug/l
- 100 - 1,000 ug/l
- 1,000 - 10,000 ug/l
- 10,000 - 100,000 ug/l
- > 100,000 ug/l

TR-05 <2.0 — MONITOR WELL IDENTIFIER; CONCENTRATION IN MICROGRAMS PER LITER FOURTH QUARTER 2008

< — LESS THAN; COMPOUND WAS NOT DETECTED AT OR ABOVE THE REPORTED DETECTION LIMIT

ug/l — MICROGRAMS PER LITER

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

BENZENE
COARSE-GRAINED
UPPER MUDDY CREEK FORMATION
FOURTH QUARTER 2008

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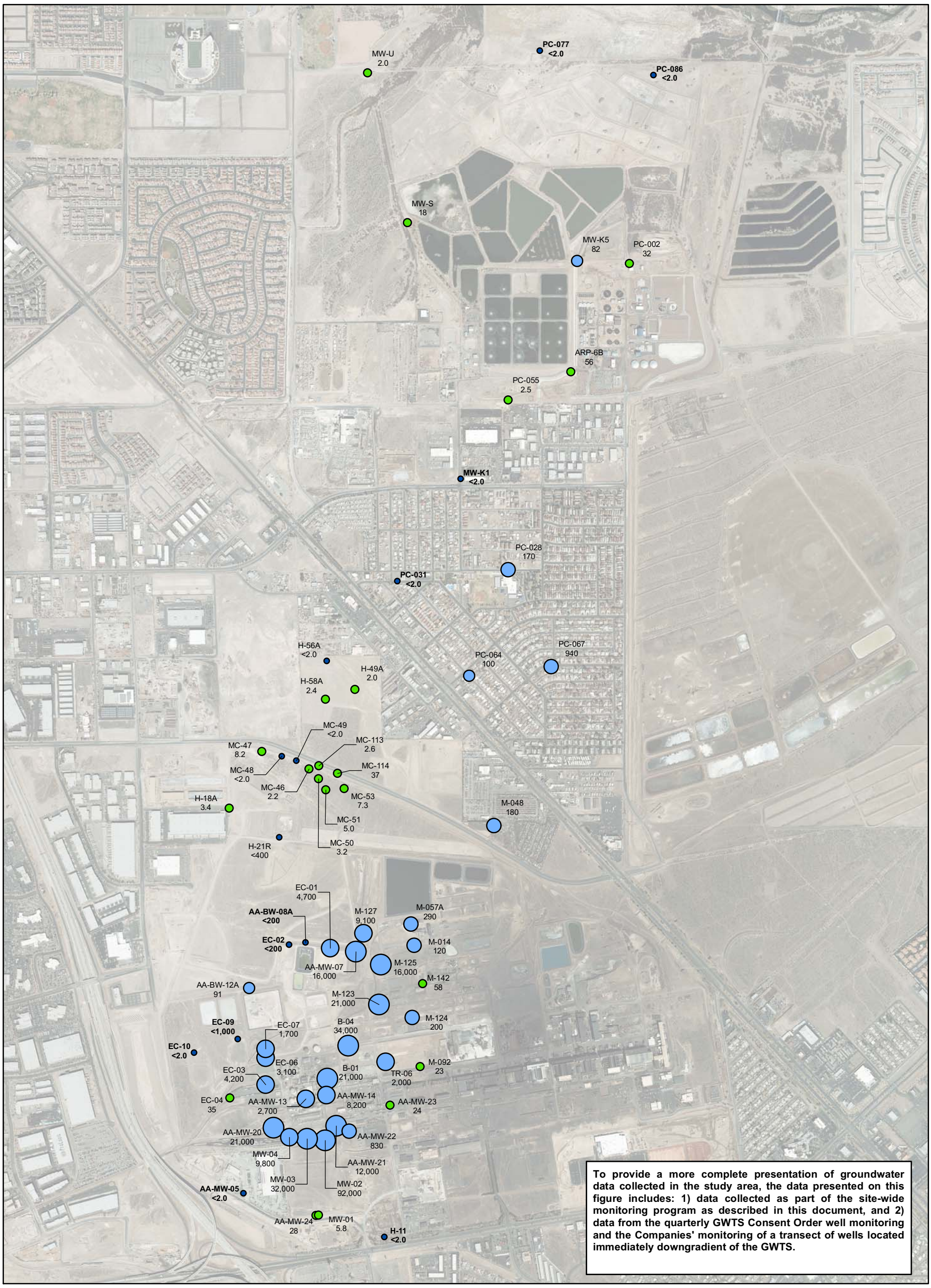
FIGURE 22

PREP BY JWM REV BY BRW RPT NO 1012.13 Benzene-3rdWB.mxd



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EXPLANATION

CHLOROFORM CONCENTRATION
EPA METHOD: 8260B

- NON-DETECTABLE AT THE REPORTING LIMIT
- < 80 ug/l (MAXIMUM CONTAMINANT LEVEL FOR TTHM)
- 80 - 100 ug/l
- 100 - 1,000 ug/l
- 1,000 - 10,000 ug/l
- 10,000 - 100,000 ug/l
- > 100,000 ug/l

H-11 MONITOR WELL IDENTIFIER
<2.0 CONCENTRATION IN MICROGRAMS PER LITER FOURTH QUARTER 2008

< LESS THAN; COMPOUND WAS NOT DETECTED AT OR ABOVE THE REPORTED DETECTION LIMIT

ug/l MICROGRAMS PER LITER

TTHM TOTAL TRIHALOMETHANES (BROMODICHLOROMETHANE + BROMOFORM + CHLOROFORM + DIBROMOCHLOROMETHANE)

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

CHLOROFORM
SHALLOW ZONE
FOURTH QUARTER 2008

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FIGURE 23

PREP BY JWM REV BY BRW RPT NO 1012.13 Chloroform-Shallow.mxd

EXPLANATION

CHLOROFORM CONCENTRATION
EPA METHOD: 8260B

- NON-DETECTABLE AT THE REPORTING LIMIT
- < 80 ug/l (MAXIMUM CONTAMINANT LEVEL FOR TTHM)
- 80 - 100 ug/l
- 100 - 1,000 ug/l
- 1,000 - 10,000 ug/l
- 10,000 - 100,000 ug/l
- > 100,000 ug/l

CP-01 MONITOR WELL IDENTIFIER
<2.0 CONCENTRATION IN MICROGRAMS PER LITER FOURTH QUARTER 2008

< LESS THAN; COMPOUND WAS NOT DETECTED AT OR ABOVE THE REPORTED DETECTION LIMIT

ug/l MICROGRAMS PER LITER

TTHM TOTAL TRIHALOMETHANES (BROMODICHLOROMETHANE + BROMOFORM + CHLOROFORM + DIBROMOCHLOROMETHANE)

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

CHLOROFORM
FINE-GRAINED
UPPER MUDDY CREEK FORMATION
FOURTH QUARTER 2008

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FIGURE 24

PREP BY JWM REV BY BRW RPT NO 1012.13 chloroform-2ndWB.mxd

EXPLANATION

CHLOROFORM CONCENTRATION
EPA METHOD: 8260B

- NON-DETECTABLE AT THE REPORTING LIMIT
- < 80 ug/l (MAXIMUM CONTAMINANT LEVEL FOR TTHM)
- 80 - 100 ug/l
- 100 - 1,000 ug/l
- 1,000 - 10,000 ug/l
- 10,000 - 100,000 ug/l
- > 100,000 ug/l

TR-05 MONITOR WELL IDENTIFIER
<2.0 CONCENTRATION IN MICROGRAMS PER LITER FOURTH QUARTER 2008

< LESS THAN; COMPOUND WAS NOT DETECTED AT OR ABOVE THE REPORTED DETECTION LIMIT

ug/l MICROGRAMS PER LITER

TTHM TOTAL TRIHALOMETHANES (BROMODICHLOROMETHANE + BROMOFORM + CHLOROFORM + DIBROMOCHLOROMETHANE)

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

CHLOROFORM
COARSE-GRAINED
UPPER MUDDY CREEK FORMATION
FOURTH QUARTER 2008

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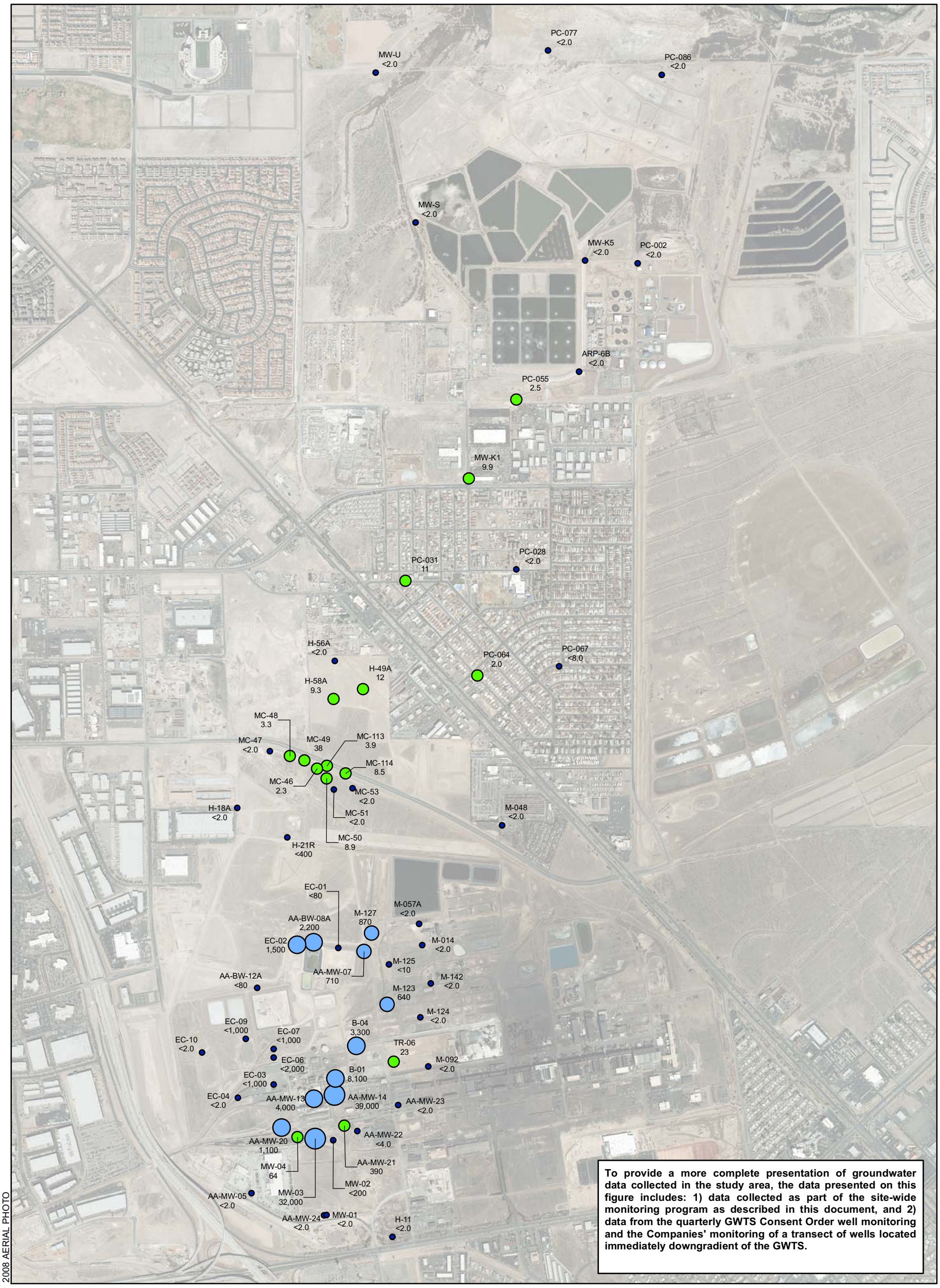
FIGURE 25

PREP BY JWM REV BY BRW RPT NO 1012.13 Chloroform-3rdWB.mxd



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EXPLANATION

1,2-DICHLOROBENZENE CONCENTRATION
EPA METHOD: 8260B

- NON-DETECTABLE AT THE REPORTING LIMIT
- < 600 ug/l (MAXIMUM CONTAMINANT LEVEL)
- 600 - 1,000 ug/l
- 1,000 - 10,000 ug/l
- 10,000 - 100,000 ug/l
- > 100,000 ug/l

H-11 MONITOR WELL IDENTIFIER
<2.0 CONCENTRATION IN MICROGRAMS PER LITER FOURTH QUARTER 2008

< LESS THAN; COMPOUND WAS NOT DETECTED AT OR ABOVE THE REPORTED DETECTION LIMIT

ug/l MICROGRAMS PER LITER

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

1,2-DICHLOROBENZENE
SHALLOW ZONE
FOURTH QUARTER 2008

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FIGURE 26

PREP BY JWM REV BY BRW RPT NO 1012.13 | 12DCB-Shallow.mxd

EXPLANATION

1,2-DICHLOROBENZENE CONCENTRATION
EPA METHOD: 8260B

- NON-DETECTABLE AT THE REPORTING LIMIT
- < 600 ug/l (MAXIMUM CONTAMINANT LEVEL)
- 600 - 1,000 ug/l
- 1,000 - 10,000 ug/l
- 10,000 - 100,000 ug/l
- > 100,000 ug/l

CP-01 / **11** MONITOR WELL IDENTIFIER / CONCENTRATION IN MICROGRAMS PER LITER FOURTH QUARTER 2008

< LESS THAN; COMPOUND WAS NOT DETECTED AT OR ABOVE THE REPORTED DETECTION LIMIT

ug/l MICROGRAMS PER LITER

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

1,2-DICHLOROBENZENE
FINE-GRAINED
UPPER MUDDY CREEK FORMATION
FOURTH QUARTER 2008

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FIGURE 27

PREP BY JWM REV BY BRW RPT NO 1012.13 12DCB-2ndWB.mxd

EXPLANATION

1,2-DICHLOROBENZENE CONCENTRATION
EPA METHOD: 8260B

- NON-DETECTABLE AT THE REPORTING LIMIT
- < 600 ug/l (MAXIMUM CONTAMINANT LEVEL)
- 600 - 1,000 ug/l
- 1,000 - 10,000 ug/l
- 10,000 - 100,000 ug/l
- > 100,000 ug/l

TR-05 <2.0 — MONITOR WELL IDENTIFIER CONCENTRATION IN MICROGRAMS PER LITER FOURTH QUARTER 2008

< — LESS THAN; COMPOUND WAS NOT DETECTED AT OR ABOVE THE REPORTED DETECTION LIMIT

ug/l — MICROGRAMS PER LITER

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

1,2-DICHLOROBENZENE
COARSE-GRAINED
UPPER MUDDY CREEK FORMATION
FOURTH QUARTER 2008

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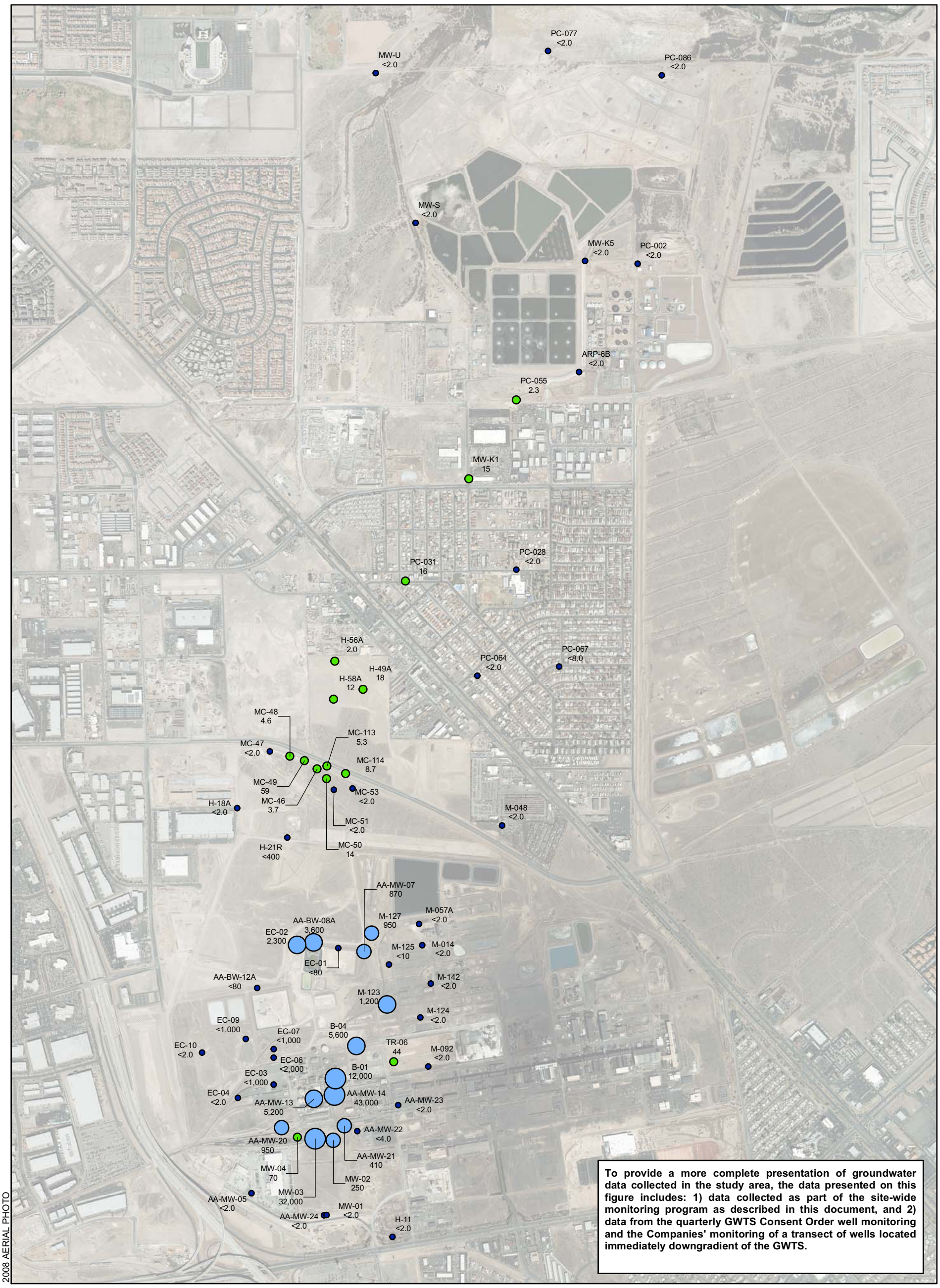
FIGURE 28

PREP BY JWM REV BY BRW RPT NO 1012.13 | 12DCB-3rdWB.mxd



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EXPLANATION

1,4-DICHLOROBENZENE CONCENTRATION
EPA METHOD: 8260B

- NON-DETECTABLE AT THE REPORTING LIMIT
- < 75 ug/l (MAXIMUM CONTAMINANT LEVEL)
- 75 - 100 ug/l
- 100 - 1,000 ug/l
- 1,000 - 10,000 ug/l
- 10,000 - 100,000 ug/l
- > 100,000 ug/l

H-11 MONITOR WELL IDENTIFIER
<2.0 CONCENTRATION IN MICROGRAMS PER LITER FOURTH QUARTER 2008

< LESS THAN; COMPOUND WAS NOT DETECTED AT OR ABOVE THE REPORTED DETECTION LIMIT

ug/l MICROGRAMS PER LITER

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

1,4-DICHLOROBENZENE
SHALLOW ZONE
FOURTH QUARTER 2008

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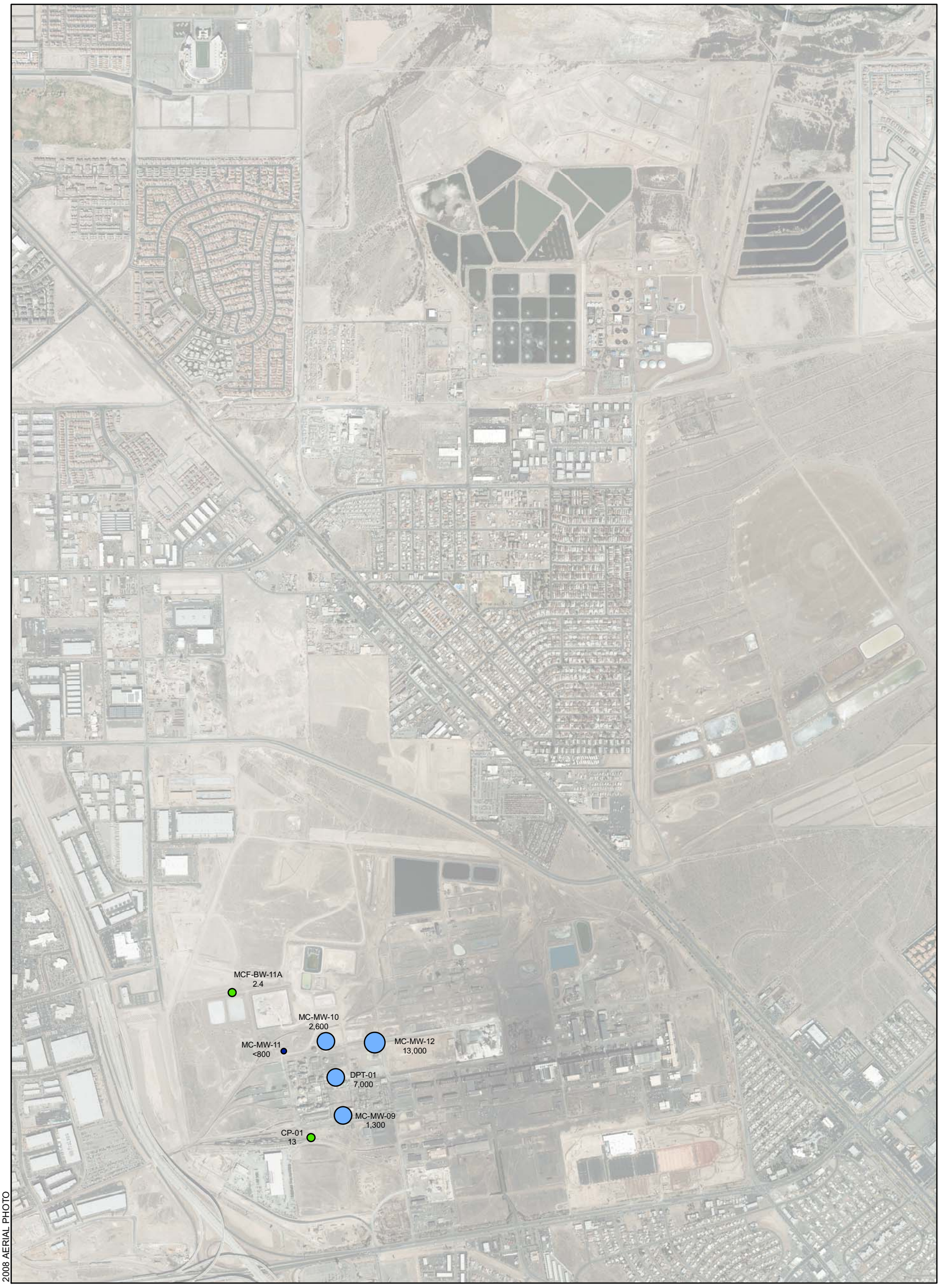
FIGURE 29

PREP BY JWM REV BY BRW RPT NO 1012.13 14DCB-Shallow.mxd



EXPLANATION

1,4-DICHLOROBENZENE CONCENTRATION
EPA METHOD: 8260B

- NON-DETECTABLE AT THE REPORTING LIMIT
- < 75 ug/l (MAXIMUM CONTAMINANT LEVEL)
- 75 - 100 ug/l
- 100 - 1,000 ug/l
- 1,000 - 10,000 ug/l
- 10,000 - 100,000 ug/l
- > 100,000 ug/l

CP-01 13 — MONITOR WELL IDENTIFIER
CONCENTRATION IN MICROGRAMS PER LITER
FOURTH QUARTER 2008

< — LESS THAN; COMPOUND WAS NOT DETECTED AT OR ABOVE THE REPORTED DETECTION LIMIT

ug/l — MICROGRAMS PER LITER

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

1,4-DICHLOROBENZENE
FINE-GRAINED
UPPER MUDDY CREEK FORMATION
FOURTH QUARTER 2008

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FIGURE 30

PREP BY JWM REV BY BRW RPT NO 1012.13 | 14DCB-2ndWB.mxd

EXPLANATION

1,4-DICHLOROBENZENE CONCENTRATION
EPA METHOD: 8260B

- NON-DETECTABLE AT THE REPORTING LIMIT
- < 75 ug/l (MAXIMUM CONTAMINANT LEVEL)
- 75 - 100 ug/l
- 100 - 1,000 ug/l
- 1,000 - 10,000 ug/l
- 10,000 - 100,000 ug/l
- > 100,000 ug/l

TR-05 MONITOR WELL IDENTIFIER
<2.0 CONCENTRATION IN MICROGRAMS PER LITER FOURTH QUARTER 2008

< LESS THAN; COMPOUND WAS NOT DETECTED AT OR ABOVE THE REPORTED DETECTION LIMIT

ug/l MICROGRAMS PER LITER

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

1,4-DICHLOROBENZENE
COARSE-GRAINED
UPPER MUDDY CREEK FORMATION
FOURTH QUARTER 2008

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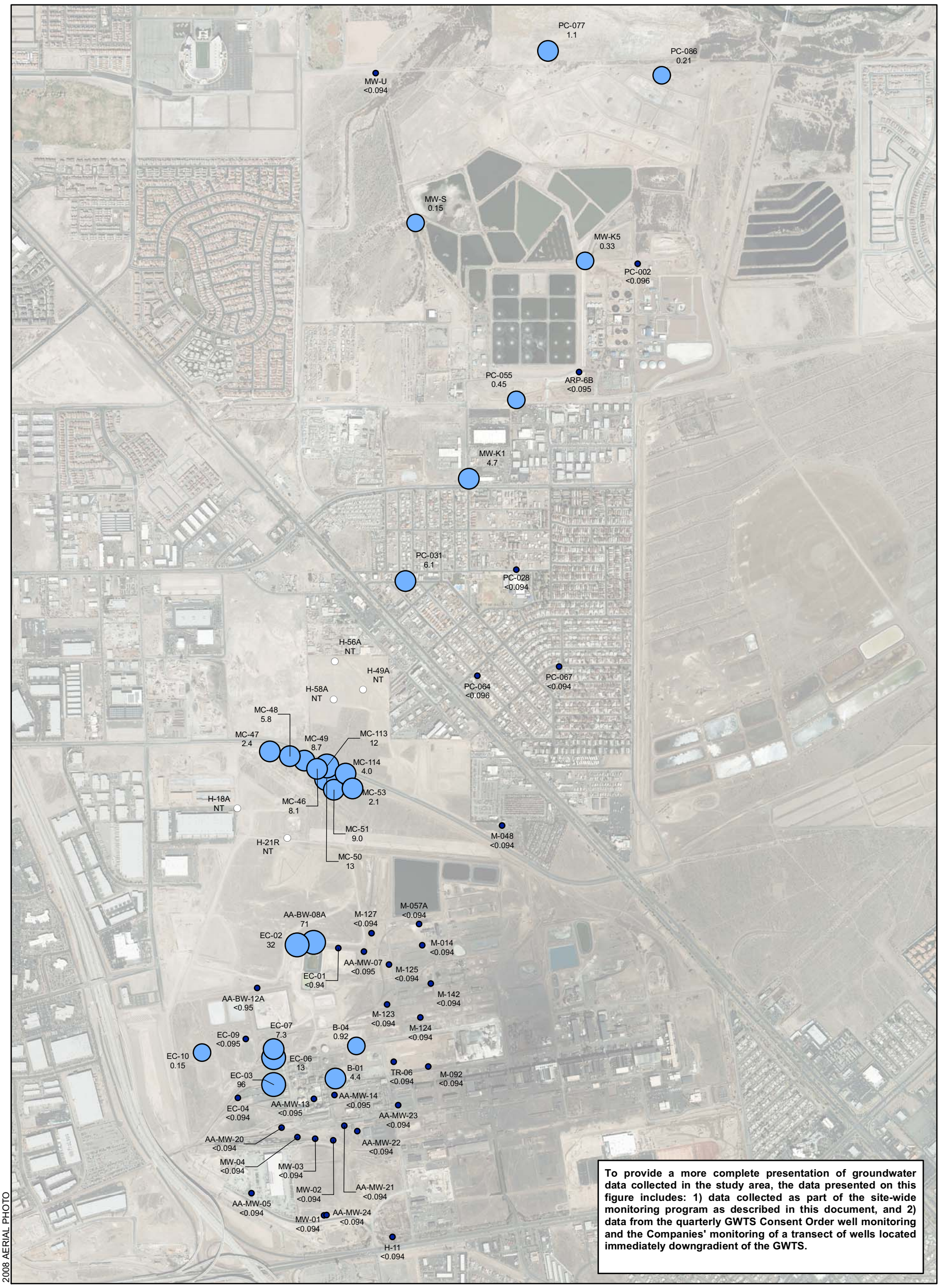
FIGURE 31

PREP BY JWM REV BY BRW RPT NO 1012.13 14DCB-3rdWB.mxd



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EXPLANATION

BETA-BHC CONCENTRATION
EPA METHOD: 8081A

- NOT TESTED
- NON-DETECTABLE AT THE REPORTING LIMIT
- < 0.037 ug/L (BCL)
- 0.037 - 0.1 ug/l
- 0.1 - 1.0 ug/l
- 1.0 - 10 ug/l
- > 10 ug/l

H-11 MONITOR WELL IDENTIFIER
<0.094 CONCENTRATION IN MICROGRAMS PER LITER FOURTH QUARTER 2008

NT SAMPLES COLLECTED FROM WELL NOT TESTED FOR THIS PARAMETER

ug/L MICROGRAMS PER LITER

BCL STATE OF NEVADA BASIC COMPARISON LEVELS

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

BETA-BHC
SHALLOW ZONE
FOURTH QUARTER 2008

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FIGURE 32

PREP BY JWM REV BY BRW RPT NO 1012.13 BBHC-Shallow.mxd

EXPLANATION

BETA-BHC CONCENTRATION
EPA METHOD: 8081A

- NON-DETECTABLE AT THE REPORTING LIMIT
- < 0.037 ug/L (BCL)
- 0.037 - 0.1 ug/l
- 0.1 - 1.0 ug/l
- 1.0 - 10 ug/l
- > 10 ug/l

CP-01 MONITOR WELL IDENTIFIER
<0.094 CONCENTRATION IN MICROGRAMS PER LITER
FOURTH QUARTER 2008

ug/L MICROGRAMS PER LITER

BCL STATE OF NEVADA BASIC COMPARISON LEVELS

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

BETA-BHC
FINE-GRAINED
UPPER MUDDY CREEK FORMATION
FOURTH QUARTER 2008

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FIGURE 33

PREP BY JWM REV BY BRW RPT NO 1012.13 BBHC-Second WBZ.mxd

EXPLANATION

BETA-BHC CONCENTRATION
EPA METHOD: 8081A

- NON-DETECTABLE AT THE REPORTING LIMIT
- < 0.037 ug/L (BCL)
- 0.037 - 0.1 ug/l
- 0.1 - 1.0 ug/l
- 1.0 - 10 ug/l
- > 10 ug/l

TR-05 MONITOR WELL IDENTIFIER
<0.094 CONCENTRATION IN MICROGRAMS PER LITER
FOURTH QUARTER 2008

ug/L MICROGRAMS PER LITER

BCL STATE OF NEVADA BASIC COMPARISON LEVELS

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

BETA-BHC
COARSE-GRAINED
UPPER MUDDY CREEK FORMATION
FOURTH QUARTER 2008

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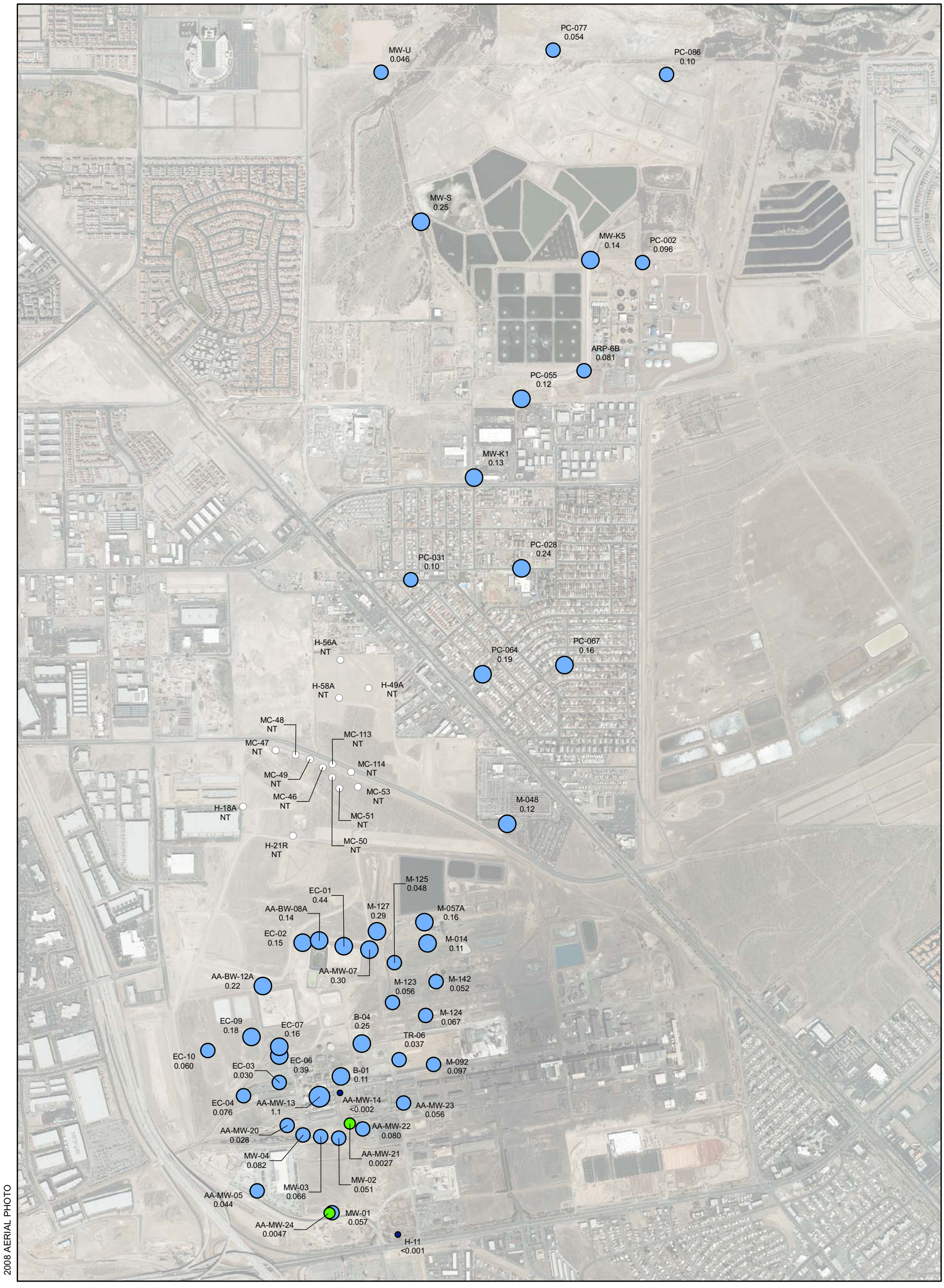
FIGURE 34

PREP BY JWM REV BY BRW RPT NO 1012.13 BBHC-third WBZ.mxd



2008 AERIAL PHOTO

EXPLANATION

ARSENIC CONCENTRATION
EPA METHOD: 6020

- NOT TESTED
- NON-DETECTABLE AT THE REPORTING LIMIT
- < 0.010 mg/l (MAXIMUM CONTAMINANT LEVEL)
- 0.010 - 0.1 mg/l
- 0.1 - 1.0 mg/l
- 1.0 - 10 mg/l
- > 10 mg/l

H-11 MONITOR WELL IDENTIFIER
<0.001 CONCENTRATION IN MILLIGRAMS PER LITER FOURTH QUARTER 2008

< LESS THAN; COMPOUND WAS NOT DETECTED AT OR ABOVE THE REPORTED DETECTION LIMIT

NT SAMPLES COLLECTED FROM WELL NOT TESTED FOR THIS PARAMETER

mg/L MILLIGRAMS PER LITER

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

ARSENIC
SHALLOW ZONE
FOURTH QUARTER 2008

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FIGURE 35

PREP BY JWM REV BY BRW RPT NO 1012.13 MCB-Shallow.mxd

EXPLANATION

ARSENIC CONCENTRATION
EPA METHOD: 6020

- NON-DETECTABLE AT THE REPORTING LIMIT
- < 0.010 mg/l (MAXIMUM CONTAMINANT LEVEL)
- 0.010 - 0.1 mg/l
- 0.1 - 1.0 mg/l
- 1.0 - 10 mg/l
- > 10 mg/l

CP-01 MONITOR WELL IDENTIFIER
0.047 CONCENTRATION IN MILLIGRAMS PER LITER FOURTH QUARTER 2008

mg/L MILLIGRAMS PER LITER

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

ARSENIC
FINE-GRAINED
UPPER MUDDY CREEK FORMATION
FOURTH QUARTER 2008

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FIGURE 36

PREP BY JWM REV BY BRW RPT NO 1012.13 AS-SecondWBZ.mxd

EXPLANATION

ARSENIC CONCENTRATION
EPA METHOD: 6020

- NON-DETECTABLE AT THE REPORTING LIMIT
- < 0.010 mg/l (MAXIMUM CONTAMINANT LEVEL)
- 0.010 - 0.1 mg/l
- 0.1 - 1.0 mg/l
- 1.0 - 10 mg/l
- > 10 mg/l

TR-05 MONITOR WELL IDENTIFIER
0.021 CONCENTRATION IN MILLIGRAMS PER LITER FOURTH QUARTER 2008

mg/L MILLIGRAMS PER LITER

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

ARSENIC
COARSE-GRAINED
UPPER MUDDY CREEK FORMATION
FOURTH QUARTER 2008

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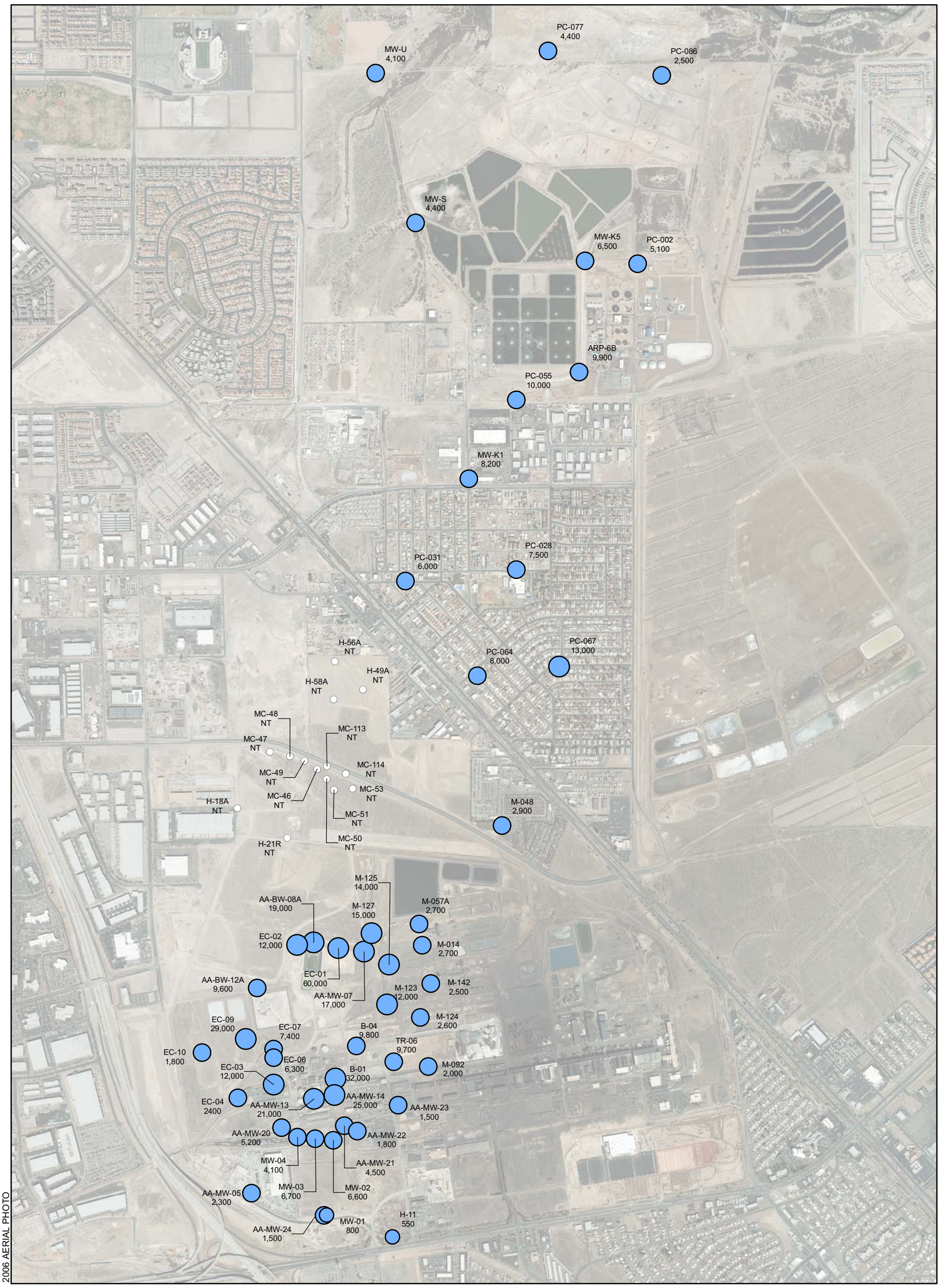
FIGURE 37

PREP BY JWM REV BY BRW RPT NO 1012.13 AS-THIRDWBZ.mxd



2006 AERIAL PHOTO

EXPLANATION

TOTAL DISSOLVED SOLIDS CONCENTRATION
EPA METHOD: 160.1

- NOT TESTED
- < 500 mg/l (SECONDARY MAXIMUM CONTAMINANT LEVEL)
- 500 - 1,000 mg/l
- 1,000 - 10,000 mg/l
- 10,000 - 100,000 mg/l
- > 100,000 mg/l

H-11 MONITOR WELL IDENTIFIER
550 CONCENTRATION IN MILLIGRAMS PER LITER FOURTH QUARTER 2008

NT SAMPLES COLLECTED FROM WELL NOT TESTED FOR THIS PARAMETER

mg/L MILLIGRAMS PER LITER

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

TOTAL DISSOLVED SOLIDS
SHALLOW ZONE
FOURTH QUARTER 2008

HARGIS + ASSOCIATES, INC.
HYDROGEOLOGY • ENGINEERING

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FIGURE 38

PREP BY JWM REV BY BRW RPT NO 1012.13 TDS-Shallow.mxd

EXPLANATION

TOTAL DISSOLVED SOLIDS CONCENTRATION
EPA METHOD: 160.1

- < 500 mg/l (SECONDARY MAXIMUM CONTAMINANT LEVEL)
- 500 - 1,000 mg/l
- 1,000 - 10,000 mg/l
- 10,000 - 100,000 mg/l
- > 100,000 mg/l

CP-01 **730** MONITOR WELL IDENTIFIER
CONCENTRATION IN MILLIGRAMS PER LITER
FOURTH QUARTER 2008

mg/L MILLIGRAMS PER LITER

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES

HENDERSON, NEVADA

TOTAL DISSOLVED SOLIDS
FINE-GRAINED
UPPER MUDDY CREEK FORMATION
FOURTH QUARTER 2008

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FIGURE 39

PREP BY JWM REV BY BRW RPT NO 1012.13 TDS-Second WBZ.mxd

EXPLANATION

TOTAL DISSOLVED SOLIDS CONCENTRATION
EPA METHOD: 160.1

- < 500 mg/l (SECONDARY MAXIMUM CONTAMINANT LEVEL)
- 500 - 1,000 mg/l
- 1,000 - 10,000 mg/l
- 10,000 - 100,000 mg/l
- > 100,000 mg/l

TR-05 800 MONITOR WELL IDENTIFIER
CONCENTRATION IN MILLIGRAMS PER LITER
FOURTH QUARTER 2008

mg/L MILLIGRAMS PER LITER

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

TOTAL DISSOLVED SOLIDS
COARSE-GRAINED
UPPER MUDDY CREEK FORMATION
FOURTH QUARTER 2008

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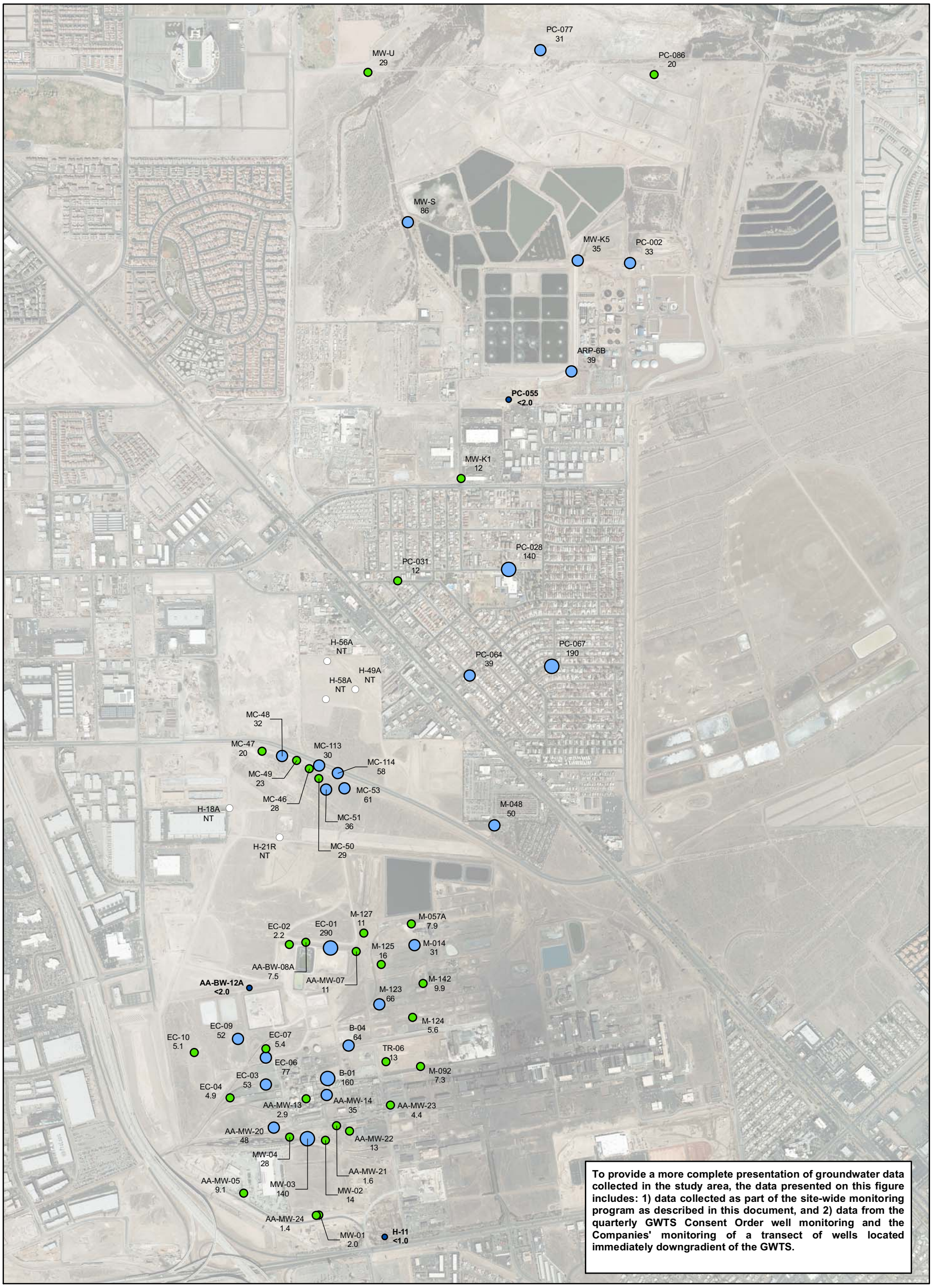
FIGURE 40

PREP BY JWM REV BY BRW RPT NO 1012.13 TDS-THIRD WBZ.mxd



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EXPLANATION

URANIUM CONCENTRATION
EPA METHOD: 200.8

- NON-DETECTABLE AT THE REPORTING LIMIT
- < 30 ug/l (MAXIMUM CONTAMINANT LEVEL FOR URANIUM)
- 30 - 100 ug/l
- 100 - 1,000 ug/l
- 1,000 - 10,000 ug/l
- 10,000 - 100,000 ug/l
- > 100,000 ug/l

H-11 MONITOR WELL IDENTIFIER
<1.0 CONCENTRATION IN MICROGRAMS PER LITER FOURTH QUARTER 2008

< LESS THAN; COMPOUND WAS NOT DETECTED AT OR ABOVE THE REPORTED DETECTION LIMIT

ug/l MICROGRAMS PER LITER

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

URANIUM
SHALLOW ZONE
FOURTH QUARTER 2008

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FIGURE 41

PREP BY JWM REV BY BRW RPT NO 1012.13 Uranium-Shallow.mxd

EXPLANATION

URANIUM CONCENTRATION
EPA METHOD: 200.8

- NON-DETECTABLE AT THE REPORTING LIMIT
- < 30 ug/l (MAXIMUM CONTAMINANT LEVEL)
- 30 - 100 ug/l
- 100 - 1,000 ug/l
- 1,000 - 10,000 ug/l
- > 10,000 ug/l

CP-01 2.3 — MONITOR WELL IDENTIFIER
CONCENTRATION IN MICROGRAMS PER LITER
FOURTH QUARTER 2008

< — LESS THAN; COMPOUND WAS NOT DETECTED AT OR ABOVE THE REPORTED DETECTION LIMIT

ug/l — MICROGRAMS PER LITER

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

URANIUM
FINE-GRAINED
UPPER MUDDY CREEK FORMATION
FOURTH QUARTER 2008

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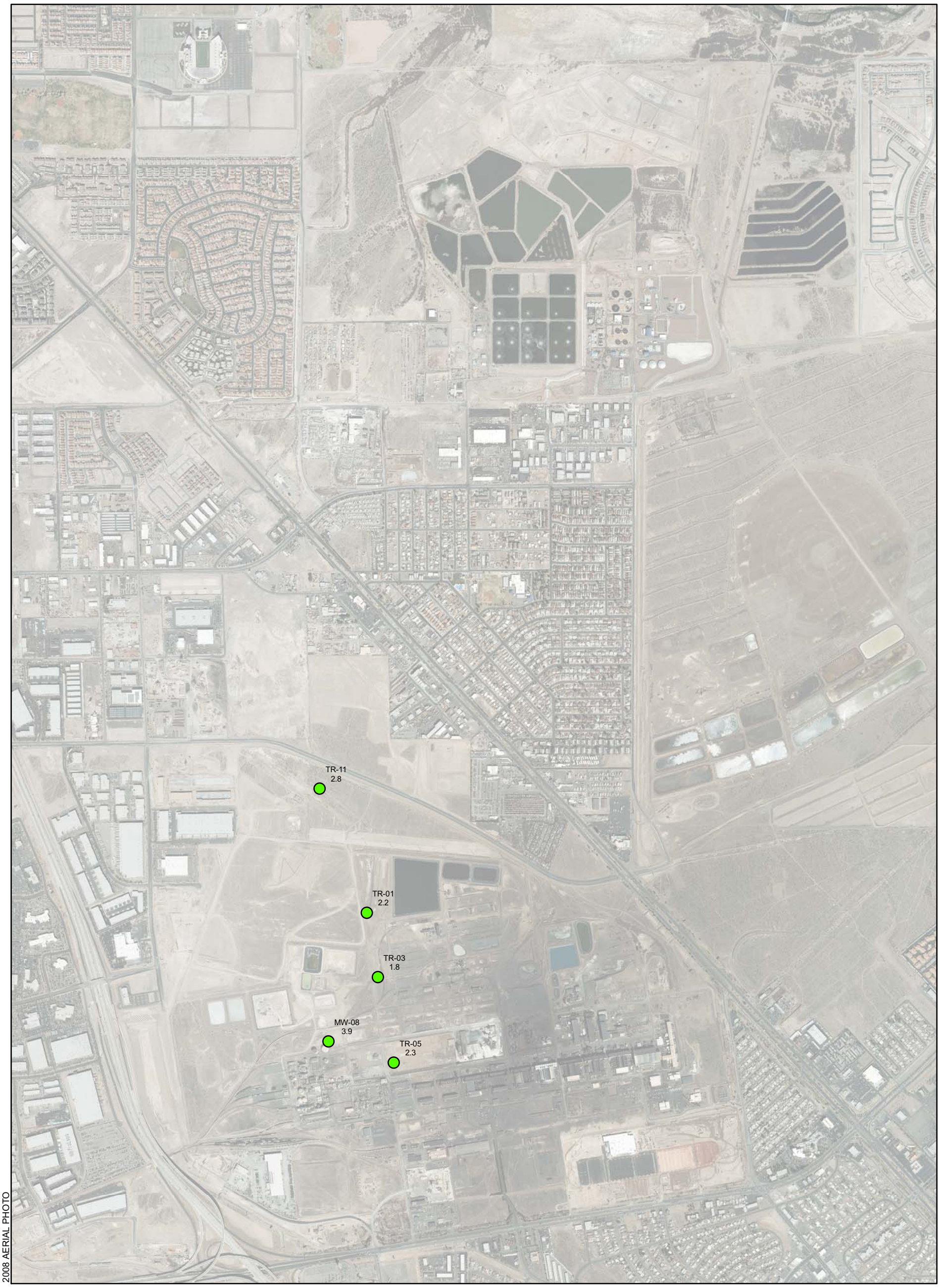
FIGURE 42

PREP BY JWM REV BY BRW RPT NO 1012.13 Uranium-2ndWB.mxd



EXPLANATION

URANIUM CONCENTRATION
EPA METHOD: 200.8

- NON-DETECTABLE AT THE REPORTING LIMIT
- < 30 ug/l (MAXIMUM CONTAMINANT LEVEL)
- 30 - 100 ug/l
- 100 - 1,000 ug/l
- 1,000 - 10,000 ug/l
- > 10,000 ug/l

TR-05 MONITOR WELL IDENTIFIER
<2.0 CONCENTRATION IN MICROGRAMS PER LITER FOURTH QUARTER

< LESS THAN; COMPOUND WAS NOT DETECTED AT OR ABOVE THE REPORTED DETECTION LIMIT

ug/l MICROGRAMS PER LITER

N

0 750 1,500
Feet

SITE-WIDE GROUNDWATER MONITORING PROGRAM
MONTROSE, STAUFFER AND OLIN SITES
HENDERSON, NEVADA

URANIUM
COARSE-GRAINED
UPPER MUDDY CREEK FORMATION
FOURTH QUARTER 2008

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FIGURE 43

PREP BY JWM REV BY BRW RPT NO 1012.13 Uranium-3rdWB.mxd

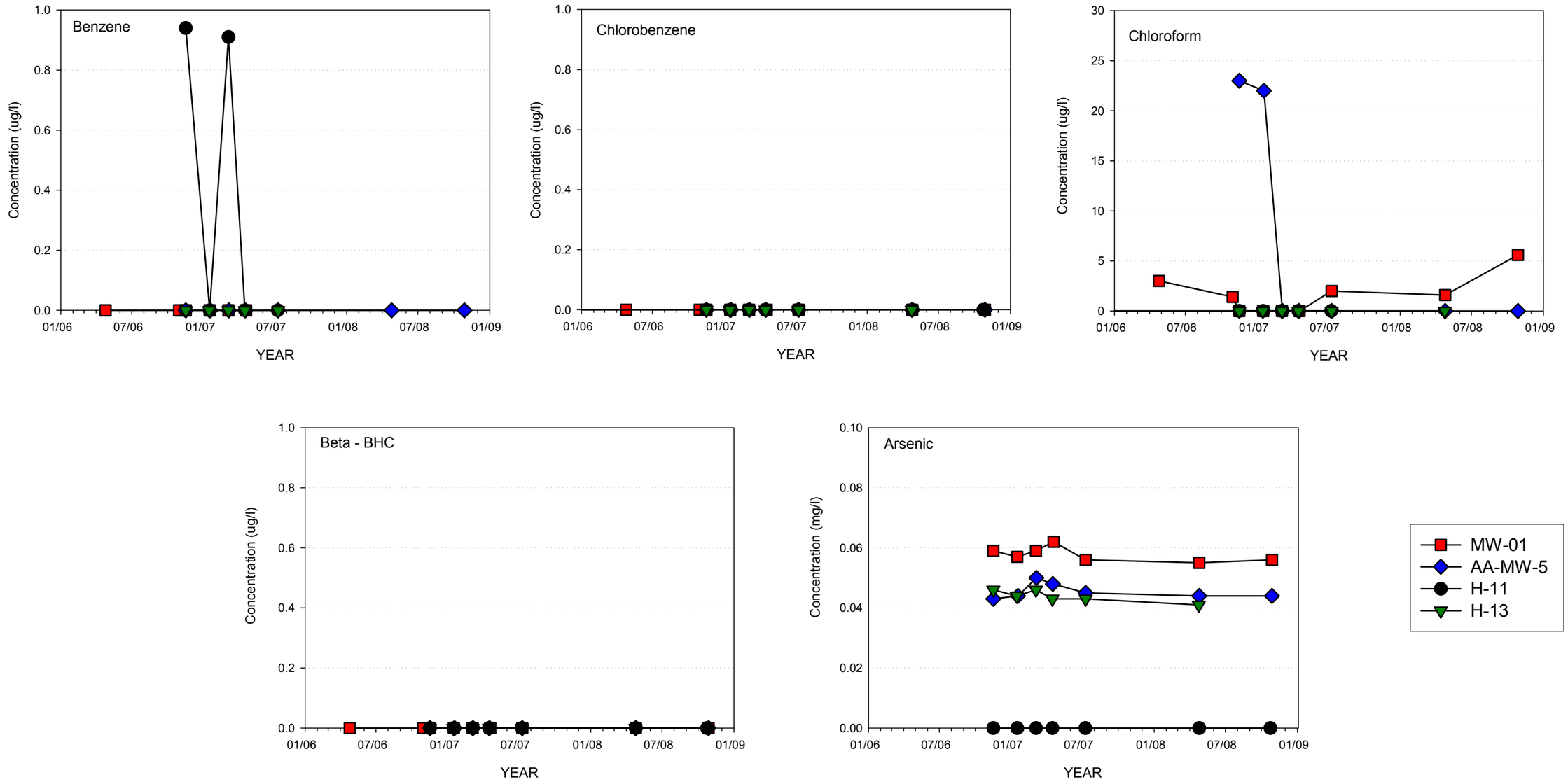

FIGURE 44. GROUNDWATER QUALITY HYDROGRAPHS - SHALLOW ZONE MONITOR WELLS - TRANSECT NO. 1.

Notes
Constituents reported as non-detectable are plotted as zero.
All concentrations are in micrograms per liter.
Arsenic concentrations are in miligrams per liter.

HARGIS + ASSOCIATES, INC.

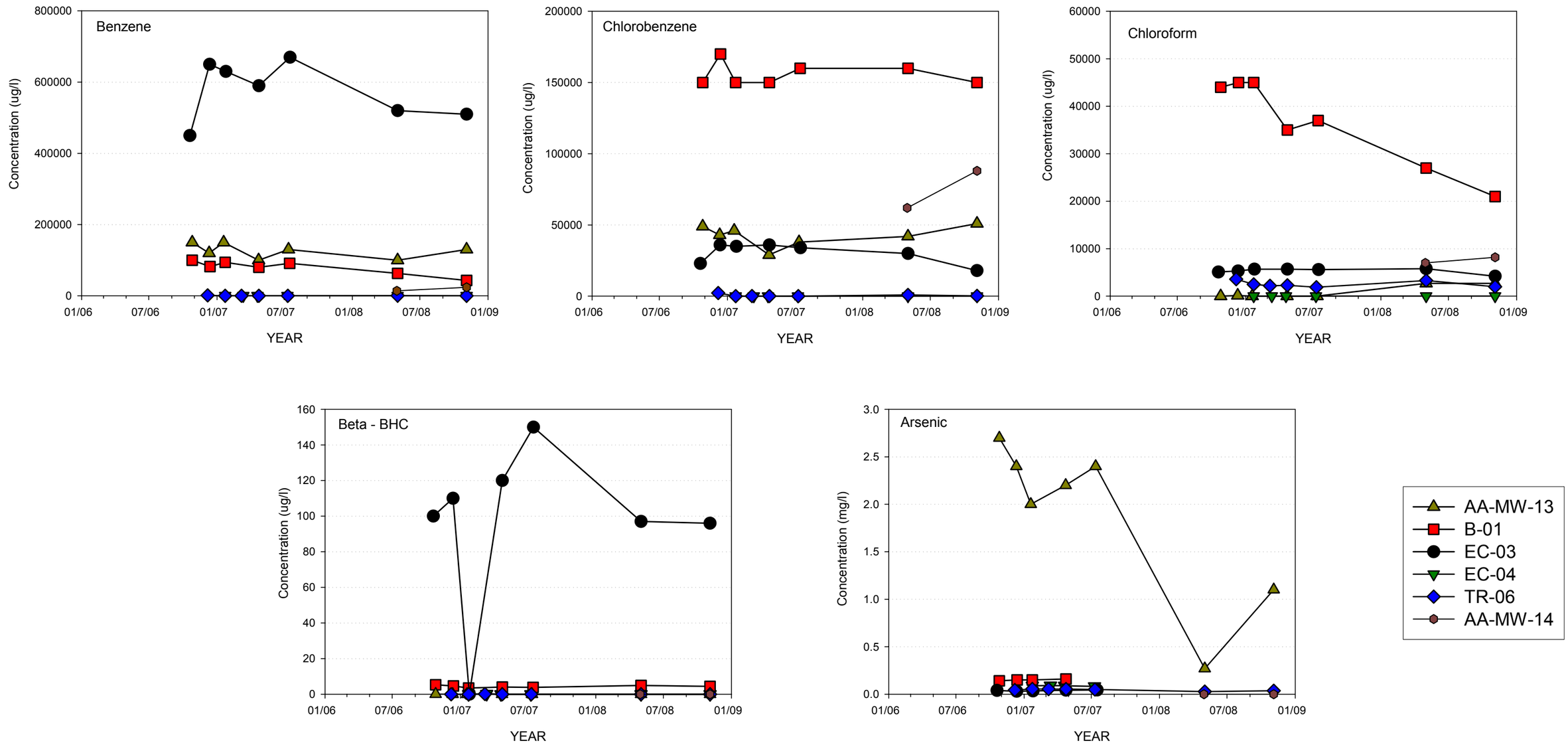

FIGURE 45. GROUNDWATER QUALITY HYDROGRAPHS - SHALLOW ZONE MONITOR WELLS - TRANSECT NO. 2

Notes
Constituents reported as non-detectable are plotted as zero.
All concentrations are in micrograms per liter.
Arsenic concentrations are in miligrams per liter.

HARGIS + ASSOCIATES, INC.

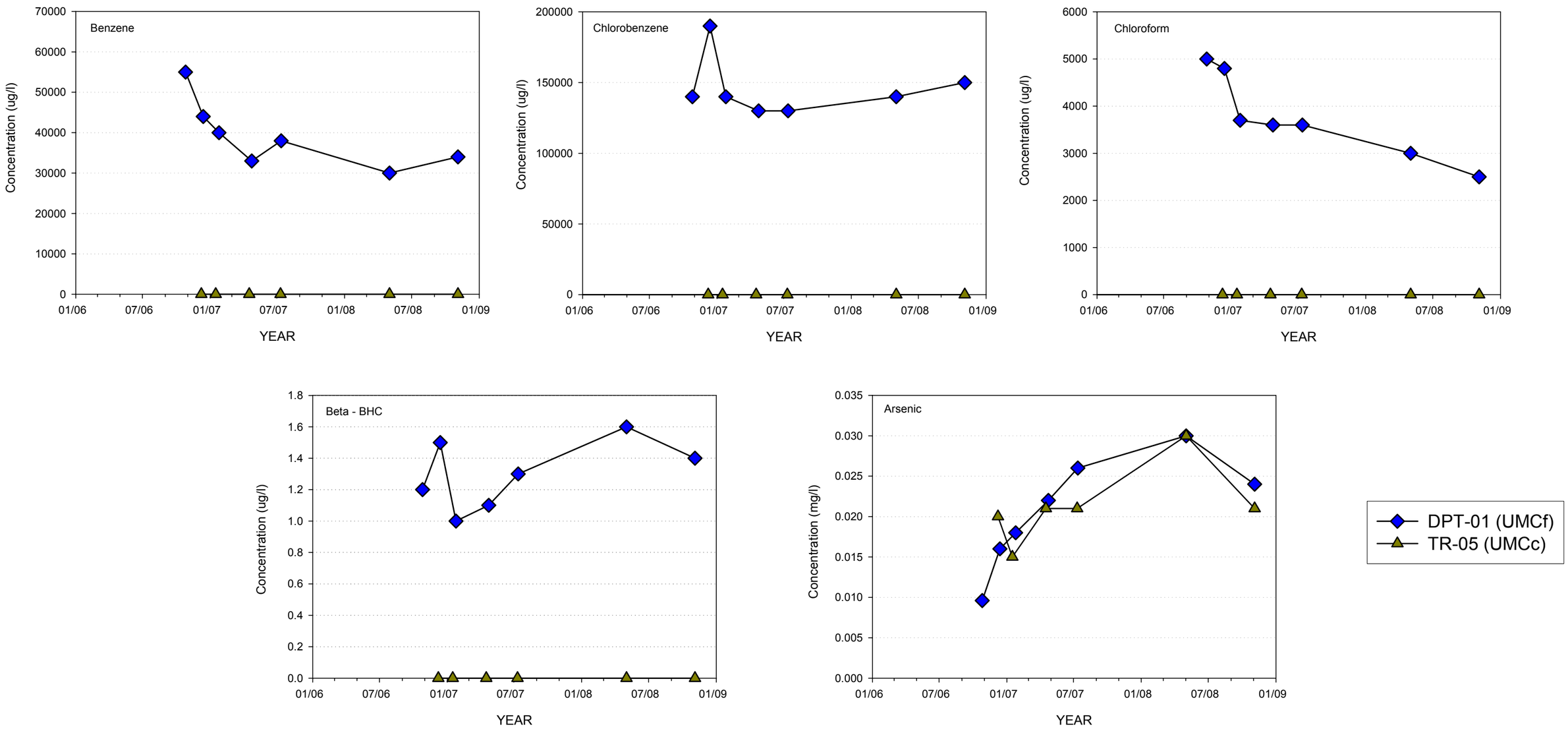

FIGURE 46. GROUNDWATER QUALITY HYDROGRAPHS - UPPER MUDDY CREEK MONITOR WELLS - TRANSECT NO. 2

Notes

Constituents reported as non-detectable are plotted as zero.
All concentrations are in micrograms per liter.
Arsenic concentrations are in miligrams per liter.
UMCf = fine grained Upper Muddy Creek
UMCc = coarse grained Upper Muddy Creek

HARGIS + ASSOCIATES, INC.

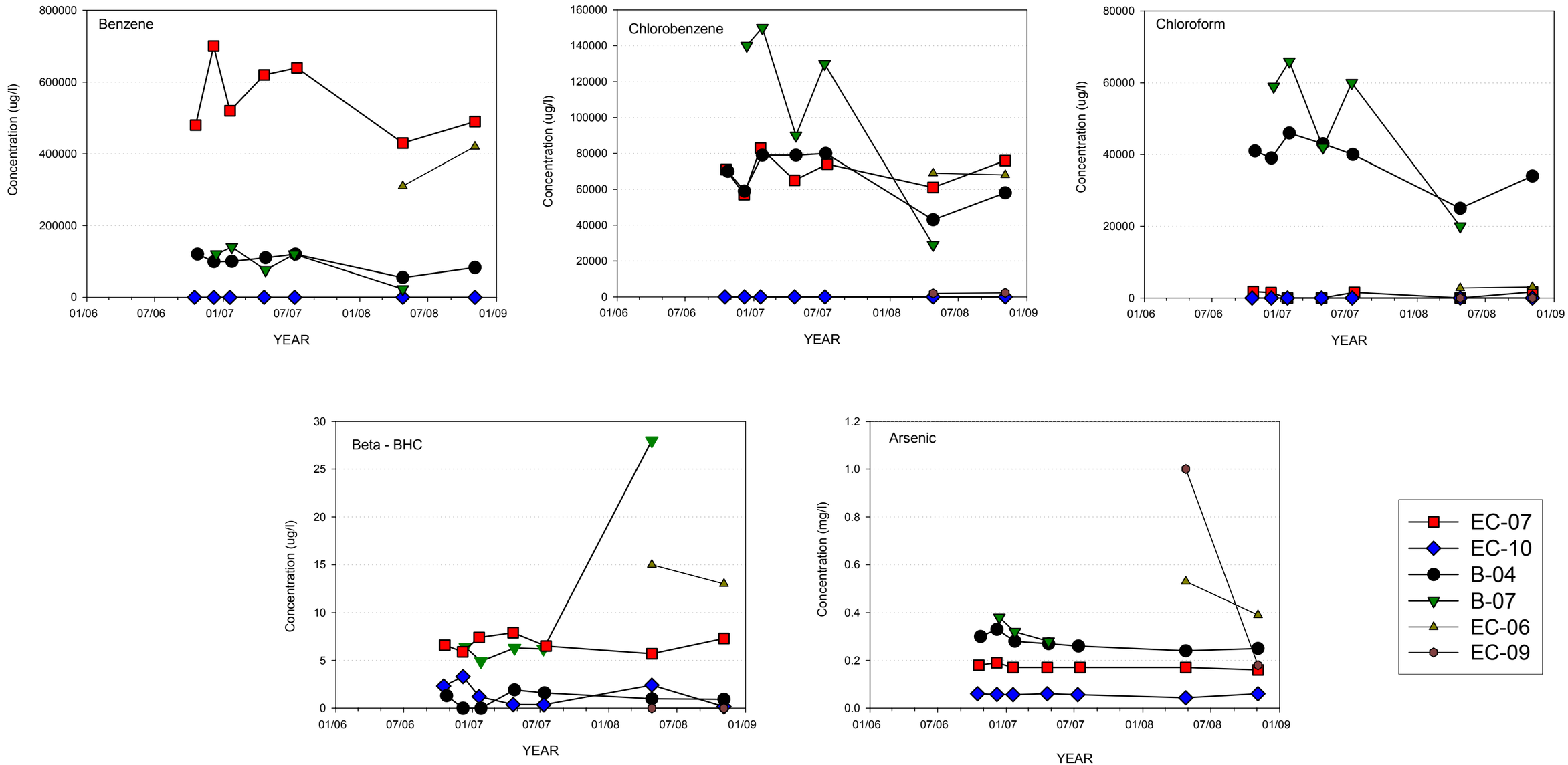

FIGURE 47. GROUNDWATER QUALITY HYDROGRAPHS - SHALLOW ZONE MONITOR WELLS - TRANSECT NO. 3

Notes
Constituents reported as non-detectable are plotted as zero.
All concentrations are in micrograms per liter.
Arsenic concentrations are in miligrams per liter.

HARGIS + ASSOCIATES, INC.

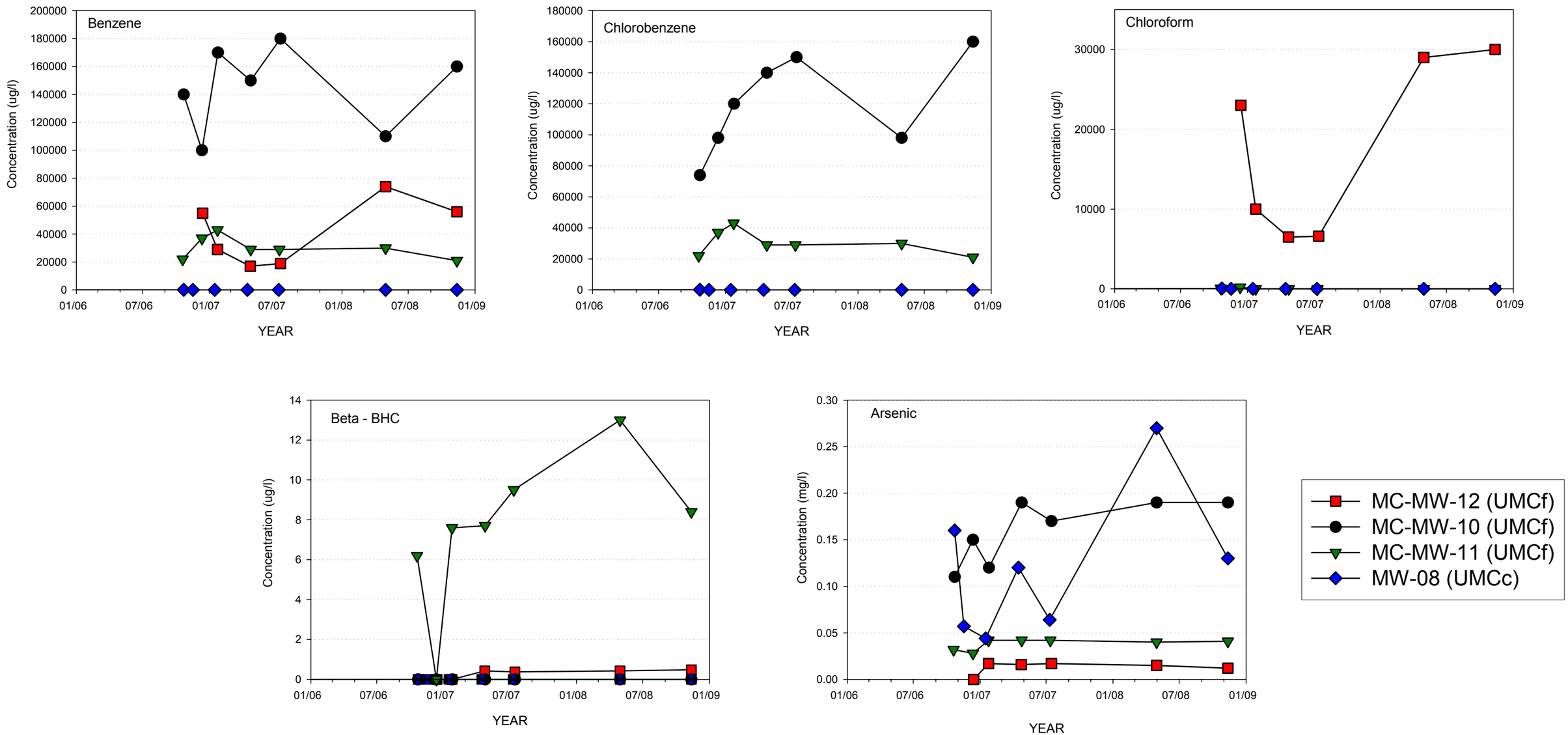

FIGURE 48. GROUNDWATER QUALITY HYDROGRAPHS - UPPER MUDDY CREEK MONITOR WELLS - TRANSECT NO. 3

Notes

Constituents reported as non-detectable are plotted as zero.
All concentrations are in micrograms per liter.
Arsenic concentrations are in miligrams per liter.
UMCf = fine grained Upper Muddy Creek
UMCc = coarse grained Upper Muddy Creek

HARGIS + ASSOCIATES, INC.

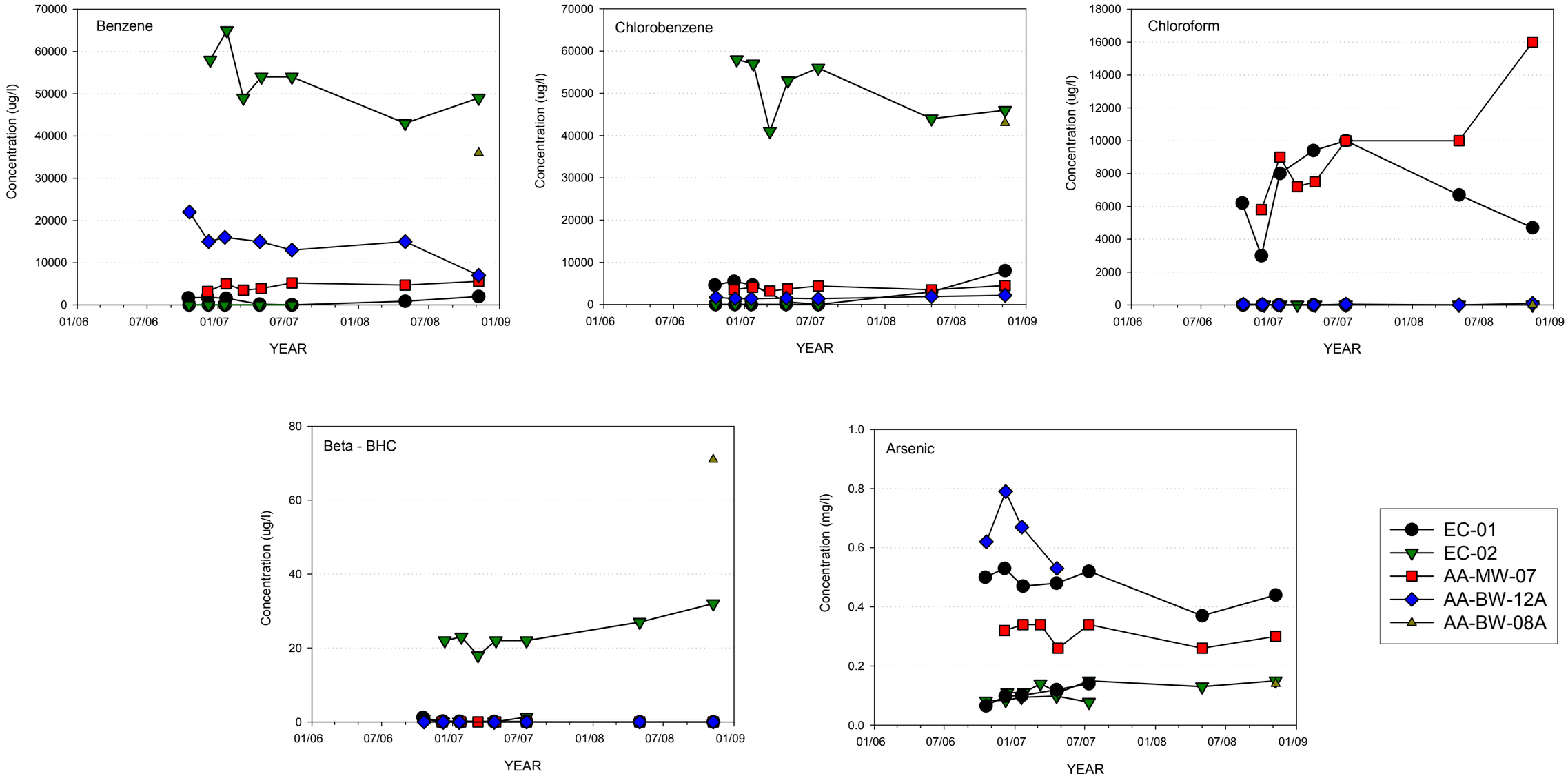

FIGURE 49. GROUNDWATER QUALITY HYDROGRAPHS - SHALLOW ZONE MONITOR WELLS - TRANSECT NO. 4

Notes
Constituents reported as non-detectable are plotted as zero.
All concentrations are in micrograms per liter.
Arsenic concentrations are in miligrams per liter.

HARGIS + ASSOCIATES, INC.

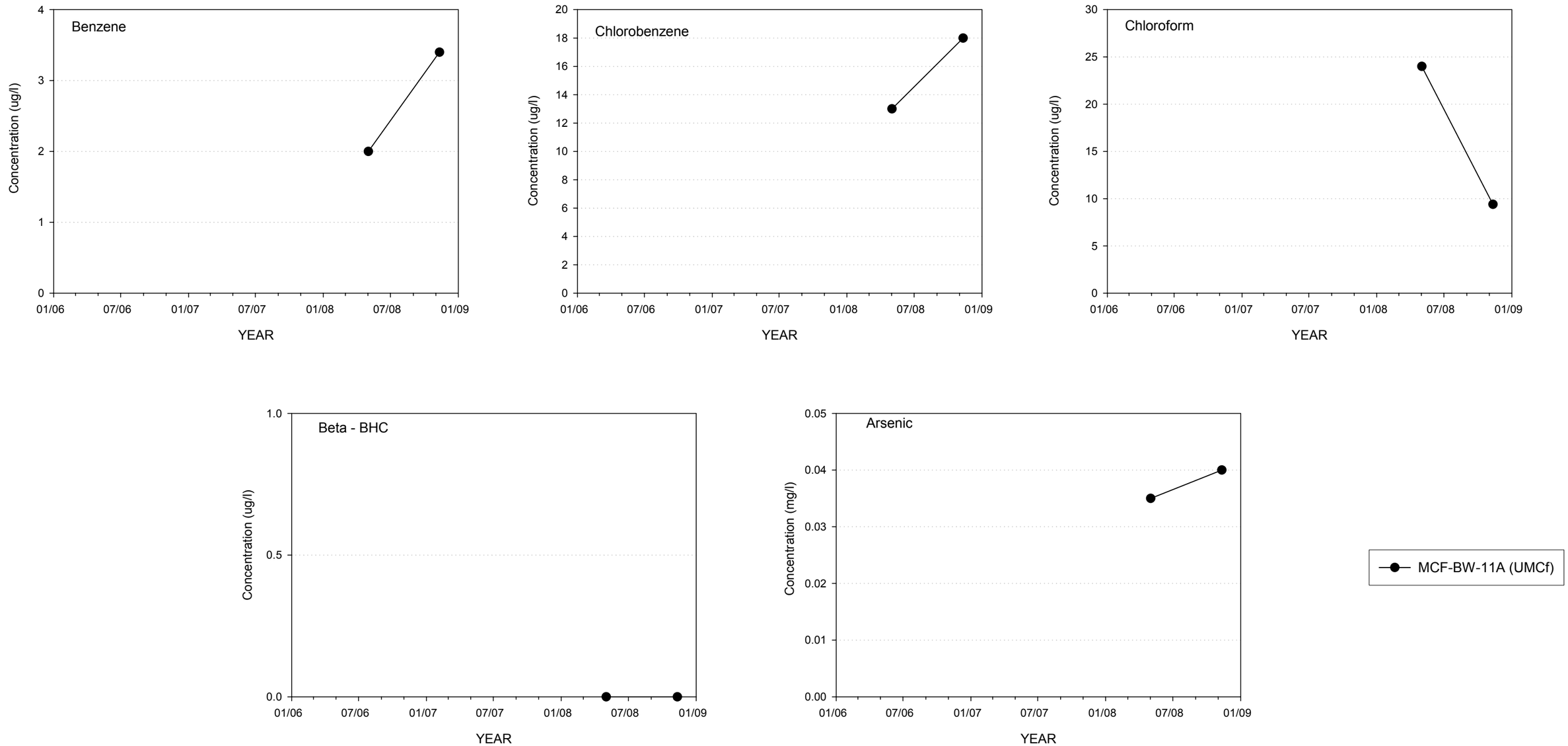

FIGURE 50. GROUNDWATER QUALITY HYDROGRAPHS - UPPER MUDDY CREEK MONITOR WELLS - TRANSECT NO. 4

Notes
Constituents reported as non-detectable are plotted as zero.
All concentrations are in micrograms per liter.
Arsenic concentrations are in miligrams per liter.
UMCf = fine grained Upper Muddy Creek
UMCc = coarse grained Upper Muddy Creek

HARGIS + ASSOCIATES, INC.

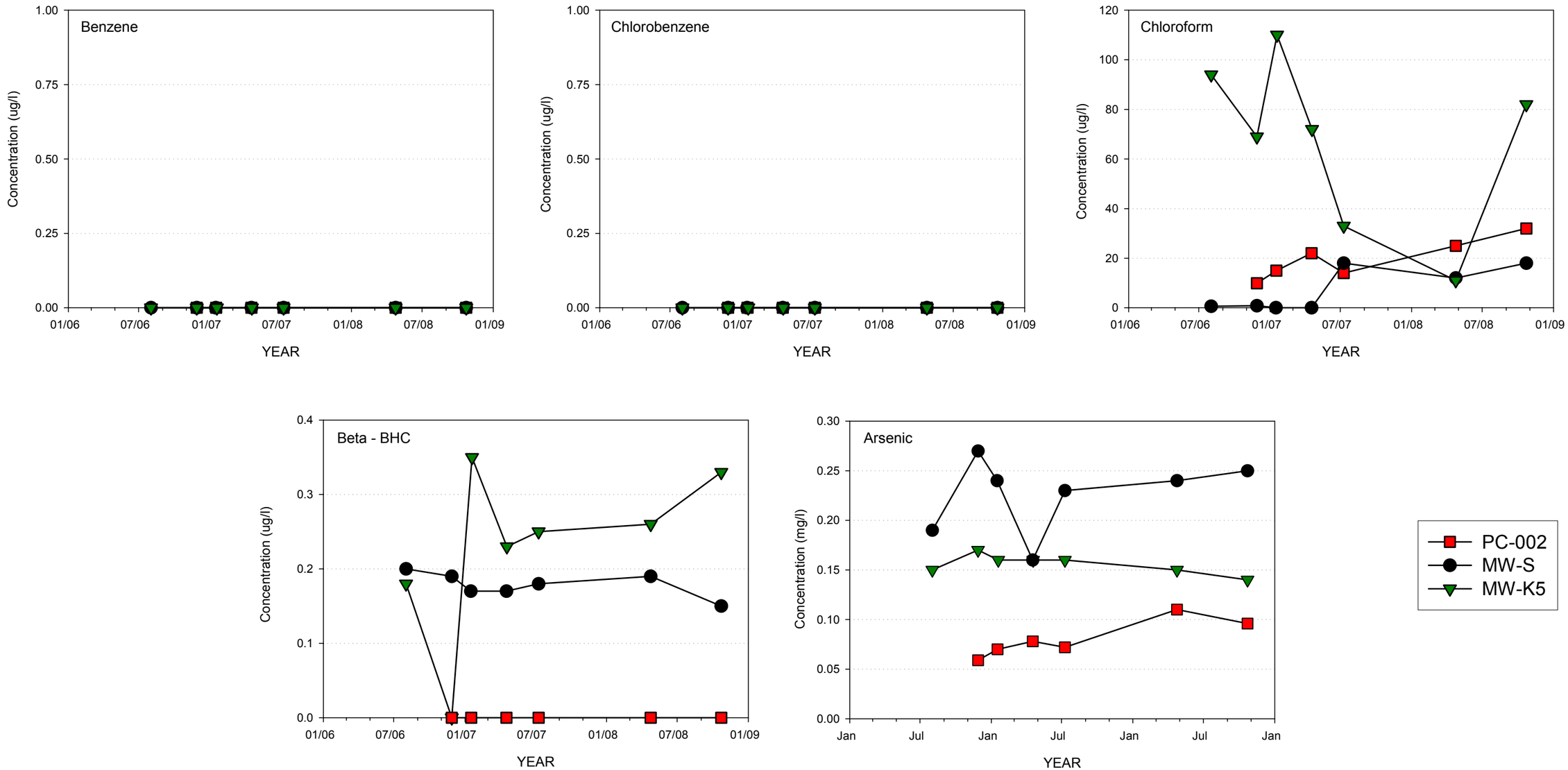

FIGURE 51. GROUNDWATER QUALITY HYDROGRAPHS - SHALLOW ZONE MONITOR WELLS - TRANSECT NO. 5

Notes
Constituents reported as non-detectable are plotted as zero.
All concentrations are in micrograms per liter.
Arsenic concentrations are in miligrams per liter.

HARGIS + ASSOCIATES, INC.

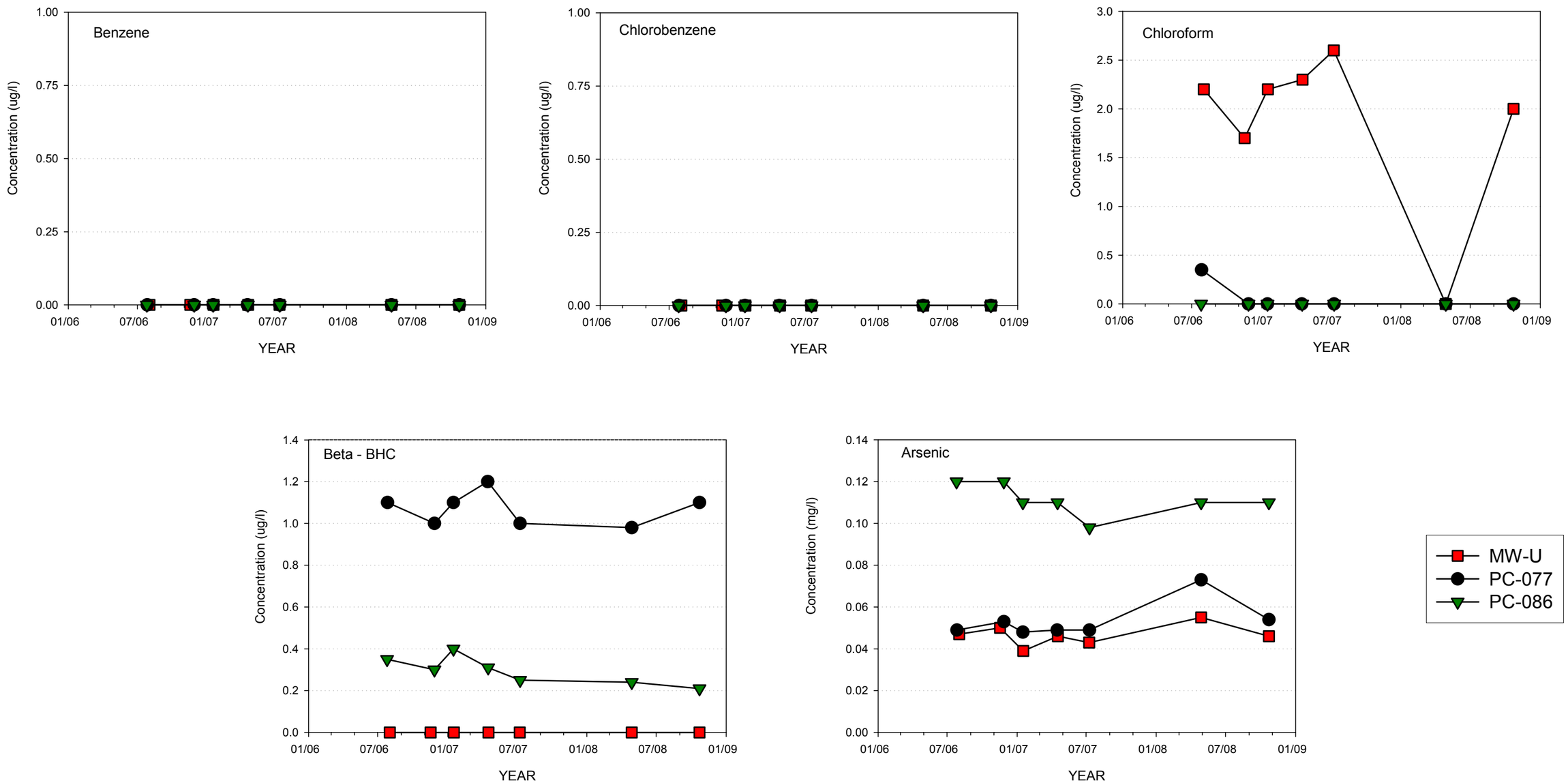

FIGURE 52. GROUNDWATER QUALITY HYDROGRAPHS - SHALLOW ZONE MONITOR WELLS - TRANSECT NO. 6

Notes
Constituents reported as non-detectable are plotted as zero.
All concentrations are in micrograms per liter.
Arsenic concentrations are in miligrams per liter.