Final

Groundwater Periodic Monitoring Report

July through December 2013

Fort Wingate Depot Activity

McKinley County, New Mexico

April 2014

Contract No. W9126G-12-D-0027
Task Order No. 0002

Prepared for:

U.S. Army Corps of Engineers®

United States Army Corps of Engineers
Fort Worth District
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14. ABSTRACT
This Groundwater Periodic Monitoring Report documents the activities conducted from July through December 2013 at Fort Wingate Depot Activity (FWDA) under the Interim Facility-Wide Groundwater Monitoring Plan, Version 6. The report describes the monitoring activities, presents the analytical data, evaluates the data, and makes recommendations for future investigation at FWDA.

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Total	**14**	**34**

BIA/BLM = Bureau of Indian Affairs, Bureau of Land Management

BRACD = U.S. Army Base Realignment and Closure Division

DOA, DAIM-ODB = Department of the Army's Assistant Chief of Staff for Installation Management

FWDA ARM = Fort Wingate Depot Activity Administrative Records Manager

FWDA BEC = Fort Wingate Depot Activity Base Realignment and Closure Environmental Coordinator

FWDA EIMS = Fort Wingate Depot Activity Environmental Information Management System

USACE SPA = U.S. Army Corps of Engineers, Albuquerque District

USACE SWF = U.S. Army Corps of Engineers, Fort Worth District

USAEC = U.S. Army Environmental Center

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List of Acronyms and Abbreviations

µg/L	microgram(s) per liter
µS/cm	micro-Siemens per centimeter
ADR	Automated Data Review
AOC	area of concern
bgs	below ground surface
BIA	Bureau of Indian Affairs
BRAC	Base Realignment and Closure
BTOC	below top of casing
°C	degrees Celsius
CERCLA	*Comprehensive Environmental Response, Compensation, and Liability Act of 1980*
CFR	*Code of Federal Regulations*
DOD	Department of Defense
DOI	U.S. Department of Interior
DRO	diesel range organics
DTW	depth to water
DUP	duplicate
EDD	electronic data deliverable
EDMS	Electronic Data Management System
Eh	redox potential
EPA	U.S. Environmental Protection Agency
EQU	equipment rinsate
ERP	Environmental Restoration Program
°F	degrees Fahrenheit
ft	foot(feet)
ft-btoc	feet below top of casing
ft/ft	foot per foot
FWDA	Fort Wingate Depot Activity
GMP	Groundwater Monitoring Plan
gpm	gallon(s) per minute
GPMR	Groundwater Periodic Monitoring Report
GRO	gasoline range organics
GWMP	Groundwater Monitoring Plan
HMX	octahydro-1.3.5.7-tetranitro-1.3.5.7-tetrazocine
HWB	Hazardous Waste Bureau
HWMR	New Mexico Hazardous Waste Management Regulations
HWMU	hazardous waste management unit
ID	identification
J	analyte was positively identified; reported value is estimated
MCL	maximum contaminant level
MD	munitions debris
mg/L	milligram(s) per liter
mL/min	milliliter(s) per minute
MS	matrix spike
MSD	matrix spike duplicate
mS/cm	milli-Siemens per centimeter
N	nitrogen
N/A	not applicable

NC	not collected
ND	not detected
NM	not measured
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMHWA	New Mexico Hazardous Waste Act
NMSA	New Mexico State Rules Act
NMWQCC	New Mexico Water Quality Control Commission
NO_3	nitrate
NS	not sampled
NTU	nephelometric turbidity unit
OB/OD	open burn/open detonation
ORP	oxidation-reduction potential
pH	scale used to measure the concentration of hydrogen atoms (acidity) of a sample
PPE	personal protective equipment
QA	quality assurance
QC	quality control
QSM	Quality Systems Manual
RCRA	*Resource Conservation and Recovery Act*
RDX	hexahydro-1,3,5-trinitro-1,3,5-triazine
RFI	RCRA Facility Investigation
SDG	sample delivery group
SVOC	semivolatile organic compound
SWMU	solid waste management unit
TDS	total dissolved solids
TNT	trinitrotoluene
TOC	top of casing
TPH	total petroleum hydrocarbons
U	Non-detected result below the limit of detection
USACE	U.S. Army Corps of Engineers
USGS	U.S. Geological Survey
UST	underground storage tank
UXO	unexploded ordnance
VOC	volatile organic compound

Executive Summary

This Groundwater Periodic Monitoring Report (GPMR) documents groundwater-monitoring activities conducted at Fort Wingate Depot Activity (FWDA) from July through December 2013 in accordance with the *Interim Facility-Wide Groundwater Monitoring Plan*, Version 6 (Innovar and Shaw, 2012). Groundwater monitoring was performed by Sundance Consulting and CH2M HILL at the FWDA under contract to the U.S. Army Corps of Engineers (USACE), Fort Worth District as part of the Environmental Restoration Program (ERP). The GPMR was prepared on behalf of the U.S. Department of the Army Base Realignment and Closure (BRAC) Division for submission to the New Mexico Environment Department (NMED) – Hazardous Waste Bureau (HWB), as required by Section V.A of the *Resource Conservation and Recovery Act* (RCRA) Permit number NM 6213820974 for the FWDA (NMED, 2005). The report presents a summary of the monitoring activities and results; an evaluation of the results; and recommendations for future monitoring events and investigations.

Field activities conducted during the reporting period included two groundwater elevation surveys and one groundwater-sampling event. Groundwater elevation surveys were performed on 9 July and 28 October 2013. A groundwater elevation survey was performed on 9 July 2013 at 81 monitoring wells and piezometers, two of which were dry. A second groundwater elevation survey was performed on 28 October 2013 at 76 monitoring wells and piezometers, one of which was dry. The groundwater-sampling event for the reporting period was performed from 29 October to 8 November 2013. Groundwater samples were collected from 62 of the monitoring wells listed in the Groundwater Monitoring Plan (GWMP) (Innovar and Shaw, 2012). The groundwater samples were analyzed for the constituents listed in Table 2-1 of this report. During this monitoring period, access to the OB/OD area was not allowed due to explosive hazards associated with the ongoing remediation activities. Monitoring of the East Landfill monitoring wells was also not performed due to ongoing landfill refuse excavation activities.

Groundwater flow directions at FWDA are controlled by regional geologic structure orientation, and by local topography and stratigraphy. The flow of groundwater in the Northern Area alluvium is from potentiometric highs in the east, north, and south towards a potentiometric low west of the Administration Area (Figures 4-1 and 4-2). Hydraulic gradients in alluvium ranged from 0.003 foot per foot (ft/ft) to 0.03 ft/ft. Groundwater flow in the shallow bedrock is to the west in the Workshop Area and to the northwest in the East Landfill area of the Northern Area (Figures 4-3 and 4-4). Groundwater elevation in the bedrock groundwater unit is slightly higher than in the alluvial groundwater unit and exists under hydraulically confined conditions in most of the Northern Area. Groundwater hydraulic gradients in the bedrock unit range from approximately 0.009 ft/ft in the Workshop Area to approximately 0.15 ft/ft in the East Landfill.

Nitrate, perchlorate, explosives, one volatile organic compound (VOC), one semi-volatile organic compound (SVOC) and metals were detected in groundwater samples at concentrations above the health-based screening levels. Six groundwater contaminant plumes have been identified: two nitrate plumes, one in the alluvial groundwater unit and one in the bedrock groundwater unit; two perchlorate plumes, one in the alluvial groundwater unit and one in the bedrock groundwater unit; an explosives plume in the alluvial groundwater unit; and a 1,2-dichloroethane plume in the alluvial groundwater unit.

Highest concentrations of nitrate contamination occur in shallow groundwater units of the Northern Area. The nitrate plume in the alluvial groundwater unit appears to originate from the TNT Leaching Beds and extends downgradient to the Administration Area. The groundwater concentrations in the alluvial nitrate plume decline in the vicinity of the leaking water storage cistern (MW01 and MW02). The extent of the alluvial nitrate plume is not defined to the west of the Administration Area. The bedrock nitrate plume is also present at the TNT Leaching Beds, but extends cross-gradient from this solid waste management unit (SWMU) to the south. A portion of the bedrock nitrate plume is collocated with the bedrock perchlorate plume and may have a common source.

The highest perchlorate concentrations were detected in groundwater samples from the bedrock groundwater unit in the Work Shop Area. The extent of the bedrock perchlorate plume has not been defined on the northern plume boundary. The alluvial perchlorate plume is located in the same vicinity as the bedrock plume.

The compound hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) is the primary explosive compound of interest. This compound is consistently detected above screening levels in the Workshop and eastern Administrative areas. The explosives plume in the alluvial groundwater unit appears to originate from the TNT Leaching Beds in the Work Shop Area. Groundwater concentrations of explosive compounds (primarily RDX) attenuate to levels below the screening criteria within 2,500 feet downgradient of the TNT Leaching Beds.

The only VOC detected in groundwater samples above regulatory cleanup standards was the chlorinated solvent 1,2-dichloroethane. The 1,2-dichloroethane plume in the alluvial groundwater unit is limited to a group of wells near a former fueling facility in the Administration Area. Groundwater samples collected from three alluvial monitoring wells had concentrations above the U.S. Environmental Protection Agency (EPA) maximum contaminant level (MCL) of 5 micrograms per liter (µg/L). No VOCs were detected above cleanup standards in bedrock wells of the Northern Area.

Dissolved aluminum, arsenic, iron, manganese, and selenium were detected above regulatory cleanup levels in multiple groundwater samples. Since background groundwater concentrations have not yet been established for the FWDA, it cannot clearly be demonstrated if the detected concentrations are a result of natural conditions or anthropogenic sources of contamination.

1.0 Introduction

This Groundwater Periodic Monitoring Report (GPMR) documents groundwater-monitoring activities conducted at the Fort Wingate Depot Activity (FWDA) from July through December 2013 in accordance with the *Interim Facility-Wide Groundwater Monitoring Plan*, Version 6 (Innovar and Shaw, 2012). Groundwater monitoring was performed by Sundance Consulting and CH2M HILL at the FWDA under contract to the U.S. Army Corps of Engineers (USACE), Fort Worth District as part of the Environmental Restoration Program (ERP). The GPMR was prepared on behalf of the U.S. Department of the Army Base Realignment and Closure (BRAC) Division for submission to the New Mexico Environment Department (NMED) – Hazardous Waste Bureau (HWB), as required by Section V.A of the *Resource Conservation and Recovery Act* (RCRA) Permit number NM 6213820974 for FWDA (NMED, 2005).

The Department of the Army BRAC Division is managing the FWDA for closure and transfer of property. As part of the planned property transfer to the Department of Interior (DOI), the installation has been divided into reuse parcels as specified by the Permit. Pending RCRA closure and property transfer of the reuse parcels, the ERP must comply with the RCRA Permit.

1.1 Site Description and Activities

The FWDA is located in McKinley County of western New Mexico, approximately seven miles east of Gallup and 130 miles west of Albuquerque (Figure 1-1). The current facility occupies an area of approximately 24 square miles (15,277 acres).

The FWDA was founded as a U.S. Cavalry post in the 1860s. In 1918, the facility became a munitions storage depot for the U.S. Department of the Army. The facility was operated by the Department of the Army for numerous missions from 1918 until 1993, when the FWDA was selected for closure under the BRAC Act of 1988. In 2002, the Department of the Army reassigned many functions at the FWDA to the BRAC Division, including property management and ERP activities. In addition to property management and ERP activities, the FWDA is currently used for missile testing. The Missile Defense Agency leases portions of the installation for these tests.

Historic activities at the FWDA that may have contributed to soil and groundwater contamination include munitions storage, maintenance, and disposal; the use and storage of petroleum fuels; and equipment maintenance (TPMC, 2008). The following areas had historic activities with known or potential impacts to site soils and/or groundwater:

- The Administration Area in the northern portion of the FWDA is the location of all active administrative and maintenance buildings. Munitions storage and shipping, fuel storage and dispensary, and mechanical maintenance activities were performed in this area.
- The Workshop Area is located directly south of the Administration Area and encompasses former industrial facilities for munitions maintenance and renovation activities, including the former trinitrotoluene (TNT) washout facility, and the TNT Leaching Beds Area.
- The Igloo Areas cover almost half of the current FWDA area and were used for the storage of various munitions. These areas consist of rows of earth-covered igloos (or earth-covered explosives storage igloos) located in the central portion of the installation. They encompass 10 earth-covered Igloo Blocks that contain 732 earth-covered igloos and 241 earthen revetments (Innovar and Shaw, 2012).

- The Open Burn/Open Detonation (OB/OD) Areas are munitions disposal locations in the southwest and western portions of the facility. The Closed OB/OD Area was used from 1948 to 1955 and includes the Old Burning Ground, the Demolition Landfill Area, and the Old Demolition Area (PMC, 1999). The current OB/OD Area was used from 1955 to 1993 and contains the hazardous waste management unit (HWMU) identified in the RCRA Permit.

1.2 Hydrogeologic Setting

A brief description of the hydrogeologic setting at the FWDA is presented in this section to provide context for the contaminant nature and extent discussions presented in Section 5 of this document.

The geologic materials exposed at the FWDA were largely deposited in the Mesozoic era and have been significantly modified by more recent erosion and redeposition. The lithified statigraphic units are Triassic to Cretaceous in age with uplift and deformation occurring in the Cretaceous during the Laramide orogeny series of mountain-building events in western North America (McCraw et al., 2009). Quaternary alluvial and colluvial deposits unconformably overlie the Mesozoic bedrock in the lower elevation and northern portions of the FWDA (Anderson et al., 2003).

The majority of the FWDA is underlain by the Triassic Age Chinle Group, which is predominantly non-marine, red-bed siliciclastics. The Chinle Group consists of the Shinarump, Bluewater Creek, Petrified Forest, and Owl Rock Formations (Anderson et al., 2003). The Petrified Forest Formation directly underlies the majority of the installation, and is subdivided into three members: the Blue Mesa, Sonsela, and Painted Desert Members. All three members of the Petrified Forest Formation outcrop in various locations across the installation. The Blue Mesa, Sonsela, and Painted Desert lithologies are green-gray smectitic mudstone, light-gray to yellowish-brown cross-bedded sandstone, and reddish-brown and grayish-red smectitic mudstone, respectively (Innovar and Shaw, 2012). In the eastern portion of the FWDA installation, the older Bluewater Creek and Shinarump Formations outcrop intermittently between Quarternary alluvium (Innovar and Shaw, 2012).

Permian Age bedrock underlies the Mesozoic rock beneath the FWDA. These strata do not outcrop in the FWDA, and are not known to be contaminated by historic activities at the installation. However, the deeper, older San Andres Limestone and Glorieta Sandstone formations do provide the potable water supply to the installation.

In the northern portion of the installation, the surface is covered by either remnants of the Chinle Group or Quaternary alluvial and colluvial deposits. The majority of the alluvial deposits are present in the Northern Area of the installation in lowland areas between bedrock remnants. However, alluvial deposits are also present along intermittent streams draining the Nutria Monocline (also known as the Hogback) and Zuni Mountains, which flow downgradient through the northern portion of the installation before joining the South Fork of the Rio Puerco. Based on soil-boring logs from the installation, alluvial deposits are heterogeneous and are thickest near major drainages. The alluvium has been found to be up to 150 feet thick near the South Fork of the Rio Puerco. In the Administration Area, alluvium thickness generally ranges between 30 and 70 feet.

The regional groundwater aquifer in the vicinity of FWDA is present in the semi-confined Permian San Andres Limestone and Glorieta Sandstone Formations (Cooper and John, 1968; Summers, 1972). Shallow groundwater is also present in the unconsolidated alluvium and Mesozoic bedrock overlying these units, but is typically of poor quality.

Groundwater flow in the San Andres-Glorieta aquifer is to the north beneath the FWDA and is separated from the shallow groundwater units by shales and claystones across much of the FWDA area (Anderson et al., 2003). The top of the San Andres-Glorieta aquifer is approximately 1,100 feet below ground surface (bgs) near the Administration Area. Recharge to both the regional aquifer and to shallow groundwater units is from precipitation and snowmelt primarily in the upland areas and along faults south of the FWDA.

Shallow groundwater flow in the southern portions of the installation (OB/OD Area) is to the north. Groundwater recharge occurs in the higher elevations and discharges to the arroyos. Significant thicknesses of alluvium are not present in the OB/OD Areas and shallow groundwater typically occurs in the bedrock units. However, water-bearing zones are occasionally identified in the alluvium present in arroyo bottoms.

The groundwater flow direction in the alluvium present in the northern portion of the FWDA is predominantly to the southwest and west. Along the northern border of the installation, hydraulic communication exists between the groundwater and the Rio Puerco during periods of active stream flow. Groundwater flow in the alluvium occurs primarily in discontinuous, stream-deposited sand and gravel units. Groundwater flow in the bedrock units in the northern portion of the FWDA is to the west and north. The direction of groundwater flow in the bedrock units is largely controlled by the bedding dip direction and other geologic structural features.

The depth to water under FWDA is generally between 10 and 100 feet bgs.

1.3 Regulatory Background

Environmental restoration activities at the FWDA began in 1989 under the *Comprehensive Environmental Response, Compensation, and Liability Act* of 1980 (CERCLA) guidelines, as part of the Installation Restoration Program. The one exception was the OB/OD Area, which followed RCRA guidelines.

Since that time, the NMED has become the lead regulatory agency. In 2002, NMED determined that the remediation pathway would be solely through a RCRA permit for post-closure care of the OB/OD Area with a RCRA corrective action module attached to address requirements for other solid waste management units (SWMUs) and areas of concern (AOCs). The RCRA Permit was finalized in December 2005 and became effective 31 December 2005 (NMED, 2005). The RCRA permit identified one HWMU within the current OB/OD unit (Parcel 3), and a total of 93 SWMUs and AOCs.

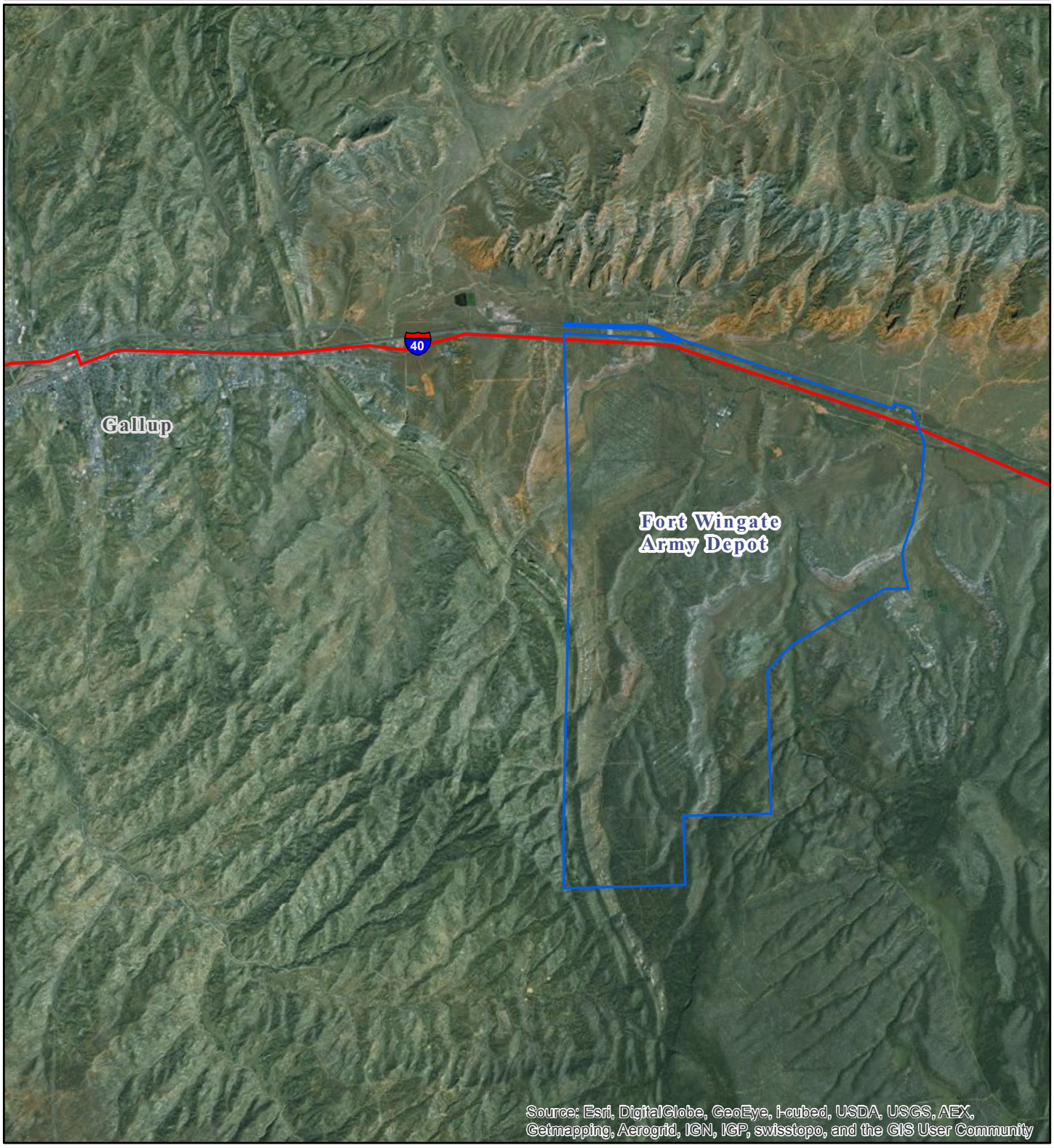
Since the 1980s, a number of groundwater investigations have been completed at the FWDA. Groundwater investigation efforts have primarily focused on five areas: the TNT Leaching Beds Area (SWMU 1 located within Parcel 21); the Administration Area (multiple SWMUs and AOCs located in Parcels 6, 7, and 11); the Eastern Landfill Area (SWMU 13 located within Parcel 18); Buildings 542 and 600 Area (SWMUs 11 and 4 located within Parcel 6); and the OB/OD Area (located within Parcel 3). Numerous groundwater monitoring wells have been installed to characterize the nature and extent of contamination that resulted from activities associated with the OB/OD units and various SWMUs and AOCs. Figure 1-2 shows the current monitoring well network and the reuse parcels in the northern areas which include the administrative and workshop areas. Figure 1-3 shows the current monitoring well network and the reuse parcels in the southern area which includes the OB/OD units.

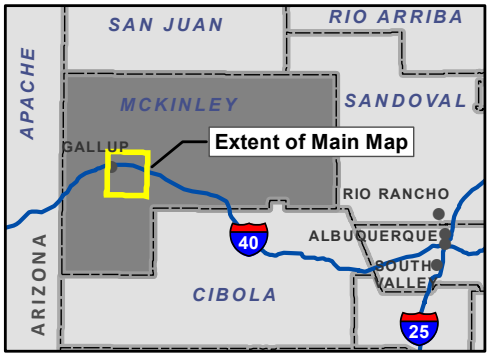
The Interim Facility-Wide Groundwater Monitoring Plan (GWMP) is required by Permit Section V.A and describes the groundwater monitoring activities to be conducted as part of the Environmental Restoration Program at the FWDA. The current monitoring network has been designed to evaluate the horizontal and vertical extent of chemical constituents in groundwater, and transport of chemicals that originate from multiple sources. The current GWMP combines the original 2008 Plan, approved by NMED, and subsequent revisions produced annually. Revisions to the GWMP are based on an analysis of historic groundwater monitoring data and a data-quality objective assessment. Sampling under the NMED-approved GWMP has been ongoing since 2008. The results of the monitoring activities are documented in semiannual groundwater monitoring reports and submitted to NMED.

1.4 Document Organization

The GPMR is organized to comply with the guidance presented in the NMED's *General Reporting Requirements for Routine Groundwater Monitoring at RCRA Sites* (NMED, 2003). The remainder of this document is organized into the following sections:

- Section 2 provides a discussion of the activities or scope of services performed during the July through December 2013 reporting period.
- Section 3 presents the applicable regulatory criteria that sample analytical results are compared against for FWDA.
- Section 4 presents the results of the quarterly groundwater elevation surveys.
- Section 5 presents the groundwater sample analytical data for the July through December 2013 monitoring period.
- Section 6 presents a summary discussion of the groundwater monitoring results and recommendations for future monitoring events.





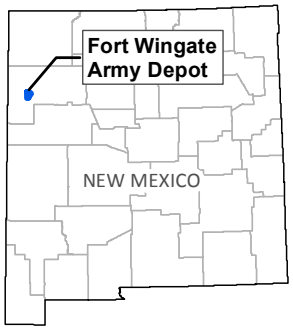


FIGURE 1-1
LOCATION MAP
Groundwater Periodic Monitoring Report for July to December 2013
Fort Wingate Depot Activity, McKinley County, New Mexico

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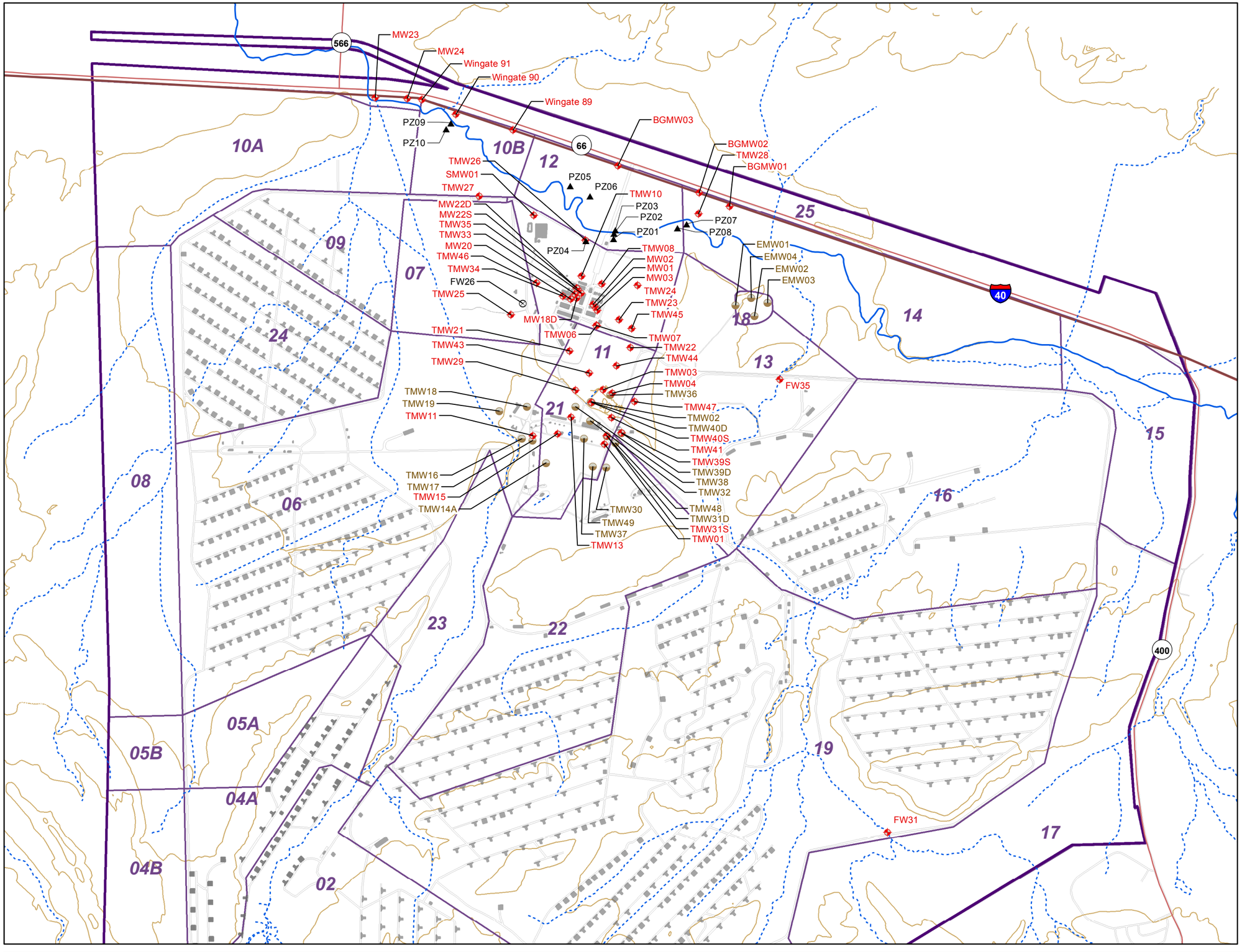
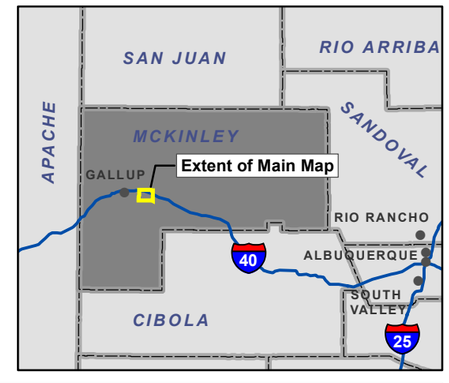


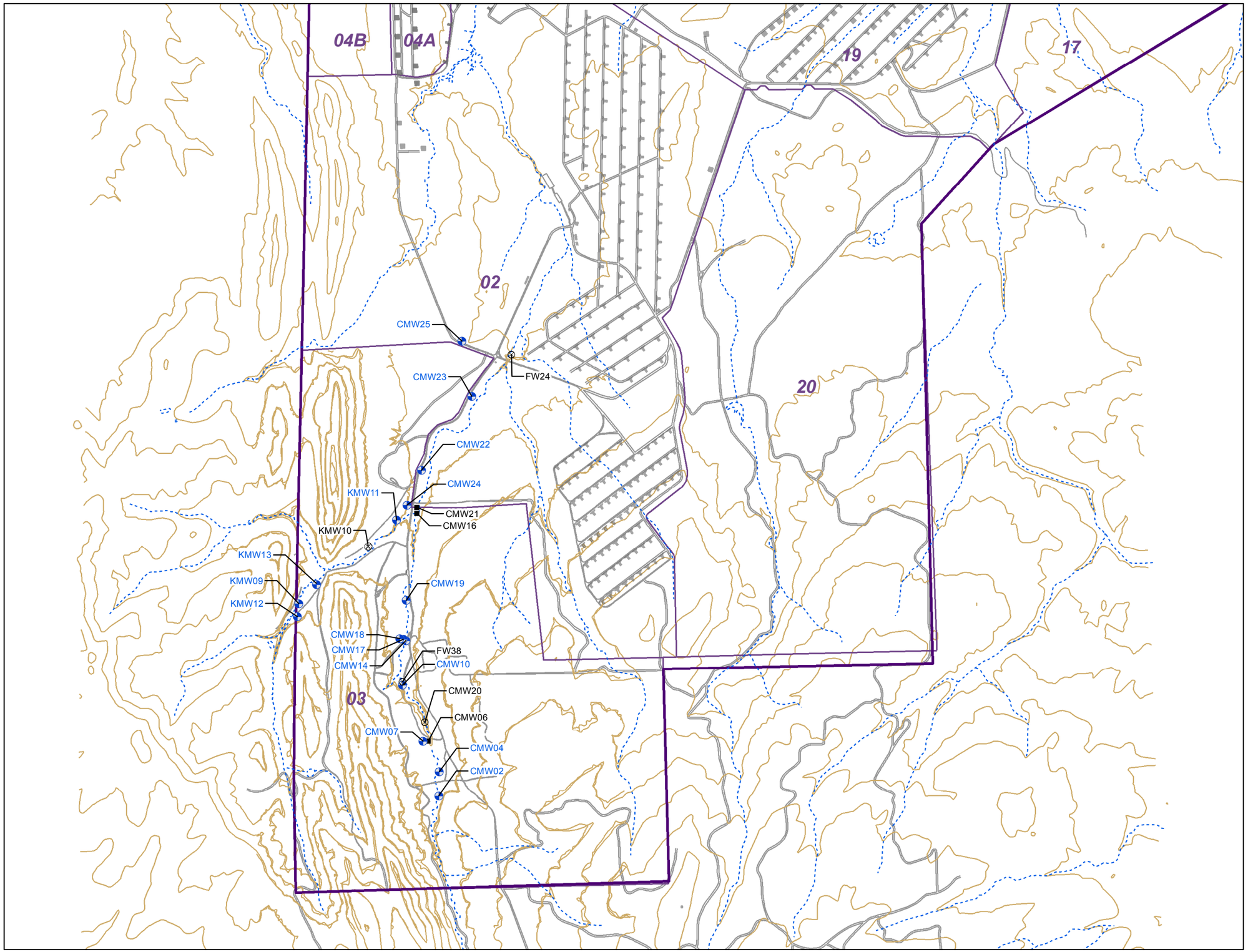
Legend

- Piezometers
- OB/OD Monitoring Well
- Alluvial Monitoring Well
- Bedrock Monitoring Well
- Dry or Damaged Well
- Buried Well
- Arroyo
- Stream
- Building
- Fort Wingate Installation Boundary
- Property Transfer Parcel
- Topographic Contour (100 foot Interval)
- Fort Wingate Road

FIGURE 1-2
SITE FEATURES - NORTH AREA
Groundwater Periodic Monitoring
Report for January to June 2013
Fort Wingate Depot Activity,
McKinley County, New Mexico

0 0.25 0.5 0.75 1 mi
0 0.5 1 1.5 km
N



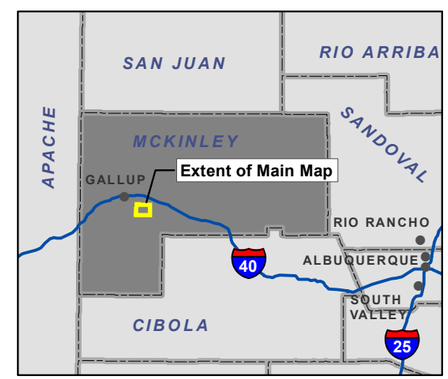


Legend

- OB/OD Monitoring Well
- Dry or Damaged Well
- Buried Well
- Arroyo
- Stream
- Building
- Fort Wingate Installation Boundary
- Property Transfer Parcel
- Topographic Contour (100 foot Interval)
- Fort Wingate Road

FIGURE 1-3
SITE FEATURES - SOUTHERN AREA
Groundwater Periodic Monitoring Report for July to December 2013
Fort Wingate Depot Activity, McKinley County, New Mexico

0 0.25 0.5 0.75 1 mi
0 0.5 1 1.5 km
N



2.0 Scope of Services

This section presents an overview the field activities, laboratory analyses, and data management activities conducted during the period from July through December 2013. Field activities conducted during the reporting period included two groundwater elevation surveys and one groundwater-sampling event. All monitoring activities were conducted in accordance with the GWMP (Innovar and Shaw, 2012). The groundwater monitoring locations are shown in Figure 1-2 and Figure 1-3.

2.1 Groundwater Elevation Measurements

Groundwater elevation surveys were performed at the FWDA on 9 July and 28 October 2013. On 9 July 2013, depth to water (DTW) was measured at 81 monitoring wells and piezometers and two wells were verified as dry. On 28 October 2013 prior to groundwater sampling, DTW was measured at 76 monitoring wells and piezometers, and one well was verified as dry. Well Wingate89 was not measured due to flooding in the area that prevented access to the well. The four wells located in the East Landfill area, EMW01 through EMW04, were not measured due to ongoing landfill refuse excavation activities. Of the 76 measured locations, 50 locations were alluvial monitoring wells, 16 locations were bedrock monitoring wells, and 10 locations were piezometers—all located in the Northern Area (Administrative and Workshop Areas). During both survey events, no access to the OB/OD area was permitted due to explosive hazards associated with the excavation and removal of unexploded ordinance (UXO) and munitions debris (MD). No groundwater elevation measurements were collected in the OB/OD area during the monitoring period.

As a health and safety consideration, water level measurements were collected by two-person teams. One team member documented the field measurements and the second operated the water level meter. The DTW was measured from the top of the casing reference point at each monitoring well and piezometers using a Solonist® Model 101 water level meter. The DTW measurements were recorded in the field data sheets or field notebooks to the nearest 0.01 foot. Copies of the field notes are provided in Appendix A.

The portions of the water level meter that came in contact with groundwater water were decontaminated after each use by washing with Liqui-Nox® soap solution and rinsing with deionized water. Decontamination fluids were contained in 5-gallon buckets for later disposal at the FWDA evaporation tank. Portions of the water level meter that were lowered into wells were wiped down with paper towels as they were retrieved from the well casings.

The DTW data were tabulated and compared against historic data to identify potential field measurement errors. Following this evaluation, the groundwater elevation at each monitoring location was calculated by subtracting the DTW from the surveyed elevation of the top of casing reference point. The groundwater elevation data were subsequently used to generate groundwater elevation contour maps and calculate hydraulic gradients for the alluvial and bedrock water bearing units at FWDA. The groundwater elevation data and analyses are presented in Section 4 of this document.

2.2 Groundwater Sampling

The groundwater-sampling event for the reporting period was performed from 29 October to 8 November 2013. Groundwater samples were collected from 62 of the 82 monitoring wells listed in the GWMP (Innovar and Shaw, 2012). The four monitoring wells located in the East Landfill area, EMW01 through EMW04, were not sampled due to ongoing refuse removal activities at the site. The 16 monitoring wells in the OB/OD area were not sampled due to the explosive hazards associated with the active remediation of the area. The groundwater samples were analyzed for the constituents listed in Table 2-1. The sample analytical results are presented in Section 5 of this document. Variances from the GWMP are also discussed in Section 5.

Monitoring well purging and sampling was performed using a variety of sampling techniques: dedicated low-flow pneumatic pumps from BESST Products, dedicated pneumatic Bennett pumps, a non-dedicated Grundfos Redi-Flo2 submersible pump, and disposable bailers. During well purging operations, the water quality

parameters of pH, temperature, specific conductance, dissolved oxygen, turbidity, and oxygen reduction potential (ORP) were measured using a Horiba U-52 water quality meter or Hydrolab® Quanta-G multi-parameter meter and HF® Scientific DRT-15CE portable turbidimeter, and recorded on groundwater sampling field data sheets. All water quality meters were calibrated daily according to manufacturer specifications. The groundwater sampling field data sheets for each monitoring well are presented in Appendix B.

Monitoring wells equipped with dedicated low-flow pneumatic pumps were purged in accordance with the GWMP and the NMED's position paper *Use of Low-Flow and Other Non-Traditional Sampling Techniques for RCRA Compliant Groundwater Monitoring* (NMED, 2001). Well purging was performed until water-quality parameters stabilized within the following ranges: temperature (+/-10 percent), pH (+/-0.5 standard units), specific conductance (+/-10 percent), dissolved oxygen (+/-10 percent), turbidity (+/-10 percent), and ORP (+/-10 percent). In general, drawdown was minimized during final parameter stabilization and during sampling to ensure that formation water was being measured and sampled. In several wells, the poor production of the screened formations resulted in drawdown of up to four feet during the initial period of low-flow pumping prior to stabilization.

Monitoring wells not equipped with low-flow pumps were purged by pumping or bailing three well volumes of the water standing in the well (including the saturated annular space). Water-quality parameters were measured during the well purging operations until they stabilized within the ranges presented above. If a monitoring well was emptied prior to the purging of three well volumes due to a slow recharge rate, then the well was sampled after it refilled with sufficient groundwater volume. This typically required the sample team to return to the well location on the following day to collect the groundwater sample. A minimum of three water-quality parameter measurements were collected from wells that emptied during purging operations.

Nine wells in the monitoring program are equipped with Bennett Sample Pumps, which are pneumatic pumps operated with compressed nitrogen. The wells equipped with Bennett pumps were purged and sampled using the dedicated pumps. Eighteen wells not equipped with dedicated pumps were purged dry by either bailing, or with a non-dedicated, Grundfos Redi-Flow2 submersible electric pump. All samples from wells without dedicated pumps were collected using disposable bailers.

The Grundfos Redi-Flo2 submersible pump was decontaminated between sample locations by pumping Liqui-Nox® soap solution through the pump and pumping through two rinse cycles with de-ionized water. The Grundfos pump discharge tubing was discarded at the end of each day that it was used for well purging. Disposable bailers used for well purging and sampling were also discarded and not reused at other sample locations. Three quality assurance equipment rinsate samples were collected from the decontaminated submersible pump and the analytical results were evaluated as part of the data validation process. Eleven monitoring wells were purged utilizing the Grundfos Redi-Flo2 submersible pump. The three equipment rinsate samples comply with the 10 percent sample frequency requirement of the GWMP (Innovar and Shaw, 2012). The equipment rinsate sample results indicate equipment decontamination was sufficient to prevent cross-contamination.

Following well purging, groundwater samples were collected in laboratory-supplied bottles for the analyses listed in Table 2-1. The quality assurance/quality control (QA/QC) samples collected during the monitoring event are also listed in Table 2-1 and meet the requirements specified in the GWMP. Filled sample bottles were placed, on ice, in coolers for shipment to TestAmerica Laboratories. Sample coolers were shipped daily, under chain-of-custody, by FedEx overnight delivery. Copies of the chain-of-custody forms for the sampling event are provided in Appendix B.

Water was generated during well-purging activities as part of the sampling process. Decontamination fluids were generated during the decontamination of non-dedicated sampling equipment and reusable monitoring equipment. Purge water and decontamination fluids were contained in closable 5-gallon and 15-gallon containers during sampling activities and emptied into the FWDA evaporation tank on a daily basis. Solid waste such as disposable sampling equipment, personal protective equipment (PPE), and general refuse was placed in FWDA refuse containers.

2.3 Data Management and Validation

An electronic database was created to support the data management and tracking activities for the groundwater-monitoring event. The database was used to prepare sample labels in advance of the monitoring event and prepare electronic chain-of-custody forms on a daily basis at the FWDA during the monitoring event. Sample identifiers were assigned based on the convention described in the GWMP. Groundwater sample identifiers consisted of the well identification (ID) and sample date. The QA and QC samples used the same ID number as the parent sample and followed by MS (matrix spike) and MSD (matrix spike duplicate), as dictated by the work plan. Changes were made to the sample identifiers for field duplicates so that these QC samples would be blind to the laboratory. The DUP naming convention was not utilized. The duplicates relating to normal samples are presented in Table 2-1. No triplicate samples were collected due to the absence of a contract with a third party laboratory to analyze split samples. Copies of the chain-of-custody forms were emailed to the project chemist on a daily basis to facilitate sample tracking and laboratory interaction.

Sample analyses were performed by TestAmerica Laboratories in accordance with the *Department of Defense Quality Systems Manual for Environmental Laboratories* (DoD, 2010). Electronic data deliverables (EDDs) of the analytical results for each individual sample delivery group (SDG) were provided by TestAmerica Laboratories for validation. The sample result EDDs were loaded into the Automated Data Review (ADR) software for data validation. Results were subjected to 100-percent Level 2, Functional Guideline equivalent validation procedures using ADR. An additional 10 percent of the sample results were subjected to Level 4 data validation by the project chemist. The validated data output files from ADR were exported to the FWDA Electronic Data Management System (EDMS) database. The EDMS database was used to prepare the validated data table output presented in this report. Information on the data validation process and the results are presented in Appendix C.

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TABLE 2-1
Fall 2013 Groundwater Sample Matrix (Page 1 of 3)
Groundwater Periodic Monitoring Report July through December 2013

Well ID	Sample ID	Total Explosives Method 8330B	TCL VOCs Method 8260B	TCL SVOCs Method 8270C	TCL Pesticides Method 8081A	TAL Total Metals Methods 6010C/6020A/ 7470A	TAL Dissolved Metals Methods 6010C/6020A/ 7470A	Total Nitrate/Nitrite Method 9056	Perchlorate Method 6860	TPH DRO Method 8015C	TPH GRO Method 8015C
OB/OD Area Monitoring Wells - No Sampling due to No Safe Access											
Northern Area Monitoring Wells - Alluvial											
BGMW01	BGMW01102013	X	X	X	X	X	X	X	X		
BGMW02	BGMW02102013	X	X	X	X	X	X	X	X		
Matrix	BGMW02102013MS	X	X	X	X	X	X	X	X		
Spike	BGMW02102013MSD	X	X	X	X	X	X	X	X		
BGMW03	BGMW03102013	X	X	X	X	X	X	X	X		
Duplicate	DBW03102013	X	X	X	X	X	X	X	X		
FW31	FW31102013	X	X	X	X	X	X	X			
FW35	FW35102013	X	X	X		X	X	X			
MW01	MW01102013	X	X		X	X	X	X	X	X	X
MW02	MW02102013	X	X		X	X	X	X	X	X	X
MW03	MW03102013	X	X			X	X	X	X	X	X
MW18D	MW18D102013	X	X			X	X	X	X	X	X
MW20	MW20102013	X	X	X	X	X	X	X	X	X	X
MW22D	MW22D102013	X	X	X	X	X	X	X	X	X	X
Duplicate	DMW22D102013	X	X	X	X	X	X	X	X	X	X
MW22S	MW22S102013	X	X	X	X	X	X	X	X	X	X
MW23	MW23102013	X	X	X	X	X	X	X	X		
Duplicate	DMW23102013	X	X	X	X	X	X	X	X		
MW24	MW24102013	X	X	X	X	X	X	X	X		
Duplicate	DMW24102013	X	X	X	X	X	X	X	X		
SMW01	SMW01102013	X	X	X		X	X	X	X		
TMW01	TMW01102013	X	X			X	X	X	X		
TMW03	TMW03102013	X	X	X		X	X	X	X		
TMW04	TMW04102013	X	X	X		X	X	X	X		
TMW06	TMW06102013	X	X	X		X	X	X			
TMW07	TMW07102013	X	X	X		X	X	X			
TMW08	TMW08102013		X		X	X	X	X	X	X	X
TMW10	TMW10102013	X	X			X	X	X	X		
TMW11	TMW11102013	X	X			X	X	X	X		

TABLE 2-1

Fall 2013 Groundwater Sample Matrix (Page 2 of 3)

Groundwater Periodic Monitoring Report July through December 2013

Well ID	Sample ID	Total Explosives Method 8330B	TCL VOCs Method 8260B	TCL SVOCs Method 8270C	TCL Pesticides Method 8081A	TAL Total Metals Methods 6010C/6020A/ 7470A	TAL Dissolved Metals Methods 6010C/6020A/ 7470A	Total Nitrate/Nitrite Method 9056	Perchlorate Method 6860	TPH DRO Method 8015C	TPH GRO Method 8015C
	Northern Area Monitoring Wells - Alluvial										
TMW13	TMW13102013		X			X	X	X	X		
TMW15	TMW15102013	X	X	X		X	X	X	X		
TMW21	TMW21102013	X	X			X	X	X	X		
TMW22	TMW22102013	X	X	X		X	X	X	X		
TMW23	TMW23102013	X	X		X	X	X	X	X		
TMW24	TMW24102013	X	X		X	X	X	X	X		
TMW25	TMW25102013	X	X			X	X	X			
TMW26	TMW26102013	X	X			X	X	X	X		
TMW27	TMW27102013		X			X	X		X		
TMW28	TMW28102013		X			X	X				
TMW29	TMW29102013	X	X			X	X	X	X		
TMW31S	TMW31S102013	X	X	X	X	X	X	X	X	X	
TMW33	TMW33102013		X	X		X	X	X		X	X
TMW34	TMW34102013		X			X	X	X	X	X	X
Duplicate	DTW34102013		X			X	X	X	X	X	X
Matrix	TMW34102013MS		X			X	X	X	X	X	X
Spike	TMW34102013MSD		X			X	X	X	X	X	X
TMW35	TMW35102013		X	X	X	X	X	X	X	X	X
TMW39S	TMW39S102013	X	X	X	X	X	X	X	X		
TMW40S	TMW40S102013	X	X	X	X	X	X	X	X		
TMW41	TMW41102013	X	X	X	X	X	X	X	X		
TMW43	TMW43102013	X	X	X	X	X	X	X	X		
TMW44	TMW44102013	X	X	X	X	X	X	X	X		
TMW45	TMW45102013	X	X	X	X	X	X	X	X		
TMW46	TMW46102013	X	X	X	X	X	X	X	X		
TMW47	TMW47102013	X	X	X	X	X	X	X	X		

TABLE 2-1

Fall 2013 Groundwater Sample Matrix (Page 3 of 3)

Groundwater Periodic Monitoring Report July through December 2013

Well ID	Sample ID	Total Explosives Method 8330B	TCL VOCs Method 8260B	TCL SVOCs Method 8270C	TCL Pesticides Method 8081A	TAL Total Metals Methods 6010C/6020A/ 7470A	TAL Dissolved Metals Methods 6010C/6020A/ 7470A	Total Nitrate/Nitrite Method 9056	Perchlorate Method 6860	TPH DRO Method 8015C	TPH GRO Method 8015C
	Northern Area Monitoring Wells - Bedrock										
EMW01	Not sampled due to source removal activities										
EMW02	Not sampled due to source removal activities										
EMW03	Not sampled due to source removal activities										
EMW04	Not sampled due to source removal activities										
TMW02	TMW02102013	X	X			X	X	X	X		
TMW14A	TMW14A102013	X	X	X		X	X	X			
TMW16	TMW16102013	X	X	X		X	X		X		
TMW17	TMW17102013		X			X	X	X	X		
TMW18	TMW18102013	X	X	X		X	X	X	X		
TMW19	TMW19102013	X	X	X		X	X		X		
TMW30	TMW30102013	X	X	X	X	X	X	X	X		
TMW31D	TMW31D102013	X	X	X	X	X	X	X	X		
Duplicate	DTW31D102013	X	X	X	X	X	X	X	X		
Matrix	TMW31D102013MS	X	X	X	X	X	X	X	X		
Spike	TMW31D102013MSD	X	X	X	X	X	X	X	X		
TMW32	TMW32102013	X	X	X	X	X	X	X	X		
TMW36	TMW36102013	X	X	X	X	X	X	X	X		
TMW37	TMW37102013	X	X	X	X	X	X	X	X		
TMW38	YMW38102013	X	X	X	X	X	X	X	X		
TMW39D	TMW39D102013	X	X	X	X	X	X	X	X		
TMW40D	TMW40D102013	X	X	X	X	X	X	X	X		
TMW48	TMW48102013	X	X	X	X	X	X	X	X		
Duplicate	DTW48102013	X	X	X	X	X	X	X	X		
Matrix	TMW48102013MS	X	X	X	X	X	X	X	X		
Spike	TMW48102013MSD	X	X	X	X	X	X	X	X		
TMW49	TMW49102013	X	X	X	X	X	X	X	X		
Duplicate	DTW49102013	X	X	X	X	X	X	X	X		

Acronyms and Abbreviations

DRO: diesel range organics ID: identification TAL: target analyte list TPH: total petroleum hydrocarbon(s)
GRO: gasoline range organics SVOC: semivolatile organic compound TCL: target compound list VOC: volatile organic compound

Notes

X = samples collected according to Work Plan (Innovar, 2012)
Trip Blank samples were collected daily and Equipment Blanks were collected twice a week (not shown above)

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3.0 Regulatory Criteria

On December 1, 2005, NMED issued a RCRA Permit (EPA ID No. NM6213820974) to the U.S. Department of the Army (Permittee), the owner and operator of FWDA. The Permit established the general and specific standards and requirements for these activities pursuant to the New Mexico Hazardous Waste Act (NMHWA), as amended; New Mexico State Rules Act (NMSA) 1978, §§ 74-4-1 et seq.; and the New Mexico Hazardous Waste Management Regulations (HWMR), 20 New Mexico Administrative Code (NMAC) Part 4.1 (NMED, 2005).

As required by Section V.A of the Permit, the Army developed and implemented a groundwater-monitoring program. A GWMP was developed according to provisions of the Permit, Section VIII.B.1 (20 NMAC § 4.1.500, incorporating 40 *Code of Federal Regulations* [CFR] 264.101) (TPMC, 2008). NMED approved the initial GWMP in March 2008. The GWMP has been revised five times with the revisions submitted to NMED in 2009, 2010, 2011, 2012, and 2013. All groundwater monitoring, sampling, and reporting activities are conducted in compliance with the Permit, applicable Permit attachments, and the GWMP.

Attachment 7 of the Permit provides cleanup levels applicable to the FWDA groundwater-monitoring program. Groundwater analytical results are evaluated and compared to these cleanup levels (referred to as regulatory health standards). The following documents and regulations are used to determine if the concentration of a particular hazardous constituent exceeds the RCRA Permit cleanup level (NMED, 2005).

1. New Mexico Water Quality Control Commission (NMWQCC) standards in 20 NMAC § 6.2.4103.A and B
2. U.S. Environmental Protection Agency (EPA) drinking water maximum contaminant level (MCL) under 40 CFR Parts 141 and 142
3. No current NMWQCC or MCL standard exists for perchlorate. Pending NMED approval of a standard, a screening level of 6 micrograms per liter (µg/L) will be used for perchlorate as stated in the RCRA Permit.

If both an NMWQCC standard and an EPA MCL have been established for a contaminant, the lower of the two is used as the criterion. The Permit does not specify cleanup standards for compounds (other than perchlorate) that do not have either NMWQCC or MCL standards. The Permit specifies that risk-based cleanup standards should be developed for these compounds and must be approved by NMED. Pending the development and approval of cleanup criteria, the EPA Region 6 Human Health Tap Water Screening Levels are used as temporary criteria.

The GWMP, requires the Army to submit periodic monitoring reports within 60 days of receipt of validated groundwater chemical analytical results and the Permit, Section V.A.2 requires the format to be consistent with the NMED's *General Reporting Requirements for Routine Groundwater Monitoring at RCRA Sites* (Innovar and Shaw, 2012; NMED, 2003).

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4.0 Groundwater Elevations

Groundwater elevation surveys in monitoring wells and piezometers at the FWDA are currently performed on a quarterly basis. Two groundwater elevation surveys were performed during this monitoring period, the first on 9 July 2013 and the second on 28 October 2013. As noted in Section 2, no groundwater elevation measurements were collected in the OB/OD area during these events and no monitoring was performed at the East Landfill during the October event. The groundwater elevation data are used to calculate hydraulic gradients and determine groundwater flow directions in the Northern Area alluvium, Northern Area bedrock and OB/OD Area water-bearing units. Tables 4-1 through 4-3 present the DTW measurements in feet, the surveyed elevation of the top of casing (TOC), and calculated groundwater elevations in feet above the North American Vertical Datum 1988 (NAVD 88) for the July and October 2013 monitoring events. Figures 4-1 through 4-5 show the groundwater elevation maps for the two monitoring events.

4.1 Northern Area Groundwater Elevations

Shallow groundwater in the Northern Area is present in both unconsolidated alluvium and bedrock. The water quality and hydraulic properties differ between these two groundwater-bearing units. Therefore, the groundwater elevation data and chemistry are presented and discussed separately. Table 4-1 presents the groundwater elevation data for wells screened in alluvium. Table 4-2 presents the groundwater elevation data for wells screened in the bedrock. The Northern Area groundwater elevation contour maps are shown in Figures 4-1 through 4-4. The groundwater elevation contours presented in these figures were developed using the mathematical interpolation algorithms in Surfer, Version 11 software. The Kriging geostatistical interpolation method were used to generate a 100-foot-by-100-foot interpolated grid based on the groundwater elevations. Boundary conditions were used to crop the interpolation grids based on geologic constraints and data limitations. The Kriging geostatistical interpretation is the preferred method and was used to generate the groundwater elevation contours for the bedrock shown in Figures 4-3 and 4-4. In some portions of the bedrock monitoring area, groundwater elevation data was found to be inconsistent and conflicting between adjacent well locations. Bedrock contours in Figure 4-3 and Figure 4-4 were hand drawn using groundwater elevation data, well screen information and hydrogeologic information, and Kriging contour information. Hydrogeologic information was used to modify geostatistical interpolation data to determine which data points to bias against using professional judgment and hydrologic expertise. All contours presented in these figures were reviewed and corrected digitally by an experienced hydrogeologist.

4.1.1 Northern Area Alluvial Groundwater System

The groundwater flow direction in the alluvium is from potentiometric highs in the east, north, and south towards a potentiometric low west of the Administration Area (Figures 4-1 and 4-2). From the Administration Area, the groundwater flow direction is generally to the west. These groundwater flow directions are consistent with recent historic data. A small groundwater mound is present in the Administration Area near monitoring wells MW01, MW02, and MW03. This feature has been previously attributed to a leaking water-storage cistern (USACE, 2012). The cistern is no longer in service and the groundwater mound is expected to attenuate over time. Groundwater flow directions and elevations were very similar between the July and October 2013 monitoring events, and were consistent with recent historical data. The recent historical data is also included in Table 4-1.

Hydraulic gradients ranged from 0.003 foot per foot (ft/ft) to 0.03 ft/ft in the alluvial groundwater unit. The steepest gradients were found in the southeast portions of the monitoring area and the flattest gradients were found in the western portions of the monitoring area. Hydraulic gradients did not vary significantly in direction or magnitude between the July and October 2013 monitoring events.

4.1.2 Northern Area Bedrock Groundwater System

Groundwater flow in the shallow bedrock is to the west in the Workshop Area and to the northwest in the East Landfill area (Figures 4-3 and 4-4). These trends are consistent with recent data from previous monitoring events. Groundwater flow directions and elevations were very similar between the July and October 2013 monitoring events. Water-level elevation data from monitoring wells TMW02 and TWMW40D were not used in the generation of the groundwater-elevation contour maps or the calculation of hydraulic gradients because they appear to be completed in different water-bearing zones than the other bedrock monitoring wells. Groundwater elevation in the bedrock groundwater unit is slightly higher than in the alluvial groundwater unit and is under hydraulically confined conditions in most of the Northern Area.

Groundwater hydraulic gradient is relatively moderate in the Workshop Area at approximately 0.009 ft/ft. The hydraulic gradient in the East Landfill area is steep at approximately 0.15 ft/ft in July 2013. The calculated hydraulic gradients were very similar to recent historic gradients, and did not vary significantly in direction or magnitude between the July and October 2013 monitoring events.

4.2 OB/OD Area Groundwater Elevations

No monitoring data were collected in this area during the July to December monitoring period. Recent historic groundwater elevation data are presented in Table 4-3. Monitoring of the OB/OD Area wells will resume following completion of remediation activities in the area.

TABLE 4-1

Northern Area Groundwater Elevations (Wells Screened in Alluvial Sediments) (Page 1 of 2)

Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	TOC Elevation (ft)	24-Jan-12 Elevation (ft)	12-Apr-12 Elevation (ft)	23-Jul-12 Elevation (ft)	22/23-Oct-12 Elevation (ft)	9-Jan-13 Elevation (ft)	1-Apr-13 Elevation (ft)	9-Jul-13 DTW (ft-btoc)	9-Jul-13 Elevation (ft)	28-Oct-13 DTW (ft-btoc)	28-Oct-13 Elevation (ft)
BGMW01	6692.68	NM	6674.36	6673.72	6673.69	6673.70	6673.92	19.41	6673.27	18.76	6673.92
BGMW02	6691.99	NM	6671.57	6670.91	6670.79	6670.91	6671.12	21.41	6670.58	20.76	6671.23
BGMW03	6680.57	NM	6665.03	6663.93	6663.84	6665.32	6664.75	17.04	6663.53	16.61	6663.96
FW26	6674.4	NM	NM	NM	Dry	Dry	Dry	Dry	Dry	Dry	Dry
FW31	6832.49	6790.58	6790.61	6790.54	6790.27	6790.18	6790.36	42.25	6790.24	42.29	6790.20
FW35	6711.11	6689.66	6688.72	6686.43	6685.36	6685.95	6686.33	27.00	6684.11	27.83	6683.28
MW01	6685.94	6643.96	6644.03	6643.86	6643.8	6643.64	6643.85	42.31	6643.63	42.35	6643.59
MW02	6685.22	6646.28	6646.24	6646.09	6646.06	6645.57	6645.76	39.82	6645.40	39.96	6645.26
MW03	6689.53	6643.64	6643.67	6643.51	6643.51	6643.32	6643.58	46.22	6643.31	46.08	6643.45
MW18D	6686.32	6643.5	6643.50	6643.21	6643.24	6643.00	6643.32	43.27	6643.05	43.20	6643.12
MW18S	6686.61	NM	NM	NM	Dry	6647.94	6648.01	Dry	Dry	38.78*	6648.01*
MW20	6687.67	6642.76	6642.86	6642.63	6642.55	6642.49	6642.69	45.19	6642.48	45.23	6642.44
MW22D	6684.55	6642.85	6642.92	6642.61	6642.67	6642.42	6642.74	42.08	6642.47	42.06	6642.49
MW22S	6684.69	6643.14	6643.14	6642.88	6642.67	6642.67	6642.91	41.98	6642.71	41.92	6642.77
MW23	6654.5	6640.08	6640.11	6639.61	6639.3	6639.25	6639.49	15.54	6638.96	15.14	6639.36
MW24	6657.08	6638.25	6638.50	6637.27	6637.14	6646.14	6638.05	20.25	6636.83	19.76	6637.32
SMW01	6669.94	6641.35	6641.34	6640.34	6640.08	6641.83	6640.05	30.69	6639.25	30.64	6639.30
TMW01	6711.84	6675.16	6675.01	6674.66	6674.52	6674.44	6674.22	37.98	6673.86	38.06	6673.78
TMW03	6702.43	6645.55	6645.58	6645.48	6645.42	6645.48	6645.49	57.08	6645.35	57.01	6645.42
TMW04	6700.86	6644.52	6644.54	6644.5	6644.48	6644.52	6644.55	56.44	6644.42	56.36	6644.50
TMW06	6690.63	6643.73	6643.76	6643.61	6643.62	6643.44	6643.72	47.21	6643.42	46.96	6643.67
TMW07	6690.47	6643.13	6643.48	6642.86	6643.36	6642.86	6643.52	47.38	6643.09	46.76	6643.71
TMW08	6680.31	6643.86	6643.86	6643.57	6643.7	6643.39	6643.59	36.85	6643.46	36.75	6643.56
TMW10	6680.04	6642.86	6642.91	6642.56	6642.49	6642.35	6643.73	37.61	6642.43	37.6	6642.44
TMW11	6718.28	6652.07	6651.97	6651.69	6650.49	6651.37	6651.37	67.13	6651.15	67.34	6650.94
TMW13	6707.49	6647.71	6647.68	6647.53	6647.44	6647.50	6647.44	60.17	6647.32	60.19	6647.30
TMW15	6713.89	6649.91	6649.88	6649.63	6649.48	6649.48	6649.42	64.63	6649.26	64.7	6649.19
TMW21	6695.14	6644.54	6644.63	6644.5	6644.53	6644.47	6644.58	50.78	6644.36	50.63	6644.51
TMW22	6691.74	6643.16	6643.09	6642.93	6643.13	6642.88	6643.11	48.84	6642.90	48.46	6643.28
TMW23	6687.66	6642.30	6642.27	6642.11	6642.23	6642.03	6642.24	45.61	6642.05	45.26	6642.40
TMW24	6680.42	6641.78	6641.81	6641.66	6641.81	6641.67	6641.94	38.67	6641.75	38.75	6641.67
TMW25	6672.88	6634.04	6634.12	6633.87	6633.82	6634.63	6634.00	39.06	6633.82	38.99	6633.89
TMW26	6677.71	6651.45	6651.54	6650.33	6649.9	6650.45	6650.60	27.26	6650.45	25.87	6651.84
TMW27	6668.13	6640.38	6640.47	6640.17	6639.95	6639.95	6640.14	28.17	6639.96	28.24	6639.89

TABLE 4-1

Northern Area Groundwater Elevations (Wells Screened in Alluvial Sediments) (Page 2 of 2)

Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	TOC Elevation (ft)	24-Jan-12 Elevation (ft)	12-Apr-12 Elevation (ft)	23-Jul-12 Elevation (ft)	22/23-Oct-12 Elevation (ft)	9-Jan-13 Elevation (ft)	1-Apr-13 Elevation (ft)	9-Jul-13 DTW (ft-btoc)	9-Jul-13 Elevation (ft)	28-Oct-13 DTW (ft-btoc)	28-Oct-13 Elevation (ft)
TMW28	6689.17	6670.93	6671.04	6670.26	6670.05	6670.26	6670.36	19.49	6669.68	18.13	6671.04
TMW29	6702.88	6645.73	6645.77	6645.62	6645.65	6645.66	6645.60	57.33	6645.55	57.31	6645.57
TMW31S	6710.2	6673.35	6674.22	6673.8	6673.7	6673.62	6673.39	37.20	6673.00	37.21	6672.99
TMW33	6686.6	6643.32	6643.28	6643.01	6643.00	6642.76	6643.09	43.76	6642.84	43.69	6642.91
TMW34	6687.29	6641.74	6641.82	6641.61	6641.51	6641.81	6641.66	45.80	6641.49	45.85	6641.44
TMW35	6686.52	6643.10	6643.10	6642.81	6642.75	6642.69	6642.92	43.85	6642.67	43.88	6642.64
TMW39S	6708.61	6673.76	6673.73	6673.67	6673.63	6673.73	6673.47	35.17	6673.44	35.37	6673.24
TMW40S	6706.4	6646.43	6646.28	6646.26	6646.26	6646.19	6646.19	60.28	6646.12	60.25	6646.15
TMW41	6705.21	6665.20	6665.19	6664.89	6664.97	6664.97	6664.77	40.67	6664.54	40.51	6664.70
TMW43	6698.63	NM	6645.42	6645.32	6645.32	6645.25	6645.36	53.43	6645.20	53.33	6645.30
TMW44	6697.31	NM	6644.71	6644.68	6644.72	6644.56	6644.78	52.79	6644.52	52.48	6644.83
TMW45	6689	NM	6641.18	6641.18	6641.21	6641.16	6641.35	47.78	6641.22	47.4	6641.60
TMW46	6680.98	NM	6636.57	6636.79	6636.54	6636.57	6637.03	44.2	6636.78	44.39	6636.59
TMW47	6701.88	NM	6655.64	6655.81	6655.76	6655.79	6655.78	46.21	6655.67	46.18	6655.70
Wingate89	6663.69	6648.71	6648.71	6648.54	6648.2	6648.41	6648.55	15.34	6648.35	NM	NM
Wingate90	6656.49	6643.37	6643.37	6643.1	6642.79	6642.87	6643.09	15.71	6640.78	13.71	6642.78
Wingate91	6659.74	6645.94	6645.94	6645.65	6645.34	6646.40	6645.60	14.44	6645.30	14.4	6645.34
PZ01	6677.29	6651.14	6650.60	6650.60	6650.03	6650.43	6650.58	27.12	6650.17	26.9	6650.39
PZ02	6674.95	6652.56	6652.06	6652.06	6650.44	6651.74	6652.05	23.22	6651.73	23.26	6651.69
PZ03	6679.44	6653.45	6653.06	6653.06	6653.25	6653.08	6653.44	26.42	6653.02	26.28	6653.16
PZ04	6676.68	6649.20	6648.64	6648.64	6646.58	6649.38	6648.65	28.40	6648.28	28.02	6648.66
PZ05	6674.15	6654.75	6648.25	6648.25	6652.81	6653.68	6654.16	21.05	6653.10	20.61	6653.54
PZ06	6676.04	6658.16	6655.91	6655.91	6656.25	6657.09	6657.77	20.70	6655.34	19.16	6656.88
PZ07	6684.53	6670.81	6669.48	6669.48	6668.93	6668.95	6669.06	16.16	6668.37	12.02	6672.51
PZ08	6686.81	6669.78	6668.14	6668.14	6667.66	6669.79	6667.92	19.86	6666.95	15.10	6671.71
PZ09	6653.61	6639.08	6637.83	6637.83	6637.8	6638.04	6638.66	16.37	6637.24	15.34	6638.27
PZ10	6657.27	6638.91	6637.65	6637.65	6637.67	6637.87	6638.52	20.23	6637.04	19.19	6638.08

Acronyms and Abbreviations

btoc: below top of casing

DTW: depth to water

ft: foot/feet

NM: not measured

TOC: top of casing

Notes:

* Well was nearly dry and not sampled; water elevation may not be representative of the water table

Elevations are recorded in U.S. feet above North American Vertical Datum 1988 (NAVD 88)

Wells were not installed during this monitoring event

TABLE 4-2

Northern Area Groundwater Elevations (Wells Screened in Bedrock)

Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	TOC Elevation (ft)	24-Jan-12 Elevation (ft)	12-Apr-12 Elevation (ft)	23-Jul-12 Elevation (ft)	22/23-Oct-12 Elevation (ft)	9-Jan-13 Elevation (ft)	1-Apr-13 Elevation (ft)	9-Jul-13 DTW (ft-btoc)	9-Jul-13 Elevation (ft)	28-Oct-13 DTW (ft-btoc)	28-Oct-13 Elevation (ft)
EMW01	6718.38	6637.55	6638.30	6637.55	6638.30	6637.49	6638.45	80.55	6637.83	NM	NM
EMW02	6702.49	6670.56	6670.98	6670.56	6670.98	6669.89	6670.40	32.72	6669.77	NM	NM
EMW03	6701.09	6671.99	6671.96	6671.99	6671.96	6671.54	6671.59	29.99	6671.10	NM	NM
EMW04	6708.30	6602.36	6607.16	6602.36	6607.16	6602.22	6607.20	104.71	6603.59	NM	NM
TMW02	6705.35	6650.01	6649.98	6650.01	6649.98	6649.93	6649.85	55.65	6649.70	55.50	6649.85
TMW14A	6723.54	6660.38	6660.18	6660.38	6660.18	6659.70	6659.47	64.5	6659.04	64.22	6659.32
TMW16	6714.15	6658.77	6658.68	6658.77	6658.68	6658.25	6658.17	56.2	6657.95	56.2	6657.95
TMW17	6719.89	6657.98	6657.87	6657.98	6657.87	6657.44	6657.33	62.59	6657.30	62.61	6657.28
TMW18	6713.49	6660.04	6659.01	6660.04	6659.01	6658.63	6658.57	55.11	6658.38	55.13	6658.36
TMW19	6700.52	6658.37	6658.31	6658.37	6658.31	6657.95	6657.88	42.87	6657.65	42.71	6657.81
TMW30	6714.59	6675.18	6674.93	6675.18	6674.93	6674.61	6674.47	40.47	6674.12	40.15	6674.44
TMW31D	6710.44	6674.65	6674.20	6674.65	6674.20	6673.91	6673.39	37.41	6673.03	37.51	6672.93
TMW32	6709.31	6670.89	6670.73	6670.89	6670.73	6670.48	6669.99	39.61	6669.70	39.75	6669.56
TMW36	6699.04	6673.09	6672.91	6673.09	6672.91	6672.22	6672.09	27.25	6671.79	26.49	6672.55
TMW37	6713.09	6668.29	6668.24	6668.29	6668.24	6667.89	6667.58	45.8	6667.29	45.87	6667.22
TMW38	6706.79	6660.36	6660.59	6660.36	6660.59	6660.30	6660.18	46.88	6659.91	46.99	6659.80
TMW39D	6708.61	6675.29	6675.11	6675.29	6675.11	6674.49	6674.29	34.67	6673.94	34.78	6673.83
TMW40D	6706.15	6675.16	6674.98	6675.16	6674.98	6674.32	6674.15	32.35	6673.80	32.50	6673.65
TMW48	6709.84	6675.30	6675.15	6675.30	6675.15	6674.60	6674.29	35.85	6673.99	36.00	6673.84
TMW49	6714.71	6672.10	6671.87	6672.10	6671.87	6671.29	6671.11	43.90	6670.81	44.11	6670.60

Acronyms and Abbreviations

btoc: below top of casing

DTW: depth to water

ft: foot/feet

NM: not measured

TOC: top of casing

Notes:

Elevations are recorded in U.S. feet above North American Vertical Datum 1988 (NAVD 88)

TABLE 4-3

OB/OD Area Groundwater Elevations

Groundwater Periodic Monitoring Report July through December 2013

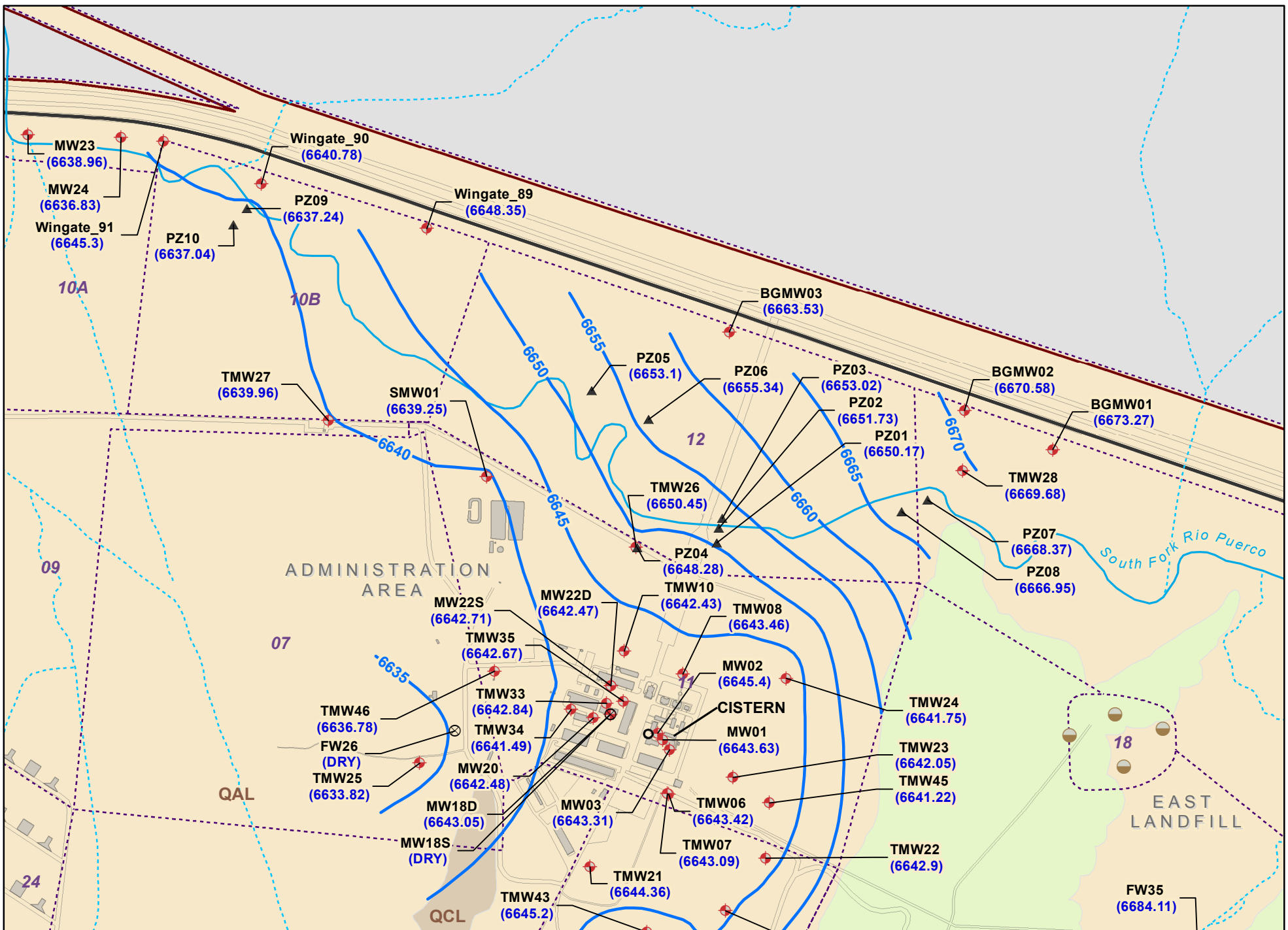
Well Identifier	TOC Elevation (ft)	24-Jan-12	12-Apr-12	23-Jul-12	22/23-Oct-12	9-Jan-13	1-Apr-13	9-Jul-13		28-Oct-13	
		Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	DTW (ft-btoc)	Elevation (ft)	DTW (ft-btoc)	Elevation (ft)
CMW02	7258.00	NM	7243.98	7240.58	7238.80	NM	7239.09	NM	NM	NM	NM
CMW04	7251.15	NM	7204.87	7204.44	7204.34	NM	7203.83	NM	NM	NM	NM
CMW07	7235.16	NM	7192.87	7192.14	7191.35	NM	7190.27	NM	NM	NM	NM
CMW10	7179.31	NM	7114.04	7111.45	7113.92	NM	7113.26	NM	NM	NM	NM
CMW14	7153.06	NM	7120.86	7118.75	7119.60	NM	7118.74	NM	NM	NM	NM
CMW17	7145.18	NM	7121.68	7121.98	7125.23	NM	7121.36	NM	NM	NM	NM
CMW18	7158.24	NM	7116.39	7115.85	7115.52	NM	7115.07	NM	NM	NM	NM
CMW19	7129.85	NM	7103.88	7101.89	7101.05	NM	7101.55	NM	NM	NM	NM
CMW22	7081.94	NM	6967.39	6967.39	6967.30	NM	6967.35	NM	NM	NM	NM
CMW23	7035.58	NM	6938.23	6938.23	6938.01	NM	6938.00	NM	NM	NM	NM
CMW24	7099.68	NM	7054.26	7054.26	7054.23	NM	7054.36	NM	NM	NM	NM
CMW25	7007.52	NM	6969.94	6969.94	6970.59	NM	6970.20	NM	NM	NM	NM
FW24	6999.19	NM	NM	NM	Dry	NM	Dry	NM	NM	NM	NM
FW38	7172.02	NM	Dry	Dry	Dry	NM	Dry	NM	NM	NM	NM
KMW09	7187.93	NM	7147.24	7146.95	7146.85	NM	7146.74	NM	NM	NM	NM
KMW10	7131.38	NM	6964.71	6964.61	6964.67	NM	Dry	NM	NM	NM	NM
KMW11	7108.78	NM	7076.08	7075.79	7075.89	NM	7075.33	NM	NM	NM	NM
KMW12	7193.08	NM	7143.96	7143.43	7143.62	NM	7143.51	NM	NM	NM	NM
KMW13	7168.46	NM	NM	NM	NM	NM	7114.91*	NM	NM	NM	NM

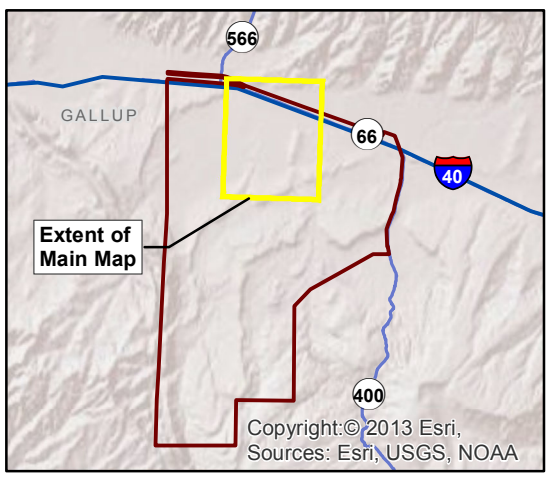
Acronyms and Abbreviations

btoc: below top of casing
DTW: depth to water
ft: foot/feet
NM: not measured
OB: open burn
OD: open detonation
TOC: top of casing

Notes:

Wells CMW06, CMW16, and CMW21 are buried and not accessible for depth to water measurements
Well casing at CMW20 is damaged and does not allow for depth to water measurements
Elevations are recorded in U.S. feet above North American Vertical Datum 1988 (NAVD 88)
* Well was near dry and not sampled; water elevation may not be representative





State Plane Coordinate System, New Mexico West,
North American Datum 1983, US Feet.
North American Vertical Datum 1988, US Feet.

Data Sources:
Roads, Railroad: Tele Atlas GDT-Dynamap, 2008;
Populated Places: ESRI 2005;
Fort Wingate Environmental Restoration Detail: USACE.

Legend

- Alluvial Monitoring Well
- Bedrock Monitoring Well
- Piezometer
- Dry Well
- Water Supply Well 69
- TMW11 (6651.15) — Well Label = Well ID (Groundwater Elevation in feet)
- −6635− Alluvial Groundwater Contours, July 2013
- Building
- 10A — Property Transfer Parcel
- Fort Wingate Installation Boundary
- Arroyo
- Stream
- Road

Surface Geology

- QAL — QAL - Quarternary Alluvial Deposits
- QCL — QCL - Quaternary Colluvial and Gravel Deposits
- TRPP — TRPP - Petrified Forest Formation, Painted Desert Member

FIGURE 4-1
July 2013 Northern Area Alluvial Groundwater Contour Map

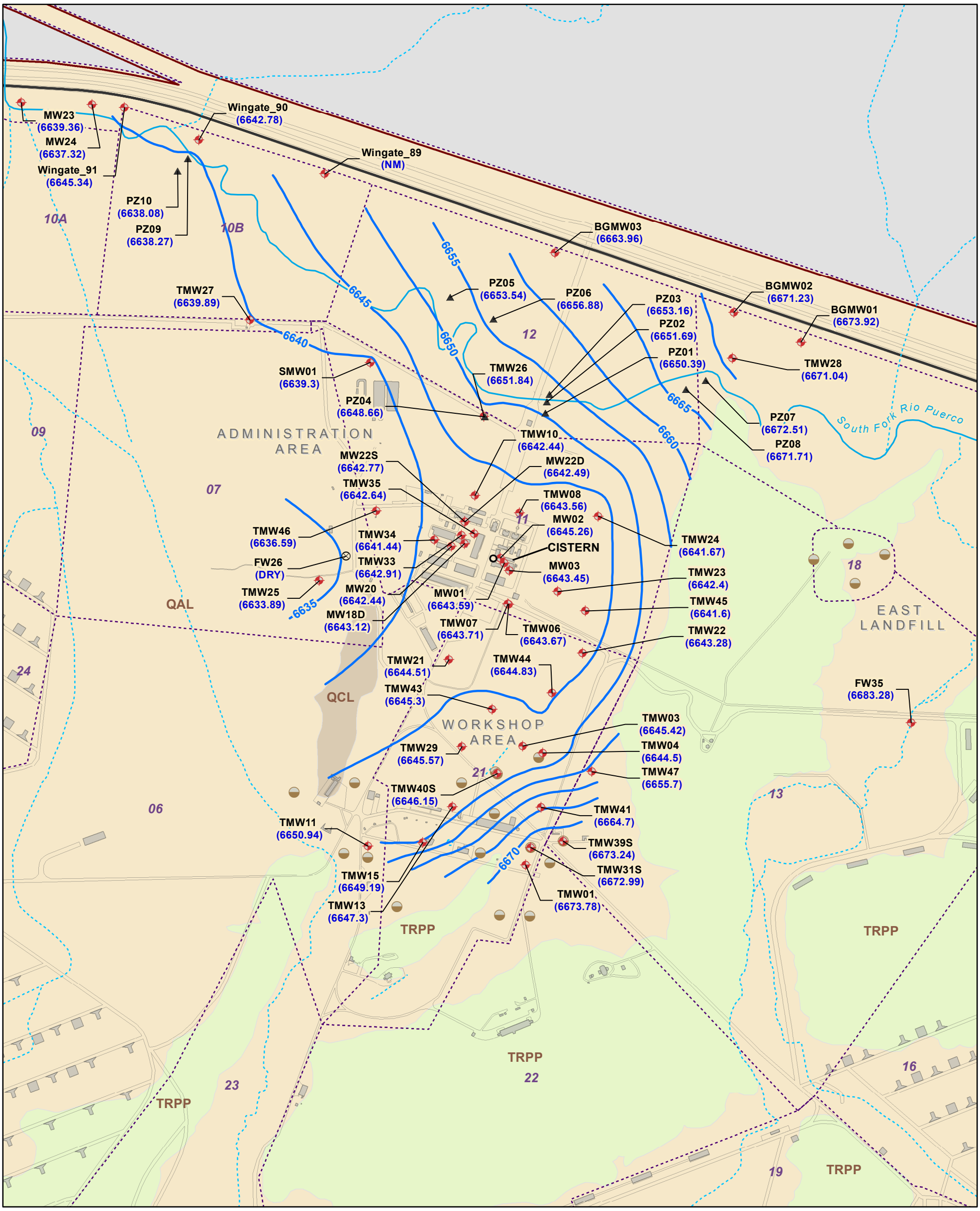
Groundwater Periodic Monitoring Report for July to December 2013

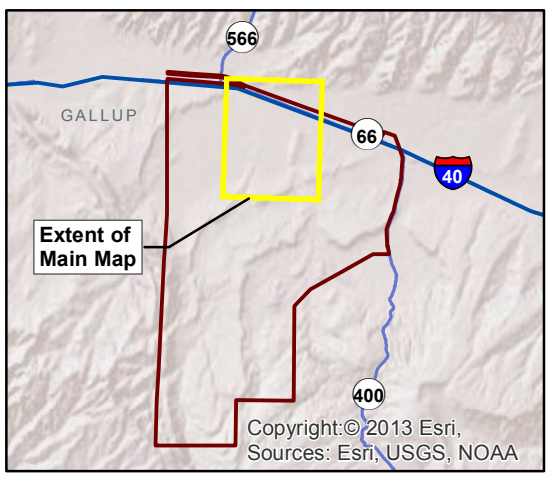
Fort Wingate Depot Activity,
McKinley County, New Mexico

0 500 1,000 1,500 2,000 ft

0 100 200 300 400 500 m

N





State Plane Coordinate System, New Mexico West,
North American Datum 1983, US Feet.
North American Vertical Datum 1988, US Feet.

Data Sources:
Roads, Railroad: Tele Atlas GDT-Dynamap, 2008;
Populated Places: ESRI 2005;
Fort Wingate Environmental Restoration Detail: USACE.

Legend

- Alluvial Monitoring Well
- Bedrock Monitoring Well
- Piezometer
- Dry Well
- Water Supply Well 69
- TMW11 (6650.94) Well Label = Well ID (Groundwater Elevation in feet)
- 6635 Alluvial Groundwater Contours, October 2013
- Building
- 10A Property Transfer Parcel
- Fort Wingate Installation Boundary
- Arroyo
- Stream
- Road

Surface Geology

- QAL - QAL - Quarternary Alluvial Deposits
- QCL - QCL - Quaternary Colluvial and Gravel Deposits
- TRPP - TRPP - Petrified Forest Formation, Painted Desert Member

FIGURE 4-2
October 2013 Northern Area Alluvial Groundwater Contour Map

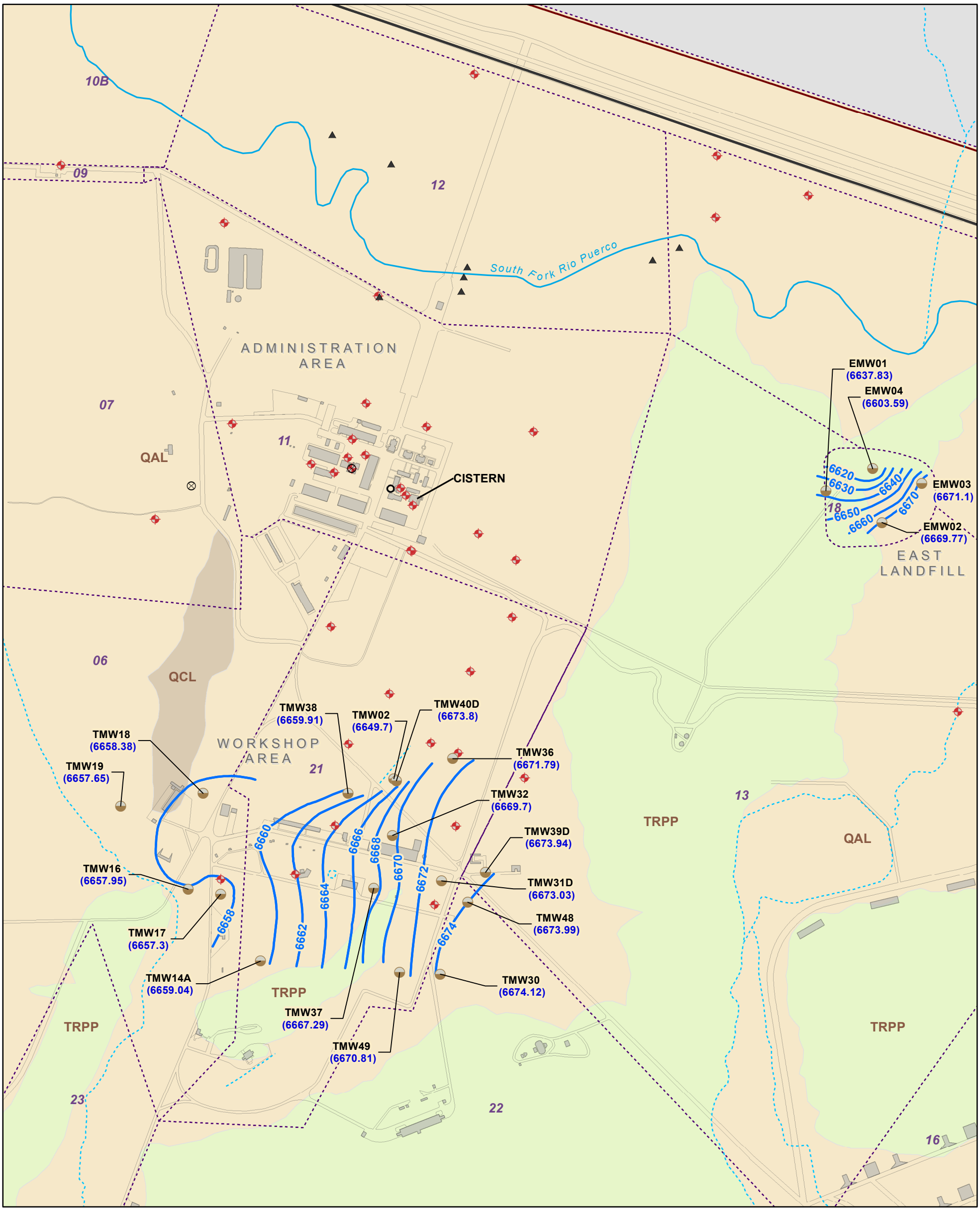
Groundwater Periodic Monitoring Report for July to December 2013

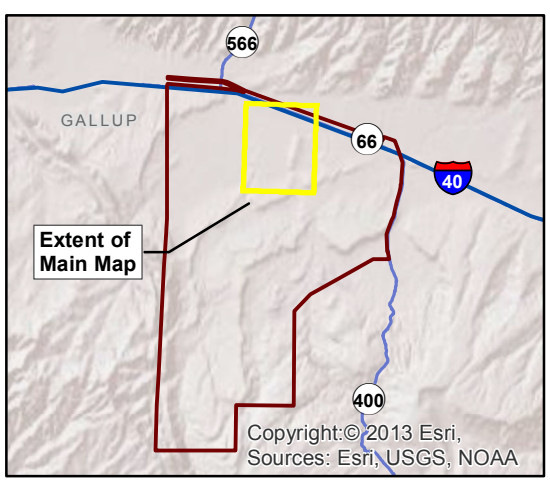
Fort Wingate Depot Activity,
McKinley County, New Mexico

0 500 1,000 1,500 2,000 ft

0 100 200 300 400 500 m

N





State Plane Coordinate System, New Mexico West,
North American Datum 1983, US Feet.
North American Vertical Datum 1988, US Feet.

Data Sources:
Roads, Railroad: Tele Atlas GDT-Dynamap, 2008;
Populated Places: ESRI 2005;
Fort Wingate Environmental Restoration Detail: USACE.

Legend

- Alluvial Monitoring Well
- Bedrock Monitoring Well
- Piezometer
- Dry Well
- Water Supply Well 69
- TMW11 (6650.94) Well Label = Well ID (Groundwater Elevation in feet)
- 6660 Bedrock Groundwater Contours, July 2013
- Building
- 10A Property Transfer Parcel
- Fort Wingate Installation Boundary
- Arroyo
- Stream
- Road

Surface Geology

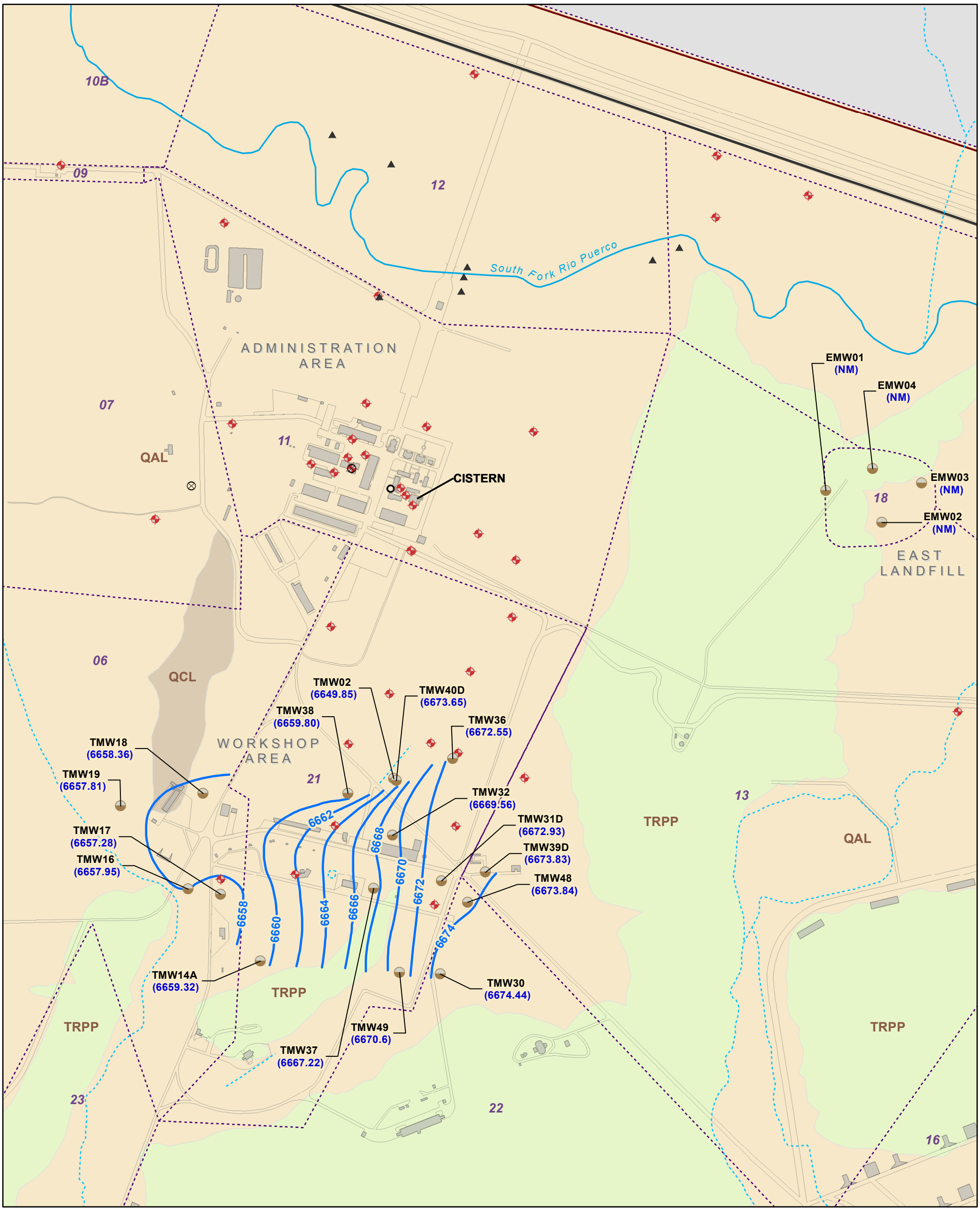
- QAL - QAL - Quarternary Alluvial Deposits
- QCL - QCL - Quaternary Colluvial and Gravel Deposits
- TRPP - TRPP - Petrified Forest Formation, Painted Desert Member

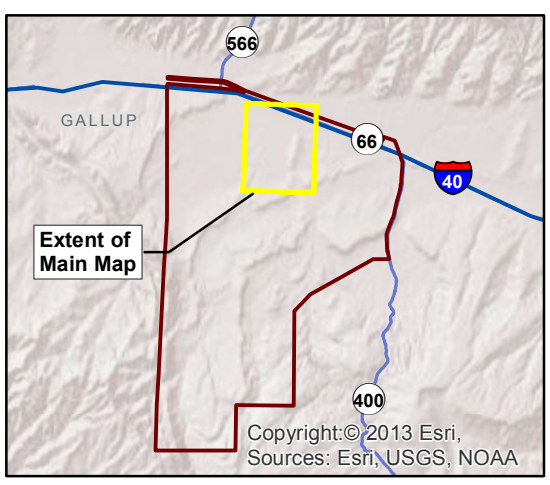
FIGURE 4-3
July 2013 Northern Area Bedrock Groundwater Contour Map

Groundwater Periodic Monitoring Report for July to December 2013
Fort Wingate Depot Activity, McKinley County, New Mexico

Note: Elevation data from well TMW02 is not used to generate contours. Well screens for this well are not consistent with adjacent bedrock monitoring wells resulting in anomalous low water elevations.

0 500 1,000 1,500 2,000 ft
0 100 200 300 400 500 m
N





State Plane Coordinate System, New Mexico West,
North American Datum 1983, US Feet.
North American Vertical Datum 1988, US Feet.

Data Sources:
Roads, Railroad: Tele Atlas GDT-Dynamap, 2008;
Populated Places: ESRI 2005;
Fort Wingate Environmental Restoration Detail: USACE.

Legend

- Alluvial Monitoring Well
- Bedrock Monitoring Well
- Piezometer
- Dry Well
- Water Supply Well 69
- TMW11 (6650.94) Well Label = Well ID (Groundwater Elevation in feet)
- 6660 Bedrock Groundwater Contours, October 2013
- Building
- 10A Property Transfer Parcel
- Fort Wingate Installation Boundary
- Arroyo
- Stream
- Road

Surface Geology

- QAL - QAL - Quarternary Alluvial Deposits
- QCL - QCL - Quaternary Colluvial and Gravel Deposits
- TRPP - TRPP - Petrified Forest Formation, Painted Desert Member

FIGURE 4-4
October 2013 Northern Area Bedrock Groundwater Contour Map

Groundwater Periodic Monitoring Report for July to December 2013
Fort Wingate Depot Activity, McKinley County, New Mexico

Note: Elevation data from well TMW02 is not used to generate contours. Well screens for this well are not consistent with adjacent bedrock monitoring wells resulting in anomalous low water elevations.

0 500 1,000 1,500 2,000 ft
0 100 200 300 400 500 m
N

5.0 Groundwater Analytical Results

The groundwater quality parameters and laboratory analytical results for the fall 2013 sampling event are presented in Tables 5-1 through 5-8. Figures 5-1 through 5-5 are maps for the various groundwater contaminants identified at the FWDA. The laboratory data were reviewed and determined to be valid and suitable for the project objectives. The data quality evaluation (DQE) report is provided in Appendix C.

5.1 Northern Area Analytical Results

5.1.1 Water Quality Parameters

The water-quality parameter measurements collected in the field provide useful data for assessing general water quality and evaluating contaminant fate and transport. The stable parameter readings and drawdown measurements collected during well purging activities are presented in Table 5-1.

The specific conductance of groundwater is considered a proxy for total dissolved solids (TDS) concentration. For most groundwater, multiplying the specific conductance value in micro-Siemens per centimeter (µS/cm) by a factor of 0.55 to 0.75 yields an approximate TDS concentration in milligrams per liter (mg/L) (Hem, 1989). Groundwater specific conductance values ranged from 0.619 to 17.0 milli-Siemens per centimeter (mS/cm). Median values for groundwater from the Northern Area monitoring wells were 3.59 and 2.72 mS/cm in the alluvial and bedrock units, respectively. Calculating an approximate TDS concentration using the conversion factors presented above indicates that the groundwater of the Northern Area is brackish with median TDS concentration of greater than 1,500 mg/L.

Groundwater pH measurements ranged from 6.7 to 9.7, with two data points above 9.0 in the Northern Area bedrock monitoring wells. Median pH values were 7.77 and 8.27 in the Northern Area alluvial and bedrock groundwater units, respectively.

Dissolved oxygen is a measure of aerobic and anaerobic conditions in the water-bearing units. Dissolved oxygen values ranged from 0.0 to 7.8 mg/L, with median values of 0.53 and 0 mg/L for the alluvial and bedrock groundwater units, respectively. Low median values indicate that anaerobic conditions (<1 mg/L) are likely present in many areas of the FWDA. The dissolved oxygen measurements for samples collected using bailer techniques are considered to be somewhat elevated due to the introduction of a bailer into the water column.

The oxidation state for groundwater was measured as oxidation reduction potential (ORP) in a majority of wells and subsequently calculated as the redox potential (Eh). These values are a measure of electrical potential in the aquifer that can be used to determine the stability of contaminants in groundwater. Measurements of ORP were not collected at several wells during the last two days of sampling due to calibration failure of the Horiba field equipment. Since the calibration failures occurred during the final two days of sampling, there was insufficient time available to order replacement Horiba equipment and Hydrolab® field equipment was substituted for two of three field sampling teams. The available Hydrolab® field instruments were not equipped with ORP sensors. The Eh values were calculated from the instrument-specific ORP readings using a formula that accounts for the instrument calibration standard and location specific water temperature (Horiba, 2014; Matsushida, 1974). The formula used for the calculation and the Eh values are presented in Table 5-1.

The Eh values ranged from 434 to -90 milivolts (mV) across the monitoring area. Median values of Eh were 242 mV in alluvial aquifer wells and 66 mV in the bedrock wells, respectively.

5.1.2 Nitrate and Nitrite

Nitrate and nitrite were released at the FWDA due to historic activities relating to munitions storage and disposal. Nitrate is also a naturally occurring compound commonly detected in natural surface water and groundwater systems. Nitrate and nitrite were analyzed by EPA Method 9056 and reported as the nitrogen mass concentrations, nitrate-nitrogen and nitrite-nitrogen. Fort Wingate groundwater samples were previously

analyzed for nitrate and nitrite using EPA Method 300.0. Methods 9056 and 300.0 are considered parallel methods with slightly more conservative QA/QC requirements for Method 9056. Additionally, Method 9056 is covered under the DOD QSM and is included in the contracted laboratory's Environmental Laboratory Accreditation Program certification where Method 300.0 is not. Analytical results generated using Method 9056 are expected to be comparable to those generated using Method 300.0. A summary of the nitrate and nitrite analytical results is presented in Table 5-2.

Nitrate was detected in samples from 34 alluvial monitoring wells in the Northern Area. Concentrations of nitrate ranged from 0.098 J to 140 mg/L, and exceeded the EPA MCL of 10 mg/L in samples from 14 alluvial monitoring wells in the Northern Area. Nitrite was detected in six alluvial monitoring wells in the Northern Area, with concentrations ranging from 0.15 J to 0.72 mg/L. Groundwater nitrite concentrations did not exceeded the EPA MCL of 1 mg/L in any samples collected during the fall 2013 monitoring event. The highest nitrate concentrations in alluvial groundwater were found in the Workshop Area immediately downgradient of the TNT Leaching Beds (TMW40S and TMW03). Groundwater nitrate concentrations were also detected above the MCLs in multiple samples collected from wells in the Administrative Area. The extent of nitrate contamination downgradient (to the west) of the Administration Area has not been defined. Figure 5-1 shows the groundwater nitrate and nitrite concentration data for alluvial monitoring wells in the Northern Area.

Nitrate was detected in samples from eight bedrock monitoring wells in the Northern Area. Groundwater nitrate concentrations from bedrock monitoring wells ranged from 0.24 J to 88 mg/L and exceeded the EPA MCL in four wells. Nitrite was only detected in two groundwater samples from the bedrock monitoring wells at locations TMW32 and TMW40D at a concentrations of 0.79 J and 0.38 J mg/L respectively. The highest groundwater nitrate concentrations in the bedrock groundwater unit were found in the Workshop Area (TMW02) immediately downgradient of the TNT Leaching Beds. However, samples from three monitoring wells upgradient of the TNT Leaching Beds also had nitrate concentrations that exceeded the EPA MCL. Figure 5-2 shows the groundwater nitrate and nitrite concentration data for bedrock monitoring wells in the Northern Area.

5.1.3 Explosive Compounds

Explosive compounds were released to the environment at the FWDA due to historic munitions storage, maintenance, and disposal activities. Groundwater samples were analyzed for explosives using EPA Method SW8330B. A summary of the explosive analytical results is presented in Table 5-3. To date, no regulatory cleanup standards have been established for explosive compounds at the FWDA. The EPA Region 6 Human Health Tap Water Screening Levels are presented in Table 5-3 as reference screening criteria.

Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) is a recognized groundwater explosive compound of interest and is detected at concentrations an order of magnitude higher than screening criteria in several samples from alluvial monitoring wells. Highest concentrations of RDX were detected downgradient of the TNT Leaching Beds in wells TMW03 and TMW40S at concentrations of 450 J and 1300 µg/L respectively. Explosives contaminants concentrations are below detection limits or present at significantly lower concentrations in the bedrock aquifer. The compound RDX was detected in the sample from bedrock well TMW36 at 2.4 J µg/L. This detection was the only explosive compound found to exceed screening levels in samples from bedrock wells. Explosives were also detected at concentrations below 1 µg/L in samples from bedrock monitoring wells TMW02, TMW19 and TMW30.The RDX plume is well defined. Groundwater explosive concentration data are shown in Figures 5-3 and 5-4 for the alluvial and bedrock groundwater units, respectively.

Two explosives compounds other than RDX were detected above screening levels. Nitrobenzene, a breakdown product of TNT was also detected at concentrations above the Human Health Tap Water Screening Levels in one alluvial well and one bedrock well downgradient of the TNT Leaching beds. The compound 2,4-dinitrotoluene, is also a breakdown product of TNT and was detected above the Human Health Tap Water Screening Levels in one alluvial well and one bedrock well downgradient of the TNT Leaching beds. Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX) is the only other explosive compound detected in groundwater samples at significant concentrations, however, all detections were at concentrations below screening levels.

The following explosive compounds were detected in groundwater samples from alluvial and bedrock monitoring wells collected during the fall 2013 monitoring event (the maximum concentrations are shown in parentheses):

- 1,3,5-trinitrobenzene (2.5 J µg/L at TMW04), detected in two samples
- 1,3-dinitrobenzene (0.11 J µg/L at TMW36), detected in two samples
- 2,6-dinitrotoluene (0.45 J µg/L at TMW04), detected in two samples
- 2-amino-4,6-dinitrotoluene (3.4 J µg/L at TMW04), detected in eight samples
- 2-nitrotoluene (0.12 J µg/L at TMW30)
- 3-nitrotoluene (0.13 J µg/L at TMW19)
- 4-amino-4,6-dinitrotoluene (3.4 J µg/L at TMW03), detected in five samples
- RDX (1300 µg/L at TMW40S), detected in seven samples
- Nitrobenzene (1.5 J µg/L at TMW40S), detected in two samples
- HMX (36 µg/L at TMW40S,) detected in three samples

5.1.4 Perchlorate

Groundwater samples were analyzed for perchlorate by EPA Method 6860. A summary of analytical results is presented in Table 5-4. Groundwater perchlorate-concentration data for the Northern Area are shown in Figures 5-3 and 5-4. The regulatory screening level for perchlorate is 6 µg/L, as defined in the FWDA RCRA Permit. The highest perchlorate concentrations were found in groundwater samples collected from bedrock monitoring wells in the Workshop Area. The extent of perchlorate groundwater contamination has not been completely defined to date.

Perchlorate was detected in groundwater samples from 25 alluvial monitoring wells in the Northern Area with concentrations ranging from 0.0088 J to 800 µg/L. Perchlorate was detected in groundwater samples from eight bedrock wells with concentrations ranging from 4.7 to 4,400 µg/L. Overall, the regulatory screening level was exceeded in groundwater samples collected from five alluvial wells and seven bedrock wells.

The higher perchlorate concentrations detected in groundwater samples collected from bedrock monitoring wells suggest that the source area of perchlorate contamination is located upgradient in a recharge area for the bedrock groundwater unit. Based on site history and analytical results from previous investigations, the source area for perchlorate contamination is believed to be SWMU 27, Building 528 Complex (USACE, 2011b). The perchlorate contamination identified in the alluvial water-bearing unit is collocated with the bedrock groundwater plume and is believed to result from a common source.

5.1.5 Volatile Organic Compounds

Groundwater contamination from volatile organic compounds (VOCs) above screening levels is limited to a small number of shallow alluvial monitoring wells in the Administration Area. The detected VOCs are primarily associated with chlorinated solvents, petroleum fuels, and their breakdown products. Groundwater samples were analyzed for VOCs by EPA Method SW8260B. A summary of the VOC analytical results is presented in Table 5-5. Nine VOCs were detected in one or more groundwater samples collected during the fall 2013 monitoring event. Figure 5-5 shows the VOC data for samples collected in the Northern Area.

The only VOC detected in groundwater samples above regulatory cleanup standards was the chlorinated solvent 1,2-dichloroethane. Groundwater samples collected from three alluvial monitoring wells in the vicinity to a former fueling facility had concentrations above the EPA MCL of 5 µg/L. The wells, MW18D, MW20, and TMW33, had 1,2-dichloroethane concentrations of 80 J, 6.1, and 37 µg/L respectively. No other VOCs were detected in groundwater samples above cleanup standards or screening levels.

Overall, VOCs were detected in 18 alluvial wells and seven bedrock wells of the Northern Area. The majority of VOC detections at locations away from the central portion of the Administrative Area were sporadic and at concentrations below regulatory screening levels. The following VOCs were detected in samples collected during the fall 2013 monitoring event in the Northern Area (the maximum detected concentrations are shown in parentheses):

- 1,1,1-trichloroethane (2.7 µg/L at MW22S)
- 1,1-dichloroethane (0.76 J µg/L at MW22S)
- 1,1-dichloroethene (0.27 J µg/L at MW22S)
- 1,2-dichloroethane (80 J µg/L at MW18D), detected in six samples
- Acetone (21 µg/L at TMW28) detected in nine samples
- Carbon disulfide (6.2 µg/L at TMW47), detected in eight samples
- Chloroform (0.18 J µg/L at TMW49)
- Chloromethane (0.54 J µg/L at TMW17)
- Toluene (120 µg/L at TMW18), detected in five samples

5.1.6 Other Organic Compounds

Detections of organic compounds other than VOCs in groundwater samples from the FWDA are generally sporadic and at concentrations below screening levels. A summary of the detected organic compounds other than VOCs is presented in Table 5-6.

No pesticides, as analyzed by EPA Method SW8081A, were detected in any groundwater samples.

Petroleum hydrocarbons, as analyzed by EPA Method SW8015C, were detected in several samples collected from wells in the Administration and Workshop Areas of the Northern Area. Overall, petroleum hydrocarbons were detected in samples from six alluvial wells, with no detections in bedrock wells. The highest concentrations occurred in shallow wells adjacent to the former fueling facility (190 J µg/L as diesel range organics in TMW33).

One semivolatile organic compound (SVOCs) was detected at concentrations above the screening level. The source of the 1,2-diphenylhydrazine is not clear. The compound was only detected in alluvial well TMW43 at a concentration of 0.22 J J µg/L. The compound is associated with historic use of dyes and current use in pharmaceutical chemicals. No other SVOCs were detected above screening levels. The compound 2,4-dinitrophenol may be a degradation product of TNT and was detected in three alluvial wells downgradient of the TNT Leaching Beds (TMW03, TMW22, and TWM40S) at concentrations below screening levels. Only SVOCs attributable to sampling and laboratory contamination were detected in more than three samples. The common plastic additive bis(2-ethylhexyl)phthalate which may be present in a variety of laboratory and sampling equipment (including sample tubing, pump, bailer, and laboratory equipment) was detected in samples from nine wells. Benzoic Acid is a naturally occurring organic compound that is present in some plants and excreted by many animal species, and thus may be introduced as a contaminant into water samples, or by natural processes in groundwater. Benzoic acid was detected in eight samples.

Detections of other SVOCs were sporadic (with each compound occurring in only three or fewer samples) and at concentrations below screening levels. Caprolactam was detected in samples from two wells and is a compound used to manufacture synthetic fibers, and may be introduced from bailing twine. Several phthalates used as plastic additives were also detected sporadically. The source of acetophenone (used as a fragrance and food additive), and polyaeromatic hydrocarbons is not clear.

The maximum detected concentrations of petroleum hydrocarbons and SVOCs detected in more than one sample are as follows:

- Diesel range organics (190 J µg/L at TMW33), detected in five samples
- Gasoline range organics (37 µg/L at MW18D), detected in two samples
- 2,4-Dinitrophenol (22 J µg/L at TMW22 and TMW41), detected in three samples
- Acetophenone (3.3 J µg/L at TMW18), detected in three samples
- Bis(2-ethylhexyl)phthalate (3.0 J µg/L at MW23), detected in nine samples
- Caprolactam (83 µg/L at TMW39S), detected in two samples
- Diethyl phthalate (1.0 J µg/L at TMW36), detected in two samples

5.1.7 Metals

Metals were collected and analyzed as total and dissolved forms at the FWDA. Groundwater samples were analyzed for metals by EPA Methods SW6010C, SW6020A, and SW7470A. Total metals analysis has been shown to be affected by sediment and the method of well purging, and does not produce representative groundwater metals concentrations at many sites. A summary of detections for dissolved metals are presented in Table 5-7. A summary of detections for total metals are presented in Table 5-8, but the results are not discussed in the report.

Dissolved aluminum, arsenic, iron, manganese, and selenium were detected in multiple groundwater samples above regulatory cleanup levels. Since background groundwater concentrations have not yet been established for the FWDA, it cannot clearly be demonstrated if the detected concentrations are a result of natural conditions or anthropogenic sources of contamination. Therefore, no contaminant plume maps were created for the metals data.

5.2 OB/OD Area Analytical Results

No monitoring was performed in the OB/OD area during this period. Historic analytical results are presented for OB/OD area wells from samples collected during the three previous monitoring events from April 2012 through April 2013 in Tables 5-2 to 5-8.

5.3 Field Variances from the Work Plan

A variance from the GWMP occurred during the laboratory analysis of samples for VOCs and SVOCs. The laboratory analyzed all samples for VOCs using Method SW8260B instead of the newer Method SW8260C and for SVOCs using Method SW8270C instead of the newer Method SW8270D. There are a number of differences between versions of SW8260B and SW8260C as well as SW8270C and SW8270D. However, the overall impact from the differences to data quality is considered negligible. In part, the differences are negligible because the updates to remove dated practices would be superseded by the more conservative requirements of the Department of Defense (DOD) Quality Systems Manual (QSM) which is required for the project specific Quality Assurance Project Plan (QAPP).

An example of negligible criteria that has been updated is the use of System Performance Check Compounds (SPCCs) and Calibration Check Compounds (CCCs). These two criteria have removed in the SW8260C and SW8270D version and replaced with a table of compounds with more specific response factor suggestions. The compound response factors are recommendations only. An example of criteria that maybe less conservative in the newest version of either method than that of the DOD QSM is the calibration control of the instrument. The required method control of the calibration is somewhat more liberal in both the SW8260C and SW8270D versions than it was in the SW8260B and SW8270C versions and all are less conservative than the DOD QSM. The laboratory standard practice is to use the DOD QSM when different from the method.

Overall, there are no changes to the versions of the methods that are a significant concern to data quality, especially when considering the compliance factor of meeting the DOD QSM. A request will be submitted to the laboratory to utilize Methods SW8260C and SW8270D for all future VOC and SVOC analyses.

5.4 New Findings

No new findings were identified from the fall 2013 monitoring results.

TABLE 5-1

Fall 2013 Stable Groundwater Parameters (Page 1 of 2)

Groundwater Periodic Monitoring Report July through December 2013

Location	Groundwater Zone	Screen Interval (ft bgs)	Date	Conductivity (mS/cm)	DO (mg/L)	ORP (mV)	Eh (mV)	pH (pH Units)	Temperature (degrees C)	Turbidity (NTU)	Drawdown (feet)
BGMW01	North Alluvial	12.5 - 32.5	11/8/2013	3.16	0.43	-12	199	7.40	18.03	0.84	0.48
BGMW02	North Alluvial	13.5 - 33.5	11/5/2013	5.03	2.65	159	373	7.77	12.89	3.04	0.09
BGMW03	North Alluvial	8.5 - 28.5	11/4/2013	3.44	2.02	220	434	7.77	12.93	166.5	N/A
FW31	North Alluvial	10.0 - 50.0	10/31/2013	2.23	0.57	66	280	8.11	13.39	5.42	N/A
FW35	North Alluvial	10.0 - 30.0	10/29/2013	3.73	6.22	33	247	7.43	13.81	253.1	N/A
MW01	North Alluvial	33.6 - 53.6	10/30/2013	3.69	0.0	-4	210	7.83	13.83	468.8	N/A
MW02	North Alluvial	37.0 - 47.0	10/30/2013	2.47	0.0	-3	211	7.20	14.23	640.4	N/A
MW03	North Alluvial	43.0 - 53.0	11/5/2013	5.06	0.0	9	224	7.22	12.43	0.42	0.09
MW18D	North Alluvial	47.0 - 57.0	11/1/2013	9.39	0.0	-82	133	7.36	12.03	0.80	1.10
MW20	North Alluvial	47.0 - 57.0	11/8/2013	5.89	0.47	-36	177	6.87	14.42	44.17	0.20
MW22D	North Alluvial	47.0 - 57.0	11/1/2013	5.97	1.23	195	409	7.24	13.92	0.0	0.00
MW22S	North Alluvial	31.0 - 41.0	10/29/2013	5.6	3.92	180	394	7.10	14.28	>1100	N/A
MW23	North Alluvial	63.5 - 133.5	11/7/2013	1.71	2.77	43	258	7.93	12.31	208.7	N/A
MW24	North Alluvial	16.0 - 66.0	11/7/2013	1.32	0.03	-38	177	7.56	11.93	2.12	N/A
SMW01	North Alluvial	29.9 - 49.9	11/8/2013	2.59	0.16	NM	NM	7.95	12.42	0.71	0.67
TMW01	North Alluvial	44.0 - 59.0	11/6/2013	2.92	0.41	NM	NM	7.36	13.22	0.62	0.00
TMW03	North Alluvial	49.8 - 69.8	11/4/2013	4.24	0.0	123	338	7.84	12.46	3.33	0.07
TMW04	North Alluvial	50.0 - 70.0	11/4/2013	3.84	4.89	90	303	8.11	15.40	2.01	0.14
TMW06	North Alluvial	45.0 - 55.0	11/7/2013	3.60	0.46	NM	NM	7.73	13.56	0.30	0.18
TMW07	North Alluvial	65.0 - 75.0	10/29/2013	5.36	4.18	103	318	6.72	12.67	39	N/A
TMW08	North Alluvial	30.0 - 60.0	11/8/2013	14.80	0.0	-11	203	7.12	13.61	17.00	0.19
TMW10	North Alluvial	28.0 - 58.0	11/1/2013	8.42	0.1	0.0	214	7.79	13.27	0.00	0.05
TMW11	North Alluvial	55.0 - 80.0	11/5/2013	2.26	0.22	-108	107	8.25	11.91	0.06	0.06
TMW13	North Alluvial	60.7 - 70.7	11/5/2013	2.14	1.06	-76	139	8.06	12.29	0.05	0.01
TMW15	North Alluvial	56.0 - 71.0	11/6/2013	2.21	0.87	-101	113	7.71	13.49	0.42	0.00
TMW21	North Alluvial	48.0 - 58.0	11/7/2013	2.57	0.49	NM	NM	7.82	18.74	0.40	0.14
TMW22	North Alluvial	52.0 - 62.0	10/28/2013	3.39	1.92	54	266	8.15	15.94	102.9	N/A
TMW23	North Alluvial	42.5 - 52.5	10/28/2013	3.06	1.58	18	231	8.07	15.68	97.31	N/A
TMW24	North Alluvial	42.5 - 52.5	11/8/2013	3.58	0.60	NM	NM	7.67	15.89	0.90	0.59
TMW25	North Alluvial	42.5 - 52.5	11/4/2013	3.70	0.28	-113	100	7.88	14.76	0.73	0.19
TMW26	North Alluvial	45.0 - 55.0	11/4/2013	3.49	0.0	-70	144	7.96	12.99	38.54	0.00
TMW27	North Alluvial	60.0 - 70.0	11/5/2013	1.29	0.07	-168	47	7.71	11.69	0.48	0.14
TMW28	North Alluvial	37.0 - 47.0	11/5/2013	2.41	0.28	-76	139	7.56	11.45	2.12	0.08
TMW29	North Alluvial	49.0 - 59.0	10/30/2013	2.38	4.89	173	389	7.49	11.08	>1100	N/A
TMW31S	North Alluvial	50.0 - 60.0	10/29/2013	2.7	2.50	38	251	7.90	14.62	293.8	N/A
TMW33	North Alluvial	37.0 - 57.0	10/29/2013	9.78	1.08	30	242	7.80	17.13	347	N/A
TMW34	North Alluvial	37.0 - 57.0	11/1/2013	5.98	0.0	47	260	7.09	14.83	3.31	0.02
TMW35	North Alluvial	35.0 - 55.0	11/4/2013	5.20	0.27	51	265	7.43	13.92	0.02	0.00
TMW39S	North Alluvial	32.5 - 52.5	11/4/2013	3.82	5.40	205	419	8.16	13.71	157.9	N/A

TABLE 5-1

Fall 2013 Stable Groundwater Parameters (Page 2 of 2)

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Location	Groundwater Zone	Screen Interval (ft bgs)	Date	Conductivity (mS/cm)	DO (mg/L)	ORP (mV)	Eh (mV)	pH (pH Units)	Temperature (degrees C)	Turbidity (NTU)	Drawdown (feet)
TMW40S	North Alluvial	50.0 - 60.0	10/29/2013	4.04	3.54	142	357	8.14	12.79	>1100	N/A
TMW41	North Alluvial	55.5 - 65.5	10/29/2013	4.02	3.31	85	299	8.38	13.67	141.6	N/A
TMW43	North Alluvial	58.0 - 78.0	10/30/2013	2.24	0.76	158	373	7.28	12.81	0.14	0.05
TMW44	North Alluvial	43.5 - 63.5	10/28/2013	2.99	1.31	51	263	8.09	16.43	117.1	N/A
TMW45	North Alluvial	38.5 - 58.5	11/7/2013	3.60	0.12	-119	96	7.63	12.33	29.42	N/A
TMW46	North Alluvial	38.5 - 58.5	10/29/2013	5.00	0.96	4	217	8.06	15.31	76.26	0.06
TMW47	North Alluvial	82.5 - 102.5	11/7/2013	2.27	0.0	-176	38	8.60	13.79	1.88	1.16
TMW02	North Bedrock	67.9 - 81.9	11/4/2013	4.34	0.0	70	283	8.22	14.71	1.66	0.83
TMW14A	North Bedrock	94.25 - 109.25	11/6/2013	1.74	0.95	-191	24	8.62	11.83	1.74	0.26
TMW16	North Bedrock	123.0 - 138.0	10/30/2013	1.79	0.0	-256	-42	8.6	12.86	50.36	N/A
TMW17	North Bedrock	112.0 - 127.0	11/6/2013	1.67	1.33	-204	7.8	9.29	16.69	17.42	0.00
TMW18	North Bedrock	150.0 - 160.0	10/30/2013	2.73	0.0	-147	67	9.65	13.06	2.72	N/A
TMW19	North Bedrock	169.0 - 184.0	10/30/2013	2.71	0.0	-305	-90	8.14	12.61	60.41	N/A
TMW30	North Bedrock	35.0 - 45.0	10/29/2013	2.13	7.79	32	246	8.15	14.10	17.10	N/A
TMW31D	North Bedrock	77.0 - 107.0	11/6/2013	2.59	1.04	7	222	7.52	12.29	2.42	0.02
TMW32	North Bedrock	117.0 - 137.0	11/7/2013	3.37	0.57	-210	5.5	7.93	11.44	0.57	0.09
TMW36	North Bedrock	132.0 - 152.0	11/4/2013	2.86	0.0	-193	22	8.31	12.25	31.21	N/A
TMW37	North Bedrock	88.0 - 108.0	10/30/2013	2.32	0.0	-221	-6.6	8.37	13.03	10.82	N/A
TMW38	North Bedrock	118.9 - 158.9	10/31/2013	3.54	0.0	-150	66	8.50	11.21	0.00	1.12
TMW39D	North Bedrock	70.0 - 100.0	11/6/2013	3.46	0.36	-7	208	8.38	12.76	1.87	0.04
TMW40D	North Bedrock	135.0 - 155.0	11/7/2013	2.99	0.0	-147	66	8.14	14.49	0.37	0.04
TMW48	North Bedrock	71.0 - 91.0	10/31/2013	2.51	0.0	88	303	7.51	11.77	3.74	0.02
TMW49	North Bedrock	40.0 - 60.0	11/6/2013	2.80	3.99	38	254	7.59	10.67	0.67	0.81

Acronyms and Abbreviations

bgs: below ground surface

C: Celsius

DO: dissolved oxygen

Drawdown is measured as the change in water level from initial measurement to final field reading on the day of well purging

ft: foot/feet

mg/L: milligrams per liter

mS/cm: microsiemens per centimeter

mV: millivolts

N/A: Not applicable. Drawdown measurements are not applicable for casing volume purging method

NTU: nephelometric turbidity units

ORP: oxygen reduction potential

pH: hydrogen (ion) concentration

Eh: Redox potential

Note: Eh is calculated from the ORP field reading and the water temperature using manufacturer specifications. The formula for conversion of ORP to Eh is as follows:

$Eh = ORP_{measured} + Eh_{reference} = ORP_{measured} + 206 - 0.7*(Temperature - 25)$

Sources: Horiba, 2014 and Matsushita, 1974

TABLE 5-2

Summary of Nitrate-nitrogen and Nitrite-nitrogen Analytical Detections (Page 1 of 7)

Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	Nitrate-N (mg/L)		Nitrite-N (mg/L)	
					EPA Method 9056	EPA Method 300.0	EPA Method 9056	EPA Method 300.0
				Regulatory Limits	[a]10	[a]10	[b]1	[b]1
BGMW01	BGMW01102013	Normal	North Alluvial	11/8/2013	0.20 U		0.20 U	
	BGMW01042013	Normal	North Alluvial	4/2/2013	0.20 U		0.20 U	
	BGMW01102012	Normal	North Alluvial	10/26/2012	0.20 U		0.20 U	
	BGMW01042012	Normal	North Alluvial	4/25/2012		1.9		0.054 U
BGMW02	BGMW02102013	Normal	North Alluvial	11/5/2013	**13**		0.20 U	
	BGMW02042013	Normal	North Alluvial	4/3/2013	**12 J**		0.20 R	
	BGMW02102012	Normal	North Alluvial	10/30/2012	**12**		0.20 U	
	BGMW02042012	Normal	North Alluvial	4/25/2012		**18**		0.054 U
BGMW03	BGMW03102013	Normal	North Alluvial	11/5/2013	3.8		0.20 UJ	
	DBW03102013	Duplicate	North Alluvial	11/5/2013	4.7		0.15 J	
	DBW03042013	Duplicate	North Alluvial	4/8/2013	4.2		0.20 U	
	BGMW03042013	Normal	North Alluvial	4/8/2013	4.1		0.20 U	
	BGMW03102012	Normal	North Alluvial	10/31/2012	5.8		0.11 J	
	BGMW03042012	Normal	North Alluvial	4/24/2012		8.3		0.35
FW31	FW31102013	Normal	North Alluvial	11/1/2013	0.098 J		0.10 U	
	FW31042013	Normal	North Alluvial	4/12/2013	0.24 J		0.10 UJ	
	FW31102012	Normal	North Alluvial	11/5/2012	0.27 J		0.10 U	
	FW31042012	Normal	North Alluvial	4/20/2012		0.29 J		0.054 U
FW35	FW35102013	Normal	North Alluvial	10/29/2013	0.28 J		0.10 UJ	
	FW35042013	Normal	North Alluvial	4/11/2013	0.27 J		0.20 U	
	FW35102012	Normal	North Alluvial	11/7/2012	0.67 J		0.20 U	
	FW35042012	Normal	North Alluvial	4/20/2012		0.99		0.054 U
MW01	MW01102013	Normal	North Alluvial	11/1/2013	7.3		0.10 U	
	MW01042013	Normal	North Alluvial	4/15/2013	6.7		0.20 U	
	MW01102012	Normal	North Alluvial	10/24/2012	2.9		0.20 U	
	MW01042012	Normal	North Alluvial	4/20/2012		6.4		0.054 U
MW02	MW02102013	Normal	North Alluvial	11/1/2013	1.6		0.10 U	
	MW02042013	Normal	North Alluvial	4/12/2013	1.3		0.10 U	
	MW02102012	Normal	North Alluvial	10/24/2012	0.39 J		0.10 U	
	MW02042012	Normal	North Alluvial	4/23/2012		1.4		0.054 U
MW03	MW03102013	Normal	North Alluvial	11/5/2013	9.6		0.20 U	
	MW03042013	Normal	North Alluvial	4/4/2013	9.1		0.20 U	
	MW03102012	Normal	North Alluvial	10/23/2012	9.7		0.20 U	
	MW03042012	Normal	North Alluvial	4/20/2012		**10**		0.054 U
	MW03042012DUP	Duplicate	North Alluvial	4/20/2012		9.9		0.054 U
MW18D	MW18D102013	Normal	North Alluvial	11/1/2013	0.20 U		0.20 U	
	MW18D042013	Normal	North Alluvial	4/17/2013	0.31 J		0.50 U	
	MW18D102012	Normal	North Alluvial	11/8/2012	0.50 U		0.50 U	
	MW18D042012	Normal	North Alluvial	4/19/2012		0.048 U		0.054 U
MW20	MW20102013	Normal	North Alluvial	11/8/2013	**11**		0.62 J	
	DW20042013	Duplicate	North Alluvial	4/10/2013	**15**		0.95 J	
	MW20042013	Normal	North Alluvial	4/10/2013	**15**		0.93 J	
	MW20102012	Normal	North Alluvial	10/29/2012	**17**		**4.7 J**	
	MW20042012	Normal	North Alluvial	4/24/2012		**23**		**4.3**
MW22D	DMW22D102013	Duplicate	North Alluvial	11/1/2013	**26 J**		0.20 U	
	MW22D102013	Normal	North Alluvial	11/1/2013	**26 J**		0.20 U	
	MW22D042013	Normal	North Alluvial	4/9/2013	**24**		0.20 U	
	MW22D102012	Normal	North Alluvial	11/8/2012	**24 J**		0.20 U	
	MW22D042012	Normal	North Alluvial	4/19/2012		**23**		0.054 U

TABLE 5-2
Summary of Nitrate-nitrogen and Nitrite-nitrogen Analytical Detections (Page 2 of 7)
Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	Nitrate-N (mg/L)		Nitrite-N (mg/L)	
					EPA Method 9056	EPA Method 300.0	EPA Method 9056	EPA Method 300.0
				Regulatory Limits	[a]10	[a]10	[b]1	[b]1
MW22S	MW22S102013	Normal	North Alluvial	10/31/2013	**19**		0.20 U	
	MW22S042013	Normal	North Alluvial	4/11/2013	**20**		0.20 U	
	MW22S102012	Normal	North Alluvial	10/25/2012	**20**		0.20 U	
	MW22S042012	Normal	North Alluvial	4/20/2012		**22**		0.054 U
MW23	MW23102013	Normal	North Alluvial	11/8/2013	0.10 U		0.10 U	
	DMW23102013	Duplicate	North Alluvial	11/8/2013	0.10 U		0.10 U	
	DMW23042013	Duplicate	North Alluvial	4/8/2013	0.10 U		0.10 U	
	MW23042013	Normal	North Alluvial	4/8/2013	0.10 U		0.10 U	
	MW23102012DUP	Duplicate	North Alluvial	10/31/2012	0.10 U		0.10 U	
	MW23102012	Normal	North Alluvial	10/31/2012	0.10 U		0.10 U	
	MW23042012	Normal	North Alluvial	4/26/2012		0.42		0.054 U
	MW23042012DUP	Duplicate	North Alluvial	4/26/2012		0.36		0.054 U
SMW01	SMW01102013	Normal	North Alluvial	11/8/2013	0.10 U		0.10 U	
	SMW01042013	Normal	North Alluvial	4/12/2013	0.055 J		0.10 UJ	
	SMW01102012	Normal	North Alluvial	11/1/2012	0.10 U		0.10 U	
	SMW01042012	Normal	North Alluvial	4/20/2012		0.048 U		0.054 U
TMW01	TMW01102013	Normal	North Alluvial	11/6/2013	9.3		0.10 U	
	TMW01042013	Normal	North Alluvial	4/15/2013	8.4		0.10 U	
	TMW01102012	Normal	North Alluvial	10/31/2012	7.5		0.10 U	
	TMW01042012	Normal	North Alluvial	4/24/2012		8.8		0.054 U
TMW03	TMW03102013	Normal	North Alluvial	11/4/2013	**130**		0.72 J	
	TMW03042013	Normal	North Alluvial	4/16/2013	**140 J**		0.82 J	
	TMW03102012	Normal	North Alluvial	11/7/2012	**140**		0.33 J	
	TMW03042012	Normal	North Alluvial	4/20/2012		**150**		0.58
	TMW03102011	Normal	North Alluvial	10/14/2011		**160**		0.49
TMW04	TMW04102013	Normal	North Alluvial	11/4/2013	**43**		0.20 U	
	TMW04042013	Normal	North Alluvial	4/16/2013	**48**		0.20 U	
	TMW04102012	Normal	North Alluvial	11/7/2012	**45**		0.20 U	
	TMW04042012	Normal	North Alluvial	4/25/2012		8.1		0.054 U
TMW06	TMW06102013	Normal	North Alluvial	11/7/2013	**14**		0.20 U	
	TMW06042013	Normal	North Alluvial	4/15/2013	**13**		0.20 U	
	TMW06102012	Normal	North Alluvial	11/8/2012	**15**		0.20 U	
	TMW06042012	Normal	North Alluvial	4/18/2012		**15**		0.054 U
TMW07	TMW07102013	Normal	North Alluvial	10/29/2013	0.10 UJ		0.10 UJ	
	TMW07042013	Normal	North Alluvial	4/8/2013	0.16 J		0.20 U	
	TMW07102012	Normal	North Alluvial	11/6/2012	0.12 J		0.20 U	
	TMW07042012	Normal	North Alluvial	4/20/2012		0.21 J		0.054 U
TMW08	TMW08102013	Normal	North Alluvial	11/8/2013	4.4 J		1.0 U	
	DTW08042013	Duplicate	North Alluvial	4/3/2013	4.5 J		1.0 U	
	TMW08042013	Normal	North Alluvial	4/3/2013	4.6		0.50 U	
	TMW08102012	Normal	North Alluvial	10/24/2012	**34**		1.0 U	
	TMW08042012	Normal	North Alluvial	4/19/2012		4.6		0.054 U
TMW10	TMW10102013	Normal	North Alluvial	11/1/2013	0.25 J		0.50 U	
	TMW10042013	Normal	North Alluvial	4/16/2013	0.37 J		0.50 UJ	
	TMW10102012	Normal	North Alluvial	10/24/2012	0.50 U		0.50 U	
	TMW10102012DUP	Duplicate	North Alluvial	10/24/2012	0.50 U		0.50 U	
	TMW10042012	Normal	North Alluvial	4/24/2012		0.21 J		0.054 U
	TMW101042012DUP	Duplicate	North Alluvial	4/24/2012		0.22		0.054 U

TABLE 5-2

Summary of Nitrate-nitrogen and Nitrite-nitrogen Analytical Detections (Page 3 of 7)

Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	Nitrate-N (mg/L)		Nitrite-N (mg/L)	
					EPA Method 9056	EPA Method 300.0	EPA Method 9056	EPA Method 300.0
				Regulatory Limits	[a]10	[a]10	[b]1	[b]1
TMW11	TMW11102013	Normal	North Alluvial	11/5/2013	3.5		0.10 U	
	TMW11042013	Normal	North Alluvial	4/9/2013	4.7		0.10 U	
	TMW11102012	Normal	North Alluvial	11/9/2012	4.4		0.10 U	
	TMW11102012DUP	Duplicate	North Alluvial	11/9/2012	4.41		0.10 U	
	TMW11042012	Normal	North Alluvial	4/20/2012		5.2		0.054 U
TMW13	TMW13102013	Normal	North Alluvial	11/5/2013	0.10 U		0.10 U	
	TMW13042013	Normal	North Alluvial	4/17/2013	1.5		0.10 U	
	TMW13102012	Normal	North Alluvial	11/8/2012	1.6		0.10 U	
	TMW13102012DUP	Duplicate	North Alluvial	11/8/2012	1.59		0.10 U	
	TMW13042012	Normal	North Alluvial	4/23/2012		1.7		0.054 U
TMW21	TMW21102013	Normal	North Alluvial	11/7/2013	8.8		0.10 U	
	TMW21042013	Normal	North Alluvial	4/16/2013	8.3		0.10 U	
	TMW21102012	Normal	North Alluvial	11/8/2012	8.7		0.10 U	
	TMW21042012	Normal	North Alluvial	4/17/2012		7.8		0.054 U
TMW22	TMW22102013	Normal	North Alluvial	10/29/2013	**12 J**		0.10 U	
	TMW22042013	Normal	North Alluvial	4/12/2013	**11 J**		0.20 UJ	
	TMW22102012	Normal	North Alluvial	11/6/2012	**10**		0.20 U	
	TMW22042012	Normal	North Alluvial	4/18/2012		**11**		0.054 U
TMW23	TMW23102013	Normal	North Alluvial	10/29/2013	**32**		0.69 J	
	TMW23042013	Normal	North Alluvial	4/8/2013	**31**		0.20 U	
	TMW23102012	Normal	North Alluvial	11/6/2012	**32**		0.20 U	
	TMW23042012	Normal	North Alluvial	4/24/2012		**32**		0.054 U
TMW24	TMW24102013	Normal	North Alluvial	11/8/2013	0.20 U		0.20 U	
	TMW24042013	Normal	North Alluvial	4/4/2013	0.20 U		0.20 U	
	TMW24102012	Normal	North Alluvial	10/31/2012	0.20 U		0.20 U	
	TMW24042012	Normal	North Alluvial	4/23/2012		0.048 U		0.054 U
TMW25	TMW25102013	Normal	North Alluvial	11/4/2013	0.47 J		0.20 U	
	TMW25042013	Normal	North Alluvial	4/16/2013	0.59 J		0.20 U	
	TMW25102012	Normal	North Alluvial	11/1/2012	0.54 J		0.20 U	
	TMW25042012	Normal	North Alluvial	4/17/2012		0.67		0.054 U
TMW29	TMW29102013	Normal	North Alluvial	10/31/2013	3.3		0.10 U	
	TMW29042013	Normal	North Alluvial	4/11/2013	5.1		0.10 U	
	TMW29102012	Normal	North Alluvial	10/26/2012	3.5		0.20 U	
	TMW29042012	Normal	North Alluvial	4/23/2012		3.7		0.054 U
TMW31S	TMW31S102013	Normal	North Alluvial	10/30/2013	7.7		0.10 U	
	TMW31S042013	Normal	North Alluvial	4/11/2013	7.8		0.10 U	
	TMW31S102012DUP	Duplicate	North Alluvial	11/5/2012	7.6		0.10 U	
	TMW31S102012	Normal	North Alluvial	11/5/2012	7.9		0.10 U	
	TMW31S042012	Normal	North Alluvial	4/19/2012		7.7		0.054 U
TMW33	TMW33102013	Normal	North Alluvial	10/30/2013	0.27 U		0.50 U	
	TMW33042013	Normal	North Alluvial	4/17/2013	0.29 U		0.50 U	
	TMW33102012	Normal	North Alluvial	10/26/2012	0.29 J		0.50 U	
	TMW33102012DUP	Duplicate	North Alluvial	10/26/2012	0.28		0.50 U	
	TMW33042012	Normal	North Alluvial	4/19/2012		0.048 U		0.054 U
TMW34	DTW34102013	Duplicate	North Alluvial	11/1/2013	**55 J**		0.20 U	
	TMW34102013	Normal	North Alluvial	11/1/2013	**57 J**		0.10 U	
	TMW34042013	Normal	North Alluvial	4/10/2013	**50**		0.20 U	
	TMW34-102012	Normal	North Alluvial	10/23/2012	**50**		0.20 U	
	TMW34042012	Normal	North Alluvial	4/24/2012		**50**		0.054 U

TABLE 5-2

Summary of Nitrate-nitrogen and Nitrite-nitrogen Analytical Detections (Page 4 of 7)

Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	Nitrate-N (mg/L)		Nitrite-N (mg/L)	
					EPA Method 9056	EPA Method 300.0	EPA Method 9056	EPA Method 300.0
				Regulatory Limits	[a]10	[a]10	[b]1	[b]1
TMW35	TMW35102013	Normal	North Alluvial	11/4/2013	**15**		0.20 U	
	DTW35042013	Duplicate	North Alluvial	4/9/2013	**16 J**		0.20 UJ	
	TMW35042013	Normal	North Alluvial	4/9/2013	**15**		0.20 U	
	TMW35-102012	Normal	North Alluvial	10/23/2012	**17**		0.20 U	
	TMW35042012	Normal	North Alluvial	4/23/2012		**20**		0.054 U
TMW39S	TMW39S102013	Normal	North Alluvial	11/5/2013	8.4		0.20 U	
	TMW39S042013	Normal	North Alluvial	4/11/2013	8.8		0.20 U	
	TMW39S102012	Normal	North Alluvial	11/1/2012	8.1		0.20 U	
	TMW39S042012	Normal	North Alluvial	4/23/2012		8.6		0.054 U
TMW40S	TMW40S102013	Normal	North Alluvial	10/31/2013	**140**		0.22 J	
	TMW40S042013	Normal	North Alluvial	4/12/2013	**110 J**		**1.4 J**	
	TMW40S102012	Normal	North Alluvial	11/6/2012	**130**		0.35 J	
	TMW40S042012	Normal	North Alluvial	4/24/2012		**100**		**1.6**
TMW41	TMW41102013	Normal	North Alluvial	10/30/2013	5.9		0.20 U	
	TMW41042013	Normal	North Alluvial	4/11/2013	6.5		0.20 U	
	TMW41102012	Normal	North Alluvial	11/6/2012	5.7		0.20 U	
	TMW41042012	Normal	North Alluvial	4/23/2012		6.2		0.054 U
TMW43	TMW43102013	Normal	North Alluvial	10/30/2013	9.4		0.10 U	
	TMW43042013	Normal	North Alluvial	4/16/2013	8.7		0.10 U	
	TMW43102012	Normal	North Alluvial	11/8/2012	8.2		0.10 U	
	TMW43042012	Normal	North Alluvial	4/24/2012		**10**		0.19 J
TMW44	TMW44102013	Normal	North Alluvial	10/29/2013	**48**		0.68 J	
	TMW44042013	Normal	North Alluvial	4/8/2013	**45**		0.20 U	
	TMW44102012	Normal	North Alluvial	11/6/2012	**45**		0.20 U	
	TMW44042012	Normal	North Alluvial	4/24/2012		**46**		0.054 U
TMW45	TMW45102013	Normal	North Alluvial	11/7/2013	0.20 U		0.20 U	
	TMW45042013	Normal	North Alluvial	4/4/2013	0.33 J		0.20 U	
	TMW45102012DUP	Duplicate	North Alluvial	11/6/2012	0.50 J		0.20 U	
	TMW45102012	Normal	North Alluvial	11/6/2012	0.48 J		0.20 U	
	TMW45042012	Normal	North Alluvial	4/24/2012		5.5		0.054 U
TMW46	TMW46102013	Normal	North Alluvial	10/30/2013	**86**		0.20 U	
	TMW46042013	Normal	North Alluvial	4/8/2013	**82**		0.20 U	
	TMW46102012	Normal	North Alluvial	11/6/2012	**87**		0.20 U	
	TMW46042012	Normal	North Alluvial	4/24/2012		**97**		0.054 U
TMW47	TMW47102013	Normal	North Alluvial	11/7/2013	0.10 U		0.10 U	
	TMW47042013	Normal	North Alluvial	4/15/2013	0.10 U		0.10 U	
	TMW47102013	Normal	North Alluvial	11/2/2012	**16**		0.10 U	
	TMW47042012	Normal	North Alluvial	4/25/2012		**18**		0.054 U
EMW02	[c] Well not sampled in fall 2013							
	EMW02042013	Normal	North Bedrock	4/16/2013	0.70 J		0.50 U	
	EMW02102012	Normal	North Bedrock	10/25/2012	0.97 J		0.50 U	
	EMW02102012DUP	Duplicate	North Bedrock	10/25/2012	1.08		0.50 U	
	EMW02042012	Normal	North Bedrock	4/23/2012		0.55		0.054 U
EMW04	[c] Well not sampled in fall 2013							
	EMW04042013	Normal	North Bedrock	4/15/2013	1.3 J		0.50 U	
	EMW04102012DUP	Duplicate	North Bedrock	10/25/2012	0.99 J		0.50 U	
	EMW04102012	Normal	North Bedrock	10/25/2012	0.50 UJ		0.50 U	
	EMW04042012	Normal	North Bedrock	4/25/2012		0.048 U		0.054 U

TABLE 5-2

Summary of Nitrate-nitrogen and Nitrite-nitrogen Analytical Detections (Page 5 of 7)

Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	Nitrate-N (mg/L)		Nitrite-N (mg/L)	
					EPA Method 9056	EPA Method 300.0	EPA Method 9056	EPA Method 300.0
				Regulatory Limits	[a]10	[a]10	[b]1	[b]1
TMW02	TMW02102013	Normal	North Bedrock	11/4/2013	**88**		0.20 U	
	TMW02042013	Normal	North Bedrock	4/16/2013	**89**		0.20 U	
	TMW02102012	Normal	North Bedrock	10/31/2012	**93**		0.20 U	
	TMW02042012	Normal	North Bedrock	4/24/2012		**99**		0.054 U
TMW15	TMW15102013	Normal	North Bedrock	11/6/2013	8.9		0.10 U	
	TMW15042013	Normal	North Bedrock	4/17/2013	7.2		0.10 U	
	TMW15102012	Normal	North Bedrock	11/8/2012	6.9		0.10 U	
	TMW15042012	Normal	North Bedrock	4/23/2012		5		0.054 U
TMW17	TMW17102013	Normal	North Bedrock	11/6/2013	0.10 U		0.10 U	
	TMW17042013	Normal	North Bedrock	4/9/2013	0.10 U		0.10 U	
	TMW17102012	Normal	North Bedrock	11/9/2012	0.16 J		0.10 U	
	TMW17042012	Normal	North Bedrock	4/24/2012		0.048 U		0.054 U
TMW18	TMW18102013	Normal	North Bedrock	10/31/2013	0.10 U		0.10 U	
	TMW18042013	Normal	North Bedrock	4/12/2013	0.10 U		0.10 U	
	TMW18102012	Normal	North Bedrock	11/5/2012	0.10 UJ		0.10 U	
	TMW18102012DUP	Duplicate	North Bedrock	11/5/2012	0.049 J		0.10 U	
	TMW18042012	Normal	North Bedrock	4/23/2012		0.048 U		0.054 U
TMW30	TMW30102013	Normal	North Bedrock	10/30/2013	**16**		0.10 U	
	TMW30042013	Normal	North Bedrock	4/11/2013	**13**		0.10 UJ	
	TMW30102012DUP	Duplicate	North Bedrock	11/5/2012	**15.5**		0.10 U	
	TMW30102012	Normal	North Bedrock	11/5/2012	**15**		0.10 U	
	TMW30042012	Normal	North Bedrock	4/20/2012		**15**		0.054 U
TMW31D	DTW31D102013	Duplicate	North Bedrock	11/6/2013	**15**		0.10 U	
	TMW31D102013	Normal	North Bedrock	11/6/2013	**15**		0.10 U	
	DTW31D042013	Duplicate	North Bedrock	4/10/2013	**15**		0.10 U	
	TMW31D042013	Normal	North Bedrock	4/10/2013	**15**		0.10 U	
	TMW31D102012	Normal	North Bedrock	10/30/2012	**16**		0.10 U	
	TMW31D042012	Normal	North Bedrock	4/23/2012		**16**		0.054 U
TMW32	TMW32102013	Normal	North Bedrock	11/7/2013	0.30 J		0.79 J	
	TMW32042013	Normal	North Bedrock	4/11/2013	0.41 J		**1**	
	TMW32102012DUP	Duplicate	North Bedrock	10/30/2012	1.8		0.13 J	
	TMW32102012	Normal	North Bedrock	10/30/2012	1.8		0.16 J	
	TMW32042012	Normal	North Bedrock	4/24/2012		0.048 U		0.054 U
TMW36	TMW36102013	Normal	North Bedrock	11/5/2013	0.10 U		0.10 U	
	TMW36042013	Normal	North Bedrock	4/15/2013	0.10 U		0.10 U	
	TMW36102012	Normal	North Bedrock	11/5/2012	0.055 J		0.10 U	
	TMW36042012	Normal	North Bedrock	4/20/2012		0.048 U		0.054 U
TMW37	TMW37102013	Normal	North Bedrock	10/31/2013	0.068 U		0.10 U	
	TMW37042013	Normal	North Bedrock	4/12/2013	0.20 UJ		0.20 UJ	
	TMW37102012	Normal	North Bedrock	11/2/2012	0.046 J		0.10 U	
	TMW37102012DUP	Duplicate	North Bedrock	11/2/2012	0.044		0.10 U	
	TMW37042012	Normal	North Bedrock	4/23/2012		0.048 U		0.054 U
	TMW37042012DUP	Duplicate	North Bedrock	4/23/2012		0.048		0.054

TABLE 5-2

Summary of Nitrate-nitrogen and Nitrite-nitrogen Analytical Detections (Page 6 of 7)

Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	Nitrate-N (mg/L)		Nitrite-N (mg/L)	
					EPA Method 9056	EPA Method 300.0	EPA Method 9056	EPA Method 300.0
				Regulatory Limits	[a]10	[a]10	[b]1	[b]1
TMW38	TMW38102013	Normal	North Bedrock	10/31/2013	0.20 U		0.20 U	
	TMW38042013	Normal	North Bedrock	4/11/2013	0.086 J		0.20 U	
	TMW38102012	Normal	North Bedrock	11/8/2012	0.10 U		0.10 U	
	TMW38042012	Normal	North Bedrock	4/20/2012		0.048 U		0.054 U
TMW39D	TMW39D102013	Normal	North Bedrock	11/6/2013	0.24 J		0.20 U	
	TMW39D042013	Normal	North Bedrock	4/10/2013	0.71 J		0.20 U	
	TMW39D102012	Normal	North Bedrock	10/31/2012	0.19 J		0.20 U	
	TMW39D102012DUP	Duplicate	North Bedrock	10/31/2012	0.193		0.20 U	
	TMW39D042012	Normal	North Bedrock	4/23/2012		7.6		0.054 U
TMW40D	TMW40D102013	Normal	North Bedrock	11/7/2013	0.10 U		0.38 J	
	TMW40D042013	Normal	North Bedrock	4/11/2013	2		0.36 J	
	TMW40D102012	Normal	North Bedrock	11/1/2012	1.7		1.1	
	TMW40D042012	Normal	North Bedrock	4/23/2012		2.1		0.34
TMW48	DTW48102013	Duplicate	North Bedrock	10/31/2013	**16**		0.10 U	
	TMW48102013	Normal	North Bedrock	10/31/2013	**16**		0.10 U	
	DTW48042013	Duplicate	North Bedrock	4/10/2013	**16**		0.10 U	
	TMW48042013	Normal	North Bedrock	4/10/2013	**16**		0.10 U	
	TMW48102012	Normal	North Bedrock	11/2/2012	**16**		0.10 U	
	TMW48042012	Normal	North Bedrock	4/25/2012		**50**		0.054 U
TMW49	DTW49102013	Duplicate	North Bedrock	11/6/2013	7.3		0.10 U	
	TMW49102013	Normal	North Bedrock	11/6/2013	7.2		0.10 U	
	DTW49042013	Duplicate	North Bedrock	4/15/2013	7.2		0.10 U	
	TMW49042013	Normal	North Bedrock	4/15/2013	7.7		0.10 U	
	TMW49102012	Normal	North Bedrock	10/31/2012	7.5		0.10 U	
	TMW49042012	Normal	North Bedrock	4/25/2012		1.3		0.054 U
CMW02	[d.] Well not sampled in fall 2013							
	CMW02042013	Normal	OB/OD	4/2/2013	2.7		0.10 U	
	CMW02102012	Normal	OB/OD	10/29/2012	2.7		0.10 U	
	CMW02042012	Normal	OB/OD	4/16/2012		1.1		0.054 U
CMW10	[d.] Well not sampled in fall 2013							
	CMW10042013	Normal	OB/OD	4/3/2013	3.6		0.20 U	
	CMW10102012	Normal	OB/OD	11/7/2012	3.6		0.20 U	
	CMW10042012	Normal	OB/OD	4/19/2012		3.7		0.054 U
CMW14	[d.] Well not sampled in fall 2013							
	CMW14042013	Normal	OB/OD	4/3/2013	0.20 U		0.20 U	
	CMW14102012	Normal	OB/OD	11/6/2012	0.50 U		0.50 U	
	CMW14042012	Normal	OB/OD	4/19/2012		0.3		0.054 U
CMW17	[d.] Well not sampled in fall 2013							
	CMW17042013	Normal	OB/OD	4/3/2013	2.9		0.10 U	
	CMW17102012DUP	Duplicate	OB/OD	11/6/2012	3		0.10 U	
	CMW17102012	Normal	OB/OD	11/6/2012	3		0.10 U	
	CMW17042012	Normal	OB/OD	4/17/2012		2.5		0.054 U
CMW18	[d.] Well not sampled in fall 2013							
	CMW18042013	Normal	OB/OD	4/4/2013	3.3		0.10 U	
	DCW18042013	Duplicate	OB/OD	4/4/2013	3.3		0.10 U	
	CMW18102012	Normal	OB/OD	11/6/2012	3.6		0.10 U	
	CMW18102012DUP	Duplicate	OB/OD	11/6/2012	3.6		0.10 U	
	CMW18042012	Normal	OB/OD	4/17/2012		3.8		0.054 U

TABLE 5-2

Summary of Nitrate-nitrogen and Nitrite-nitrogen Analytical Detections (Page 7 of 7)

Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	Nitrate-N (mg/L) EPA Method 9056	Nitrate-N (mg/L) EPA Method 300.0	Nitrite-N (mg/L) EPA Method 9056	Nitrite-N (mg/L) EPA Method 300.0
				Regulatory Limits	[a]10	[a]10	[b]1	[b]1
CMW22	[d.] Well not sampled in fall 2013							
	CMW22042013	Normal	OB/OD	4/5/2013	0.076 J		0.10 U	
	CMW22102012	Normal	OB/OD	11/1/2012	0.10 U		0.10 U	
	CMW22042012	Normal	OB/OD	4/18/2012		0.26 J		0.054 U
CMW25	[d.] Well not sampled in fall 2013							
	CMW25042013	Normal	OB/OD	4/8/2013	0.10 U		0.10 U	
	CMW25102012	Normal	OB/OD	11/7/2012	0.10 U		0.10 U	
	CMW25042012	Normal	OB/OD	4/20/2012		0.048 U		0.054 U
KMW09	[d.] Well not sampled in fall 2013							
	KMW09042013	Normal	OB/OD	4/4/2013	0.20 U		0.20 U	
	KMW09102012	Normal	OB/OD	10/26/2012	0.20 U		0.20 U	
	KMW09042012	Normal	OB/OD	4/18/2012		0.61		0.054 U
KMW10	[d.] Well not sampled in fall 2013							
	KMW10042013	Normal	OB/OD	4/5/2013	9.4		0.10 U	
	KMW10102012	Normal	OB/OD	10/29/2012	9.3		0.10 U	
	KMW10042012	Normal	OB/OD	4/21/2012		9		0.054 U
KMW11	[d.] Well not sampled in fall 2013							
	KMW11042013	Normal	OB/OD	4/4/2013	0.13 U		0.10 U	
	KMW11102012	Normal	OB/OD	11/1/2012	0.17 J		0.10 U	
	KMW11042012	Normal	OB/OD	4/18/2012		0.24 J		0.054 U
	KMW11042012DUP	Duplicate	OB/OD	4/18/2012		0.25		0.054
KMW12	[d.] Well not sampled in fall 2013							
	KMW12042013	Normal	OB/OD	4/5/2013	0.24 J		0.20 U	
	KMW12102012	Normal	OB/OD	10/29/2012	0.57 J		0.20 U	
	KMW12102012DUP	Duplicate	OB/OD	10/29/2012	0.566		0.20 U	
	KMW12042012	Normal	OB/OD	4/18/2012		0.34		0.054 U

Acronyms and Abbreviations

CAS: Chemical Abstract Services (registry number)

DUP: duplicate

J: analyte was positively identified; reported value is estimated

mg/L: milligrams per liter

N: nitrogen

R: result is unusable for any purpose

U - Non-detected result below the limit of detection

Notes

[a.] New Mexico Water Quality Control Commission regulatory limit is 10 mg/L

[b.] EPA Maximum Contaminant Level regulatory limit is 1.0 mg/L

[c.] Wells at the East Landfill were not sampled this event due to excavation and offsite disposal of refuse

[d.] OB/OD wells were not accessible due to active source area remediation

Bold indicates analyte was positively detected above regulatory limits

If no detections occurred for nitrate or nitrite during the previous four events, no non-detect or historic data is presented

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TABLE 5-3

Summary of Total Explosives Analytical Detections (Page 1 of 6)

Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	EPA Method 8330B (µg/L)											
					1,3,5-Trinitrobenzene CAS 99-35-4	1,3-Dinitrobenzene CAS 99-65-0	2,4,6-Trinitrotoluene CAS 118-96-7	2,4-Dinitrotoluene CAS 121-14-2	2-Amino-4,6-Dinitrotoluene CAS 35572-78-2	2-Nitrotoluene CAS 88-72-2	3-Nitrotoluene CAS 99-08-1	4-Amino-2,6-Dinitrotouene CAS 19406-51-0	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) CAS 121-82-4	Methyl-2,4,6-trinitrophenylnitramine CAS 479-45-8	Nitrobenzene CAS 98-95-3	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX) CAS 2691-41-0
					[a.] Regulatory Limit (EPA Region 6 Tap Water Screening Levels)											
					460	**1.5**	**2.2**	**0.2**	**30**	**0.27**	**1.3**	**30**	**0.61**	**61**	**0.12**	**780**
FW31	FW31102013	Normal	North Alluvial	11/1/2013	0.43 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	FW31042013	Normal	North Alluvial	4/12/2013	0.41 UJ	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ
	FW31102012	Normal	North Alluvial	11/5/2012	0.46 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.24 J
	FW31042012	Normal	North Alluvial	4/20/2012	0.019 UJ	0.025 UJ	0.018 UJ	0.030 UJ	0.023 UJ	0.025 UJ	0.023 UJ	0.023 UJ	0.028 UJ	0.088 UJ	0.049 UJ	0.026 UJ
FW35	FW35102013	Normal	North Alluvial	10/29/2013	0.42 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	FW35042013	Normal	North Alluvial	4/11/2013	0.40 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
	FW35102012	Normal	North Alluvial	11/7/2012	0.43 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	FW35042012	Normal	North Alluvial	4/20/2012	0.019 U	0.025 U	0.018 U	0.030 U	0.023 U	0.025 U	0.023 U	0.023 U	0.028 U	0.089 UJ	0.049 U	0.026 U
MW03	MW03102013	Normal	North Alluvial	11/5/2013	0.44 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 UJ	0.17 U	0.17 U
	MW03042013	Normal	North Alluvial	4/4/2013	0.45 UJ	0.17 UJ	0.17 UJ	0.17 UJ	0.17 UJ	0.17 UJ	0.17 UJ	0.17 UJ	0.17 UJ	0.17 UJ	0.17 UJ	0.17 UJ
	MW03-102012	Normal	North Alluvial	10/23/2012	0.41 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
	MW03042012	Normal	North Alluvial	4/20/2012	0.019 U	0.46	0.018 U	0.030 U	0.023 U	0.025 U	0.023 U	0.023 U	0.028 U	0.089 UJ	0.049 U	0.026 U
MW18D	MW18D102013	Normal	North Alluvial	11/1/2013	0.45 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
	MW18D042013	Normal	North Alluvial	4/17/2013	0.41 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ
	MW18D102012	Normal	North Alluvial	11/8/2012	0.42 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	MW18D042012	Normal	North Alluvial	4/19/2012	0.020 UJ	**4.5**	0.019 U	0.031 U	0.024 U	0.026 U	0.024 U	0.024 U	0.029 U	0.092 UJ	0.051 U	0.027 U
TMW03	TMW03102013	Normal	North Alluvial	11/4/2013	1.6 J	0.17 R	0.17 R	**0.45 J**	1.6 J	0.17 R	0.17 UJ	3.4 J	**450 J**	0.17 R	0.17 UJ	28 J
	TMW03042013	Normal	North Alluvial	4/16/2013	0.94 J	0.16 UJ	0.16 UJ	0.16 UJ	1.3 J	0.16 UJ	0.16 UJ	3.4 J	**420**	0.16 UJ	0.16 UJ	0.16 UJ
	TMW03102012	Normal	North Alluvial	11/7/2012	0.42 U	0.16 U	0.16 U	**0.41 J**	0.96 J	0.16 U	0.16 U	2.4 J	**590**	0.16 U	0.16 U	5.1 J
	TMW03042012	Normal	North Alluvial	4/25/2012	0.019 U	**32**	0.018 U	0.030 U	0.023 U	0.025 U	0.023 U	0.36	0.028 U	0.088 U	0.049 U	0.026 UJ
TMW04	TMW04102013	Normal	North Alluvial	11/4/2013	2.5 J	0.11 J	0.16 UJ	0.16 UJ	3.4 J	0.16 UJ	0.16 UJ	0.16 UJ	**5.9 J**	0.16 UJ	0.16 UJ	22 J
	TMW04042013	Normal	North Alluvial	4/16/2013	2.0 UJ	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ	0.41 J	1.6 J	**2.5 J**	0.15 UJ	0.15 UJ	0.15 UJ
	TMW04102012	Normal	North Alluvial	11/7/2012	0.41 U	0.16 U	0.16 U	0.16 U	2.0 J	0.16 U	0.16 U	3.2 J	0.16 U	0.16 U	0.16 U	0.16 U
	TMW04042012	Normal	North Alluvial	4/25/2012	2.8 J	0.025 R	0.018 R	0.030 R	1.5 J	0.025 R	0.023 R	1.6 J	0.028 R	0.088 R	0.049 R	0.026 R
TMW06	TMW06102013	Normal	North Alluvial	11/7/2013	0.42 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ
	TMW06042013	Normal	North Alluvial	4/15/2013	0.43 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ
	TMW06102012	Normal	North Alluvial	11/8/2012	0.42 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	TMW06042012	Normal	North Alluvial	4/18/2012	0.019 UJ	0.29	0.018 U	0.030 U	0.023 U	0.025 U	0.023 U	0.023 U	0.028 U	0.089 UJ	0.049 U	0.026 U

TABLE 5-3

Summary of Total Explosives Analytical Detections (Page 2 of 6)

Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	EPA Method 8330B (µg/L)											
					1,3,5-Trinitrobenzene CAS 99-35-4	1,3-Dinitrobenzene CAS 99-65-0	2,4,6-Trinitrotoluene CAS 118-96-7	2,4-Dinitrotoluene CAS 121-14-2	2-Amino-4,6-Dinitrotoluene CAS 35572-78-2	2-Nitrotoluene CAS 88-72-2	3-Nitrotoluene CAS 99-08-1	4-Amino-2,6-Dinitrotoluene CAS 19406-51-0	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) CAS 121-82-4	Methyl-2,4,6-trinitrophenylnitramine CAS 479-45-8	Nitrobenzene CAS 98-95-3	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX) CAS 2691-41-0
					[a.] Regulatory Limit (EPA Region 6 Tap Water Screening Levels)											
					460	**1.5**	**2.2**	**0.2**	**30**	**0.27**	**1.3**	**30**	**0.61**	**61**	**0.12**	**780**
TMW07	TMW07102013[d]	Normal	North Alluvial	10/29/2013	0.42 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	TMW07042013	Normal	North Alluvial	4/8/2013	0.42 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 U	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 U	0.16 UJ
	TMW07102012	Normal	North Alluvial	11/6/2012	0.64 J	0.16 U	0.16 U	0.16 U	0.16 U	0.15 J	0.16 UJ	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	TMW07042012	Normal	North Alluvial	4/20/2012	0.020 U	0.026 U	0.019 U	0.031 U	0.024 U	0.026 U	0.024 U	0.024 U	0.029 U	0.091 UJ	0.051 U	0.027 U
TMW21	TMW21102013	Normal	North Alluvial	11/7/2013	0.46 UJ	0.17 UJ	0.17 UJ	0.17 UJ	0.17 UJ	0.17 UJ	0.17 UJ	0.17 UJ	0.17 UJ	0.17 UJ	0.17 UJ	0.17 UJ
	TMW21042013	Normal	North Alluvial	4/16/2013	0.44 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ
	TMW21102012	Normal	North Alluvial	11/8/2012	0.42 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	TMW21042012	Normal	North Alluvial	4/17/2012	0.12 J	0.025 U	0.018 U	0.030 U	0.023 U	0.025 U	0.023 U	0.023 U	**1.0**	0.089 UJ	0.049 U	0.026 U
TMW22	TMW22102013	Normal	North Alluvial	10/29/2013	0.42 U	0.16 U	0.16 U	0.16 U	0.21 J	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	TMW22042013	Normal	North Alluvial	4/12/2013	0.43 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	TMW22102012	Normal	North Alluvial	11/6/2012	0.42 U	0.16 U	0.16 U	0.16 U	0.15 J	0.16 U	0.16 UJ	0.16 U	0.38	0.16 U	0.16 U	0.16 U
	TMW22042012	Normal	North Alluvial	4/18/2012	0.019 UJ	0.025 U	0.018 U	0.030 U	0.023 U	0.025 U	0.023 U	0.023 U	0.028 U	0.089 UJ	0.049 U	0.026 U
TMW23	TMW23102013[d]	Normal	North Alluvial	10/29/2013	0.40 U	0.15 U	0.15 U	0.15 U	0.71 J	0.15 U	0.15 U	0.34 J	**56**	0.15 U	0.15 U	0.15 U
	TMW23042013	Normal	North Alluvial	4/8/2013	0.42 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	**40 J**	0.16 UJ	**0.58 J**	0.16 U
	TMW23102012	Normal	North Alluvial	11/6/2012	0.42 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	**56**	0.16 U	0.16 U	0.16 U
	TMW23042012	Normal	North Alluvial	4/24/2012	0.019 U	0.025 U	0.018 U	0.030 U	0.023 U	0.025 U	0.023 U	0.023 U	**36**	0.088 U	0.049 U	0.026 UJ
TMW40S	TMW40S102013	Normal	North Alluvial	10/31/2013	0.43 U	0.16 U	0.16 U	0.16 U	1.5 J	0.16 U	0.16 U	0.16 UJ	**1300**	0.16 U	**1.5 J**	36
	TMW40S042013	Normal	North Alluvial	4/12/2013	1.0 J	0.16 R	0.35 J	0.16 R	1.8 J	0.16 R	0.16 R	1.3 J	**730**	0.16 R	0.16 U	18 J
	TMW40S102012	Normal	North Alluvial	11/9/2012	0.50 U	0.19 U	0.19 U	0.19 U	2.1 J	0.19 U	0.19 U	1.5 J	**1300**	0.19 U	0.19 U	28
	Well installed September 2011															
TMW43	TMW43102013	Normal	North Alluvial	10/30/2013	0.43 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	**3.4**	0.16 U	0.16 U	0.16 U
	TMW43042013	Normal	North Alluvial	4/16/2013	0.43 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	**2.7 J**	0.16 UJ	0.16 UJ	0.16 UJ
	TMW43102012	Normal	North Alluvial	11/8/2012	0.42 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	**4.5 J**	0.16 U	0.16 U	0.16 U
	TMW43042012	Normal	North Alluvial	4/24/2012	0.019 U	0.025 U	0.018 U	0.030 U	0.023 U	0.025 U	0.023 U	0.023 U	**2.5**	0.088 U	0.049 U	0.12 J
TMW44	TMW44102013	Normal	North Alluvial	10/29/2013	0.41 U	0.15 U	0.15 U	0.15 U	0.93 J	0.15 U	0.15 U	0.42 J	0.15 U	0.15 U	0.15 U	0.15 U
	TMW44042013	Normal	North Alluvial	4/8/2013	0.66 J	0.16 U	0.26 J	0.16 U	0.91 J	0.16 U	0.16 U	0.72 J	**0.88 J**	0.16 U	0.16 U	0.16 U
	TMW44102012	Normal	North Alluvial	11/6/2012	0.42 UJ	0.16 UJ	0.16 UJ	0.16 UJ	1.3 J	0.16 UJ	0.16 UJ	1.3 J	0.16 UJ	0.16 UJ	0.16 UJ	0.16 U
	TMW44042012	Normal	North Alluvial	4/24/2012	0.26 J	0.025 U	0.018 U	0.030 U	0.023 U	0.025 U	0.023 U	0.023 U	0.028 U	0.088 U	0.049 U	0.026 UJ

TABLE 5-3
Summary of Total Explosives Analytical Detections (Page 3 of 6)
Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	EPA Method 8330B (µg/L)											
					1,3,5-Trinitrobenzene CAS 99-35-4	1,3-Dinitrobenzene CAS 99-65-0	2,4,6-Trinitrotoluene CAS 118-96-7	2,4-Dinitrotoluene CAS 121-14-2	2-Amino-4,6-Dinitrotoluene CAS 35572-78-2	2-Nitrotoluene CAS 88-72-2	3-Nitrotoluene CAS 99-08-1	4-Amino-2,6-Dinitrotouene CAS 19406-51-0	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) CAS 121-82-4	Methyl-2,4,6-trinitrophenylnitramine CAS 479-45-8	Nitrobenzene CAS 98-95-3	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX) CAS 2691-41-0
					[a.] Regulatory Limit (EPA Region 6 Tap Water Screening Levels)											
					460	1.5	2.2	0.2	30	0.27	1.3	30	0.61	61	0.12	780
TMW47	TMW47102013	Normal	North Alluvial	11/7/2013	0.43 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.083 J	0.16 UJ	0.16 UJ	0.11 J	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ
	TMW47042013	Normal	North Alluvial	4/15/2013	0.42 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.18 J
	TMW47102012	Normal	North Alluvial	11/2/2012	0.43 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	TMW47042012	Normal	North Alluvial	4/25/2012	0.019 UJ	0.025 UJ	0.018 UJ	0.030 UJ	0.023 UJ	0.025 UJ	0.023 UJ	0.023 UJ	0.028 UJ	0.089 UJ	0.049 UJ	0.026 UJ
EMW01	[b.] Well not sampled in fall 2013															
	EMW01042013	Normal	North Bedrock	4/15/2013	0.43 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ
	EMW01102012	Normal	North Bedrock	10/25/2012	0.43 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 UJ
	EMW01042012	Normal	North Bedrock	4/23/2012	0.019 U	0.2	0.018 U	0.030 U	0.048 J	0.025 U	0.023 U	0.023 U	0.028 U	0.088 U	0.049 U	0.026 UJ
TMW02	TMW02102013	Normal	North Bedrock	11/4/2013	0.44 U	0.16 U	0.16 U	0.16 U	0.25 J	0.16 U	0.16 U	0.50 J	0.16 U	0.16 U	0.16 U	0.16 U
	TMW02042013	Normal	North Bedrock	4/16/2013	0.43 UJ	0.16 U	0.16 U	0.16 U	0.22 J	0.16 UJ	0.16 UJ	0.20 UJ	0.16 U	0.16 U	0.16 UJ	0.16 UJ
	TMW02102012	Normal	North Bedrock	10/31/2012	0.42 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.54 J	0.16 UJ	0.16 UJ	0.36 J	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ
	TMW02042012	Normal	North Bedrock	4/24/2012	0.059 J	0.025 U	0.018 U	0.030 U	0.023 U	0.025 U	0.023 U	0.075 J	0.028 U	0.088 U	0.049 U	0.026 UJ
TMW14A	TMW14A102013	Normal	North Bedrock	11/6/2013	0.42 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ
	TMW14A042013	Normal	North Bedrock	4/17/2013	0.40 UJ	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ
	TMW14A102012	Normal	North Bedrock	11/8/2012	0.44 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	TMW14A042012	Normal	North Bedrock	4/21/2012	0.019 U	0.65	0.018 U	0.030 U	0.023 U	0.025 U	0.023 UJ	0.023 U	0.028 U	0.088 U	0.049 U	0.026 UJ
TMW16	TMW16102013	Normal	North Bedrock	10/31/2013	0.42 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	TMW16042013	Normal	North Bedrock	4/18/2013	0.42 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	TMW16102012	Normal	North Bedrock	11/6/2012	0.42 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 UJ	0.16 U	0.33	0.16 U	0.16 U	0.16 U
	TMW16042012	Normal	North Bedrock	4/21/2012	0.019 U	0.025 U	0.018 U	0.030 U	0.023 U	0.025 U	0.023 UJ	0.023 U	0.028 U	0.088 U	0.049 U	0.026 UJ
TMW18	TMW18102013	Normal	North Bedrock	10/31/2013	0.43 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.45 J	0.16 U	0.16 U	0.16 U
	TMW18042013	Normal	North Bedrock	4/12/2013	0.43 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.096 J	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ
	TMW18102012	Normal	North Bedrock	11/5/2012	0.42 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	TMW18102012DU	Duplicate	North Bedrock	11/5/2012	0.43 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	TMW18042012	Normal	North Bedrock	4/23/2012	0.019 U	0.025 U	0.018 U	0.030 U	0.023 U	0.025 U	0.023 UJ	0.023 U	0.028 U	0.088 U	0.049 U	0.026 UJ
TMW19	TMW19102013	Normal	North Bedrock	10/31/2013	0.43 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.13 J	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	TMW19042013	Normal	North Bedrock	4/12/2013	0.42 U	0.16 U	0.16 U	0.16 U	0.10 J	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	TMW19102012	Normal	North Bedrock	11/5/2012	0.42 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	TMW19042012	Normal	North Bedrock	4/21/2012	0.019 U	0.025 U	0.018 U	0.030 U	0.023 U	0.025 U	0.023 UJ	0.023 U	0.028 U	0.088 U	0.049 U	0.026 UJ

TABLE 5-3

Summary of Total Explosives Analytical Detections (Page 4 of 6)

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Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	EPA Method 8330B (µg/L)											
					1,3,5-Trinitrobenzene CAS 99-35-4	1,3-Dinitrobenzene CAS 99-65-0	2,4,6-Trinitrotoluene CAS 118-96-7	2,4-Dinitrotoluene CAS 121-14-2	2-Amino-4,6-Dinitrotoluene CAS 35572-78-2	2-Nitrotoluene CAS 88-72-2	3-Nitrotoluene CAS 99-08-1	4-Amino-2,6-Dinitrotoluene CAS 19406-51-0	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) CAS 121-82-4	Methyl-2,4,6-trinitrophenylnitramine CAS 479-45-8	Nitrobenzene CAS 98-95-3	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX) CAS 2691-41-0
					[a.] Regulatory Limit (EPA Region 6 Tap Water Screening Levels)											
					460	1.5	2.2	0.2	30	0.27	1.3	30	0.61	61	0.12	780
TMW30	TMW30102013	Normal	North Bedrock	10/30/2013	0.42 U	0.16 U	0.16 U	0.16 U	0.16 U	0.12 J	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	TMW30042013	Normal	North Bedrock	4/11/2013	0.42 UJ	0.098 J	0.16 U	0.16 UJ	0.077 J	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.60 J
	TMW30102012DU	Duplicate	North Bedrock	11/5/2012	0.44 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.34 J
	TMW30102012	Normal	North Bedrock	11/5/2012	0.44 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.26 J
	TMW30042012	Normal	North Bedrock	4/20/2012	0.019 U	0.10 J	0.018 U	0.031 U	0.023 U	0.026 U	0.023 U	0.023 U	0.029 U	0.090 UJ	0.050 U	0.027 U
TMW32	TMW32102013	Normal	North Bedrock	11/7/2013	0.43 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ
	TMW32042013	Normal	North Bedrock	4/11/2013	0.42 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	TMW32102012DU	Duplicate	North Bedrock	10/30/2012	0.42 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	TMW32102012	Normal	North Bedrock	10/30/2012	0.43 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	TMW32042012	Normal	North Bedrock	4/24/2012	0.019 U	0.025 U	0.018 U	0.030 U	0.023 U	0.025 U	0.023 U	0.023 U	0.11 J	0.088 U	0.049 U	0.026 UJ
TMW36	TMW36102013	Normal	North Bedrock	11/5/2013	0.42 UJ	0.86 J	0.16 UJ	**0.22 J**	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	**2.4 J**	0.16 UJ	**0.29 J**	0.16 UJ
	TMW36042013	Normal	North Bedrock	4/15/2013	0.43 U	0.16 U	0.16 U	0.16 U	0.22	0.15 J	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	TMW36102012	Normal	North Bedrock	11/5/2012	0.51 J	0.71 J	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.70 J	**2.0 J**	0.16 UJ	0.16 UJ	1.7 J
	TMW36042012	Normal	North Bedrock	4/20/2012	0.019 U	0.025 U	0.018 U	0.030 U	0.023 U	0.025 U	0.023 U	0.023 U	0.028 U	0.088 UJ	0.049 U	0.026 U
TMW38	TMW38102013	Normal	North Bedrock	10/31/2013	0.44 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	TMW38042013	Normal	North Bedrock	4/11/2013	0.40 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
	TMW38102012	Normal	North Bedrock	11/8/2012	0.44 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	**1.6**	0.17 U
	TMW38042012	Normal	North Bedrock	4/20/2012	0.019 U	**1.9 J**	0.018 U	0.030 U	0.023 U	0.025 U	0.023 U	0.023 U	0.028 U	0.089 UJ	0.049 U	0.026 U
TMW39D	TMW39D102013	Normal	North Bedrock	11/6/2013	0.43 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ
	TMW39D042013	Normal	North Bedrock	4/10/2013	0.43 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	TMW39D102012	Normal	North Bedrock	10/31/2012	0.41 UJ	0.15 U	0.15 U	0.15 U	0.15 U	0.15 UJ	0.15 UJ	0.15 U	0.15 U	0.15 U	0.15 U	0.23 J
	TMW39D042012	Normal	North Bedrock	4/23/2012	0.019 U	0.025 U	0.018 U	0.030 U	0.023 U	0.025 U	0.023 U	0.023 U	0.028 U	0.088 U	0.049 U	0.026 UJ
CMW04	[c.] Well not sampled in fall 2013															
	CMW04042013	Normal	OB/OD	4/2/2013	0.41 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	CMW04102012	Normal	OB/OD	10/29/2012	0.44 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	CMW04042012	Normal	OB/OD	4/17/2012	0.019 UJ	**4.6**	0.018 U	0.030 U	0.023 U	0.025 U	0.023 U	0.023 U	0.028 U	0.088 UJ	0.049 U	0.026 U

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					1,3,5-Trinitrobenzene CAS 99-35-4	1,3-Dinitrobenzene CAS 99-65-0	2,4,6-Trinitrotoluene CAS 118-96-7	2,4-Dinitrotoluene CAS 121-14-2	2-Amino-4,6-Dinitrotoluene CAS 35572-78-2	2-Nitrotoluene CAS 88-72-2	3-Nitrotoluene CAS 99-08-1	4-Amino-2,6-Dinitrotoluene CAS 19406-51-0	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) CAS 121-82-4	Methyl-2,4,6-trinitrophenylnitramine CAS 479-45-8	Nitrobenzene CAS 98-95-3	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX) CAS 2691-41-0
					[a.] Regulatory Limit (EPA Region 6 Tap Water Screening Levels)											
					460	1.5	2.2	0.2	30	0.27	1.3	30	0.61	61	0.12	780
CMW10	[c.] Well not sampled in fall 2013															
	CMW10042013	Normal	OB/OD	4/3/2013	0.43 U	0.16 U	0.16 U	0.16 U	0.16 U	0.11 J	0.16 UJ	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	CMW10102012	Normal	OB/OD	11/7/2012	0.42 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	CMW10042012	Normal	OB/OD	4/19/2012	0.019 UJ	0.025 U	0.018 U	0.030 U	0.023 U	0.025 U	0.023 U	0.023 U	0.028 U	0.089 UJ	0.049 U	0.026 U
CMW14	[c.] Well not sampled in fall 2013															
	CMW14042013	Normal	OB/OD	4/3/2013	0.43 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 UJ	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	CMW14102012	Normal	OB/OD	11/6/2012	0.43 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 UJ	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	CMW14042012	Normal	OB/OD	4/24/2012	0.019 U	1.2	0.018 U	0.030 U	0.023 U	0.025 U	0.023 U	0.023 U	0.028 U	0.088 U	0.098 J	0.026 UJ
CMW17	[c.] Well not sampled in fall 2013															
	CMW17042013	Normal	OB/OD	4/3/2013	0.43 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 UJ	0.084 J	**2.1**	0.16 U	0.16 U	0.28 J
	CMW17102012DU	Duplicate	OB/OD	11/6/2012	0.42 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 UJ	0.16 U	**1.8**	0.16 U	0.16 U	0.16 U
	CMW17102012	Normal	OB/OD	11/6/2012	0.42 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 UJ	0.16 U	**1.7**	0.16 U	0.16 U	0.16 U
	CMW17042012	Normal	OB/OD	4/17/2012	0.019 UJ	0.025 U	0.018 U	0.030 U	0.023 U	0.025 U	0.023 U	0.023 U	0.028 U	0.089 UJ	0.049 U	0.026 U
CMW18	[c.] Well not sampled in fall 2013															
	CMW18042013	Normal	OB/OD	4/4/2013	0.43 U	0.16 U	0.16 U	0.16 U	2.2	0.16 U	0.16 U	2.8	**67**	0.16 U	0.16 U	21
	DCW18042013	Duplicate	OB/OD	4/4/2013	0.42 U	0.16 U	0.16 U	0.16 U	2.1 J	0.16 U	0.16 U	2.7 J	**68**	0.16 U	0.16 U	19 J
	CMW18102012	Normal	OB/OD	11/6/2012	0.43 U	0.16 U	0.16 U	0.16 U	1.9	0.16 U	0.16 U	2.5	**66**	0.16 U	0.16 U	18
	CMW18042012	Normal	OB/OD	4/17/2012	0.019 UJ	0.025 U	0.018 U	0.030 U	0.023 U	0.025 U	0.023 U	0.023 U	0.028 U	0.089 UJ	0.049 U	0.026 U
CMW19	[c.] Well not sampled in fall 2013															
	CMW19042013	Normal	OB/OD	4/4/2013	0.44 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
	CMW19102012	Normal	OB/OD	10/30/2012	0.46 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
	CMW19042012	Normal	OB/OD	4/24/2012	0.019 U	**6.3**	0.018 U	0.030 U	0.023 U	0.025 U	0.023 U	0.023 U	0.028 U	0.52	0.049 U	0.026 UJ
CMW23	[c.] Well not sampled in fall 2013															
	CMW23042013	Normal	OB/OD	4/8/2013	0.43 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	CMW23102012	Normal	OB/OD	10/30/2012	0.44 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.093 J	0.16 U	0.16 U	0.16 U
	CMW23042012	Normal	OB/OD	4/18/2012	0.019 UJ	0.025 U	0.018 U	0.030 U	0.023 U	0.025 U	0.023 U	0.023 U	0.028 U	0.089 UJ	0.049 U	0.026 U

TABLE 5-3

Summary of Total Explosives Analytical Detections (Page 6 of 6)

Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	EPA Method 8330B (µg/L)											
					1,3,5-Trinitrobenzene CAS 99-35-4	1,3-Dinitrobenzene CAS 99-65-0	2,4,6-Trinitrotoluene CAS 118-96-7	2,4-Dinitrotoluene CAS 121-14-2	2-Amino-4,6-Dinitrotoluene CAS 35572-78-2	2-Nitrotoluene CAS 88-72-2	3-Nitrotoluene CAS 99-08-1	4-Amino-2,6-Dinitrotoene CAS 19406-51-0	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) CAS 121-82-4	Methyl-2,4,6-trinitrophenylnitramine CAS 479-45-8	Nitrobenzene CAS 98-95-3	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX) CAS 2691-41-0
					[a.] Regulatory Limit (EPA Region 6 Tap Water Screening Levels)											
					460	**1.5**	**2.2**	**0.2**	**30**	**0.27**	**1.3**	**30**	**0.61**	**61**	**0.12**	**780**
CMW24	[c.] Well not sampled in fall 2013															
	CMW24042013	Normal	OB/OD	4/5/2013	0.43 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	1.3 J
	CMW24102012	Normal	OB/OD	11/1/2012	0.44 U	0.17 U	0.17 U	0.17 U	0.17 U	**0.72**	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
	CMW24042012	Normal	OB/OD	4/24/2012	1.8	0.025 U	0.018 U	**0.4**	0.72	0.025 U	0.023 U	0.023 U	**250**	0.088 U	0.049 U	3.5 J
KMW09	[c.] Well not sampled in fall 2013															
	KMW09042013	Normal	OB/OD	4/4/2013	0.44 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	KMW09102012	Normal	OB/OD	10/26/2012	0.41 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	**2.7**	0.15 U
	KMW09042012	Normal	OB/OD	4/18/2012	0.019 UJ	**8.8**	**2.5**	0.030 U	0.023 U	0.025 U	0.023 U	0.023 U	0.028 U	0.088 UJ	0.049 U	0.026 U
KMW11	[c.] Well not sampled in fall 2013															
	KMW11042013	Normal	OB/OD	4/4/2013	0.41 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
	KMW11102012	Normal	OB/OD	11/1/2012	0.42 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	KMW11042012	Normal	OB/OD	4/18/2012	0.019 UJ	0.3	0.018 U	0.030 U	0.023 U	0.025 U	0.023 U	0.023 U	0.028 U	0.089 UJ	0.049 U	0.026 U

Acronyms and Abbreviations

J: analyte was positively identified; reported value is estimated

U: Non-detected result reported at the limit of detection.

UJ : The analyte was not detected however, the result is estimated because of discrepancies in meeting certain analyte-specific quality control criteria

R: result is unusable for any purpose

µg/L: microgram(s) per liter

Notes:

Bold indicates analyte was positively detected above regulatory limits

[a.] EPA 2012. EPA Region 6, Regional Screening Levels (Formerly Human Health Medium Specific Screening Levels)

[b.] Wells in the East Landfill were not sampled due to landfill excavation and removal

[c.] Wells in the OB/OD area were not accessible during active remediation of the area

[d.] Method 8330B analytical results from samples TMW07102013 and TMW23102013 were not consistent with any historical results. It is believed that sample results for these two locations were switched by the analytical laboratory based upon a review of field notes and historical data. The data has been corrected in this table.

If no detections occurred for explosives compounds during the previous four events, no non-detect or historic data is presented

TABLE 5-4
Summary of Perchlorate Analytical Detections (Page 1 of 6)
Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	Perchlorate (µg/L) CAS 14797-73-0	
					EPA Method 6850	EPA Method 6860
				Regulatory Limits	[a]6.0	[a]6.0
BGMW02	BGMW02102013	Normal	North Alluvial	11/5/2013		0.49
	BGMW02042013	Normal	North Alluvial	4/3/2013		0.44 J
	BGMW02102012	Normal	North Alluvial	10/30/2012		0.45
	BGMW02042012	Normal	North Alluvial	4/25/2012	0.51	
BGMW03	BGMW03102013	Normal	North Alluvial	11/5/2013		0.28
	DBW03102013	Duplicate	North Alluvial	11/5/2013		0.31
	DBW03042013	Duplicate	North Alluvial	4/8/2013		0.34
	BGMW03042013	Normal	North Alluvial	4/8/2013		0.35
	BGMW03102012	Normal	North Alluvial	10/31/2012		3.1
	BGMW03042012	Normal	North Alluvial	4/24/2012	0.579	
MW01	MW01102013	Normal	North Alluvial	11/1/2013		0.022 J
	MW01042013	Normal	North Alluvial	4/15/2013		0.017 J
	MW01102012	Normal	North Alluvial	10/24/2012		0.020 U
	MW01042012	Normal	North Alluvial	4/26/2012	0.100 U	
MW02	MW02102013	Normal	North Alluvial	11/1/2013		0.012 J
	MW02042013	Normal	North Alluvial	4/12/2013		0.020 U
	MW02102012	Normal	North Alluvial	10/24/2012		0.0093 J
	MW02042012	Normal	North Alluvial	4/23/2012	0.100 U	
MW03	MW03102013	Normal	North Alluvial	11/5/2013		0.015 J
	MW03042013	Normal	North Alluvial	4/4/2013		0.023 J
	MW03102012	Normal	North Alluvial	10/23/2012		0.017 J
	MW03042012	Normal	North Alluvial	4/20/2012	0.100 U	
MW18D	MW18D102013	Normal	North Alluvial	11/1/2013		0.039 J
	MW18D042013	Normal	North Alluvial	4/17/2013		0.10 U
	MW18D102012	Normal	North Alluvial	11/8/2012		0.020 U
	MW18D042012	Normal	North Alluvial	4/19/2012	0.5	
MW20	MW20102013	Normal	North Alluvial	11/8/2013		0.44 J
	DW20042013	Duplicate	North Alluvial	4/10/2013		0.44 J
	MW20042013	Normal	North Alluvial	4/10/2013		0.49 J
	MW20102012	Normal	North Alluvial	10/29/2012		0.47 J
	MW20042012	Normal	North Alluvial	4/24/2012	0.684	
MW22D	DMW22D102013	Duplicate	North Alluvial	11/1/2013		0.31 J
	MW22D102013	Normal	North Alluvial	11/1/2013		0.73 J
	MW22D042013	Normal	North Alluvial	4/9/2013		0.26 J
	MW22D102012	Normal	North Alluvial	11/8/2012		0.18
	MW22D042012	Normal	North Alluvial	4/19/2012	0.219	
MW22S	MW22S102013	Normal	North Alluvial	11/1/2013		0.063
	MW22S042013	Normal	North Alluvial	4/12/2013		0.072 J
	MW22S102012	Normal	North Alluvial	10/29/2012		0.57
	MW22S042012	Normal	North Alluvial	4/21/2012	0.133 J	
MW23	DMW23102013	Duplicate	North Alluvial	11/8/2013		0.020 U
	MW23102013	Normal	North Alluvial	11/8/2013		0.020 U
	DMW23042013	Duplicate	North Alluvial	4/8/2013		0.014 J
	MW23042013	Normal	North Alluvial	4/8/2013		0.020 UJ
	MW23102012DUP	Duplicate	North Alluvial	10/31/2012		0.020 U
	MW23102012	Normal	North Alluvial	10/31/2012		0.020 U
	MW23042012	Normal	North Alluvial	4/26/2012	0.100 U	

TABLE 5-4
Summary of Perchlorate Analytical Detections (Page 2 of 6)
Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	Perchlorate (µg/L) CAS 14797-73-0	
					EPA Method 6850	EPA Method 6860
				Regulatory Limits	[a]6.0	[a]6.0
TMW01	TMW01102013	Normal	North Alluvial	11/6/2013		**310**
	TMW01042013	Normal	North Alluvial	4/15/2013		**270**
	TMW01102012	Normal	North Alluvial	10/31/2012		**300**
	TMW01042012	Normal	North Alluvial	4/24/2012	**296**	
TMW03	TMW03102013	Normal	North Alluvial	11/4/2013		0.84
	TMW03042013	Normal	North Alluvial	4/16/2013		0.79
	TMW03102012	Normal	North Alluvial	11/7/2012		0.85
	TMW03042012	Normal	North Alluvial	4/20/2012	0.962	
TMW04	TMW04102013	Normal	North Alluvial	11/4/2013		0.35
	TMW04042013	Normal	North Alluvial	4/16/2013		0.25
	TMW04102012	Normal	North Alluvial	11/7/2012		0.41
	TMW04042012	Normal	North Alluvial	4/25/2012	0.371	
TMW11	TMW11102013	Normal	North Alluvial	11/5/2013		0.16
	TMW11042013	Normal	North Alluvial	4/9/2013		0.15 J
	TMW11102012	Normal	North Alluvial	11/9/2012		0.15
	TMW11042012	Normal	North Alluvial	4/20/2012	0.176 J	
TMW13	TMW13102013	Normal	North Alluvial	11/5/2013		0.078
	TMW13042013	Normal	North Alluvial	4/17/2013		0.066
	TMW13102012	Normal	North Alluvial	11/8/2012		0.068
	TMW13042012	Normal	North Alluvial	4/23/2012	0.0838 J	
TMW15	TMW15102013	Normal	North Alluvial	11/6/2013		0.24
	TMW15042013	Normal	North Alluvial	4/17/2013		0.16
	TMW15102012	Normal	North Alluvial	11/8/2012		0.14
	TMW15042012	Normal	North Alluvial	4/23/2012	0.166 J	
TMW21	TMW21102013	Normal	North Alluvial	11/7/2013		0.020 U
	TMW21042013	Normal	North Alluvial	4/16/2013		0.011 J
	TMW21102012	Normal	North Alluvial	11/8/2012		0.020 U
	TMW21042012	Normal	North Alluvial	4/17/2012	0.100 U	
TMW22	TMW22102013	Normal	North Alluvial	10/29/2013		0.0088 J
	TMW22042013	Normal	North Alluvial	4/12/2013		0.0091 J
	TMW22102012	Normal	North Alluvial	11/6/2012		0.013 J
	TMW22042012	Normal	North Alluvial	4/18/2012	0.100 U	
TMW23	TMW23102013	Normal	North Alluvial	10/29/2013		0.045 J
	TMW23042013	Normal	North Alluvial	4/8/2013		0.044 J
	TMW23102012	Normal	North Alluvial	11/6/2012		0.041 J
	TMW23042012	Normal	North Alluvial	4/24/2012	0.113 J	
TMW26	TMW26102013	Normal	North Alluvial	11/4/2013		0.020 U
	TMW26042013	Normal	North Alluvial	4/17/2013		0.055
	TMW26102012	Normal	North Alluvial	10/25/2012		0.020 U
	TMW26102012DUP	Duplicate	North Alluvial	10/25/2012		0.020 U
	TMW26042012	Normal	North Alluvial	4/20/2012	0.100 U	
TMW29	TMW29102013	Normal	North Alluvial	10/31/2013		0.084 UJ
	TMW29042013	Normal	North Alluvial	4/11/2013		0.086
	TMW29102012	Normal	North Alluvial	10/26/2012		0.071
	TMW29042012	Normal	North Alluvial	4/21/2012	0.112 J	
TMW31S	TMW31S102013	Normal	North Alluvial	10/30/2013		**430**
	TMW31S042013	Normal	North Alluvial	4/11/2013		**470**
	TMW31S102012DUP	Duplicate	North Alluvial	11/5/2012		**570**
	TMW31S102012	Normal	North Alluvial	11/5/2012		**500**
	TMW31S042012	Normal	North Alluvial	4/19/2012	**507**	

TABLE 5-4
Summary of Perchlorate Analytical Detections (Page 3 of 6)
Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	Perchlorate (µg/L) CAS 14797-73-0	
					EPA Method 6850	EPA Method 6860
				Regulatory Limits	[a]6.0	[a]6.0
TMW34	TMW34102013	Normal	North Alluvial	11/1/2013		0.30 J
	DTW34102013	Duplicate	North Alluvial	11/1/2013		0.029 J
	TMW34042013	Normal	North Alluvial	4/10/2013		0.24 J
	TMW34-102012	Normal	North Alluvial	10/23/2012		0.25
	TMW34042012	Normal	North Alluvial	4/26/2012	0.288	
TMW35	TMW35102013	Normal	North Alluvial	11/4/2013		0.10
	DTW35042013	Duplicate	North Alluvial	4/9/2013		0.096 J
	TMW35042013	Normal	North Alluvial	4/9/2013		0.096 J
	TMW35102012	Normal	North Alluvial	10/23/2012		NS
	TMW35042012	Normal	North Alluvial	4/23/2012	0.214	
TMW39S	TMW39S102013	Normal	North Alluvial	11/5/2013		**800**
	TMW39S042013	Normal	North Alluvial	4/11/2013		**780**
	TMW39S102012	Normal	North Alluvial	11/1/2012		**720**
	TMW39S042012	Normal	North Alluvial	4/23/2012	**702**	
TMW40S	TMW40S102013	Normal	North Alluvial	10/31/2013		**20**
	TMW40S042013	Normal	North Alluvial	4/15/2013		**29**
	TMW40S102012	Normal	North Alluvial	11/6/2012		**51 J**
	TMW40S042012	Normal	North Alluvial	4/24/2012	**76.8**	
TMW41	TMW41102013	Normal	North Alluvial	10/30/2013		2.5
	TMW41042013	Normal	North Alluvial	4/11/2013		1.9
	TMW41102012	Normal	North Alluvial	11/6/2012		1.9 J
	TMW41042012	Normal	North Alluvial	4/23/2012	1.68	
TMW44	TMW44102013	Normal	North Alluvial	10/29/2013		0.010 J
	TMW44042013	Normal	North Alluvial	4/8/2013		0.020 U
	TMW44102012	Normal	North Alluvial	11/6/2012		0.38 J
	TMW44042012	Normal	North Alluvial	4/24/2012	0.100 U	
TMW45	TMW45102013	Normal	North Alluvial	11/7/2013		0.020 U
	TMW45042013	Normal	North Alluvial	4/4/2013		0.020 U
	TMW45102012DUP	Duplicate	North Alluvial	11/6/2012		0.020 UJ
	TMW45102012	Normal	North Alluvial	11/6/2012		0.020 UJ
	TMW45042012	Normal	North Alluvial	4/24/2012	0.368	
TMW46	TMW46102013	Normal	North Alluvial	10/30/2013		0.36
	TMW46042013	Normal	North Alluvial	4/8/2013		0.49
	TMW46102012	Normal	North Alluvial	11/6/2012		0.46
	TMW46042012	Normal	North Alluvial	4/24/2012	0.712	
TMW47	TMW47102013	Normal	North Alluvial	11/7/2013		0.020 U
	TMW47042013	Normal	North Alluvial	4/15/2013		0.020 UJ
	TMW47102012	Normal	North Alluvial	11/2/2012		0.014 J
	TMW47042012	Normal	North Alluvial	4/25/2012	0.100 U	
EMW01	[b] Well not sampled in fall 2013					
	EMW01042013	Normal	North Bedrock	4/15/2013		0.016 J
	EMW01102012	Normal	North Bedrock	10/25/2012		0.029 J
	EMW01042012	Normal	North Bedrock	4/23/2012	0.100 U	
TMW02	TMW02102013	Normal	North Bedrock	11/4/2013		4.7
	TMW02042013	Normal	North Bedrock	4/16/2013		**6.1 J**
	TMW02102012	Normal	North Bedrock	10/31/2012		**9**
	TMW02042012	Normal	North Bedrock	4/24/2012	**17.5**	

TABLE 5-4
Summary of Perchlorate Analytical Detections (Page 4 of 6)
Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	Perchlorate (µg/L) CAS 14797-73-0	
					EPA Method 6850	EPA Method 6860
				Regulatory Limits	[a]6.0	[a]6.0
TMW16	TMW16102013	Normal	North Bedrock	10/31/2013		0.020 U
	TMW16042013	Normal	North Bedrock	4/18/2013		0.020 U
	TMW16102012	Normal	North Bedrock	11/6/2012		0.018 J
	TMW16042012	Normal	North Bedrock	4/21/2012	0.100 U	
TMW17	TMW17102013	Normal	North Bedrock	11/6/2013		0.020 U
	TMW17042013	Normal	North Bedrock	4/9/2013		0.020 UJ
	TMW17102012	Normal	North Bedrock	11/9/2012		0.019 J
	TMW17042012	Normal	North Bedrock	4/24/2012	0.100 U	
TMW18	TMW18102013	Normal	North Bedrock	10/31/2013		0.024 UJ
	TMW18042013	Normal	North Bedrock	4/12/2013		0.010 J
	TMW18102012	Normal	North Bedrock	11/5/2012		0.019 J
	TMW18102012DUP	Duplicate	North Bedrock	11/5/2012		0.018 J
	TMW18042012	Normal	North Bedrock	4/23/2012	0.100 U	
TMW30	TMW30102013	Normal	North Bedrock	10/30/2013		**1900**
	TMW30042013	Normal	North Bedrock	4/11/2013		**2100**
	TMW30102012DUP	Duplicate	North Bedrock	11/5/2012		**2000**
	TMW30102012	Normal	North Bedrock	11/5/2012		**2500**
	TMW30042012	Normal	North Bedrock	4/20/2012	**2570**	
TMW31D	DTW31D102013	Duplicate	North Bedrock	11/6/2013		**1500**
	TMW31D102013	Normal	North Bedrock	11/6/2013		**1500**
	DTW31D042013	Duplicate	North Bedrock	4/10/2013		**1400 J**
	TMW31D042013	Normal	North Bedrock	4/10/2013		**1500 J**
	TMW31D102012	Normal	North Bedrock	10/30/2012		**1500**
	TMW31D042012	Normal	North Bedrock	4/23/2012	**1480**	
TMW32	TMW32102013	Normal	North Bedrock	11/7/2013		**290**
	TMW32042013	Normal	North Bedrock	4/11/2013		**200**
	TMW32102012DUP	Duplicate	North Bedrock	10/30/2012		**360**
	TMW32102012	Normal	North Bedrock	10/30/2012		**370**
	TMW32042012	Normal	North Bedrock	4/24/2012	**114**	
TMW36	TMW36102013	Normal	North Bedrock	11/5/2013		0.020 U
	TMW36042013	Normal	North Bedrock	4/15/2013		0.020 U
	TMW36102012	Normal	North Bedrock	11/5/2012		0.017 J
	TMW36042012	Normal	North Bedrock	4/20/2012	0.100 U	
TMW37	TMW37102013	Normal	North Bedrock	10/31/2013		0.020 U
	TMW37042013	Normal	North Bedrock	4/12/2013		0.020 U
	TMW37102012	Normal	North Bedrock	11/2/2012		**1300 J**
	TMW37042012	Normal	North Bedrock	4/23/2012	0.100 U	
TMW38	TMW38102013	Normal	North Bedrock	10/31/2013		0.020 UJ
	TMW38042013	Normal	North Bedrock	4/11/2013		0.024 J
	TMW38102012	Normal	North Bedrock	11/8/2012		0.020 U
	TMW38042012	Normal	North Bedrock	4/20/2012	0.100 U	
TMW39D	TMW39D102013	Normal	North Bedrock	11/6/2013		**8.5**
	TMW39D042013	Normal	North Bedrock	4/10/2013		**77 J**
	TMW39D102012	Normal	North Bedrock	10/31/2012		3.1
	TMW39D042012	Normal	North Bedrock	4/23/2012	**765**	

TABLE 5-4
Summary of Perchlorate Analytical Detections (Page 5 of 6)
Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	Perchlorate (µg/L)	
					EPA Method 6850	EPA Method 6860
				Regulatory Limits	[a]6.0	[a]6.0
TMW40D	TMW40D102013	Normal	North Bedrock	11/7/2013		**260**
	TMW40D042013	Normal	North Bedrock	4/11/2013		**280**
	TMW40D102012	Normal	North Bedrock	11/1/2012		**330**
	TMW40D042012	Normal	North Bedrock	4/23/2012	**283**	
TMW48	TMW48102013	Normal	North Bedrock	10/31/2013		**1500 J**
	DTW48102013	Duplicate	North Bedrock	10/31/2013		**4400 J**
	DTW48042013	Duplicate	North Bedrock	4/10/2013		**1300 J**
	TMW48042013	Normal	North Bedrock	4/10/2013		**1600 J**
	TMW48102012	Normal	North Bedrock	11/2/2012		**1800**
	TMW48042012	Normal	North Bedrock	4/25/2012	**1640**	
TMW49	DTW49102013	Duplicate	North Bedrock	11/6/2013		**1500 J**
	TMW49102013	Normal	North Bedrock	11/6/2013		**4100 J**
	DTW49042013	Duplicate	North Bedrock	4/15/2013		**1700**
	TMW49042013	Normal	North Bedrock	4/15/2013		**1900**
	TMW49102012	Normal	North Bedrock	10/31/2012		**2100**
	TMW49042012	Normal	North Bedrock	4/25/2012	**2570**	
CMW02	[c] Well not sampled in fall 2013					
	CMW02042013	Normal	OB/OD	4/2/2013		0.63
	CMW02102012	Normal	OB/OD	10/29/2012		0.56
	CMW02042012	Normal	OB/OD	4/16/2012	0.796	
CMW10	[c] Well not sampled in fall 2013					
	CMW10042013	Normal	OB/OD	4/3/2013		0.66
	CMW10102012	Normal	OB/OD	11/7/2012		3.3
	CMW10042012	Normal	OB/OD	4/19/2012	0.845	
CMW14	[c] Well not sampled in fall 2013					
	CMW14042013	Normal	OB/OD	4/3/2013		0.020 J
	CMW14102012	Normal	OB/OD	11/6/2012		0.025 J
	CMW14042012	Normal	OB/OD	4/23/2012	0.100 U	
CMW17	[c] Well not sampled in fall 2013					
	CMW17042013	Normal	OB/OD	4/3/2013		1.8
	CMW17102012DUP	Duplicate	OB/OD	11/6/2012		2.1 J
	CMW17102012	Normal	OB/OD	11/6/2012		1.9 J
	CMW17042012	Normal	OB/OD	4/17/2012	1.87	
CMW18	[c] Well not sampled in fall 2013					
	CMW18042013	Normal	OB/OD	4/4/2013		5.7
	DCW18042013	Duplicate	OB/OD	4/4/2013		5.7
	CMW18102012	Normal	OB/OD	11/6/2012		5.3 J
	CMW18042012	Normal	OB/OD	4/17/2012	5.23	

TABLE 5-4
Summary of Perchlorate Analytical Detections (Page 6 of 6)
Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	Perchlorate (µg/L)	
					EPA Method 6850	EPA Method 6860
				Regulatory Limits	[a]6.0	[a]6.0
KMW10	[c.] Well not sampled in fall 2013					
	KMW10042013	Normal	OB/OD	4/5/2013		2.2
	KMW10102012	Normal	OB/OD	10/29/2012		2.3
	KMW10042012	Normal	OB/OD	4/20/2012	2.42	
KMW11	[c.] Well not sampled in fall 2013					
	KMW11042013	Normal	OB/OD	4/4/2013		0.4
	KMW11102012	Normal	OB/OD	11/1/2012		0.4
	KMW11042012	Normal	OB/OD	4/18/2012	0.368	

Acronyms and Abbreviations

CAS: Chemical Abstract Services (registry number)

DUP: duplicate

NS: not sampled

J: analyte was positively identified; reported value is estimated

µg/L: microgram(s) per liter

Bold indicates analyte was positively detected above regulatory limits

Notes:

[a.] Regulatory Limit is 6 µg/L (Resource Conservation and Recovery Act Permit Screening Levels, NMED 2011)

[b.] Wells in the East Landfill were not sampled due to landfill excavation and removal

[c.] Wells in the OB/OD area were not accessible during active remediation of the area

If no detection occurred for explosives compounds during the last four events, no non-detect or historic data is presented

TABLE 5-5

Summary of Volatile Organic Compound Analytical Detections (Page 1 of 7)

Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	EPA Method 8260B (µg/L)																		
					1,1,1-Trichloroethane CAS 71-55-6	1,1-Dichloroethane CAS 75-34-3	1,1-Dichloroethene CAS 75-35-4	1,2,3-Trichlorobenzene CAS 120-82-1	1,2-Dichloroethane CAS 107-06-2	1,4-Dichlorobenzene CAS 106-46-7	2-Butanone CAS 78-93-3	Acetone CAS 67-64-1	Benzene CAS 71-43-2	Bromochloromethane CAS 74-97-5	Carbon Disulfide CAS 75-15-0	Chloroform CAS 67-66-3	Chloromethane CAS 74-87-3	Cumene CAS 98-82-8	Methyl Tert-butyl Ether CAS 1634-04-4	Naphthalene CAS 91-20-3	Styrene CAS 100-42-5	Tetrachloroethene CAS 127-18-4	Toluene CAS 108-88-3	trans-1,2-Dichloroethene CAS 156-60-5
					Regulatory Limit																		
					[a] 60	[a] 25	[a] 5	[c] 5.2	[b] 5	[b] 75	[c] 4,900	[c] 12,000	[b] 5	[c] 83	[c] 720	[a] 100	[c] 190	[c] 390	[c] 12	[a] 30	[b] 100	[b] 5	[a] 750	[c] 100
BGMW01	BGMW01102013	Normal	North Alluvial	11/8/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	2.5 J	0.20 U	0.40 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	BGMW01042013	Normal	North Alluvial	4/2/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	BGMW01102012	Normal	North Alluvial	10/26/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	BGMW01042012	Normal	North Alluvial	4/25/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
BGMW02	BGMW02102013	Normal	North Alluvial	11/5/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	13	0.20 U	0.40 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	BGMW02042013	Normal	North Alluvial	4/3/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	BGMW02102012	Normal	North Alluvial	10/30/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	3.0 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	BGMW02042012	Normal	North Alluvial	4/25/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
BGMW03	BGMW03102013	Normal	North Alluvial	11/5/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	DBW03102013	Duplicate	North Alluvial	11/5/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	DBW03042013	Duplicate	North Alluvial	4/8/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	BGMW03042013	Normal	North Alluvial	4/8/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	BGMW03102012	Normal	North Alluvial	10/31/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	2.3 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 UJ	0.20 U
	BGMW03042012	Normal	North Alluvial	4/24/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
FW31	FW31102013	Normal	North Alluvial	11/1/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	0.80 U	0.20 U	0.80 R	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	FW31042013	Normal	North Alluvial	4/12/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.19 J	0.20 U
	FW31102012	Normal	North Alluvial	11/5/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	FW31042012	Normal	North Alluvial	4/20/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
FW35	FW35102013	Normal	North Alluvial	10/29/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	FW35042013	Normal	North Alluvial	4/11/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.25 J	0.40 U	0.40 U	0.40 U	0.20 U
	FW35102012	Normal	North Alluvial	11/7/2012	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	1.0 U	0.79 U	0.25 U	0.50 U	0.86 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.50 U	0.25 U	0.25 U
	FW35042012	Normal	North Alluvial	4/20/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	1.0 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
MW01	MW01102013	Normal	North Alluvial	11/1/2013	0.20 U	0.40 U	0.40 U	0.40 U	1.3	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	0.80 U	0.20 U	0.80 R	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	MW01042013	Normal	North Alluvial	4/15/2013	0.20 U	0.20 U	0.20 U	0.40 U	1.1	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	MW01102012	Normal	North Alluvial	10/24/2012	0.20 U	0.20 U	0.20 U	0.40 U	1.4	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	MW01042012	Normal	North Alluvial	4/20/2012	0.16 U	0.25 U	0.19 U	0.38 U	1.5	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
MW18D	MW18D102013	Normal	North Alluvial	11/1/2013	0.20 U	0.40 U	0.40 U	0.40 U	**80 J**	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	0.53 J	0.20 U	0.80 R	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	MW18D042013	Normal	North Alluvial	4/17/2013	0.20 U	0.20 U	0.20 U	0.40 U	**74**	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	MW18D102012	Normal	North Alluvial	11/8/2012	0.20 U	0.20 U	0.20 U	0.40 U	**93**	0.40 U	3.2 U	3.3 J	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	MW18D042012	Normal	North Alluvial	4/19/2012	0.16 U	0.25 U	0.19 U	0.38 U	**110**	0.18 U	0.28 U	3.8 J	0.20 U	0.20 U	1.1 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
MW20	MW20102013	Normal	North Alluvial	11/8/2013	0.20 U	0.40 U	0.40 U	0.40 U	**6.1**	0.40 U	3.2 U	3.9 J	0.20 U	0.40 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	DW20042013	Duplicate	North Alluvial	4/10/2013	0.20 U	0.20 U	0.20 U	0.40 U	**7.4**	0.40 U	3.2 U	5.7 J	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	MW20042013	Normal	North Alluvial	4/10/2013	0.20 U	0.20 U	0.20 U	0.40 U	**7.0**	0.40 U	3.2 U	6.4 UJ	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	MW20102012	Normal	North Alluvial	10/29/2012	0.20 U	0.20 U	0.20 U	0.28 J	**8.8**	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.51 J	0.40 U	0.40 U	0.40 U	0.20 U
	MW20042012	Normal	North Alluvial	4/24/2012	0.16 U	0.25 U	0.19 U	0.38 U	**9.0**	0.18 U	0.28 U	5.7	0.20 U	0.20 U	0.15 U	0.19 U	1.0 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
MW22D	DMW22D102013	Duplicate	North Alluvial	11/1/2013	0.20 U	0.40 U	0.40 U	0.40 U	1.4	0.40 U	3.2 U	6.4 UJ	0.20 U	0.40 U	0.80 U	0.20 U	0.80 R	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	MW22D102013	Normal	North Alluvial	11/1/2013	0.20 U	0.40 U	0.40 U	0.40 U	1.4	0.40 U	3.2 U	3.0 J	0.20 U	0.40 U	0.80 U	0.20 U	0.80 R	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	MW22D042013	Normal	North Alluvial	4/9/2013	0.20 U	0.20 U	0.20 U	0.40 U	1.2	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	MW22D102012	Normal	North Alluvial	11/8/2012	0.20 U	0.20 U	0.20 U	0.40 U	1.2	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	MW22D042012	Normal	North Alluvial	4/19/2012	0.16 U	0.25 U	0.19 U	0.38 U	1.2	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U

TABLE 5-5

Summary of Volatile Organic Compound Analytical Detections (Page 2 of 7)

Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	EPA Method 8260B (µg/L)																		
					1,1,1-Trichloroethane CAS 71-55-6	1,1-Dichloroethane CAS 75-34-3	1,1-Dichloroethene CAS 75-35-4	1,2,3-Trichlorobenzene CAS 120-82-1	1,2-Dichloroethane CAS 107-06-2	1,4-Dichlorobenzene CAS 106-46-7	2-Butanone CAS 78-93-3	Acetone CAS 67-64-1	Benzene CAS 71-43-2	Bromochloromethane CAS 74-97-5	Carbon Disulfide CAS 75-15-0	Chloroform CAS 67-66-3	Chloromethane CAS 74-87-3	Cumene CAS 98-82-8	Methyl Tert-butyl Ether CAS 1634-04-4	Naphthalene CAS 91-20-3	Styrene CAS 100-42-5	Tetrachloroethene CAS 127-18-4	Toluene CAS 108-88-3	trans-1,2-Dichloroethene CAS 156-60-5
					Regulatory Limit																		
					[a.] 60	[a.] 25	[a.] 5	[c.] 5.2	[b.] 5	[b.] 75	[c.] 4,900	[c.] 12,000	[b.] 5	[c.] 83	[c.] 720	[a.] 100	[c.] 190	[c.] 390	[c.] 12	[a.] 30	[b.] 100	[b.] 5	[a.] 750	[c.] 100
MW22S	MW22S102013	Normal	North Alluvial	10/30/2013	2.7	0.76 J	0.27 J	0.40 U	0.40 U	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	0.80 UJ	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	MW22S042013	Normal	North Alluvial	4/11/2013	3	0.81 J	0.20 U	0.40 U	0.52 J	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	MW22S102012	Normal	North Alluvial	10/25/2012	2.8	0.78 J	0.20 U	0.40 U	0.65 J	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	MW22S042012	Normal	North Alluvial	4/20/2012	2.3	0.92 J	0.19 U	0.38 U	0.61 J	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
MW23	DMW23102013	Duplicate	North Alluvial	11/8/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	3.3 J	0.20 U	0.40 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	20	0.20 U
	MW23102013	Normal	North Alluvial	11/8/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	4.7 J	0.20 U	0.40 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	20	0.20 U
	DMW23042013	Duplicate	North Alluvial	4/8/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	5.9 J	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	63	0.20 U
	MW23042013	Normal	North Alluvial	4/8/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	5.1 J	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	69	0.20 U
	MW23102012DUP	Duplicate	North Alluvial	10/31/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	4.6 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	71 J	0.20 U
	MW23102012	Normal	North Alluvial	10/31/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	4.3 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	45 J	0.20 U
	MW23042012	Normal	North Alluvial	4/26/2012	1.6 U	2.5 U	1.9 U	3.8 U	1.9 U	1.8 U	2.8 U	4.4 U	2.0 U	2.0 U	1.5 U	1.9 U	2.2 U	NA	1.7 U	NA	2.0 U	2.7 U	920	1.8 U
MW24	DMW24102013	Duplicate	North Alluvial	11/7/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.61 J	0.20 U
	MW24102013	Normal	North Alluvial	11/7/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.17 J	0.20 U
	DMW24042013	Duplicate	North Alluvial	4/8/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	4.6 J	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	MW24042013	Normal	North Alluvial	4/8/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	3.8 J	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	MW24102012	Normal	North Alluvial	10/31/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	2.6 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.33 J	0.20 U
	MW24042012	Normal	North Alluvial	4/26/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	75	0.18 U
SMW01	SMW01102013	Normal	North Alluvial	11/8/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	1.9 J	0.20 U	0.40 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	SMW01042013	Normal	North Alluvial	4/12/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	SMW01102012	Normal	North Alluvial	11/1/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	SMW01042012	Normal	North Alluvial	4/20/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
TMW06	TMW06102013	Normal	North Alluvial	11/7/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW06042013	Normal	North Alluvial	4/15/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW06102012	Normal	North Alluvial	11/8/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	1.9 J	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW06042012	Normal	North Alluvial	4/18/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.20 J	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
TMW08	TMW08102013	Normal	North Alluvial	11/8/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	4.3 J	0.20 U	0.40 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	DTW08042013	Duplicate	North Alluvial	4/3/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	4.7 J	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW08042013	Normal	North Alluvial	4/3/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	8.8 J	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW08102012	Normal	North Alluvial	10/24/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	2.7 J	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW08042012	Normal	North Alluvial	4/19/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	2.7 J	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
TMW21	TMW21102013	Normal	North Alluvial	11/7/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW21042013	Normal	North Alluvial	4/16/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW21102012	Normal	North Alluvial	11/8/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	3.8 J	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW21042012	Normal	North Alluvial	4/17/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
TMW24	TMW24102013	Normal	North Alluvial	11/8/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	0.72 J	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW24042013	Normal	North Alluvial	4/4/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW24102012	Normal	North Alluvial	10/31/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	2.8 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 UJ	0.20 U
	TMW24042012	Normal	North Alluvial	4/23/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
TMW25	TMW25102013	Normal	North Alluvial	11/4/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	0.80 J	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW25042013	Normal	North Alluvial	4/16/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.55 J	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW25102012	Normal	North Alluvial	11/1/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	3.0 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW25042012	Normal	North Alluvial	4/17/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U

TABLE 5-5
Summary of Volatile Organic Compound Analytical Detections (Page 3 of 7)
Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	EPA Method 8260B (µg/L)																			
					1,1,1-Trichloroethane CAS 71-55-6	1,1-Dichloroethane CAS 75-34-3	1,1-Dichloroethene CAS 75-35-4	1,2,3-Trichlorobenzene CAS 120-82-1	1,2-Dichloroethane CAS 107-06-2	1,4-Dichlorobenzene CAS 106-46-7	2-Butanone CAS 78-93-3	Acetone CAS 67-64-1	Benzene CAS 71-43-2	Bromochloromethane CAS 74-97-5	Carbon Disulfide CAS 75-15-0	Chloroform CAS 67-66-3	Chloromethane CAS 74-87-3	Cumene CAS 98-82-8	Methyl Tert-butyl Ether CAS 1634-04-4	Naphthalene CAS 91-20-3	Styrene CAS 100-42-5	Tetrachloroethene CAS 127-18-4	Toluene CAS 108-88-3	trans-1,2-Dichloroethene CAS 156-60-5
					Regulatory Limit																			
					[a.] 60	[a.] 25	[a.] 5	[c.] 5.2	[b.] 5	[b.] 75	[c.] 4,900	[c.] 12,000	[b.] 5	[c.] 83	[c.] 720	[a.] 100	[c.] 190	[c.] 390	[c.] 12	[a.] 30	[b.] 100	[b.] 5	[a.] 750	[c.] 100
TMW26	TMW26102013	Normal	North Alluvial	11/4/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	2.5 U	0.20 U	0.40 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	DMW26042013	Duplicate	North Alluvial	4/17/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW26042013	Normal	North Alluvial	4/17/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW26102012	Normal	North Alluvial	10/25/2012	0.20 U	0.20 U	0.20 U	0.40 UJ	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW26102012DUP	Duplicate	North Alluvial	10/25/2012	0.20 U	0.20 U	0.20 U	0.19 J	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW26042012	Normal	North Alluvial	4/20/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
TMW28	TMW28102013	Normal	North Alluvial	11/5/2013	0.20 U	0.40 U	0.40 U	0.19 U	0.40 U	0.40 U	3.2 U	21	0.20 U	0.40 U	0.82 J	0.20 U	0.80 U	0.40 U	0.40 U	0.33 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW28042013	Normal	North Alluvial	4/2/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.63 J	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW28102012	Normal	North Alluvial	10/25/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW28042012	Normal	North Alluvial	4/26/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
TMW29	TMW29102013	Normal	North Alluvial	10/31/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW29042013	Normal	North Alluvial	4/11/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW29102012	Normal	North Alluvial	10/26/2012	0.20 U	0.20 U	0.20 U	0.26 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.50 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW29042012	Normal	North Alluvial	4/21/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.32 J	NA	0.20 U	0.26 U	0.20 U	0.18 U
TMW31S	TMW31S102013	Normal	North Alluvial	10/30/2013	0.20 U	0.40 U	0.40 UJ	0.40 U	0.40 U	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	0.80 UJ	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW31S042013	Normal	North Alluvial	4/11/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW31S102012DUP	Duplicate	North Alluvial	11/5/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 UJ	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW31S102012	Normal	North Alluvial	11/5/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	2.0 J	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW31S042012	Normal	North Alluvial	4/19/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
TMW33	TMW33102013	Normal	North Alluvial	10/30/2013	0.20 U	0.40 U	0.40 UJ	0.40 U	**37**	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	0.80 UJ	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW33042013	Normal	North Alluvial	4/17/2013	0.20 U	0.20 U	0.20 U	0.40 U	**35**	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW33102012DUP	Duplicate	North Alluvial	10/26/2012	0.20 U	0.20 U	0.20 U	0.40 U	**41 J**	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW33102012	Normal	North Alluvial	10/26/2012	0.20 U	0.20 U	0.20 U	0.40 U	**38 J**	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW33042012	Normal	North Alluvial	4/19/2012	0.16 U	0.25 U	0.19 U	0.38 U	**42**	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
TMW34	TMW34102013	Normal	North Alluvial	11/1/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	3.9 J	0.20 U	0.40 U	0.80 U	0.20 U	0.80 R	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	DTW34102013	Duplicate	North Alluvial	11/1/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	6.4 UJ	0.20 U	0.40 U	0.80 U	0.20 U	0.80 R	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW34042013	Normal	North Alluvial	4/10/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW34102012	Normal	North Alluvial	10/23/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW34042012	Normal	North Alluvial	4/24/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.44 J	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
TMW35	TMW35102013	Normal	North Alluvial	11/4/2013	0.20 U	0.40 U	0.40 U	0.40 U	2.0	0.40 U	3.2 U	8.1 U	0.20 U	0.40 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	DTW35042013	Duplicate	North Alluvial	4/9/2013	0.20 U	0.20 U	0.20 U	0.40 U	1.9	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW35042013	Normal	North Alluvial	4/9/2013	0.20 U	0.20 U	0.20 U	0.40 U	1.9	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW35102012	Normal	North Alluvial	10/23/2012	0.20 U	0.20 U	0.20 U	0.40 U	2.3	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW35042012	Normal	North Alluvial	4/23/2012	0.16 U	0.25 U	0.19 U	0.38 U	1.9	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 UJ	NA	0.20 U	0.26 U	0.20 U	0.18 U
TMW39S	TMW39S102013	Normal	North Alluvial	11/5/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW39S042013	Normal	North Alluvial	4/11/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW39S102012	Normal	North Alluvial	11/1/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	1.9 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW39S042012	Normal	North Alluvial	4/23/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
TMW40S	TMW40S102013	Normal	North Alluvial	10/31/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	2.6 U	0.20 U	0.40 U	0.80 U	1.4 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW40S042013	Normal	North Alluvial	4/15/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.81 J	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.23 J	0.40 U	0.20 U
	TMW40S102012	Normal	North Alluvial	11/9/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.25 J	0.80 U	0.20 J	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW40S042012	Normal	North Alluvial	4/24/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	1.0 U	NA	0.17 U	NA	0.20 U	1.0 U	0.20 U	0.18 U

TABLE 5-5

Summary of Volatile Organic Compound Analytical Detections (Page 4 of 7)

Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	EPA Method 8260B (µg/L)																		
					1,1,1-Trichloroethane CAS 71-55-6	1,1-Dichloroethane CAS 75-34-3	1,1-Dichloroethene CAS 75-35-4	1,2,3-Trichlorobenzene CAS 120-82-1	1,2-Dichloroethane CAS 107-06-2	1,4-Dichlorobenzene CAS 106-46-7	2-Butanone CAS 78-93-3	Acetone CAS 67-64-1	Benzene CAS 71-43-2	Bromochloromethane CAS 74-97-5	Carbon Disulfide CAS 75-15-0	Chloroform CAS 67-66-3	Chloromethane CAS 74-87-3	Cumene CAS 98-82-8	Methyl Tert-butyl Ether CAS 1634-04-4	Naphthalene CAS 91-20-3	Styrene CAS 100-42-5	Tetrachloroethene CAS 127-18-4	Toluene CAS 108-88-3	trans-1,2-Dichloroethene CAS 156-60-5
					Regulatory Limit																		
					[a] 60	[a] 25	[a] 5	[c] 5.2	[b] 5	[b] 75	[c] 4,900	[c] 12,000	[b] 5	[c] 83	[c] 720	[a] 100	[c] 190	[c] 390	[c] 12	[a] 30	[b] 100	[b] 5	[a] 750	[c] 100
TMW45	TMW45102013	Normal	North Alluvial	11/7/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW45042013	Normal	North Alluvial	4/4/2013	0.20 UJ	0.20 UJ	0.20 UJ	0.40 UJ	0.20 UJ	0.40 UJ	3.2 UJ	2.3 J	0.20 UJ	0.20 UJ	0.80 UJ	0.20 UJ	0.80 UJ	0.22 J	0.40 UJ	0.80 UJ	0.40 UJ	0.40 UJ	0.40 UJ	0.20 UJ
	TMW45102012DUP	Duplicate	North Alluvial	11/6/2012	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	1.0 U	1.5 UJ	0.25 U	0.50 U	0.22 UJ	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.50 U	0.25 U	0.25 U
	TMW45102012	Normal	North Alluvial	11/6/2012	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	1.0 U	1.0 UJ	0.25 U	0.50 U	0.25 UJ	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.50 U	0.25 U	0.25 U
	TMW45042012	Normal	North Alluvial	4/24/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
TMW47	TMW47102013	Normal	North Alluvial	11/7/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	6.2	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW47042013	Normal	North Alluvial	4/15/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	8.8	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW47102012	Normal	North Alluvial	11/2/2012	0.20 U	0.20 U	0.20 U	0.45 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.71 J	0.20 U	0.80 U	0.40 U	0.40 U	0.37 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW47042012	Normal	North Alluvial	4/25/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
EMW04	[d] Well not sampled in fall 2013																						
	EMW04042013	Normal	North Bedrock	4/15/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	EMW04102012DUP	Duplicate	North Bedrock	10/25/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.39 J	0.20 U
	EMW04102012	Normal	North Bedrock	10/25/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.41 J	0.20 U
	EMW04042012	Normal	North Bedrock	4/25/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
TMW14A	TMW14A102013	Normal	North Bedrock	11/6/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	0.47 J	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW14A042013	Normal	North Bedrock	4/17/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 J	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW14A102012	Normal	North Bedrock	11/8/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.71 J	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW14A042012	Normal	North Bedrock	4/21/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	1.4	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
TMW16	TMW16102013	Normal	North Bedrock	10/31/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	3.7	0.20 U
	TMW16042013	Normal	North Bedrock	4/18/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	10	0.20 U
	TMW16102012	Normal	North Bedrock	11/6/2012	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	1.0 U	1.0 U	0.25 U	0.50 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.70 J	0.25 U	0.50 U	0.42 J	0.25 U
	TMW16042012	Normal	North Bedrock	4/26/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.54 J	0.18 U
TMW17	TMW17102013	Normal	North Bedrock	11/6/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	2.7	0.20 U	0.54 J	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW17042013	Normal	North Bedrock	4/9/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	5.2	0.20 U	1.8 J	0.40 U	0.40 U	0.80 U	0.30 J	0.40 U	0.40 U	0.20 U
	TMW17102012	Normal	North Bedrock	11/9/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	4.9 J	0.20 U	0.20 U	7.5	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW17042012	Normal	North Bedrock	4/24/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	7.8	0.19 U	0.43 J	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.24 J
TMW18	TMW18102013	Normal	North Bedrock	10/31/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	120	0.20 U
	TMW18042013	Normal	North Bedrock	4/12/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	82	0.20 U
	TMW18102012	Normal	North Bedrock	11/5/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	2.6 J	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	6.7 J	0.20 U
	TMW18102012DUP	Duplicate	North Bedrock	11/5/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	2.5 J	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	55 J	0.20 U
	TMW18042012	Normal	North Bedrock	4/23/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	58	0.18 U
TMW19	TMW19102013	Normal	North Bedrock	10/31/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.64 U	0.20 U
	TMW19042013	Normal	North Bedrock	4/12/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	2.9	0.20 U
	TMW19102012	Normal	North Bedrock	11/5/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.70 J	0.20 U
	TMW19042012	Normal	North Bedrock	4/21/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
TMW30	TMW30102013	Normal	North Bedrock	10/30/2013	0.20 U	0.40 U	0.40 UJ	0.40 U	0.40 U	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	0.80 UJ	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW30042013	Normal	North Bedrock	4/11/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW30102012DUP	Duplicate	North Bedrock	11/5/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW30102012	Normal	North Bedrock	11/5/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW30042012	Normal	North Bedrock	4/20/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U

TABLE 5-5
Summary of Volatile Organic Compound Analytical Detections (Page 5 of 7)
Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	EPA Method 8260B (µg/L)																		
					1,1,1-Trichloroethane CAS 71-55-6	1,1-Dichloroethane CAS 75-34-3	1,1-Dichloroethene CAS 75-35-4	1,2,3-Trichlorobenzene CAS 120-82-1	1,2-Dichloroethane CAS 107-06-2	1,4-Dichlorobenzene CAS 106-46-7	2-Butanone CAS 78-93-3	Acetone CAS 67-64-1	Benzene CAS 71-43-2	Bromochloromethane CAS 74-97-5	Carbon Disulfide CAS 75-15-0	Chloroform CAS 67-66-3	Chloromethane CAS 74-87-3	Cumene CAS 98-82-8	Methyl Tert-butyl Ether CAS 1634-04-4	Naphthalene CAS 91-20-3	Styrene CAS 100-42-5	Tetrachloroethene CAS 127-18-4	Toluene CAS 108-88-3	trans-1,2-Dichloroethene CAS 156-60-5
					Regulatory Limit																		
					[a] 60	[a] 25	[a] 5	[c] 5.2	[b] 5	[b] 75	[c] 4,900	[c] 12,000	[b] 5	[c] 83	[c] 720	[a] 100	[c] 190	[c] 390	[c] 12	[a] 30	[b] 100	[b] 5	[a] 750	[c] 100
TMW31D	DTW31D102013	Duplicate	North Bedrock	11/6/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW31D102013	Normal	North Bedrock	11/6/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	DTW31D042013	Duplicate	North Bedrock	4/10/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW31D042013	Normal	North Bedrock	4/10/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW31D102012	Normal	North Bedrock	10/30/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW31D042012	Normal	North Bedrock	4/23/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	2.2 J	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
TMW36	TMW36102013	Normal	North Bedrock	11/5/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.47 J	0.20 U
	TMW36042013	Normal	North Bedrock	4/15/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	1.9 J	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.38 J	0.20 U
	TMW36102012	Normal	North Bedrock	11/5/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	1.8 J	2.5 J	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	19	0.20 U
	TMW36042012	Normal	North Bedrock	4/20/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	89	0.18 U
TMW37	TMW37102013	Normal	North Bedrock	10/31/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.19 U	0.20 U
	TMW37042013	Normal	North Bedrock	4/12/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	1.7	0.20 U
	TMW37102012	Normal	North Bedrock	11/2/2012	0.20 U	0.20 U	0.20 U	0.26 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.66 J	0.20 U
	TMW37042012	Normal	North Bedrock	4/23/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	6.2	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	19	0.18 U
TMW38	TMW38102013	Normal	North Bedrock	10/31/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	4.8	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW38042013	Normal	North Bedrock	4/11/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	1.1 J	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW38102012	Normal	North Bedrock	11/8/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.85 J	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW38042012	Normal	North Bedrock	4/20/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
TMW49	DTW49102013	Duplicate	North Bedrock	11/6/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	0.80 U	0.17 J	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW49102013	Normal	North Bedrock	11/6/2013	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	3.2 U	6.4 U	0.20 U	0.40 U	0.80 U	0.18 J	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	DTW49042013	Duplicate	North Bedrock	4/15/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW49042013	Normal	North Bedrock	4/15/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	TMW49102012	Normal	North Bedrock	10/31/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	2.0 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 UJ	0.20 U
	TMW49042012	Normal	North Bedrock	4/25/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.20 U
CMW04	[e] Well not sampled in fall 2013																						
	CMW04042013	Normal	OBOD	4/2/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	4.3	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	CMW04102012	Normal	OBOD	10/29/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	3.2 U	0.20 U	0.20 U	3.4	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	CMW04042012	Normal	OBOD	4/17/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	1.4 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
CMW07	[e] Well not sampled in fall 2013																						
	CMW07042013	Normal	OBOD	4/4/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.0 J	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	CMW07102012	Normal	OBOD	10/30/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	2.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	CMW07042012	Normal	OBOD	4/19/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
CMW10	[e] Well not sampled in fall 2013																						
	CMW10042013	Normal	OBOD	4/3/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	5.5 J	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	CMW10102012	Normal	OBOD	11/7/2012	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	1.0 U	1.0 U	0.25 U	0.50 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.50 U	0.25 U	0.25 U
	CMW10042012	Normal	OBOD	4/19/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	5.0 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U

TABLE 5-5

Summary of Volatile Organic Compound Analytical Detections (Page 6 of 7)

Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	EPA Method 8260B (µg/L)																		
					1,1,1-Trichloroethane CAS 71-55-6	1,1-Dichloroethane CAS 75-34-3	1,1-Dichloroethene CAS 75-35-4	1,2,3-Trichlorobenzene CAS 120-82-1	1,2-Dichloroethane CAS 107-06-2	1,4-Dichlorobenzene CAS 106-46-7	2-Butanone CAS 78-93-3	Acetone CAS 67-64-1	Benzene CAS 71-43-2	Bromochloromethane CAS 74-97-5	Carbon Disulfide CAS 75-15-0	Chloroform CAS 67-66-3	Chloromethane CAS 74-87-3	Cumene CAS 98-82-8	Methyl Tert-butyl Ether CAS 1634-04-4	Naphthalene CAS 91-20-3	Styrene CAS 100-42-5	Tetrachloroethene CAS 127-18-4	Toluene CAS 108-88-3	trans-1,2-Dichloroethene CAS 156-60-5
					Regulatory Limit																		
					[a] 60	[a] 25	[a] 5	[c] 5.2	[b] 5	[b] 75	[c] 4,900	[c] 12,000	[b] 5	[c] 83	[c] 720	[a] 100	[c] 190	[c] 390	[c] 12	[a] 30	[b] 100	[b] 5	[a] 750	[c] 100
CMW14	[e] Well not sampled in fall 2013																						
	CMW14042013	Normal	OBOD	4/3/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	2.4 J	0.40 J	0.20 U	0.80 U	0.20 U	1.3 J	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	CMW14102012	Normal	OBOD	11/6/2012	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	1.0 U	1.3 U	0.41 J	0.50 U	1.6 U	0.25 U	1.3 J	0.25 U	0.25 U	0.25 U	0.25 U	0.50 U	0.25 U	0.25 U
	CMW14042012	Normal	OBOD	4/19/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	10 U	0.36 J	0.20 U	0.15 U	0.19 U	2	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
CMW19	[e] Well not sampled in fall 2013																						
	CMW19042013	Normal	OBOD	4/4/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.73 J	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	CMW19102012	Normal	OBOD	10/30/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	3.4 U	0.20 U	0.20 U	0.81 J	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	CMW19042012	Normal	OBOD	4/24/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
CMW22	[e] Well not sampled in fall 2013																						
	CMW22042013	Normal	OBOD	4/5/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	CMW22102012	Normal	OBOD	11/1/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	CMW22042012	Normal	OBOD	4/18/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.21 J	0.20 J
CMW23	[e] Well not sampled in fall 2013																						
	CMW23042013	Normal	OBOD	4/8/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	CMW23102012	Normal	OBOD	10/30/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	CMW23042012	Normal	OBOD	4/20/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.35 J	0.18 U
CMW24	[e] Well not sampled in fall 2013																						
	CMW24042013	Normal	OBOD	4/5/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	2.1 J	0.20 U	0.20 U	16 J	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	CMW24102012	Normal	OBOD	11/1/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	2.0 U	0.20 U	0.20 U	57	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	CMW24042012	Normal	OBOD	4/24/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	51	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
CMW25	[e] Well not sampled in fall 2013																						
	CMW25042013	Normal	OBOD	4/8/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.46 J	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	CMW25102012	Normal	OBOD	11/7/2012	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	1.0 U	1.0 U	0.25 U	0.50 U	0.77 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.50 U	0.25 U	0.25 U
	CMW25042012	Normal	OBOD	4/20/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.71 J	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
KMW09	[e] Well not sampled in fall 2013																						
	KMW09042013	Normal	OBOD	4/4/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	KMW09102012	Normal	OBOD	10/26/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.45 J	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	KMW09042012	Normal	OBOD	4/18/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.20 U	0.18 U
KMW10	[e] Well not sampled in fall 2013																						
	KMW10042013	Normal	OBOD	4/5/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.35 J	0.40 U	0.20 U
	KMW10102012	Normal	OBOD	10/29/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	3.7 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.22 J	0.40 U	0.20 U
	KMW10042012	Normal	OBOD	4/21/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	0.55 J	0.18 U

TABLE 5-5
Summary of Volatile Organic Compound Analytical Detections (Page 7 of 7)
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Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	EPA Method 8260B (µg/L)																		
					1,1,1-Trichloroethane CAS 71-55-6	1,1-Dichloroethane CAS 75-34-3	1,1-Dichloroethene CAS 75-35-4	1,2,3-Trichlorobenzene CAS 120-82-1	1,2-Dichloroethane CAS 107-06-2	1,4-Dichlorobenzene CAS 106-46-7	2-Butanone CAS 78-93-3	Acetone CAS 67-64-1	Benzene CAS 71-43-2	Bromochloromethane CAS 74-97-5	Carbon Disulfide CAS 75-15-0	Chloroform CAS 67-66-3	Chloromethane CAS 74-87-3	Cumene CAS 98-82-8	Methyl Tert-butyl Ether CAS 1634-04-4	Naphthalene CAS 91-20-3	Styrene CAS 100-42-5	Tetrachloroethene CAS 127-18-4	Toluene CAS 108-88-3	trans-1,2-Dichloroethene CAS 156-60-5
					Regulatory Limit																		
					[a.] 60	[a.] 25	[a.] 5	[c.] 5.2	[b.] 5	[b] 75	[c.] 4,900	[c.] 12,000	[b.] 5	[c] 83	[c.] 720	[a.] 100	[c.] 190	[c.] 390	[c.] 12	[a.] 30	[b.] 100	[b.] 5	[a.] 750	[c] 100
KMW11	[e.] Well not sampled in fall 2013																						
	KMW11042013	Normal	OBOD	4/4/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	1.8	0.40 U	0.20 U
	KMW11102012	Normal	OBOD	11/1/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	2.0	0.40 U	0.20 U
	KMW11042012	Normal	OBOD	4/18/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	1.7	0.20 U	0.18 U
KMW12	[e.] Well not sampled in fall 2013																						
	KMW12042013	Normal	OBOD	4/5/2013	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	KMW12102012	Normal	OBOD	10/29/2012	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.40 U	3.2 U	6.4 U	0.20 U	0.20 U	0.80 U	0.20 U	0.80 U	0.40 U	0.40 U	0.80 U	0.40 U	0.40 U	0.40 U	0.20 U
	KMW12042012	Normal	OBOD	4/18/2012	0.16 U	0.25 U	0.19 U	0.38 U	0.19 U	0.18 U	0.28 U	0.44 U	0.20 U	0.20 U	0.15 U	0.19 U	0.22 U	NA	0.17 U	NA	0.20 U	0.26 U	5.4	0.18 U

Acronyms and Abbreviations
CAS: Chemical Abstract Services (registry number)
J: analyte was positively identified; reported value is estimated
µg/L: microgram(s) per liter
NA: not analyzed
R: result is unusable for any purpose
U: Non-detected result reported at the limit of detection
UJ : The analyte was not detected; however, the result is estimated because of discrepancies in meeting certain analyte-specific quality control criteria
Bold indicates analyte was positively detected above regulatory limits
Regulatory Limits:
[a.] New Mexico Water Quality Control Commission Standard - New Mexico Title 20, Chapter 6, Part 2, Section 3103
[b.] EPA Maximum Contaminant Level - Code of Federal Regulations Title 40, Parts 141, 142, and 143
[c.] EPA 2012. EPA Region 6, Regional Screening Levels (Formerly Human Health Medium Specific Screening Levels)
[d.] Wells in the East Landfill were not sampled due to landfill excavation and removal
[e.] Wells in the OB/OD area were not accessible during active remediation of the area
Notes:
If no detection occurred for volatile organic compounds during the last four events, no non-detect or historic data is presented

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TABLE 5-6

Summary of Semivolatile Organic Compounds and Total Petroleum Hydrocarbons Analytical Results (Page 1 of 6)

Groundwater Periodic Monitoring Report July through December 2013

Well ID	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	Diesel Range Organics (mg/L) CAS GRO	Gasoline Range Organics (µg/L) CAS GRO	1,2-Diphenylhydrazine CAS 122-66-7	2,4-Dinitrophenol CAS 51-28-5	2,4-Dinitrotoluene CAS 121-14-2	2,6-Dinitrotoluene CAS 606-20-2	2-Methyl Naphthalene CAS 91-57-6	2-Methylphenol CAS 105-67-9	2-Nitroanaline CAS 88-74-4	4-Bromophenyl-phenylether CAS 101-55-3	Acenaphthene CAS 83-32-9	Acetophenone CAS 98-86-2	Anthracene CAS 120-12-7	Benzo(g,h,i)perylene CAS 191-24-2	Benzoic Acid CAS 65-85-0	Benzyl Alcohol CAS 100-51-6	Bis(2-Chloroisopropyl) Ether CAS 108-60-1	Bis(2-Ethylhexyl) Phthalate CAS 117-81-7	Butyl Benzyl Phthlate CAS 85-68-7	Caprolactam CAS 105-60-2	Chrysene CAS 218-01-9	Dibenzofuran CAS 132-64-9	Dibutyl phthalate CAS 84-74-2	Diethyl phthalate CAS 84-66-2	Di-N-Butyle Phthalate CAS 84-74-2	Fluoranthene CAS 206-44-0	Fluorene CAS 86-73-7	Hexachlorobenzene CAS 118-74-1	M,P-Cresol CAS MEPH34	Naphthalene CAS 91-20-3	N-Nitroso-Di-N-Propylamine CAS 621-64-7	N-Nitrosodiphenylamine CAS 86-30-6	Phenol CAS 108-95-2	Pyrene CAS 129-00-0
					Method 8015C		EPA Method 8270C (µg/L)																															
							Regulatory Limit																															
					N/A	N/A	[c]0.067	[a]30	[c]0.2	[c]15	[c]27	[a]720	[a]150	N/A	[a]400	[a]1500	[a]1300	NA	[a]58000	[a]1500	[c]0.31	[b]6	[c]14	[a]7700	[c]2.9	[a]5.8	[a]670	[a]11000	[a]670	[a]630	[a]220	[b]1	[c]720	[a]30	[c]10	[a]10	[c]5	[a]87
BGMW01	BGMW01102013	Normal	North Alluvial	11/8/2013	NA	NA	1.0 U	21 U	4.1 U	4.1 U	1.0 U	4.1 U	4.1 U	1.0 U	1.0 U	5.1 U	1.0 U	1.0 U	51 U	1.0 U	1.0 U	1.0 U	4.1 U	10 U	1.0 U	1.0 U	NA	1.0 U	4.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.1 U	1.0 U
	BGMW01042013	Normal	North Alluvial	4/2/2013	NA	NA	0.97 U	19 U	3.9 U	3.9 U	0.97 U	3.9 U	3.9 U	0.97 U	0.97 U	4.9 U	0.97 U	0.97 U	49 U	0.97 U	NA	0.97 U	3.9 U	9.7 U	0.97 U	0.97 U	3.9 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	4.9 U	0.97 U
	BGMW01102012	Normal	North Alluvial	10/26/2012	NA	NA	0.99 U	20 U	4.0 U	4.0 U	0.99 U	4.0 U	4.0 U	0.99 U	0.99 U	NA	0.99 U	0.99 U	49 U	0.99 U	NA	5.0 J	4.0 U	NA	0.99 U	0.99 U	4.0 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	4.9 U	0.99 U
	BGMW01042012	Normal	North Alluvial	4/25/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 UJ	0.18 U	0.25 U	NA	0.19 U	5.1 U	0.18 U	0.24 U	NA	NA	0.24 U	5.1 U	0.25 U	5.1 UJ	0.19 U	0.19 UJ	5.1 U	0.17 U	0.20 U	0.18 U	0.17 U	0.24 U	0.39 U	0.22 UJ	0.32 U	0.16 U	0.14 U	0.21 U
BGMW02	BGMW02102013	Normal	North Alluvial	11/5/2013	NA	NA	1.0 U	20 U	4.1 U	4.1 U	1.0 U	4.1 U	4.1 U	1.0 U	1.0 U	5.1 U	1.0 U	1.0 U	51 U	1.0 U	1.0 U	1.0 U	4.1 U	10 U	1.0 U	1.0 U	NA	1.0 U	4.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.1 U	1.0 U
	BGMW02042013	Normal	North Alluvial	4/3/2013	NA	NA	1.0 U	20 U	4.1 U	4.1 U	1.0 U	4.1 U	4.1 U	1.0 U	1.0 U	5.1 U	1.0 U	1.0 U	51 U	1.0 U	NA	1.0 U	4.1 U	10 U	1.0 U	1.0 U	4.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.1 U	1.0 U
	BGMW02102012	Normal	North Alluvial	10/30/2012	NA	NA	0.99 U	20 U	4.0 U	4.0 U	0.99 U	4.0 U	4.0 U	0.99 U	0.99 U	NA	0.99 U	0.99 U	50 U	0.99 U	NA	0.63 J	4.0 U	NA	0.99 U	0.99 U	4.0 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	5.0 U	0.99 U
	BGMW02042012	Normal	North Alluvial	4/25/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 UJ	0.18 U	0.25 U	NA	0.19 U	5.1 U	0.18 U	0.24 U	NA	NA	0.24 U	0.27 U	0.88 J	5.1 UJ	0.19 U	0.19 UJ	5.1 U	0.17 U	0.20 U	0.18 U	0.17 U	0.24 U	0.39 U	0.22 UJ	0.32 U	0.16 U	0.14 U	0.21 U
BGMW03	BGMW03102013	Normal	North Alluvial	11/5/2013	NA	NA	1.0 U	20 U	4.0 U	4.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	5.1 U	1.0 U	1.0 U	51 U	1.0 U	1.0 U	1.0 U	4.0 U	18 J	1.0 U	1.0 U	NA	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.1 U	1.0 U
	DBW03102013	Duplicate	North Alluvial	11/5/2013	NA	NA	0.95 U	19 U	3.8 U	3.8 U	0.95 U	3.8 U	3.8 U	0.95 U	0.95 U	4.7 U	0.95 U	0.95 U	47 U	0.95 U	0.95 U	0.95 U	3.8 U	14 J	0.95 U	0.95 U	NA	0.95 U	3.8 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.7 U	0.95 U
	DBW03042013	Duplicate	North Alluvial	4/8/2013	NA	NA	0.95 U	19 U	3.8 U	3.8 U	0.95 U	3.8 U	3.8 U	0.95 U	0.95 U	4.7 U	0.95 U	0.95 U	47 U	0.95 U	NA	0.95 U	3.8 U	11 J	0.95 U	0.95 U	3.8 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.7 U	0.95 U
	BGMW03042013	Normal	North Alluvial	4/8/2013	NA	NA	0.97 U	19 U	3.9 U	3.9 U	0.97 U	3.9 U	3.9 U	0.97 U	0.97 U	4.8 U	0.97 U	0.97 U	48 U	0.97 U	NA	0.97 U	3.9 U	11 J	0.97 U	0.97 U	3.9 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	4.8 U	0.97 U
	BGMW03102012	Normal	North Alluvial	10/31/2012	NA	NA	0.96 U	19 U	3.8 U	3.8 U	0.96 U	3.8 U	3.8 U	0.96 U	0.96 U	NA	0.96 U	0.96 U	48 U	0.96 U	NA	0.77 J	3.8 U	NA	0.96 U	0.96 U	3.8 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U
	BGMW03042012	Normal	North Alluvial	4/24/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 U	0.18 U	0.24 U	NA	0.19 U	5.0 U	0.18 U	0.24 U	NA	NA	0.25 J	0.91 J	0.24 U	5.0 U	0.19 U	0.19 U	0.20 U	0.16 U	0.19 U	0.18 U	0.16 U	0.24 U	0.38 U	0.22 U	0.32 U	0.16 U	0.14 U	0.21 U
FW31	FW31102013	Normal	North Alluvial	11/1/2013	NA	NA	1.1 U	21 U	4.2 U	4.2 U	1.1 U	4.2 U	4.2 U	1.1 U	1.1 U	5.3 U	1.1 U	1.1 U	53 U	1.1 U	1.1 U	1.1 U	4.2 U	11 U	1.1 U	1.1 U	NA	1.1 U	4.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.3 U	1.1 U
	FW31042013	Normal	North Alluvial	4/12/2013	NA	NA	0.95 U	19 U	3.8 U	3.8 U	0.95 U	3.8 U	3.8 U	0.95 U	0.95 U	4.8 U	0.95 U	0.95 U	48 U	0.95 U	NA	0.95 U	3.8 U	9.5 U	0.95 U	0.95 U	3.8 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.8 U	0.95 U
	FW31102012	Normal	North Alluvial	11/5/2012	NA	NA	1.0 U	21 U	4.2 U	4.2 U	1.0 U	4.2 U	4.2 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	52 U	1.0 U	NA	0.83 J	4.2 U	NA	1.0 U	1.0 U	4.2 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.2 U	1.0 U
	FW31042012	Normal	North Alluvial	4/20/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FW35	FW35102013	Normal	North Alluvial	10/29/2013	NA	NA	1.0 UJ	20 U	4.0 UJ	4.0 UJ	1.0 UJ	4.0 U	4.0 UJ	1.0 UJ	1.0 UJ	5.0 UJ	1.0 UJ	1.0 UJ	50 U	1.0 UJ	1.0 UJ	1.0 UJ	4.0 UJ	10 UJ	1.0 UJ	1.0 UJ	NA	1.0 UJ	4.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 U	1.0 UJ	1.0 UJ	1.0 UJ	5.0 UJ	1.0 UJ
	FW35042013	Normal	North Alluvial	4/11/2013	NA	NA	0.98 U	20 U	3.9 U	3.9 U	0.98 U	3.9 U	3.9 U	0.98 U	0.98 U	4.9 U	0.98 U	0.98 U	49 U	0.98 U	NA	0.98 U	3.9 U	17 J	0.98 U	0.98 U	3.9 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	4.9 U	0.98 U
	FW35102012	Normal	North Alluvial	11/7/2012	NA	NA	0.95 U	19 U	3.8 U	3.8 U	0.95 U	3.8 U	3.8 U	0.95 U	0.95 U	NA	0.95 U	0.95 U	48 U	0.50 J	NA	4.0 J	3.8 U	NA	0.95 U	0.95 U	3.8 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.8 U	0.95 U
	FW35042012	Normal	North Alluvial	4/20/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 U	0.18 U	0.25 U	NA	0.19 U	5.1 U	0.18 U	0.24 U	NA	NA	0.24 U	5.1 U	0.25 U	5.1 U	0.19 U	0.19 U	5.1 U	0.17 U	0.20 U	0.18 U	0.17 U	0.24 U	0.39 U	0.22 U	0.32 U	0.16 U	0.14 U	0.21 U
MW01	MW01102013	Normal	North Alluvial	11/1/2013	85 J	20 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MW01042013	Normal	North Alluvial	4/15/2013	110 J	20 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MW01102012	Normal	North Alluvial	10/24/2012	280	20 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MW01042012	Normal	North Alluvial	4/20/2012	100 UJ	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW02	MW02102013	Normal	North Alluvial	11/1/2013	87 J	20 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MW02042013	Normal	North Alluvial	4/12/2013	93 J	20 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MW02102012	Normal	North Alluvial	10/24/2012	96 U	20 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MW02042012	Normal	North Alluvial	4/25/2012	100 UJ	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW03	MW03102013	Normal	North Alluvial	11/5/2013	96 U	20 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MW03042013	Normal	North Alluvial	4/4/2013	52 J	20 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MW03102012	Normal	North Alluvial	10/23/2012	95 U	20 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MW03042012	Normal	North Alluvial	4/20/2012	100 UJ	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW18D	MW18D102013	Normal	North Alluvial	11/1/2013	110 U	37	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MW18D042013	Normal	North Alluvial	4/17/2013	110 J	46 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MW18D102012	Normal	North Alluvial	11/8/2012	51 J	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MW18D042012	Normal	North Alluvial	4/19/2012	100 UJ	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW20	MW20102013	Normal	North Alluvial	11/8/2013	100 U	20 U	0.97 U	19 U	3.9 U	3.9 U	0.97 U	3.9 U	3.9 U	0.97 U	0.97 U	4.9 U	0.97 U	0.97 U	49 U	0.97 U	0.97 U	0.97 U	3.9 U	9.7 U	0.97 U	0.97 U	NA	0.97 U	3.9 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	4.9 U	0.97 U
	DW20042013	Duplicate	North Alluvial	4/10/2013	100 J	20 U	0.94 U	19 U	3.8 U	3.8 U	0.94 U	3.8 U	3.8 U	0.94 U	0.94 UJ	4.7 U	0.94 UJ	0.94 U	47 U	0.94 U	NA	0.94 UJ	3.8 U	9.4 U	0.94 U	0.94 UJ	3.8 U	0.94 UJ	0.94 U	0.94 UJ	0.94 UJ	0.94 UJ	0.94 U	0.94 U	0.94 U	0.94 U	4.7 U	0.94 UJ
	MW20042013	Normal	North Alluvial	4/10/2013	81 J	20 U	**1.4 J**	20 U	4.1 U	4.1 U	1.0 U	4.1 U	4.1 U	1.4 J	0.52 J	5.1 U	0.43 J	1.0 U	51 U	1.0 U	NA	2.8 J	4.1 U	10 U	1.0 U	0.78 J	4.1 U	1.4 J	1.0 U	0.46 J	0.98 J	0.95 J	1.0 U	1.0 U	1.0 U	1.0 U	5.1 U	0.45 J
	MW20102012	Normal	North Alluvial	10/29/2012	94 U	20 U	0.94 U	19 U	3.8 U	3.8 U	0.94 U	3.8 U	3.8 U	0.94 U	0.94 U	NA	0.94 U	0.94 U	47 U	0.94 U	NA	0.94 U	3.8 U	NA	0.94 U	0.94 U	3.8 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U
	MW20042012	Normal	North Alluvial	4/24/2012	100 UJ	100 U	NA	5.7 U	0.25 U	0.28 U	0.25 UJ	0.18 U	0.25 U	NA	0.19 U	5.1 U	0.18 U	0.24 U	NA	NA	0.24 U	0.27 U	0.25 U	5.1 R	0.19 U	0.19 UJ	5.1 U	5.1 U	0.20 U	0.18 U	0.17 U	0.24 U	0.39 U	0.22 UJ	0.32 U	0.16 U	0.14 U	0.21 U

TABLE 5-6

Summary of Semivolatile Organic Compounds and Total Petroleum Hydrocarbons Analytical Results (Page 2 of 6)

Groundwater Periodic Monitoring Report July through December 2013

Well ID	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	Method 8015C		EPA Method 8270C (µg/L)																																
					Diesel Range Organics (mg/L) CAS GRO	Gasoline Range Organics (µg/L) CAS GRO	1,2-Diphenylhydrazine CAS 122-66-7	2,4-Dinitrophenol CAS 51-28-5	2,4-Dinitrotoluene CAS 121-14-2	2,6-Dinitrotoluene CAS 606-20-2	2-Methyl Naphthalene CAS 91-57-6	2-Methylphenol CAS 105-67-9	2-Nitroanaline CAS 88-74-4	4-Bromophenyl-phenylether CAS 101-55-3	Acenaphthene CAS 83-32-9	Acetophenone CAS 98-86-2	Anthracene CAS 120-12-7	Benzo(g,h,i)perylene CAS 191-24-2	Benzoic Acid CAS 65-85-0	Benzyl Alcohol CAS 100-51-6	Bis(2-Chloroisopropyl) Ether CAS 108-60-1	Bis(2-Ethylhexyl) Phthalate CAS 117-81-7	Butyl Benzyl Phthlate CAS 85-68-7	Caprolactam CAS 105-60-2	Chrysene CAS 218-01-9	Dibenzofuran CAS 132-64-9	Dibutyl phthalate CAS 84-74-2	Diethyl phthalate CAS 84-66-2	Di-N-Butyle Phthalate CAS 84-74-2	Fluoranthene CAS 206-44-0	Fluorene CAS 86-73-7	Hexachlorobenzene CAS 118-74-1	M,P-Cresol CAS MEPH34	Naphthalene CAS 91-20-3	N-Nitroso-Di-N-Propylamine CAS 621-64-7	N-Nitrosodiphenylamine CAS 86-30-6	Phenol CAS 108-95-2	Pyrene CAS 129-00-0
							Regulatory Limit																																
					N/A	N/A	[c]0.067	[a]30	[c]0.2	[c]15	[c]27	[a]720	[a]150	N/A	[a]400	[a]1500	[a]1300	NA	[a]58000	[a]1500	[c]0.31	[b]6	[c]14	[a]7700	[c]2.9	[a]5.8	[a]670	[a]11000	[a]670	[a]630	[a]220	[b]1	[c]720	[a]30	[c]10	[a]10	[c]5	[a]87
MW22D	DMW22D102013	Duplicate	North Alluvial	11/1/2013	98 UJ	20 U	1.0 U	20 U	4.1 U	4.1 U	1.0 U	4.1 U	4.1 U	1.0 U	1.0 U	5.1 U	1.0 U	1.0 U	51 U	1.0 U	1.0 U	1.0 U	4.1 U	10 U	1.0 U	1.0 U	NA	1.0 U	4.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.1 U	1.0 U
	MW22D102013	Normal	North Alluvial	11/1/2013	49 J	20 U	1.1 U	21 U	4.2 U	4.2 U	1.1 U	4.2 U	4.2 U	1.1 U	1.1 U	5.3 U	1.1 U	1.1 U	53 U	1.1 U	1.1 U	1.1 U	4.2 U	11 U	1.1 U	1.1 U	NA	1.1 U	4.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.3 U	1.1 U
	MW22D042013	Normal	North Alluvial	4/9/2013	66 J	20 U	0.95 U	19 U	3.8 U	3.8 U	0.95 U	3.8 U	3.8 U	0.95 U	0.95 U	4.8 U	0.95 U	0.95 U	48 U	0.95 U	NA	0.95 U	3.8 U	9.5 U	0.95 U	0.95 U	3.8 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.8 U	0.95 U
	MW22D102012	Normal	North Alluvial	11/8/2012	99 U	20 U	0.99 U	20 U	4.0 U	4.0 U	0.99 U	4.0 U	4.0 U	0.99 U	0.99 U	NA	0.99 U	0.99 U	49 U	0.99 U	NA	0.99 U	4.0 U	NA	0.99 U	0.99 U	4.0 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	4.9 U	0.99 U
	MW22D042012	Normal	North Alluvial	4/19/2012	100 UJ	100 U	NA	5.7 U	0.25 U	0.28 U	0.25 U	0.18 U	0.24 U	NA	0.19 U	5.0 U	0.18 U	0.24 U	NA	NA	0.24 U	0.27 U	0.24 U	5.0 U	0.19 U	0.19 U	5.0 U	0.16 U	0.19 U	0.18 U	0.16 U	0.24 U	0.38 U	0.22 U	0.32 U	0.16 U	0.14 U	0.21 U
MW22S	MW22S102013	Normal	North Alluvial	10/30/2013	120 J	20 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 UJ	NA	NA	NA	NA	NA	NA	1.0 UJ	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MW22S102013	Normal	North Alluvial	11/4/2013	NA	NA	1.0 UJ	20 U	4.0 UJ	4.0 UJ	1.0 UJ	4.0 U	4.0 U	1.0 UJ	1.0 UJ	5.0 UJ	1.0 UJ	1.0 UJ	50 U	1.0 UJ	1.0 UJ	1.0 UJ	4.0 UJ	10 UJ	NA	1.0 UJ	NA	1.0 UJ	4.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 U	1.0 UJ	1.0 UJ	1.0 UJ	5.0 U	1.0 UJ
	MW22S042013	Normal	North Alluvial	4/16/2013	480	13 J	0.96 U	19 U	3.8 U	3.8 U	0.96 U	3.8 U	3.8 U	0.96 U	0.96 U	4.8 U	0.96 U	0.96 U	48 U	0.96 U	NA	0.96 U	3.8 U	9.6 U	0.96 U	0.96 U	3.8 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U
	MW22S102012	Normal	North Alluvial	10/25/2012	110 J	12 J	0.96 U	19 U	3.8 U	3.8 U	0.96 U	3.8 U	3.8 U	0.96 U	0.96 U	NA	0.96 U	NA	48 U	0.96 U	NA	2.0 J	3.8 U	NA	NA	0.96 U	3.8 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U
	MW22S042012	Normal	North Alluvial	4/21/2012	200 UJ	100 U	NA	5.7 U	0.25 U	0.28 U	0.25 U	0.18 U	0.24 U	NA	0.19 U	5.0 U	0.18 U	NA	NA	NA	0.24 U	1.2 J	0.24 U	5.0 U	NA	0.19 U	0.26 J	5.0 U	0.19 U	0.18 U	0.16 U	0.24 U	0.38 U	0.22 U	0.32 U	0.16 U	0.14 U	0.21 U
MW23	DMW23102013	Duplicate	North Alluvial	11/8/2013	NA	NA	1.0 U	20 U	4.1 U	4.1 U	1.0 U	4.1 U	4.1 U	1.0 U	1.0 U	5.1 U	1.0 U	NA	51 U	1.0 U	1.0 U	2.7 J	4.1 U	10 U	NA	1.0 U	NA	1.0 U	4.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.1 U	1.0 U
	MW23102013	Normal	North Alluvial	11/8/2013	NA	NA	1.0 U	20 U	4.1 U	4.1 U	1.0 U	4.1 U	4.1 U	1.0 U	1.0 U	5.1 U	1.0 U	0.96 U	51 U	1.0 U	1.0 U	3.0 J	4.1 U	10 U	0.96 U	1.0 U	NA	1.0 U	4.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.1 U	1.0 U
	DMW23042013	Duplicate	North Alluvial	4/8/2013	NA	NA	0.98 U	20 U	3.9 U	3.9 U	0.98 U	1.5 J	3.9 U	0.98 U	0.98 U	4.9 U	0.98 U	0.24 U	27 J	0.98 U	NA	2.8 J	3.9 U	9.8 U	0.19 U	0.98 U	3.9 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	2.1 J	0.98 U	0.98 U	0.98 U	3.5 J	0.98 U
	MW23042013	Normal	North Alluvial	4/8/2013	NA	NA	1.0 U	20 U	4.1 U	4.1 U	1.0 U	1.7 J	4.1 U	1.0 U	1.0 U	5.1 U	1.0 U	NA	19 J	1.0 U	NA	2.7 J	4.1 U	10 U	NA	1.0 U	4.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 J	1.0 U	1.0 U	1.0 U	5.1 UJ	1.0 U
	MW23102012DUP	Duplicate	North Alluvial	10/31/2012	NA	NA	0.99 U	20 U	4.0 U	4.0 U	0.99 U	4.0 UJ	4.0 U	0.99 U	0.99 U	NA	0.99 U	1.0 U	50 U	0.99 U	NA	1.2 J	4.0 U	NA	1.0 U	0.99 U	4.0 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	5.0 U	0.99 U
	MW23102012	Normal	North Alluvial	10/31/2012	NA	NA	0.96 U	19 U	3.8 U	3.8 U	0.96 U	1.4 J	3.8 U	0.96 U	0.96 U	NA	0.96 U	1.0 U	48 U	0.96 U	NA	1.2 J	3.8 U	NA	1.0 U	0.96 U	3.8 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U
	MW23042012	Normal	North Alluvial	4/26/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 UJ	0.18 U	0.24 U	NA	0.19 U	5.0 U	0.18 U	0.98 U	NA	NA	0.24 U	5.0 U	0.24 U	5.0 UJ	0.98 U	0.19 UJ	5.0 U	5.0 U	0.19 U	0.18 U	0.16 U	0.24 U	2.5 J	0.22 UJ	0.32 U	0.16 U	**23**	0.21 U
MW24	DMW24102013	Duplicate	North Alluvial	11/7/2013	NA	NA	0.95 U	19 U	3.8 U	3.8 U	0.95 U	3.8 U	3.8 U	0.95 U	0.95 U	4.8 U	0.95 U	1.0 U	48 U	0.95 U	0.95 U	0.95 U	3.8 U	9.5 U	1.0 U	0.95 U	NA	0.95 U	3.8 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.8 U	0.95 U
	MW24102013	Normal	North Alluvial	11/7/2013	NA	NA	0.97 U	19 U	3.9 U	3.9 U	0.97 U	3.9 U	3.9 U	0.97 U	0.97 U	4.9 U	0.97 U	0.99 U	49 U	0.97 U	0.97 U	0.97 U	3.9 U	9.7 U	0.99 U	0.97 U	NA	0.97 U	3.9 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	4.9 U	0.97 U
	DMW24042013	Duplicate	North Alluvial	4/8/2013	NA	NA	0.96 U	19 U	3.8 U	3.8 U	0.96 U	3.8 U	3.8 U	0.96 U	0.96 U	4.8 U	0.96 U	0.96 U	48 U	0.96 U	NA	0.96 U	3.8 U	9.6 U	0.96 U	0.96 U	3.8 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U
	MW24042013	Normal	North Alluvial	4/8/2013	NA	NA	0.95 U	19 U	3.8 U	3.8 U	0.95 U	3.8 U	3.8 U	0.95 U	0.95 U	4.8 U	0.95 U	0.24 U	48 U	0.95 U	NA	0.95 U	3.8 U	9.5 U	0.19 U	0.95 U	3.8 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.8 U	0.95 U
	MW24102012	Normal	North Alluvial	10/31/2012	NA	NA	0.98 U	20 U	3.9 U	3.9 U	0.98 U	3.9 U	3.9 U	0.98 U	0.98 U	NA	0.98 U	0.95 U	49 U	0.98 U	NA	0.98 U	3.9 U	NA	0.95 U	0.98 U	3.9 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	4.9 U	0.98 U
	MW24042012	Normal	North Alluvial	4/26/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 UJ	0.18 U	0.24 U	NA	0.19 U	5.0 U	0.18 U	0.97 U	NA	NA	0.24 U	0.27 U	0.24 U	5.0 UJ	0.97 U	0.19 UJ	5.0 U	5.0 U	0.19 U	0.18 U	0.16 U	0.24 U	0.38 U	0.22 UJ	0.32 U	0.16 U	0.14 U	0.21 U
SMW01	SMW01102013	Normal	North Alluvial	11/8/2013	NA	NA	1.1 U	22 U	4.3 U	4.3 U	1.1 U	4.3 U	4.3 U	1.1 U	1.1 U	5.4 U	1.1 U	0.62 J	54 U	1.1 U	1.1 U	2.8 J	4.3 U	11 U	2.8 J	1.1 U	NA	1.1 U	4.3 U	0.71 J	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.4 U	0.77 J
	SMW01042013	Normal	North Alluvial	4/12/2013	NA	NA	0.97 U	19 U	3.9 U	3.9 U	0.97 U	3.9 U	3.9 U	0.97 U	0.97 U	4.9 U	0.97 U	0.95 U	49 U	0.97 U	NA	0.97 U	3.9 U	9.7 U	0.95 U	0.97 U	3.9 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	4.9 U	0.97 U
	SMW01102012	Normal	North Alluvial	11/1/2012	NA	NA	0.95 U	19 U	3.8 U	3.8 U	0.95 U	3.8 U	3.8 U	0.95 U	0.95 U	NA	0.95 U	0.98 U	48 U	0.95 U	NA	0.95 U	3.8 U	NA	0.98 U	0.95 U	3.8 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.8 U	0.95 U
	SMW01042012	Normal	North Alluvial	4/20/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 U	0.18 U	0.25 U	NA	0.19 U	5.1 U	0.18 U	0.24 U	NA	NA	0.24 U	5.1 U	0.25 U	5.1 U	0.19 U	0.19 U	5.1 U	0.20 J	0.20 U	0.18 U	0.17 U	0.24 U	0.39 U	0.22 U	0.32 U	0.16 U	0.14 U	0.21 U
TMW03	TMW03102013	Normal	North Alluvial	11/4/2013	NA	NA	1.1 U	13 J	4.2 U	4.2 U	1.1 U	4.2 U	4.2 U	1.1 U	1.1 U	5.3 U	1.1 U	0.62 J	53 U	1.1 U	1.1 U	1.1 U	4.2 U	11 U	0.82 J	1.1 U	NA	1.1 U	4.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.3 U	1.1 U
	TMW03042013	Normal	North Alluvial	4/16/2013	NA	NA	0.94 U	**73 J**	3.8 U	3.8 U	0.94 U	3.8 U	3.8 U	0.94 U	0.94 U	4.7 U	0.94 U	0.97 U	47 UJ	0.94 U	NA	0.94 U	3.8 U	9.4 U	0.97 U	0.94 U	3.8 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U
	TMW03102012	Normal	North Alluvial	11/7/2012	NA	NA	1.0 U	**39 J**	4.2 U	4.2 U	1.0 U	4.2 U	4.2 U	1.0 U	1.0 U	NA	1.0 U	0.95 U	52 U	1.0 U	NA	3.0 J	4.2 U	NA	0.95 U	1.0 U	4.2 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.2 U	1.0 U
	TMW03042012	Normal	North Alluvial	4/25/2012	NA	NA	NA	5.7 U	**0.28 J**	0.28 U	0.25 UJ	0.18 U	0.25 U	NA	0.19 U	5.1 U	0.18 U	0.24 U	NA	NA	0.24 U	0.27 U	0.25 U	5.1 UJ	0.19 U	0.19 UJ	5.1 U	0.17 U	0.20 U	0.18 U	0.17 U	0.24 U	0.39 U	0.22 UJ	0.32 U	0.16 U	0.14 U	0.21 U
TMW04	TMW04102013	Normal	North Alluvial	11/4/2013	NA	NA	1.1 U	22 U	4.4 U	4.4 U	1.1 U	4.4 U	4.4 U	1.1 U	1.1 U	5.5 U	1.1 U	1.1 U	55 U	1.1 U	1.1 U	1.1 U	4.4 U	11 U	1.1 U	1.1 U	NA	1.1 U	4.4 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.5 U	1.1 U
	TMW04042013	Normal	North Alluvial	4/16/2013	NA	NA	1.0 U	20 U	4.0 U	4.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	50 UJ	1.0 U	NA	1.0 U	4.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U
	TMW04102012	Normal	North Alluvial	11/7/2012	NA	NA	0.99 U	20 U	4.0 U	4.0 U	0.99 U	4.0 U	4.0 U	0.99 U	0.99 U	NA	0.99 U	0.99 U	49 U	0.99 U	NA	2.9 J	4.0 U	NA	0.99 U	0.99 U	4.0 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	4.9 U	0.99 U
	TMW04042012	Normal	North Alluvial	4/25/2012	NA	NA	NA	5.7 U	**0.62 J**	0.28 U	0.25 UJ	0.18 U	0.29 J	NA	0.19 U	5.0 U	0.18 U	0.24 U	NA	NA	0.24 U	0.27 U	0.24 U	5.0 UJ	0.19 U	0.19 UJ	0.20 U	5.0 U	0.19 U	0.18 U	0.16 U	0.24 U	0.38 U	0.22 UJ	0.32 U	0.16 U	0.14 U	0.21 U
TMW07	TMW07102013	Normal	North Alluvial	10/29/2013	NA	NA	1.0 U	20 U	4.0 U	4.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	11 J	1.0 U	1.0 U	1.4 J	4.0 U	10 U	1.0 U	1.0 U	NA	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U
	TMW07042013	Normal	North Alluvial	4/8/2013	NA	NA	0.98 U	20 U	3.9 U	3.9 U	0.98 U	3.9 U	3.9 U	0.98 U	0.98 U	4.9 U	0.98 U	0.98 U	49 U	0.98 U	NA	3.6 J	3.9 U	9.8 U	0.98 U	0.98 U	3.9 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	4.9 U	0.98 U
	TMW07102012	Normal	North Alluvial	11/6/2012	NA	NA	1.1 U	21 U	4.2 U	4.2 U	1.1 U	4.2 U	4.2 U	1.1 U	1.1 U	NA	1.1 U	1.1 U	53 U	1.1 U	NA	3.8 J	4.2 U	NA	1.1 U	1.1 U	4.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.3 U	1.1 U
	TMW07042012	Normal	North Alluvial	4/20/2012	NA	NA	NA	5.5 U	0.24 U	0.27 U	0.24 U	0.17 U	0.24 U	NA	0.18 U	4.9 U	0.17 U	0.23 U	NA	NA	0.23 U	4.9 U	0.24 U	4.9 U	0.18 U	0.19 U	4.9 U	0.17 J	0.19 U	0.17 U	0.16 U	0.23 U	0.37 U	0.21 U	0.31 U	0.18 J	0.14 U	0.20 U
TMW08	TMW08102013	Normal	North Alluvial	11/8/2013	100 U	20 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	DTW08042013	Duplicate	North Alluvial	4/3/2013	64 J	20 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TMW08042013	Normal	North Alluvial	4/3/2013	62 J	20 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TMW08102012	Normal	North Alluvial	10/24/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TMW08042012	Normal	North Alluvial	4/19/2012	95 UJ	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 5-6
Summary of Semivolatile Organic Compounds and Total Petroleum Hydrocarbons Analytical Results (Page 3 of 6)
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Well ID	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	Method 8015C		EPA Method 8270C (µg/L)																																	
					Diesel Range Organics (mg/L) CAS GRO	Gasoline Range Organics (µg/L) CAS GRO	1,2-Diphenylhydrazine CAS 122-66-7	2,4-Dinitrophenol CAS 51-28-5	2,4-Dinitrotoluene CAS 121-14-2	2,6-Dinitrotoluene CAS 606-20-2	2-Methyl Naphthalene CAS 91-57-6	2-Methylphenol CAS 105-67-9	2-Nitroanaline CAS 88-74-4	4-Bromophenyl-phenylether CAS 101-55-3	Acenaphthene CAS 83-32-9	Acetophenone CAS 98-86-2	Anthracene CAS 120-12-7	Benzo(g,h,i)perylene CAS 191-24-2	Benzoic Acid CAS 65-85-0	Benzyl Alcohol CAS 100-51-6	Bis(2-Chloroisopropyl) Ether CAS 108-60-1	Bis(2-Ethylhexyl) Phthalate CAS 117-81-7	Butyl Benzyl Phthlate CAS 85-68-7	Caprolactam CAS 105-60-2	Chrysene CAS 218-01-9	Dibenzofuran CAS 132-64-9	Dibutyl phthalate CAS 84-74-2	Diethyl phthalate CAS 84-66-2	Di-N-Butyle Phthalate CAS 84-74-2	Fluoranthene CAS 206-44-0	Fluorene CAS 86-73-7	Hexachlorobenzene CAS 118-74-1	M,P-Cresol CAS MEPH34	Naphthalene CAS 91-20-3	N-Nitroso-Di-N-Propylamine CAS 621-64-7	N-Nitrosodiphenylamine CAS 86-30-6	Phenol CAS 108-95-2	Pyrene CAS 129-00-0
					Regulatory Limit																																			
					N/A	N/A	[c]0.067	[a]30	[c]0.2	[c]15	[c]27	[a]720	[a]150	N/A	[a]400	[a]1500	[a]1300	NA	[a]58000	[a]1500	[c]0.31	[b]6	[c]14	[a]7700	[c]2.9	[a]5.8	[a]670	[a]11000	[a]670	[a]630	[a]220	[b]1	[c]720	[a]30	[c]10	[a]10	[c]5	[a]87
TMW15	TMW15102013	Normal	North Alluvial	11/6/2013	NA	NA	1.1 U	21 U	4.2 U	4.2 U	1.1 U	4.2 U	4.2 U	1.1 U	1.1 U	5.3 U	1.1 U	1.1 U	53 U	1.1 U	1.1 U	1.1 U	4.2 U	11 U	1.1 U	1.1 U	NA	1.1 U	4.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.3 U	1.1 U
	TMW15042013	Normal	North Alluvial	4/17/2013	NA	NA	1.0 U	20 U	4.0 U	4.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	50 UJ	1.0 U	NA	1.0 U	4.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U
	TMW15102012	Normal	North Alluvial	11/8/2012	NA	NA	0.96 U	19 U	3.9 U	3.9 U	0.96 U	3.9 U	3.9 U	0.96 U	0.96 U	NA	0.96 U	0.96 U	48 U	0.96 U	NA	0.96 U	3.9 U	NA	0.96 U	0.96 U	3.9 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U
	TMW15042012	Normal	North Alluvial	4/23/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 U	0.18 U	0.24 U	NA	0.19 U	5.0 U	0.18 U	0.24 U	NA	NA	0.24 U	0.30 J	0.24 U	5.0 U	0.19 U	0.19 U	0.20 U	0.16 U	0.19 U	0.18 U	0.16 U	0.24 U	0.38 U	0.22 U	0.32 U	0.16 U	0.14 U	0.21 U
TMW22	TMW22102013	Normal	North Alluvial	10/29/2013	NA	NA	1.1 U	22 J	4.2 U	4.2 U	1.1 U	4.2 U	4.2 U	1.1 U	1.1 U	5.3 U	1.1 U	1.1 U	17 J	1.1 U	1.1 U	2.8 J	4.2 U	11 U	1.1 U	1.1 U	NA	1.1 U	4.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.3 U	1.1 U
	TMW22042013	Normal	North Alluvial	4/12/2013	NA	NA	1.0 U	20 U	4.1 U	4.1 U	1.0 U	4.1 U	4.1 U	1.0 U	1.0 U	5.1 U	1.0 U	1.0 U	51 U	1.0 U	NA	4.3 J	4.1 U	180	1.0 U	1.0 U	4.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.1 U	1.0 U
	TMW22102012	Normal	North Alluvial	11/6/2012	NA	NA	1.0 U	20 U	4.0 U	4.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	50 U	1.0 U	NA	3.1 J	4.0 U	NA	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U
	TMW22042012	Normal	North Alluvial	4/18/2012	NA	NA	NA	5.9 U	0.26 U	0.29 U	0.25 U	0.19 U	0.25 U	NA	0.19 U	5.2 U	0.18 U	0.25 U	NA	NA	0.24 U	1.3 J	0.25 U	5.2 U	0.19 U	0.20 U	5.2 UJ	0.17 U	0.20 U	0.19 U	0.17 U	0.24 U	0.40 U	0.23 U	0.33 U	0.16 U	0.14 U	0.21 U
TMW31S	TMW31S102013	Normal	North Alluvial	10/30/2013	NA	NA	1.0 U	20 U	4.1 U	4.1 U	1.0 U	4.1 U	4.1 U	1.0 U	1.0 U	5.1 U	1.0 U	1.0 U	12 J	1.0 U	1.0 U	1.0 U	4.1 U	10 U	1.0 U	1.0 U	NA	1.0 U	4.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.1 U	1.0 U
	TMW31S042013	Normal	North Alluvial	4/11/2013	78 J	NA	0.96 U	19 U	3.8 U	3.8 U	0.96 U	3.8 U	3.8 U	0.96 U	0.96 U	4.8 U	0.96 U	0.96 U	48 U	0.96 U	NA	0.96 U	3.8 U	71	0.96 U	0.96 U	3.8 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U
	TMW31S102012DU	Duplicate	North Alluvial	11/5/2012	84 J	20 U	1.1 U	21 U	4.2 U	4.2 U	1.1 U	4.2 U	4.2 U	1.1 U	1.1 U	NA	1.1 U	1.1 U	53 U	1.1 U	NA	1.6 J	4.2 U	NA	1.1 U	1.1 U	4.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.3 U	1.1 U
	TMW31S102012	Normal	North Alluvial	11/5/2012	70 J	20 U	1.0 U	21 U	4.2 U	4.2 U	1.0 U	4.2 U	4.2 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	52 U	1.0 U	NA	2.4 J	4.2 U	NA	1.0 U	1.0 U	4.2 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.2 U	1.0 U
	TMW31S042012	Normal	North Alluvial	4/19/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 U	0.18 U	0.24 U	NA	0.19 U	5.0 U	0.18 U	0.24 U	NA	NA	0.24 U	5.0 U	0.24 U	5.0 U	0.19 U	0.19 U	5.0 U	0.31 J	0.19 U	0.18 U	0.16 U	0.24 U	0.38 U	0.22 U	0.32 U	0.16 U	0.14 U	0.21 U
TMW33	TMW33102013	Normal	North Alluvial	10/30/2013	190 J	27	1.0 U	20 U	4.0 U	4.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	12 J	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U	1.0 U	NA	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U
	TMW33042013	Normal	North Alluvial	4/17/2013	160 J	20 J	0.96 U	19 U	3.8 U	3.8 U	0.96 U	3.8 U	3.8 U	0.96 U	0.96 U	4.8 U	0.96 U	0.96 U	48 UJ	0.96 U	NA	0.96 U	3.8 U	180	0.96 U	0.96 U	3.8 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U
	TMW33102012DUP	Duplicate	North Alluvial	10/26/2012	94 U	19 J	0.94 U	19 U	3.8 U	3.8 U	0.94 U	3.8 U	3.8 U	0.94 U	0.94 U	NA	0.94 U	0.94 U	47 U	0.94 U	NA	0.94 UJ	3.8 U	NA	0.94 U	0.94 U	3.8 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U
	TMW33102012	Normal	North Alluvial	10/26/2012	94 U	16 J	0.94 U	19 U	3.8 U	3.8 U	0.94 U	3.8 U	3.8 U	0.94 U	0.94 U	NA	0.94 U	0.94 U	47 U	0.94 U	NA	1.4 J	3.8 U	NA	0.94 U	0.94 U	3.8 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U
	TMW33042012	Normal	North Alluvial	4/19/2012	100 UJ	100 U	NA	5.7 U	0.25 U	0.28 U	0.25 U	0.18 U	0.25 U	NA	0.19 U	5.1 U	0.18 U	0.24 U	NA	NA	0.24 U	3.6 J	0.25 U	5.1 U	0.19 U	0.19 U	5.1 U	0.17 U	0.20 U	0.18 U	0.17 U	0.24 U	0.39 U	0.22 U	0.32 U	0.16 U	0.14 U	0.21 U
TMW34	TMW34102013	Normal	North Alluvial	11/1/2013	110 U	20 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	DTW34102013	Duplicate	North Alluvial	11/1/2013	110 U	20 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TMW34042013	Normal	North Alluvial	4/10/2013	80 J	20 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TMW34102012	Normal	North Alluvial	10/23/2012	94 U	20 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TMW34042012	Normal	North Alluvial	4/24/2012	23 UJ	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TMW35	TMW35102013	Normal	North Alluvial	11/4/2013	110 U	20 U	1.1 U	22 U	4.3 U	4.3 U	1.1 U	4.3 U	4.3 U	1.1 U	1.1 U	5.4 U	1.1 U	1.1 U	54 U	1.1 U	1.1 U	1.1 U	4.3 U	11 U	1.1 U	1.1 U	NA	1.1 U	4.3 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.4 U	1.1 U
	DTW35042013	Duplicate	North Alluvial	4/9/2013	NA	20 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TMW35042013	Normal	North Alluvial	4/9/2013	47 J	20 U	0.98 U	20 U	3.9 U	3.9 U	0.98 U	3.9 U	3.9 U	0.98 U	0.98 U	4.9 U	0.98 U	0.98 U	49 U	0.98 U	NA	0.98 U	3.9 U	9.8 U	0.98 U	0.98 U	3.9 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	4.9 U	0.98 U
	TMW35102012	Normal	North Alluvial	10/23/2012	94 U	20 U	0.94 U	19 U	3.8 U	3.8 U	0.94 U	3.8 U	3.8 U	0.94 U	0.94 U	NA	0.94 U	0.94 U	47 U	0.94 U	NA	2.2 J	3.8 U	NA	0.94 U	0.94 U	3.8 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U
	TMW35042012	Normal	North Alluvial	4/23/2012	22 UJ	100 U	NA	5.7 U	0.25 U	0.28 U	0.25 U	0.18 U	0.24 U	NA	0.19 U	5.0 U	0.18 U	0.24 U	NA	NA	0.24 U	0.27 U	0.24 U	5.0 U	0.19 U	0.19 U	0.20 U	0.16 U	0.19 U	0.18 U	0.16 U	0.24 U	0.38 U	0.22 U	0.32 U	0.16 U	0.14 U	0.21 U
TMW39S	TMW39S102013	Normal	North Alluvial	11/5/2013	NA	NA	1.1 U	22 U	4.3 U	4.3 U	1.1 U	4.3 U	4.3 U	1.1 U	1.1 U	5.4 U	1.1 U	1.1 U	54 U	1.1 U	1.1 U	1.1 U	4.3 U	83	1.1 U	1.1 U	NA	1.1 U	4.3 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.4 U	1.1 U
	TMW39S042013	Normal	North Alluvial	4/11/2013	NA	NA	1.0 U	20 U	4.1 U	4.1 U	1.0 U	4.1 U	4.1 U	1.0 U	1.0 U	5.1 U	1.0 U	1.0 U	51 U	1.0 U	NA	1.0 U	4.1 U	31 J	1.0 U	1.0 U	4.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.1 U	1.0 U
	TMW39S102012	Normal	North Alluvial	11/1/2012	NA	NA	1.0 U	20 U	4.1 U	4.1 U	1.0 U	4.1 U	4.1 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	51 U	1.0 U	NA	1.0 U	4.1 U	NA	1.0 U	1.0 U	4.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.1 U	1.0 U
	TMW39S042012	Normal	North Alluvial	4/23/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 U	0.18 U	0.24 U	NA	0.19 U	5.0 U	0.18 U	0.24 U	NA	NA	0.24 U	5.0 U	0.24 U	5.0 U	0.19 U	0.19 U	5.0 U	0.40 J	0.19 U	0.18 U	0.16 U	0.24 U	0.38 U	0.22 U	0.32 U	0.16 U	0.14 U	0.21 U
TMW40S	TMW40S102013	Normal	North Alluvial	10/31/2013	NA	NA	0.97 UJ	22 J	3.9 UJ	3.9 UJ	0.97 UJ	3.9 U	3.9 UJ	0.97 UJ	0.97 UJ	4.8 UJ	0.97 UJ	0.97 UJ	48 U	0.97 UJ	0.97 UJ	0.97 UJ	3.9 UJ	9.7 UJ	0.97 UJ	0.97 UJ	NA	0.97 UJ	3.9 UJ	0.97 UJ	0.97 UJ	0.97 UJ	0.97 U	0.97 UJ	0.97 UJ	0.97 UJ	4.8 U	0.97 UJ
	TMW40S042013	Normal	North Alluvial	4/15/2013	NA	NA	1.1 U	23 U	4.5 U	4.5 U	1.1 U	4.5 U	4.5 U	1.1 U	1.1 U	5.7 U	1.1 U	1.1 U	57 U	1.1 U	NA	1.1 U	4.5 U	44	1.1 U	1.1 U	4.5 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.7 U	1.1 U
	Not sampled previously due to lack of water																																					
TMW41	TMW41102013	Normal	North Alluvial	10/30/2013	NA	NA	1.0 U	20 U	4.0 U	4.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	13 J	1.0 U	1.0 U	0.88 J	4.0 U	10 U	1.0 U	1.0 U	NA	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U
	TMW41042013	Normal	North Alluvial	4/11/2013	NA	NA	1.0 U	20 U	4.0 U	4.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	50 U	1.0 U	NA	1.0 U	4.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U
	TMW41102012	Normal	North Alluvial	11/6/2012	NA	NA	0.97 U	19 U	3.9 U	3.9 U	0.97 U	3.9 U	3.9 U	0.97 U	0.97 U	NA	0.97 U	0.97 U	49 U	0.97 U	NA	3.1 J	3.9 U	NA	0.97 U	0.97 U	3.9 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	4.9 U	0.97 U
	TMW41042012	Normal	North Alluvial	4/23/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 U	2.3 J	0.24 U	NA	0.19 U	5.0 U	0.18 U	0.24 U	NA	NA	0.24 U	5.0 U	0.24 U	5.0 U	0.19 U	0.19 U	5.0 U	0.16 U	0.19 U	0.18 U	0.16 U	0.24 U	0.52 J	0.22 U	0.32 U	0.16 U	0.14 U	0.21 U
TMW43	TMW43102013	Normal	North Alluvial	10/30/2013	NA	NA	**0.22 J**	19 U	3.8 U	3.8 U	0.95 U	3.8 U	3.8 U	0.95 U	0.95 U	4.8 U	0.95 U	0.95 U	48 U	0.95 U	0.95 U	0.95 U	3.8 U	9.5 U	0.95 U	0.95 U	NA	0.95 U	3.8 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.8 U	0.95 U
	TMW43042013	Normal	North Alluvial	4/16/2013	NA	NA	0.95 U	19 U	3.8 U	3.8 U	0.95 U	3.8 U	3.8 U	0.95 U	0.95 U	4.7 U	0.95 U	0.95 U	47 U	0.95 U	NA	0.95 U	3.8 U	9.5 U	0.95 U	0.95 U	3.8 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.7 U	0.95 U
	TMW43102012	Normal	North Alluvial	11/8/2012	NA	NA	1.1 U	21 U	4.3 U	4.3 U	1.1 U	4.3 U	4.3 U	1.1 U	1.1 U	NA	1.1 U	1.1 U	54 U	1.1 U	NA	1.1 U	4.3 U	NA	1.1 U	1.1 U	4.3 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.4 U	1.1 U
	TMW43042012	Normal	North Alluvial	4/24/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 U	0.18 U	0.24 U	NA	0.19 U	5.0 U	0.18 U	0.24 U	NA	NA	0.24 U	0.53 J	0.24 U	5.0 U	0.19 U	0.19 U	0.20 U	0.16 U	0.19 U	0.18 U	0.16 U	0.24 U	0.38 U	0.22 U	0.32 U	0.16 U	0.14 U	0.21 U

TABLE 5-6

Summary of Semivolatile Organic Compounds and Total Petroleum Hydrocarbons Analytical Results (Page 4 of 6)

Groundwater Periodic Monitoring Report July through December 2013

Well ID	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	Method 8015C: Diesel Range Organics (mg/L) CAS GRO	Method 8015C: Gasoline Range Organics (µg/L) CAS GRO	EPA Method 8270C (µg/L): 1,2-Diphenylhydrazine CAS 122-66-7	2,4-Dinitrophenol CAS 51-28-5	2,4-Dinitrotoluene CAS 121-14-2	2,6-Dinitrotoluene CAS 606-20-2	2-Methyl Naphthalene CAS 91-57-6	2-Methylphenol CAS 105-67-9	2-Nitroanaline CAS 88-74-4	4-Bromophenyl-phenylether CAS 101-55-3	Acenaphthene CAS 83-32-9	Acetophenone CAS 98-86-2	Anthracene CAS 120-12-7	Benzo(g,h,i)perylene CAS 191-24-2	Benzoic Acid CAS 65-85-0	Benzyl Alcohol CAS 100-51-6	Bis(2-Chloroisopropyl) Ether CAS 108-60-1	Bis(2-Ethylhexyl) Phthalate CAS 117-81-7	Butyl Benzyl Phthlate CAS 85-68-7	Caprolactam CAS 105-60-2	Chrysene CAS 218-01-9	Dibenzofuran CAS 132-64-9	Dibutyl phthalate CAS 84-74-2	Diethyl phthalate CAS 84-66-2	Di-N-Butyle Phthalate CAS 84-74-2	Fluoranthene CAS 206-44-0	Fluorene CAS 86-73-7	Hexachlorobenzene CAS 118-74-1	M,P-Cresol CAS MEPH34	Naphthalene CAS 91-20-3	N-Nitroso-Di-N-Propylamine CAS 621-64-7	N-Nitrosodiphenylamine CAS 86-30-6	Phenol CAS 108-95-2	Pyrene CAS 129-00-0
							Regulatory Limit																																	
					N/A	N/A	[c]0.067	[a]30	[c]0.2	[c]15	[c]27	[a]720	[a]150	N/A	[a]400	[a]1500	[a]1300	NA	[a]58000	[a]1500	[c]0.31	[b]6	[c]14	[a]7700	[c]2.9	[a]5.8	[a]670	[a]11000	[a]670	[a]630	[a]220	[b]1	[c]720	[a]30	[c]10	[a]10	[c]5	[a]87
TMW44	TMW44102013	Normal	North Alluvial	10/29/2013	NA	NA	1.0 UJ	20 U	4.1 UJ	4.1 UJ	1.0 UJ	4.1 U	4.1 UJ	1.0 UJ	1.0 UJ	5.1 UJ	1.0 UJ	1.0 UJ	13 J	1.0 UJ	1.0 UJ	1.0 UJ	4.1 UJ	10 UJ	1.0 UJ	1.0 UJ	NA	1.0 UJ	4.1 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 U	1.0 UJ	1.0 UJ	1.0 UJ	5.1 U	1.0 UJ
	TMW44042013	Normal	North Alluvial	4/8/2013	NA	NA	0.96 U	19 U	3.9 U	3.9 U	0.96 U	3.9 U	3.9 U	0.96 U	0.96 U	4.8 U	0.96 U	0.96 U	48 U	0.96 U	NA	0.96 U	3.9 U	11 J	0.96 U	0.96 U	3.9 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U
	TMW44102012	Normal	North Alluvial	11/6/2012	NA	NA	1.0 U	20 U	4.0 U	4.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	50 U	1.0 U	NA	4.1 J	4.0 U	NA	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U
	TMW44042012	Normal	North Alluvial	4/24/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 U	0.18 U	0.25 U	NA	0.19 U	5.1 U	0.18 U	0.24 U	NA	NA	0.24 U	3.2 J	0.25 U	5.1 U	0.19 U	0.19 U	0.20 U	0.17 U	0.20 U	0.18 U	0.17 U	0.24 U	0.39 U	0.22 U	0.32 U	0.16 U	0.14 U	0.21 U
TMW45	TMW45102013	Normal	North Alluvial	11/7/2013	NA	NA	1.1 U	22 U	4.4 U	4.4 U	1.1 U	4.4 U	4.4 U	1.1 U	1.1 U	5.5 U	1.1 U	1.1 U	55 U	1.1 U	1.1 U	1.1 U	4.4 U	11 U	1.1 U	1.1 U	NA	1.1 U	4.4 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.5 U	1.1 U
	TMW45042013	Normal	North Alluvial	4/4/2013	NA	NA	1.0 U	20 U	4.0 U	4.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	50 U	1.0 U	NA	1.0 U	4.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U
	TMW45102012DUP	Duplicate	North Alluvial	11/6/2012	NA	NA	0.95 U	19 U	3.8 U	3.8 U	0.95 U	3.8 U	3.8 U	0.95 U	0.95 U	NA	0.95 U	0.95 U	47 U	0.95 U	NA	2.8 J	3.8 U	NA	0.95 U	0.95 U	3.8 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.7 U	0.95 U
	TMW45102012	Normal	North Alluvial	11/6/2012	NA	NA	1.0 U	21 U	4.2 U	4.2 U	1.0 U	4.2 U	4.2 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	52 U	1.0 U	NA	3.1 J	4.2 U	NA	1.0 U	1.0 U	4.2 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.2 U	1.0 U
	TMW45042012	Normal	North Alluvial	4/24/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 U	0.18 U	0.24 U	NA	0.19 U	5.0 U	0.18 U	0.24 U	NA	NA	0.24 U	1.5 J	0.24 U	5.0 U	0.19 U	0.19 U	0.20 U	0.16 U	0.19 U	0.18 U	0.16 U	0.24 U	0.38 U	0.22 U	0.32 U	0.16 U	0.14 U	0.21 U
TMW46	TMW46102013	Normal	North Alluvial	10/30/2013	NA	NA	1.0 U	21 U	4.1 U	4.1 U	1.0 U	4.1 U	4.1 U	1.0 U	1.0 U	5.1 U	1.0 U	1.0 U	11 J	1.0 U	1.0 U	1.0 U	4.1 U	10 U	1.0 U	1.0 U	NA	1.0 U	4.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.1 U	1.0 U
	TMW46042013	Normal	North Alluvial	4/8/2013	NA	NA	1.0 U	20 U	4.0 U	4.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	50 U	1.0 U	NA	1.0 U	4.0 U	71	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U
	TMW46102012	Normal	North Alluvial	11/6/2012	NA	NA	1.0 U	21 U	4.2 U	4.2 U	1.0 U	4.2 U	4.2 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	52 U	1.0 U	NA	3.5 J	4.2 U	NA	1.0 U	1.0 U	4.2 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.2 U	1.0 U
	TMW46042012	Normal	North Alluvial	4/24/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 UJ	0.18 U	0.25 U	NA	0.19 U	5.1 U	0.18 U	0.24 U	NA	NA	0.24 U	5.1 U	0.25 U	5.1 R	0.19 U	0.19 UJ	5.1 U	5.1 U	0.20 U	0.18 U	0.17 U	0.24 U	0.39 U	0.22 UJ	0.32 U	0.16 U	0.14 U	0.21 U
EMW01	[d] Well not sampled in fall 2013																																					
	EMW01042013	Normal	North Bedrock	4/15/2013	NA	NA	0.95 U	19 U	3.8 U	3.8 U	0.95 U	3.8 U	3.8 U	0.95 U	0.95 U	4.8 U	0.95 U	0.95 U	48 U	0.95 U	NA	0.95 U	3.8 U	9.5 U	0.95 U	0.95 U	3.8 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.8 U	0.95 U
	EMW01102012	Normal	North Bedrock	10/25/2012	NA	NA	1.1 U	21 U	4.3 U	4.3 U	1.1 U	4.3 U	4.3 U	1.1 U	1.1 U	NA	1.1 U	1.1 U	54 U	1.1 U	NA	1.1 U	4.3 U	NA	1.1 U	1.1 U	4.3 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.4 U	1.1 U
	EMW01042012	Normal	North Bedrock	4/23/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 U	0.18 U	0.24 U	NA	0.19 U	5.0 U	0.18 U	0.24 U	NA	NA	0.24 U	0.45 J	0.24 U	5.0 U	0.19 U	0.19 U	0.20 U	5.0 U	0.19 U	0.18 U	0.16 U	0.24 U	0.38 U	0.22 U	0.32 U	0.16 U	0.14 U	0.21 U
EMW02	[d] Well not sampled in fall 2013																																					
	EMW02042013	Normal	North Bedrock	4/16/2013	NA	NA	0.95 U	19 U	3.8 U	3.8 U	0.95 U	3.8 U	3.8 U	0.95 U	0.95 U	4.7 U	0.95 U	0.95 U	47 U	0.95 U	NA	0.95 U	3.8 U	9.5 U	0.95 U	0.95 U	3.8 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.7 U	0.95 U
	EMW02102012	Normal	North Bedrock	10/25/2012	NA	NA	1.1 U	22 U	4.3 U	4.3 U	0.54 J	4.3 U	4.3 U	1.1 U	1.1 U	NA	1.1 U	1.1 U	54 U	1.1 U	NA	1.1 U	4.3 U	NA	1.1 U	1.1 U	4.3 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.4 U	1.1 U
	EMW02042012	Normal	North Bedrock	4/23/2012	NA	NA	NA	5.3 U	0.23 U	0.26 U	0.23 U	0.17 U	0.23 U	NA	0.17 U	4.6 U	0.16 U	0.22 U	NA	NA	0.22 U	0.33 J	0.23 U	4.6 U	0.17 U	0.18 U	0.18 U	0.15 U	0.18 U	0.17 U	0.15 U	0.22 U	0.36 U	0.2 U	0.29 U	0.15 U	0.13 U	0.19 U
TMW14A	TMW14A102013	Normal	North Bedrock	11/6/2013	NA	NA	1.0 U	20 U	4.1 U	4.1 U	1.0 U	4.1 U	4.1 U	1.0 U	1.0 U	5.1 U	1.0 U	1.0 U	51 U	1.0 U	1.0 U	1.0 U	4.1 U	10 U	1.0 U	1.0 U	NA	1.0 U	4.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.1 U	1.0 U
	TMW14A042013	Normal	North Bedrock	4/17/2013	NA	NA	0.96 U	19 U	3.8 U	3.8 U	0.96 U	3.8 U	3.8 U	0.96 U	0.96 U	4.8 U	0.96 U	0.96 U	48 UJ	0.96 U	NA	0.96 U	3.8 U	9.6 U	0.96 U	0.96 U	3.8 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U
	TMW14A102012	Normal	North Bedrock	11/8/2012	NA	NA	1.0 U	21 U	4.2 U	4.2 U	1.0 U	4.2 U	4.2 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	52 U	1.0 U	NA	1.0 U	4.2 U	NA	1.0 U	1.0 U	4.2 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.2 U	1.0 U
	TMW14A042012	Normal	North Bedrock	4/21/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 U	0.18 U	0.24 U	NA	0.19 U	5.0 U	0.18 U	0.24 U	NA	NA	0.24 U	0.27 U	0.24 U	5.0 U	0.19 U	0.19 U	0.20 U	0.16 U	0.19 U	0.18 U	0.16 U	0.24 U	0.38 U	0.22 U	0.32 U	0.16 U	0.14 U	0.21 U
TMW16	TMW16102013	Normal	North Bedrock	10/31/2013	NA	NA	0.96 U	19 U	3.8 U	3.8 U	0.96 U	3.8 U	3.8 U	0.96 U	0.96 U	0.82 J	0.96 U	0.96 U	48 U	0.96 U	0.96 U	1.1 J	3.8 U	9.6 U	0.96 U	0.96 U	NA	0.96 U	3.8 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U
	TMW16042013	Normal	North Bedrock	4/18/2013	NA	NA	0.95 U	19 U	3.8 U	3.8 U	0.95 U	3.8 U	3.8 U	0.95 U	0.95 U	4.7 U	0.95 U	0.95 U	47 U	0.95 U	NA	0.95 U	3.8 U	9.5 U	0.95 U	0.95 U	3.8 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.7 U	0.95 U
	TMW16102012	Normal	North Bedrock	11/6/2012	NA	NA	0.97 U	19 U	3.9 U	3.9 U	0.97 U	3.9 U	3.9 U	0.97 U	0.97 U	NA	0.97 U	0.97 U	49 U	0.97 U	NA	3.5 J	3.9 U	NA	0.97 U	0.97 U	3.9 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	4.9 U	0.97 U
	TMW16042012	Normal	North Bedrock	4/21/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 U	0.18 U	0.24 U	NA	0.19 U	5.0 U	0.18 U	0.24 U	NA	NA	0.24 U	0.40 J	0.24 U	5.0 U	0.19 U	0.19 U	0.20 U	0.16 U	0.19 U	0.18 U	0.16 U	0.24 U	0.38 U	0.22 U	0.32 U	0.16 U	0.14 U	0.21 U
TMW18	TMW18102013	Normal	North Bedrock	10/31/2013	NA	NA	1.0 U	20 U	4.0 U	4.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	3.3 J	1.0 U	1.0 U	50 U	1.0 U	1.0 U	1.5 J	4.0 U	10 U	1.0 U	1.0 U	NA	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U
	TMW18042013	Normal	North Bedrock	4/12/2013	NA	NA	0.99 U	20 U	4.0 U	4.0 U	0.99 U	5.0 J	4.0 U	0.99 U	0.99 U	7.5 J	0.99 U	0.99 U	50 U	0.99 U	NA	3.1 J	4.0 U	9.9 U	0.99 U	0.99 U	4.0 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	5.0 U	0.99 U
	TMW18102012	Normal	North Bedrock	11/5/2012	NA	NA	0.99 U	20 U	4.0 U	4.0 U	0.99 U	4.0 U	4.0 U	0.99 U	0.99 U	NA	0.99 U	0.99 U	49 U	0.99 U	NA	0.89 J	4.0 U	NA	0.99 U	0.99 U	4.0 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	4.9 U	0.99 U
	TMW18102012DUP	Duplicate	North Bedrock	11/5/2012	NA	NA	0.97 U	19 U	3.9 U	3.9 U	0.97 U	3.9 U	3.9 U	0.97 U	0.97 U	NA	0.97 U	0.97 U	48 U	0.97 U	NA	0.62 J	3.9 U	NA	0.97 U	0.97 U	3.9 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	4.8 U	0.97 U
	TMW18042012	Normal	North Bedrock	4/23/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 U	0.18 U	0.24 U	NA	0.19 U	5.0 U	0.18 U	0.24 U	NA	NA	0.24 U	3.9 J	0.24 U	5.0 U	0.19 U	0.19 U	5.0 U	0.16 U	0.19 U	0.18 U	0.16 U	0.24 U	0.38 U	0.22 U	0.32 U	0.16 U	0.14 U	0.21 U
TMW19	TMW19102013	Normal	North Bedrock	10/31/2013	NA	NA	0.95 U	19 U	3.8 U	3.8 U	0.95 U	3.8 U	3.8 U	0.95 U	0.95 U	1.2 J	0.95 U	0.95 U	48 U	0.95 U	0.95 U	1.2 J	3.8 U	9.5 U	0.95 U	0.95 U	NA	0.95 U	3.8 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.8 U	0.95 U
	TMW19042013	Normal	North Bedrock	4/12/2013	NA	NA	0.94 U	19 U	3.8 U	3.8 U	0.94 U	3.8 U	3.8 U	0.94 U	0.94 U	4.7 U	0.94 U	0.94 U	47 U	0.94 U	NA	0.94 U	3.8 U	9.4 U	0.94 U	0.94 U	3.8 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U
	TMW19102012	Normal	North Bedrock	11/5/2012	NA	NA	0.99 U	20 U	3.9 U	3.9 U	0.99 U	3.9 U	3.9 U	0.99 U	0.99 U	NA	0.99 U	0.99 U	49 U	0.99 U	NA	0.77 J	3.9 U	NA	0.99 U	0.99 U	3.9 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	4.9 U	0.99 U
	TMW19042012	Normal	North Bedrock	4/21/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 U	0.18 U	0.24 U	NA	0.19 U	5.0 U	0.18 U	0.24 U	NA	NA	0.24 U	**13 J**	0.24 U	5.0 U	0.19 U	0.19 U	0.20 U	0.16 U	0.19 U	0.18 U	0.16 U	0.24 U	0.38 U	0.22 U	0.32 U	0.16 U	0.14 U	0.21 U
TMW30	TMW30102013	Normal	North Bedrock	10/30/2013	NA	NA	1.0 U	20 U	4.1 U	4.1 U	1.0 U	4.1 U	4.1 U	1.0 U	1.0 U	5.1 U	1.0 U	1.0 U	11 J	1.0 U	1.0 U	1.0 U	4.1 U	10 U	1.0 U	1.0 U	NA	1.0 U	4.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.1 U	1.0 U
	TMW30042013	Normal	North Bedrock	4/11/2013	69 J	NA	0.98 U	20 U	3.9 U	3.9 U	0.98 U	3.9 U	3.9 U	0.98 U	0.98 U	4.9 U	0.98 U	0.98 U	49 U	0.98 U	NA	0.98 U	3.9 U	18 J	0.98 U	0.98 U	3.9 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	4.9 U	0.98 U
	TMW30102012DUP	Duplicate	North Bedrock	11/5/2012	48 J	NA	1.0 U	21 U	4.2 U	4.2 U	1.0 U	4.2 U	4.2 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	52 U	1.0 U	NA	1.1 J	4.2 U	NA	1.0 U	1.0 U	4.2 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.2 U	1.0 U
	TMW30102012	Normal	North Bedrock	11/5/2012	60 J	NA	1.0 U	21 U	4.2 U	4.2 U	1.0 U	4.2 U	4.2 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	52 U	1.0 U	NA	1.0 J	4.2 U	NA	1.0 U	1.0 U	4.2 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.2 U	1.0 U
	TMW30042012	Normal	North Bedrock	4/20/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 U	0.18 U	0.24 U	NA	0.19 U	5.0 U	0.18 U	0.24 U	NA	NA	0.24 U	5.0 U	0.24 U	5.0 U	0.19 U	0.19 U	5.0 U	0.16 U	0.19 U	0.18 U	0.16 U	0.24 U	0.38 U	0.22 U	0.32 U	0.16 U	0.14 U	0.21 U

TABLE 5-6

Summary of Semivolatile Organic Compounds and Total Petroleum Hydrocarbons Analytical Results (Page 5 of 6)

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					Method 8015C		EPA Method 8270C (µg/L)																																
					Diesel Range Organics (mg/L) CAS GRO	Gasoline Range Organics (µg/L) CAS GRO	1,2-Diphenylhydrazine CAS 122-66-7	2,4-Dinitrophenol CAS 51-28-5	2,4-Dinitrotoluene CAS 121-14-2	2,6-Dinitrotoluene CAS 606-20-2	2-Methyl Naphthalene CAS 91-57-6	2-Methylphenol CAS 105-67-9	2-Nitroanaline CAS 88-74-4	4-Bromophenyl-phenylether CAS 101-55-3	Acenaphthene CAS 83-32-9	Acetophenone CAS 98-86-2	Anthracene CAS 120-12-7	Benzo(g,h,i)perylene CAS 191-24-2	Benzoic Acid CAS 65-85-0	Benzyl Alcohol CAS 100-51-6	Bis(2-Chloroisopropyl) Ether CAS 108-60-1	Bis(2-Ethylhexyl) Phthalate CAS 117-81-7	Butyl Benzyl Phthlate CAS 85-68-7	Caprolactam CAS 105-60-2	Chrysene CAS 218-01-9	Dibenzofuran CAS 132-64-9	Dibutyl phthalate CAS 84-74-2	Diethyl phthalate CAS 84-66-2	Di-N-Butyle Phthalate CAS 84-74-2	Fluoranthene CAS 206-44-0	Fluorene CAS 86-73-7	Hexachlorobenzene CAS 118-74-1	M,P-Cresol CAS MEPH34	Naphthalene CAS 91-20-3	N-Nitroso-Di-N-Propylamine CAS 621-64-7	N-Nitrosodiphenylamine CAS 86-30-6	Phenol CAS 108-95-2	Pyrene CAS 129-00-0
					Regulatory Limit																																	
Well ID	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	N/A	N/A	[c]0.067	[a]30	[c]0.2	[c]15	[c]27	[a]720	[a]150	N/A	[a]400	[a]1500	[a]1300	NA	[a]58000	[a]1500	[c]0.31	[b]6	[c]14	[a]7700	[c]2.9	[a]5.8	[a]670	[a]11000	[a]670	[a]630	[a]220	[b]1	[c]720	[a]30	[c]10	[a]10	[c]5	[a]87
TMW31D	DTW31D102013	Duplicate	North Bedrock	11/6/2013	NA	NA	1.0 U	21 U	4.2 U	4.2 U	1.0 U	4.2 U	4.2 U	1.0 U	1.0 U	5.2 U	1.0 U	1.0 U	52 U	1.0 U	1.0 U	1.0 U	4.2 U	10 U	1.0 U	1.0 U	NA	1.0 U	4.2 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.2 U	1.0 U
	TMW31D102013	Normal	North Bedrock	11/6/2013	NA	NA	1.1 U	21 U	4.2 U	4.2 U	1.1 U	4.2 U	4.2 U	1.1 U	1.1 U	5.3 U	1.1 U	1.1 U	53 U	1.1 U	1.1 U	1.1 U	4.2 U	11 U	1.1 U	1.1 U	NA	1.1 U	4.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.3 U	1.1 U
	DTW31D042013	Duplicate	North Bedrock	4/10/2013	NA	NA	0.94 U	19 U	3.8 U	3.8 U	0.94 U	3.8 U	3.8 U	0.94 U	0.94 U	4.7 U	0.94 U	0.94 U	47 U	0.94 U	NA	0.94 U	3.8 U	9.4 U	0.94 U	0.94 U	3.8 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U
	TMW31D042013	Normal	North Bedrock	4/10/2013	NA	NA	0.97 U	19 U	3.9 U	3.9 U	0.97 U	3.9 U	3.9 U	0.97 U	0.97 U	4.9 U	0.97 U	0.97 U	49 U	0.97 U	NA	0.97 U	3.9 U	9.7 U	0.97 U	0.97 U	3.9 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	4.9 U	0.97 U
	TMW31D102012	Normal	North Bedrock	10/30/2012	98 UJ	NA	0.98 U	20 U	3.9 U	3.9 U	0.98 U	3.9 U	3.9 U	0.98 U	0.98 U	NA	0.98 U	0.98 U	49 U	0.98 U	NA	0.98 U	3.9 U	NA	0.98 U	0.98 U	3.9 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	4.9 U	0.98 U
	TMW31D042012	Normal	North Bedrock	4/23/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 U	0.18 U	0.24 U	NA	0.19 U	5.0 U	0.18 U	0.24 U	NA	NA	0.24 U	0.27 J	0.24 U	5.0 U	0.19 U	0.19 U	0.20 U	0.16 U	0.19 U	0.18 U	0.16 U	0.24 U	0.38 U	0.22 U	0.32 U	0.16 U	0.14 U	0.21 U
TMW32	TMW32102013	Normal	North Bedrock	11/7/2013	NA	NA	1.1 U	21 U	4.2 U	4.2 U	1.1 U	4.2 U	4.2 U	1.1 U	1.1 U	5.3 U	1.1 U	1.1 U	53 U	1.1 U	1.1 U	1.1 U	4.2 U	11 U	1.1 U	1.1 U	NA	1.1 U	4.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.3 U	1.1 U
	TMW32042013	Normal	North Bedrock	4/11/2013	57 J	NA	1.0 U	20 U	4.0 U	4.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	50 U	1.0 U	NA	1.0 U	4.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U
	TMW32102012DUP	Duplicate	North Bedrock	10/30/2012	NA	NA	0.96 U	19 U	3.8 U	3.8 U	0.96 U	3.8 U	3.8 U	0.96 U	0.96 U	NA	0.96 U	0.96 U	48 U	0.96 U	NA	0.96 U	3.8 U	NA	0.96 U	0.96 U	3.8 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U
	TMW32102012	Normal	North Bedrock	10/30/2012	97 UJ	NA	1.0 U	20 U	4.1 U	4.1 U	1.0 U	4.1 U	4.1 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	51 U	1.0 U	NA	1.0 U	4.1 U	NA	1.0 U	1.0 U	4.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.1 U	1.0 U
	TMW32042012	Normal	North Bedrock	4/24/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 U	0.18 U	0.25 U	NA	0.19 U	5.1 U	0.18 U	0.24 U	NA	NA	0.24 U	0.27 U	0.25 U	5.1 U	0.19 U	0.19 U	0.20 U	0.17 U	0.20 U	0.18 U	0.17 U	0.24 U	0.39 U	0.22 U	0.32 U	0.16 U	0.14 U	0.21 U
TMW36	TMW36102013	Normal	North Bedrock	11/5/2013	NA	NA	0.98 U	20 U	3.9 U	3.9 U	0.98 U	3.9 U	3.9 U	0.98 U	0.98 U	4.9 U	0.98 U	0.98 U	49 U	0.98 U	0.98 U	3.2 J	3.9 U	9.8 U	0.98 U	0.98 U	NA	1.0 J	3.9 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	4.9 U	0.98 U
	TMW36042013	Normal	North Bedrock	4/15/2013	95 U	NA	0.95 U	19 U	3.8 U	3.8 U	0.95 U	3.8 U	3.8 U	0.95 U	0.95 U	4.8 U	0.95 U	0.95 U	48 U	0.95 U	NA	0.95 U	3.8 U	9.5 U	0.95 U	0.95 U	3.8 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	4.8 U	0.95 U
	TMW36102012	Normal	North Bedrock	11/5/2012	44 J	NA	0.98 U	20 U	3.9 U	3.9 U	0.98 U	3.4 J	3.9 U	0.98 U	0.98 U	NA	0.98 U	0.98 U	49 U	0.98 U	NA	2.0 J	3.9 U	NA	0.98 U	0.98 U	3.9 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	4.9 U	0.98 U
	TMW36042012	Normal	North Bedrock	4/20/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 U	0.18 U	0.25 U	NA	0.19 U	5.1 U	0.18 U	0.24 U	NA	NA	0.24 U	5.1 U	0.25 U	5.1 U	0.19 U	0.19 U	5.1 U	0.17 U	0.20 U	0.18 U	0.17 U	0.24 U	0.39 U	0.22 U	0.32 U	0.16 U	0.14 U	0.21 U
TMW37	TMW37102013	Normal	North Bedrock	10/31/2013	NA	NA	0.97 U	19 U	3.9 U	3.9 U	0.97 U	3.9 U	3.9 U	0.97 U	0.97 U	4.8 U	0.97 U	0.97 U	48 U	0.97 U	0.97 U	0.97 U	3.9 U	9.7 U	0.97 U	0.97 U	NA	0.97 U	3.9 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	4.8 U	0.97 U
	TMW37042013	Normal	North Bedrock	4/12/2013	190 J	NA	1.0 U	20 U	4.0 U	4.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	50 U	1.0 U	NA	1.0 U	4.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U
	TMW37102012	Normal	North Bedrock	11/2/2012	100 U	NA	1.0 U	21 U	4.1 U	4.1 U	1.0 U	4.1 U	4.1 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	52 U	1.0 U	NA	1.0 J	4.1 U	NA	1.0 U	1.0 U	4.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.2 U	1.0 U
	TMW37042012	Normal	North Bedrock	4/23/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 U	0.18 U	0.24 U	NA	0.19 U	5.0 U	0.18 U	0.24 U	NA	NA	0.24 U	0.27 U	0.24 U	5.0 U	0.19 U	0.19 U	5.0 U	0.16 U	0.19 U	0.18 U	0.16 U	0.24 U	0.38 U	0.22 U	0.32 U	0.16 U	0.14 U	0.21 U
TMW38	TMW38102013	Normal	North Bedrock	10/31/2013	NA	NA	1.1 U	21 U	4.3 U	4.3 U	1.1 U	4.3 U	4.3 U	1.1 U	1.1 U	5.3 U	1.1 U	1.1 U	53 U	1.1 U	1.1 U	1.1 U	4.3 U	11 U	1.1 U	1.1 U	NA	0.60 J	4.3 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.3 U	1.1 U
	TMW38042013	Normal	North Bedrock	4/11/2013	NA	NA	0.94 U	19 U	3.8 U	3.8 U	0.94 U	3.8 U	3.8 U	0.94 U	0.94 U	4.7 U	0.94 U	0.94 U	47 U	0.94 U	NA	0.94 U	3.8 U	9.4 U	0.94 U	0.94 U	3.8 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	4.7 U	0.94 U
	TMW38102012	Normal	North Bedrock	11/8/2012	NA	NA	0.96 U	19 U	3.9 U	3.9 U	0.96 U	3.9 U	3.9 U	0.96 U	0.96 U	NA	0.96 U	0.96 U	11 J	0.96 U	NA	0.96 U	3.9 U	NA	0.96 U	0.96 U	3.9 U	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.34 J	0.96 U	0.96 U	0.96 U	4.8 U	0.96 U
	TMW38042012	Normal	North Bedrock	4/20/2012	NA	NA	NA	5.7 U	0.25 U	1.7 J	0.25 U	0.18 U	0.25 U	NA	0.19 U	5.1 U	0.18 U	0.24 U	NA	NA	0.24 U	5.1 U	0.25 U	5.1 U	0.19 U	0.19 U	5.1 U	0.41 J	0.20 U	0.18 U	0.17 U	0.24 U	0.39 U	0.22 U	0.32 U	0.16 U	0.14 U	0.21 U
TMW39D	TMW39D102013	Normal	North Bedrock	11/6/2013	NA	NA	1.1 U	21 U	4.2 U	4.2 U	1.1 U	4.2 U	4.2 U	1.1 U	1.1 U	5.3 U	1.1 U	1.1 U	53 U	1.1 U	1.1 U	1.1 U	4.2 U	11 U	1.1 U	1.1 U	NA	1.1 U	4.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.3 U	1.1 U
	TMW39D042013	Normal	North Bedrock	4/10/2013	NA	NA	0.99 U	20 U	3.9 U	3.9 U	0.99 U	3.9 U	3.9 U	0.99 U	0.99 U	4.9 U	0.99 U	0.99 U	49 U	0.99 U	NA	0.99 U	3.9 U	9.9 U	0.99 U	0.99 U	3.9 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	4.9 U	0.99 U
	TMW39D102012	Normal	North Bedrock	10/31/2012	NA	NA	1.0 U	20 U	4.0 U	4.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	50 U	1.0 U	NA	1.0 U	4.0 U	NA	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U
	TMW39D042012	Normal	North Bedrock	4/23/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 U	0.18 U	0.24 U	NA	0.19 U	5.0 U	0.18 U	0.24 U	NA	NA	0.24 U	5.0 U	0.24 U	5.0 U	0.19 U	0.19 U	5.0 U	0.31 J	0.19 U	0.18 U	0.16 U	0.24 U	0.38 U	0.22 U	0.32 U	0.16 U	0.14 U	0.21 U
TMW48	TMW48102013	Normal	North Bedrock	10/31/2013	NA	NA	1.1 U	22 U	4.4 U	4.4 U	1.1 U	4.4 U	4.4 U	1.1 U	1.1 U	5.6 U	1.1 U	1.1 U	56 U	1.1 U	1.1 U	1.1 U	4.4 U	11 U	1.1 U	1.1 U	NA	1.1 U	4.4 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.6 U	1.1 U
	DTW48102013	Duplicate	North Bedrock	10/31/2013	NA	NA	1.1 U	21 U	4.3 U	4.3 U	1.1 U	4.3 U	4.3 U	1.1 U	1.1 U	5.3 U	1.1 U	1.1 U	53 U	1.1 U	1.1 U	1.1 U	4.3 U	11 U	1.1 U	1.1 U	NA	1.1 U	4.3 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.3 U	1.1 U
	DTW48042013	Duplicate	North Bedrock	4/10/2013	NA	NA	1.1 U	21 U	4.3 U	4.3 U	1.1 U	4.3 U	4.3 U	1.1 U	1.1 U	5.3 U	1.1 U	1.1 U	53 U	1.1 U	NA	1.1 U	4.3 U	11 U	1.1 U	1.1 U	4.3 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.3 U	1.1 U
	TMW48042013	Normal	North Bedrock	4/10/2013	NA	NA	1.1 U	21 U	4.3 U	4.3 U	1.1 U	4.3 U	4.3 U	1.1 U	1.1 U	5.3 U	1.1 U	1.1 U	53 U	1.1 U	NA	1.1 U	4.3 U	11 U	1.1 U	1.1 U	4.3 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.3 U	1.1 U
	TMW48102012	Normal	North Bedrock	11/2/2012	NA	NA	0.98 U	20 U	3.9 U	3.9 U	0.98 U	3.9 U	3.9 U	0.98 U	0.98 U	NA	0.98 U	0.98 U	49 U	0.98 U	NA	0.98 U	3.9 U	NA	0.98 U	0.98 U	3.9 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	4.9 U	0.98 U
	TMW48042012	Normal	North Bedrock	4/25/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 UJ	0.18 U	0.24 U	NA	0.19 U	5.0 U	0.18 U	0.24 U	NA	NA	0.24 U	0.27 U	0.24 U	5.0 UJ	0.19 U	0.19 UJ	5.0 U	0.16 U	0.19 U	0.18 U	0.16 U	0.24 U	0.38 U	0.22 UJ	0.32 U	0.16 U	0.14 U	0.21 U
TMW49	DTW49102013	Duplicate	North Bedrock	11/6/2013	NA	NA	0.99 U	20 U	4.0 U	4.0 U	0.99 U	4.0 U	4.0 U	0.99 U	0.99 U	4.9 U	0.99 U	0.99 U	49 U	0.99 U	0.99 U	0.99 U	4.0 U	9.9 U	0.99 U	0.99 U	NA	0.99 U	4.0 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	4.9 U	0.99 U
	TMW49102013	Normal	North Bedrock	11/6/2013	NA	NA	0.99 U	20 U	4.0 U	4.0 U	0.99 U	4.0 U	4.0 U	0.99 U	0.99 U	4.9 U	0.99 U	0.99 U	49 U	0.99 U	0.99 U	0.99 U	4.0 U	9.9 U	0.99 U	0.99 U	NA	0.99 U	4.0 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	4.9 U	0.99 U
	TMW49042013	Normal	North Bedrock	4/15/2013	NA	NA	0.97 U	19 U	3.9 U	3.9 U	0.97 U	3.9 U	3.9 U	0.97 U	0.97 U	4.8 U	0.97 U	0.97 U	48 U	0.97 U	NA	0.97 U	3.9 U	9.7 U	0.97 U	0.97 U	3.9 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	4.8 U	0.97 U
	TMW49102012	Normal	North Bedrock	10/31/2012	NA	NA	0.99 U	20 U	4.0 U	4.0 U	0.99 U	4.0 U	4.0 U	0.99 U	0.99 U	NA	0.99 U	0.99 U	50 U	0.99 U	NA	0.99 U	4.0 U	NA	0.99 U	0.99 U	4.0 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	5.0 U	0.99 U
	TMW49042012	Normal	North Bedrock	4/25/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 UJ	0.18 U	0.25 U	NA	0.19 U	5.1 U	0.18 U	0.24 U	NA	NA	0.24 U	0.27 U	0.25 U	5.1 UJ	0.19 U	0.19 UJ	5.1 U	0.17 U	0.20 U	0.18 U	0.17 U	0.24 U	0.39 U	0.22 UJ	0.32 U	0.16 U	0.14 U	0.21 U
CMW10	[e.] Well not sampled in fall 2013																																					
	CMW10042013	Normal	OBOD	4/4/2013	NA	NA	1.0 U	20 U	4.1 U	4.1 U	1.0 U	4.1 U	4.1 U	1.0 U	1.0 U	5.1 U	1.0 U	1.0 U	51 U	1.0 U	NA	1.0 U	4.1 U	10 U	1.0 U	1.0 U	4.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.1 U	1.0 U
	CMW10102012	Normal	OBOD	11/7/2012	NA	NA	1.0 U	20 U	4.0 U	4.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	51 U	1.0 U	NA	3.4 J	4.0 U	NA	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.1 U	1.0 U
	CMW10042012	Normal	OBOD	4/19/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 U	0.18 U	0.25 U	NA	0.19 U	5.1 U	0.18 U	0.24 U	NA	NA	0.24 U	**8.5**	0.25 U	5.1 U	0.19 U	0.19 U	5.1 U	0.17 U	0.20 U	0.18 U	0.17 U	0.24 U	0.39 U	0.22 U	0.32 U	0.16 U	0.14 U	0.21 U

TABLE 5-6
Summary of Semivolatile Organic Compounds and Total Petroleum Hydrocarbons Analytical Detections (Page 6 of 6)
Groundwater Periodic Monitoring Report July through December 2013

Well ID	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	Method 8015C: Diesel Range Organics (mg/L) CAS GRO	Method 8015C: Gasoline Range Organics (µg/L) CAS GRO	EPA Method 8270C (µg/L): 1,2-Diphenylhydrazine CAS 122-66-7	2,4-Dinitrophenol CAS 51-28-5	2,4-Dinitrotoluene CAS 121-14-2	2,6-Dinitrotoluene CAS 606-20-2	2-Methyl Naphthalene CAS 91-57-6	2-Methylphenol CAS 105-67-9	2-Nitroanaline CAS 88-74-4	4-Bromophenyl-phenylether CAS 101-55-3	Acenaphthene CAS 83-32-9	Acetophenone CAS 98-86-2	Anthracene CAS 120-12-7	Benzo(g,h,i)perylene CAS 191-24-2	Benzoic Acid CAS 65-85-0	Benzyl Alcohol CAS 100-51-6	Bis(2-Chloroisopropyl) Ether CAS 108-60-1	Bis(2-Ethylhexyl) Phthalate CAS 117-81-7	Butyl Benzyl Phthlate CAS 85-68-7	Caprolactam CAS 105-60-2	Chrysene CAS 218-01-9	Dibenzofuran CAS 132-64-9	Dibutyl phthalate CAS 84-74-2	Diethyl phthalate CAS 84-66-2	Di-N-Butyle Phthalate CAS 84-74-2	Fluoranthene CAS 206-44-0	Fluorene CAS 86-73-7	Hexachlorobenzene CAS 118-74-1	M,P-Cresol CAS MEPH34	Naphthalene CAS 91-20-3	N-Nitroso-Di-N-Propylamine CAS 621-64-7	N-Nitrosodiphenylamine CAS 86-30-6	Phenol CAS 108-95-2	Pyrene CAS 129-00-0
				Regulatory Limit	N/A	N/A	[c]0.067	[a]30	[c]0.2	[c]15	[c]27	[a]720	[a]150	N/A	[a]400	[a]1500	[a]1300	NA	[a]58000	[a]1500	[c]0.31	[b]6	[c]14	[a]7700	[c]2.9	[a]5.8	[a]670	[a]11000	[a]670	[a]630	[a]220	[b]1	[c]720	[a]30	[c]10	[a]10	[c]5	[a]87
CMW14	[e] Well not sampled in fall 2013																																								
	CMW14042013	Normal	OBOD	4/3/2013	NA	NA	1.1 U	22 U	4.5 U	4.5 U	1.1 U	4.5 U	4.5 U	1.1 U	1.1 U	0.54 J	1.1 U	1.1 U	56 U	1.1 U	NA	1.1 U	4.5 U	13 J	1.1 U	1.1 U	4.5 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.6 U	1.1 U
	CMW14102012	Normal	OBOD	11/6/2012	NA	NA	1.0 U	20 U	4.1 U	4.1 U	1.0 U	4.1 U	4.1 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	14 J	1.0 U	NA	3.0 J	4.1 U	NA	1.0 U	1.0 U	4.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.1 U	1.0 U
	CMW14042012	Normal	OBOD	4/24/2012	NA	NA	NA	5.3 U	0.23 U	0.26 U	0.23 U	0.17 U	0.23 U	NA	0.17 U	4.7 U	0.17 U	0.22 U	NA	NA	0.22 U	0.25 U	0.23 U	4.7 U	0.18 U	0.18 U	0.19 U	0.15 U	0.18 U	0.17 U	0.15 U	0.22 U	0.36 U	0.21 U	0.30 U	0.15 U	0.13 U	0.19 U
CMW18	[e] Well not sampled in fall 2013																																								
	CMW18042013	Normal	OBOD	4/4/2013	NA	NA	1.1 U	22 U	4.4 U	4.4 U	1.1 U	4.4 U	4.4 U	1.1 U	1.1 U	5.5 U	1.1 U	1.1 U	55 U	1.1 U	NA	1.1 U	4.4 U	11 U	1.1 U	1.1 U	4.4 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.5 U	1.1 U
	DCW18042013	Duplicate	OBOD	4/4/2013	NA	NA	1.1 U	21 U	4.3 U	4.3 U	1.1 U	4.3 U	4.3 U	1.1 U	1.1 U	5.4 U	1.1 U	1.1 U	54 U	1.1 U	NA	1.1 U	4.3 U	11 U	1.1 U	1.1 U	4.3 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.4 U	1.1 U
	CMW18102012	Normal	OBOD	11/6/2012	NA	NA	1.0 U	20 U	4.1 U	4.1 U	1.0 U	4.1 U	4.1 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	51 U	1.0 U	NA	1.0 U	4.1 U	NA	1.0 U	1.0 U	4.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.1 U	1.0 U
	CMW18042012	Normal	OBOD	4/17/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 U	0.18 U	0.25 U	NA	0.19 U	5.1 U	0.18 U	0.24 U	NA	NA	0.24 U	0.35 J	0.25 U	5.1 U	0.19 U	0.19 U	5.1 UJ	0.17 U	0.20 U	0.18 U	0.17 U	0.24 U	0.39 U	0.22 U	0.32 U	0.16 U	0.14 U	0.21 U
CMW19	[e] Well not sampled in fall 2013																																							
	CMW19042013	Normal	OBOD	4/4/2013	NA	NA	1.0 U	21 U	4.1 U	4.1 U	1.0 U	4.1 U	4.1 U	1.0 U	1.0 U	5.2 U	1.0 U	1.0 U	52 U	1.0 U	NA	1.0 U	4.1 U	10 U	1.0 U	1.0 U	4.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.2 U	1.0 U
	CMW19102012	Normal	OBOD	10/30/2012	NA	NA	1.2 U	23 U	4.6 U	4.6 U	1.2 U	4.6 U	4.6 U	1.2 U	1.2 U	NA	1.2 U	1.2 U	58 U	1.2 U	NA	1.2 U	4.6 U	NA	1.2 U	1.2 U	4.6 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	5.8 U	1.2 U
	CMW19042012	Normal	OBOD	4/24/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 U	0.18 U	0.24 U	NA	0.19 U	5.0 U	0.18 U	0.24 U	NA	NA	0.24 U	0.28 J	0.24 U	5.0 U	0.19 U	0.19 U	0.20 U	0.16 U	0.19 U	0.18 U	0.16 U	0.24 U	0.38 U	0.22 U	0.32 U	0.16 U	0.14 U	0.21 U
CMW24	[e] Well not sampled in fall 2013																																							
	CMW24042013	Normal	OBOD	4/5/2013	NA	NA	1.0 U	21 U	4.1 U	4.1 U	1.0 U	4.1 U	4.1 U	1.0 U	1.0 U	5.1 U	1.0 U	1.0 U	51 U	1.0 U	NA	1.0 U	4.1 U	10 U	1.0 U	1.0 U	4.1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.1 U	1.0 U
	CMW24102012	Normal	OBOD	11/1/2012	NA	NA	1.1 U	21 U	4.2 U	4.2 U	1.1 U	4.2 U	4.2 U	1.1 U	1.1 U	NA	1.1 U	1.1 U	53 U	1.1 U	NA	1.9 J	4.2 U	NA	1.1 U	1.1 U	4.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.3 U	1.1 U
	CMW24042012	Normal	OBOD	4/24/2012	NA	NA	NA	19	**0.32 J**	0.28 U	0.25 UJ	0.18 U	0.25 U	NA	0.19 U	5.1 U	0.18 U	0.24 U	NA	NA	0.24 U	5.1 U	0.25 U	5.1 UJ	0.19 U	0.19 UJ	5.1 U	0.17 U	0.20 U	0.18 U	0.17 U	0.24 U	0.39 U	0.22 UJ	0.32 U	0.67 J	0.14 U	0.21 U
KMW10	[e] Well not sampled in fall 2013																																							
	KMW10042013	Normal	OBOD	4/5/2013	NA	NA	1.1 U	22 U	4.4 U	4.4 U	1.1 U	4.4 U	4.4 U	1.1 U	1.1 U	5.4 U	1.1 U	1.1 U	54 U	1.1 U	NA	3.8 J	4.4 U	11 U	1.1 U	1.1 U	4.4 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	5.4 U	1.1 U
	KMW10102012	Normal	OBOD	10/29/2012	NA	NA	1.3 U	26 U	5.3 U	5.3 U	1.3 U	5.3 U	5.3 U	1.3 U	1.3 U	NA	1.3 U	1.3 U	66 U	1.3 U	NA	0.93 J	5.3 U	NA	1.3 U	1.3 U	1.7 J	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	6.6 U	1.3 U
	KMW10042012	Normal	OBOD	4/21/2012	NA	NA	NA	5.7 U	0.25 U	0.28 U	0.25 U	0.18 U	0.24 U	NA	0.19 U	5.0 U	0.18 U	0.24 U	NA	NA	0.24 U	5.0 U	0.24 U	5.0 U	0.19 U	0.19 U	5.0 U	0.36 J	0.19 U	0.18 U	0.16 U	0.24 U	0.38 U	0.22 U	0.32 U	0.16 U	0.14 U	0.21 U

Acronyms and Abbreviations

ft bgs: feet below ground surface
J: analyte was positively identified; reported value is estimated
MCL: maximum contaminant level
µg/L: microgram per liter
N/A: not applicable
NA : not analyzed
NM WQCC: New Mexico Water Quality Control Commission
NS: not sampled
R: result is unusable for any purpose
U : non-detected result reported at the limit of detection.
UJ : analyte was not detected; however, the result is estimated because of discrepancies

Notes:

If no detection occurred for total petroleum hydrocarbons or semi-volatile organic compounds in the past four events, no non-detect or historic data is presented
Bold indicates analyte was positively detected above regulatory limits

Regulatory Limits:

[a] NM WQCC Standard - New Mexico Title 20, Chapter 6, Part 2, Section 3103
[b] EPA MCL - Code of Federal Regulations Title 40, Parts 141, 142, and 143
[c] EPA 2012. EPA Region 6, Regional Screening Levels (Formerly Human Health Medium Specific Screening Levels)
[d] Wells in the East Landfill were not sampled due to landfill excavation and removal
[e] Wells in the OB/OD area were not accessible during active remediation of the area

TABLE 5-7
Summary of Dissolved Metals Analytical Detections (Page 1 of 9)
Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	EPA Method 6010/6020 (µg/L)																				EPA Method 7470 (µg/L)
					Aluminum CAS 7429-90-5	Antimony CAS 7440-36-0	Arsenic CAS 7440-38-2	Barium CAS 7440-39-3	Beryllium CAS 7440-41-7	Cadmium CAS 7440-43-9	Calcium CAS 7440-70-2	Chromium CAS 7440-47-3	Cobalt CAS 7440-48-4	Copper CAS 7440-50-8	Iron CAS 7439-89-6	Lead CAS 7439-92-1	Magnesium CAS 7439-95-4	Manganese CAS 7439-96-5	Nickel CAS 7440-02-0	Potassium CAS 7440-09-7	Selenium CAS 7782-49-2	Silver CAS 7440-22-4	Sodium CAS 7440-23-5	Thallium CAS 7440-28-0	Zinc CAS 7440-66-6	Mercury CAS 7439-97-6
					Regulatory Limits																				
					[a]200	[b]6	[b]10	[c]1000	[b]4	[b]5	N/A	[c]50	[c]50	[c]1000	[a]300	[b]15	N/A	[a]50	[c]200	N/A	[c]50	[c]50	N/A	[b]2	[a]5000	[c]2
BGMW01	BGMW01102013	Normal	North Alluvial	11/8/2013	31 U	0.60 U	0.91 J	15	0.24 U	0.12 U	37,000 J	1.5 U	0.36 J	1.5 U	30 UJ	0.50 U	21,000	**170**	1.4 J	640 J	2.0 U	0.10 U	790,000	0.20 U	6.0 U	0.080 U
	BGMW01042013	Normal	North Alluvial	4/2/2013	31 U	0.60 U	0.80 J	21	0.24 U	0.12 U	58,000	1.5 U	0.66 J	1.5 U	33 J	0.50 U	29,000	**330**	2.2 J	1,100 J	2.0 U	0.10 U	900,000	0.20 U	6.0 U	0.080 U
	BGMW01102012	Normal	North Alluvial	10/26/2012	18 J	0.60 U	1.0 J	19 J	0.24 U	0.12 U	49,000	1.5 U	1.1	0.91 J	25 J	0.50 UJ	24,000	210 J	1.8 J	1,000 J	2.0 U	0.10 U	830,000	0.10 U	2.2 J	0.080 U
	BGMW01042012	Normal	North Alluvial	4/25/2012	4 J	0.52 U	1.3 J	26	0.25 U	0.27 U	54,000	3 J	0.35 J	14	48 U	0.28 J	25,000	**190**	3.1 J	430 J	3 J	0.18 U	870,000	0.16 U	14 J	0.052 U
BGMW02	BGMW02102013	Normal	North Alluvial	11/5/2013	31 U	0.60 UJ	0.88 J	17	0.24 U	0.12 U	97,000	1.5 U	0.055 J	0.98 J	30 U	0.50 U	130,000	**88**	**0.65 J**	**1000 J**	**80**	0.10 U	1,100,000	0.20 U	6.0 U	0.080 U
	BGMW02042013	Normal	North Alluvial	4/3/2013	31 U	0.66 J	0.79 J	20	0.10 J	0.14 J	99,000	1.5 U	0.25 J	0.82 J	30 U	0.50 U	130,000	**100 J**	0.69 J	1,300 J	**81**	0.051 J	1,100,000	0.14 J	6.0 U	0.080 U
	BGMW02102012	Normal	North Alluvial	10/30/2012	31 U	0.60 U	1.0 U	14	0.24 U	0.12 U	300,000	2.6 J	2.2	1.5 U	87 J	0.50 U	91,000	**840**	12	15,000	2.0 U	0.10 U	660,000	0.10 J	7.6 J	0.080 U
	BGMW02042012	Normal	North Alluvial	4/25/2012	13 J	0.52 U	**11**	21	0.25 U	0.27 U	110,000	2.7 J	0.22 J	15	48 U	0.24 U	120,000	**110**	4.1 J	660	**110**	0.18 U	1,200,000	0.16 U	15 J	0.052 U
BGMW03	BGMW03102013	Normal	North Alluvial	11/5/2013	31 UJ	1.0 J	1.7 J	38	0.24 U	0.12 U	75,000	0.51 J	0.19 J	2.7	30 UJ	0.50 U	17,000	**56**	0.55 J	2100 J	28	0.10 U	820,000	0.11 J	6.0 U	0.080 U
	DBW03102013	Duplicate	North Alluvial	11/5/2013	36 J	0.53 J	1.5 J	39	0.24 U	0.12 U	74,000	0.68 J	0.22 J	2.5	28 UJ	0.50 U	17,000	**62**	0.73 J	2200 J	30	0.10 U	840,000	0.20 UJ	6.0 U	0.080 U
	DBW03042013	Duplicate	North Alluvial	4/8/2013	130 J	0.60 U	1.1 J	47	0.24 U	0.12 U	86,000	1.5 J	0.17 J	2.5	61 J	0.50 U	17,000	17	0.77 U	3,000	29	0.10 U	690,000	0.20 UJ	6.0 UJ	0.080 U
	BGMW03042013	Normal	North Alluvial	4/8/2013	63 J	0.60 U	1.1 J	48	0.24 U	0.12 U	84,000	1.5 J	0.16 J	2.5	31 J	0.50 U	17,000	17	0.68 U	2,800 J	31	0.10 U	710,000	0.075 J	3.9 J	0.080 U
	BGMW03102012	Normal	North Alluvial	10/31/2012	58 J	0.60 U	2.3 J	32 J	0.24 U	0.12 U	44,000	1.0 J	0.62 J	4.9	35 J	0.29 J	10,000	25 J	1.5 J	2,000 J	46	0.10 U	790,000	0.10 U	11 J	0.080 U
	BGMW03042012	Normal	North Alluvial	4/24/2012	5.6 J	0.52 U	4.1	33	0.25 U	0.27 U	24,000	6.8 J	0.22 J	4 J	48 U	0.24 U	4,800	41	1.9 J	1,600	43	0.68 U	220,000	0.16 U	10 J	0.052 U
FW31	FW31102013	Normal	North Alluvial	11/1/2013	68 J	0.60 U	7.4	14	0.24 U	0.12 U	6,800	0.61 J	0.062 J	0.75 J	33 J	0.50 U	2,400	3.0 J	0.90 U	1800 J	2.0 U	0.10 U	550,000	0.20 U	6.0 UJ	0.080 U
	FW31042013	Normal	North Alluvial	4/12/2013	**320**	0.60 U	9.8	18	0.24 U	0.12 U	7,200	6.1 J	0.27 J	3	140	0.50 U	2,500	3.1 J	4.2	1,900 J	2.0 U	0.10 U	550,000	0.20 U	6.4 J	0.080 U
	FW31102012	Normal	North Alluvial	11/5/2012	39 J	0.60 U	7.5 J	12	0.24 U	0.12 U	5,800	0.55 J	0.47 J	1.5 U	30 U	0.50 U	2,500	1.8 J	0.90 U	1,600 J	2.0 U	0.10 U	540,000	0.10 U	5.4 J	0.028 J
	FW31042012	Normal	North Alluvial	4/20/2012	6.3 J	1.2 J	6.3	14	0.25 U	0.29 J	4,900	4.1 J	0.12 U	2.2 J	48 U	0.57 J	1,800 J	0.74 J	0.28 J	1,400	1.5 U	2	370,000	0.16 U	11 J	0.052 U
FW35	FW35102013	Normal	North Alluvial	10/29/2013	31 U	1.0 J	1.0 U	13 U	0.24 U	0.12 U	270,000	1.5 U	1.8	1.5 U	110	0.50 U	100,000	**130**	2.1 U	780 J	1.6 J	0.10 U	600,000	0.18 J	48	0.080 U
	FW35042013	Normal	North Alluvial	4/11/2013	31 U	0.60 U	1.0 U	12	0.24 U	0.12 U	270,000	1.5 U	0.87 J	1.5 U	27 J	0.50 UJ	100,000	**110 J**	0.98 J	880 J	2.6 J	0.10 U	590,000	0.20 UJ	6.0 U	0.080 U
	FW35102012	Normal	North Alluvial	11/7/2012	**290 J**	0.60 U	0.35 J	24	0.24 U	0.12 U	240,000	1.5 U	1.1	1.5 U	**300**	0.50 U	98,000	**390**	3.1	770 J	4.8 J	0.10 U	530,000	0.10 U	16 J	0.080 U
	FW35042012	Normal	North Alluvial	4/20/2012	1.4 U	0.58 J	1.6	9.6 J	0.25 U	0.27 U	270,000	2.3 J	0.34 J	9.2	**770**	0.24 U	100,000	19	6.6 J	370 J	9	0.18 U	610,000	0.68 J	48 J	0.052 U
MW01	MW01102013	Normal	North Alluvial	11/1/2013	**9,900**	0.60 U	2.0 J	100	0.44 J	0.12 U	37,000	5.7 J	4.8	5.6	**6,500**	3.9	9,700	**260 J**	5.7	3200	17	0.10 U	940,000	0.082 U	52 J	0.080 U
	MW01042013	Normal	North Alluvial	4/15/2013	31 U	0.60 U	0.56 J	17	0.24 U	0.12 U	30,000	0.79 J	1	1.9 J	30 U	0.50 U	7,200	3.7	1.4 J	1,100 J	15	0.10 U	950,000	0.20 U	12 J	0.080 U
	MW01102012	Normal	North Alluvial	10/24/2012	**310**	0.60 U	0.67 J	19	0.24 U	0.12 U	28,000	1.5 U	0.89 J	2.3	160	0.50 U	6,900	15	1.1 J	1,200 J	18	0.10 U	920,000	0.10 U	13 J	0.080 U
	MW01042012	Normal	North Alluvial	4/20/2012	**310**	0.57 U	2.3	21	0.25 U	0.27 U	29,000 J	4.1 J	0.18 J	13	120	0.41 J	6,600 J	26	1.4 J	600	21	0.18 U	760,000	0.16 U	25 J	0.052 U
MW02	MW02102013	Normal	North Alluvial	11/1/2013	31 U	0.60 U	1.0 U	15	0.24 U	0.12 U	160,000	1.5 U	0.10 U	1.7 J	30 U	0.50 U	34,000	4.0 J	0.73 J	920 J	6.1	0.10 U	430,000	0.084 U	14 J	0.080 U
	MW02042013	Normal	North Alluvial	4/12/2013	31 U	0.60 U	1.0 U	25	0.24 U	0.12 U	220,000	0.57 J	0.073 J	1.5 J	30 U	0.50 U	41,000	2.7 J	2.5 J	730 J	3.7 J	0.10 U	350,000	0.20 U	10 J	0.080 U
	MW02102012	Normal	North Alluvial	10/24/2012	**16,000**	0.60 U	2.0 J	150	0.52 J	0.20 J	170,000	6.5 J	2.7	5.3	**7,500**	3.5	38,000	**140**	7.6	3,900	7	0.10 U	390,000	0.081 J	62	0.080 U
	MW02042012	Normal	North Alluvial	4/21/2012	3.1 J	0.52 U	0.61 U	30	0.25 U	0.27 U	70,000	8.5 J	0.54 J	2.1 J	48 U	0.24 U	14,000	**390**	4.8 J	420 J	2.6 J	0.18 U	110,000	0.16 U	19 J	0.052 U
MW03	MW03102013	Normal	North Alluvial	11/5/2013	31 U	0.43 J	1.0 U	8.7	0.24 U	0.12 U	67,000	1.5 U	0.13 J	1.2 J	30 U	0.50 U	14,000	44	0.67 J	810 J	22	0.10 U	1,200,000	0.20 U	5.8 J	0.080 U
	MW03042013	Normal	North Alluvial	4/4/2013	31 U	0.75 J	1.0 U	9.4	0.24 U	0.12 U	67,000	1.5 U	0.21 J	1.1 J	30 U	0.50 U	13,000	43	0.60 J	640 J	20	0.13 J	1,100,000	0.23 U	4.8 J	0.080 U
	MW03102012	Normal	North Alluvial	10/23/2012	31 U	0.60 U	0.45 J	10	0.24 U	0.12 U	63,000	1.5 U	0.14 J	1.2 J	30 U	0.50 U	13,000	44	1.2 J	1,100 J	22	0.10 U	1,200,000 J	0.10 U	12 J	0.080 U
	MW03042012	Normal	North Alluvial	4/20/2012	1.8 J	0.52 U	2	8.7 J	0.25 U	0.27 U	86,000	9.2 J	0.21 J	20	220	0.24 U	21,000	40	2.6 J	330 J	18	0.18 U	1,300,000	0.16 U	20 J	0.052 U
MW18D	MW18D102013	Normal	North Alluvial	11/1/2013	31 U	0.91 J	0.97 J	17	0.24 U	0.12 U	77,000	1.5 U	0.72 J	1.1 J	89 J	0.50 U	19,000	**730 J**	3.7	2400 J	2.0 U	0.10 U	2,200,000	0.15 U	13 J	0.080 U
	MW18D042013	Normal	North Alluvial	4/17/2013	31 U	3.0 U	5.0 U	18	1.2 U	0.60 U	65,000	7.5 U	0.84 J	7.5 U	100	2.5 UJ	18,000	**740**	3.8 J	1,100 J	10 U	0.50 U	2,100,000	1.0 UJ	30 U	0.080 U
	MW18D102012	Normal	North Alluvial	11/8/2012	31 U	1.2 U	1.2 J	19	0.48 U	0.24 U	73,000	3.0 U	0.85 J	3.3 J	26 J	1.0 U	19,000	**710**	4.2 J	2,200 J	1.6 J	0.20 UJ	2,000,000	0.20 U	25 J	0.080 U
	MW18D042012	Normal	North Alluvial	4/19/2012	1.4 U	0.52 U	0.61 U	0.83 J	0.25 U	0.27 U	15,000	0.42 J	0.12 U	18	71 J	0.24 U	4,900	8.8	0.41 J	200 J	2.8 J	0.18 U	170,000	0.16 U	11 J	0.052 U
MW20	MW20102013	Normal	North Alluvial	11/8/2013	31 U	0.60 U	1.0 U	11	0.24 U	0.13 J	370000 J	1.5 U	1.2	1.6 J	30 UJ	0.50 U	79,000	**1,400**	2.8 J	4500	**98**	0.10 U	4,300,000	0.072 U	88	0.080 U
	DW20042013	Duplicate	North Alluvial	4/10/2013	31 U	3.0 U	5.0 U	14 J	1.2 U	0.60 UJ	37,0000J	5.0 J	1.9 J	7.5 U	30 U	2.5 U	83,000	**2,400**	6.2 J	3,300	**170 J**	0.50 U	4,200,000	1.0 U	130	0.080 U
	MW20042013	Normal	North Alluvial	4/10/2013	31 U	3.0 U	5.0 U	14 J	1.2 U	0.61 J	37,0000J	4.6 J	1.8 J	7.5 U	30 U	2.5 U	81,000	**2,400**	5.9 J	3,800	**170 J**	0.50 U	4,200,000	1.0 U	120	0.080 U
	MW20102012	Normal	North Alluvial	10/29/2012	31 U	0.60 U	0.41 J	14	0.24 U	0.12 U	380,000	1.5 U	1.9	1.6 J	30 U	0.50 U	87,000	**2,400 J**	3.8	6,400	**170**	0.10 U	4,300,000	0.058 J	130	0.080 U
	MW20042012	Normal	North Alluvial	4/24/2012	3.9 U	0.58 J	**21**	14	0.25 U	0.46 J	440,000	12	2.4	140	48 U	0.31 J	86,000	**2200**	16	910	**230**	0.18 U	27,000,000	0.16 U	150	0.052 U

TABLE 5-7

Summary of Dissolved Metals Analytical Detections (Page 2 of 9)

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Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	EPA Method 6010/6020 (µg/L)																				EPA Method 7470 (µg/L)
					Aluminum CAS 7429-90-5	Antimony CAS 7440-36-0	Arsenic CAS 7440-38-2	Barium CAS 7440-39-3	Beryllium CAS 7440-41-7	Cadmium CAS 7440-43-9	Calcium CAS 7440-70-2	Chromium CAS 7440-47-3	Cobalt CAS 7440-48-4	Copper CAS 7440-50-8	Iron CAS 7439-89-6	Lead CAS 7439-92-1	Magnesium CAS 7439-95-4	Manganese CAS 7439-96-5	Nickel CAS 7440-02-0	Potassium CAS 7440-09-7	Selenium CAS 7782-49-2	Silver CAS 7440-22-4	Sodium CAS 7440-23-5	Thallium CAS 7440-28-0	Zinc CAS 7440-66-6	Mercury CAS 7439-97-6
					Regulatory Limits																				
					[a]200	[b]6	[b]10	[c]1000	[b]4	[b]5	N/A	[c]50	[c]50	[c]1000	[a]300	[b]15	N/A	[a]50	[c]200	N/A	[c]50	[c]50	N/A	[b]2	[a]5000	[c]2
MW22D	DMW22D102013	Duplicate	North Alluvial	11/1/2013	31 U	0.60 U	1.0 UJ	11	0.24 U	0.12 U	83,000	1.5 U	0.21 J	0.77 J	30 U	0.50 U	16,000	**130 J**	0.78 J	1300 J	36	0.10 U	1,200,000	0.20 U	72 J	0.080 U
	MW22D102013	Normal	North Alluvial	11/1/2013	31 U	0.60 U	0.43 J	11	0.24 U	0.12 U	82,000	1.5 U	0.21 J	0.99 J	30 U	0.50 U	16,000	**120 J**	1.0 J	1300 J	37	0.10 U	1,200,000	0.20 U	60 J	0.080 U
	MW22D042013	Normal	North Alluvial	4/9/2013	31 U	0.60 U	1.0 U	11 J	0.24 U	0.12 U	83,000 J	1.5 U	0.51 J	1.5 U	30 U	0.50 U	16,000	**130**	1.1 U	660 J	36	0.10 U	1,200,000	0.084 U	7.1 J	0.080 U
	MW22D102012	Normal	North Alluvial	11/8/2012	31 U	1.2 U	2.0 U	10	0.48 U	0.24 U	76,000	3.0 U	0.21 J	2.5 J	30 U	1.0 U	15,000	**110**	1.3 J	1,300 J	40	0.20 UJ	1,100,000	0.20 U	22 J	0.080 U
	MW22D042012	Normal	North Alluvial	4/20/2012	2.6 J	0.52 U	5.4	9.5 J	0.25 U	0.37 U	74,000	3.9 J	0.24 J	13	48 U	0.24 U	14,000	**120**	2.3 J	360 J	**52**	0.18 U	890,000	0.16 U	61	0.052 U
MW22S	MW22S102013	Normal	North Alluvial	11/1/2013	**900**	0.60 U	0.81 J	21	0.24 U	0.12 U	100,000	2.6 J	0.32 J	2.6	**460**	0.59 J	21,000	33 J	1.3 J	1300 J	27	0.10 U	970,000	0.20 U	3.1 J	0.080 U
	MW22S042013	Normal	North Alluvial	4/12/2013	180 J	0.60 U	0.77 J	15	0.24 U	0.12 U	89,000	1.5 U	0.22 J	2.3	95 J	0.31 J	19,000	17	0.97 J	1,000 J	31	0.10 U	920,000	0.20 U	5.0 J	0.080 U
	MW22S102012	Normal	North Alluvial	10/29/2012	**1900**	0.54 J	1.3 J	41	0.23 J	0.12 U	110,000	1.2 J	0.83 J	2.9	**1,000**	2.8 J	23,000	**74 J**	1.9 J	2,000 J	31	0.10 U	990,000	0.10 U	7.3 J	0.080 U
	MW22S042012	Normal	North Alluvial	4/20/2012	**720**	0.57 U	4.9	19	0.25 U	0.27 U	85,000 J	1.6 J	0.34 J	14	240	1.2	18,000 J	**74**	3.5 J	450 J	44	0.18 U	750,000	0.16 U	25 J	0.052 U
MW23	DMW23102013	Duplicate	North Alluvial	11/8/2013	**930 J**	0.60 U	1.2 J	140	0.24 U	0.12 U	11,000 J	0.98 J	1.5	0.78 J	**520 J**	0.35 J	4,500	**98**	5	1,800 J	2.0 U	0.10 U	510,000	0.20 U	3.0 J	0.080 U
	MW23102013	Normal	North Alluvial	11/8/2013	51 J	0.60 U	1.1 J	130	0.24 U	0.12 U	10,000 J	1.5 UJ	1.3	1.5 UJ	40 J	0.50 UJ	4,000	**93**	4.7	1,500 J	2.0 U	0.10 U	480,000	0.20 U	6.0 UJ	0.080 U
	DMW23042013	Duplicate	North Alluvial	4/8/2013	31 UJ	0.60 UJ	0.76 J	98	0.24 U	0.12 U	7,800	1.5 U	1.6	1.5 U	30 UJ	0.50 U	3,100	**110**	7	1,900 J	2.0 U	0.10 U	480,000	0.20 UJ	6.0 U	0.080 U
	MW23042013	Normal	North Alluvial	4/8/2013	30 J	0.52 J	0.89 J	100	0.24 U	0.12 U	7,900	1.5 U	1.7	1.5 U	33 J	0.50 U	3,100	**100**	6.2	1,700 J	2.0 U	0.10 U	480,000	0.14 J	6.0 U	0.080 U
	MW23102012DUP	Duplicate	North Alluvial	10/31/2012	**220 J**	0.60 U	0.91 J	150 J	0.24 U	0.12 U	14,000	0.96 J	1.9	1.1 J	200 J	0.31 J	5,500	**110 J**	7.5	1,500 J	2.0 U	0.10 U	490,000	0.10 U	11 J	0.080 U
	MW23102012	Normal	North Alluvial	10/31/2012	**1,100 J**	0.60 U	1.1 J	160 J	0.24 U	0.12 U	14,000	2.2 J	2.3	1.7 J	**630 J**	0.54 J	5,600	**150 J**	11	1,900 J	2.0 U	0.10 U	510,000	0.10 U	12 J	0.080 U
	MW23042012	Normal	North Alluvial	4/26/2012	4.7 J	0.57 J	2.1	110	0.25 U	0.27 U	10,000	5.3 J	1.5 J	7.7	48 U	0.24 J	3,800	**97**	5 J	1,500	3.2 J	0.18 U	450,000	0.16 U	5 J	0.052 U
MW24	DMW24102013	Duplicate	North Alluvial	11/7/2013	31 U	0.49 J	0.60 J	270	0.24 U	0.12 U	30,000	1.5 U	0.10 UJ	1.5 U	**1,500**	0.50 U	9,600	**410**	0.45 J	890 J	2.0 U	0.10 U	280,000	0.069 U	6.0 U	0.080 U
	MW24102013	Normal	North Alluvial	11/7/2013	31 U	2.0 J	0.70 J	280	0.24 U	0.12 U	32,000	1.5 U	0.082 J	1.5 U	**1,500**	0.50 U	10,000	**420**	0.87 J	900 J	2.0 U	0.10 U	280,000	0.10 U	6.0 U	0.080 U
	DMW24042013	Duplicate	North Alluvial	4/8/2013	31 U	0.60 UJ	0.82 J	310	0.24 UJ	0.12 U	31,000	1.5 U	0.17 J	1.5 U	**1,800**	0.50 U	9,900	**460**	0.90 U	1,000 J	2.0 U	0.10 U	260,000	0.20 UJ	6.0 U	0.080 U
	MW24042013	Normal	North Alluvial	4/8/2013	31 U	0.57 J	0.85 J	300	0.12 J	0.12 U	31,000	1.5 U	0.083 J	1.5 U	**1,800**	0.50 U	9,800	**450**	0.90 U	1,200 J	2.0 U	0.10 U	260,000	0.18 J	6.0 U	0.080 U
	MW24102012	Normal	North Alluvial	10/31/2012	31 U	0.60 U	0.81 J	310 J	0.24 U	0.12 U	31,000	1.5 U	0.62 J	0.85 J	**1,800 J**	0.50 U	9,900	**440 J**	0.46 J	1,100 J	2.0 U	0.10 U	270,000	0.10 U	6.0 U	0.080 U
	MW24042012	Normal	North Alluvial	4/26/2012	14 J	0.52 U	2.2	280	0.25 U	0.27 U	36,000	3.3 J	1.4 J	3.9 J	**1,800**	0.24 U	11,000	**500**	0.95 J	840	1.9 J	0.18 U	260,000	0.16 U	3 J	0.052 U
SMW01	SMW01102013	Normal	North Alluvial	11/8/2013	31 U	0.60 U	0.99 J	20	0.24 U	0.12 U	18,000 J	1.5 U	0.14 J	1.2 J	30 UJ	0.50 U	5,400	**98**	1.7 J	370 J	2.0 U	0.10 U	640,000	0.083 U	2.8 J	0.080 U
	SMW01042013	Normal	North Alluvial	4/12/2013	34 J	0.60 U	0.65 J	16	0.24 U	0.12 U	18,000	1.5 U	0.097 J	0.61 J	30 U	0.50 U	5,400	47	1.3 J	430 J	2.0 U	0.10 U	510,000	0.20 U	3.0 J	0.080 U
	SMW01102012	Normal	North Alluvial	11/1/2012	31 U	0.60 U	0.68 J	17	0.24 U	0.12 U	19,000	1.5 U	0.082 J	1.4 J	30 U	0.50 U	5,800	32	1.2 J	480 J	2.0 U	0.10 U	510,000	0.10 U	6.0 U	0.080 U
	SMW01042012	Normal	North Alluvial	4/20/2012	9.3 J	0.52 U	0.64 J	17	0.25 U	0.27 U	20,000 J	2.5 J	0.12 U	6.6	48 U	0.24 U	5,800 J	**54**	1.8 J	110 U	1.5 U	0.18 U	430,000	0.16 U	10 J	0.052 U
TMW01	TMW01102013	Normal	North Alluvial	11/6/2013	31 U	0.60 U	0.84 J	11	0.24 U	0.12 U	110,000	1.5 U	0.10 U	9.4	30 U	0.50 UJ	18,000	12	0.48 J	520 J	7	0.10 UJ	560,000	0.20 U	2.7 J	0.080 U
	TMW01042013	Normal	North Alluvial	4/15/2013	31 U	0.60 U	0.63 J	12	0.24 U	0.12 U	110,000	0.67 J	0.31 J	10	35 J	0.50 U	19,000	14	0.90 U	680 J	6	0.10 U	560,000	0.20 U	6.0 U	0.080 U
	TMW01102012	Normal	North Alluvial	10/31/2012	31 U	0.60 U	0.92 J	13 J	0.24 U	0.12 U	100,000	0.56 J	0.21 J	1.8 J	30 U	0.50 U	18,000	19 J	1.2 J	550 J	7	0.10 U	580,000	0.10 U	2.4 J	0.080 U
	TMW01042012	Normal	North Alluvial	4/24/2012	1.5 U	0.52 U	2.3	11	0.25 U	0.27 U	40,000	5.5 J	0.13 J	3 J	48 U	0.24 U	6,700	16	2.1 J	210 J	12	0.18 U	190,000	0.16 U	13 J	0.052 U
TMW03	TMW03102013	Normal	North Alluvial	11/4/2013	31 U	0.60 U	0.49 J	13	0.24 U	0.12 U	49,000	1.5 U	0.084 J	0.82 J	30 U	0.50 U	11,000	5.1	0.50 J	1,400 J	**63**	0.10 U	950,000	0.20 U	10 J	0.080 U
	TMW03042013	Normal	North Alluvial	4/16/2013	100 J	0.60 U	0.62 J	12	0.24 U	0.12 U	49,000	1.5 U	0.094 J	0.74 J	130	0.50 UJ	11,000	6.8	0.47 J	1,200 J	**67**	0.10 U	960,000	0.20 UJ	15 J	0.080 U
	TMW03102012	Normal	North Alluvial	11/7/2012	31 U	0.60 U	0.61 J	13	0.24 U	0.12 U	45,000	1.5 U	0.28 J	0.73 J	30 U	0.50 U	11,000	6.1	0.48 J	1,100 J	**75**	0.10 U	910,000	0.10 U	11 J	0.080 U
	TMW03042012	Normal	North Alluvial	4/25/2012	2.1 J	0.52 U	6.4	14	0.25 U	0.27 U	56,000	1.9 J	0.16 J	13	48 U	0.24 U	12,000	6.6	1.9 J	360 J	**72**	0.18 U	1,100,000	0.16 U	15 J	0.052 U
TMW04	TMW04102013	Normal	North Alluvial	11/4/2013	31 U	0.60 U	0.97 J	7.8	0.24 U	0.12 U	29,000	1.6 J	0.10 U	1.5 U	30 U	0.50 U	5,200	0.39 J	0.49 J	1,600 J	**90**	0.10 U	900,000	0.20 U	3.8 J	0.080 U
	TMW04042013	Normal	North Alluvial	4/16/2013	31 U	1.2 U	1.0 J	6.8	0.48 U	0.24 U	29,000	1.8 J	0.31 J	3.0 U	30 U	1.0 UJ	5,300	0.64 J	1.8 U	1,600 J	**99**	0.20 U	900,000	0.40 UJ	12 U	0.080 U
	TMW04102012	Normal	North Alluvial	11/7/2012	31 U	0.60 U	1.1 J	7.4	0.24 U	0.12 U	29,000	1.8 J	0.27 J	0.64 J	30 U	0.50 U	5,500	0.71 J	0.37 J	1,400 J	**120**	0.10 U	900,000	0.10 U	4.5 J	0.080 U
	TMW04042012	Normal	North Alluvial	4/25/2012	2.8 J	0.64 J	**11**	7.6 J	0.25 U	0.32 J	36,000	4.7 J	0.12 U	14	48 U	0.24 U	5,900	0.27 U	0.88 J	630	**110**	0.18 U	890,000	0.16 U	7.3 J	0.052 U
TMW06	TMW06102013	Normal	North Alluvial	11/7/2013	31 U	0.60 U	0.56 J	14	0.24 U	0.12 U	33,000	1.5 U	0.10 U	3.3	30 U	0.50 U	7,100	20	0.91 J	570 J	2.2 J	0.10 U	930,000	0.20 U	6.0 U	0.080 U
	TMW06042013	Normal	North Alluvial	4/15/2013	31 U	0.60 U	0.74 J	13	0.24 U	0.12 U	30,000	0.89 J	0.10 U	4.1	30 U	0.50 U	7,000	16	0.97 J	760 J	1.7 J	0.10 U	950,000	0.20 U	2.4 J	0.080 U
	TMW06102012	Normal	North Alluvial	11/8/2012	31 U	3.0 U	5.0 U	15	1.2 U	0.60 U	37,000	7.5 U	0.50 U	8.3 J	30 U	2.5 U	8,500	29	4.5 U	410 J	4.6 J	0.50 UJ	980,000	0.50 U	30 U	0.080 U
	TMW06042012	Normal	North Alluvial	4/18/2012	1.9 J	0.52 U	2.3	14	0.25 U	0.27 U	40,000	10	0.12 U	28	120	0.24 J	9,900	23	1.5 J	280 J	7	0.18 U	1,100,000	0.16 U	12 J	0.052 U

TABLE 5-7
Summary of Dissolved Metals Analytical Detections (Page 3 of 9)
Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	EPA Method 6010/6020 (µg/L)																				EPA Method 7470 (µg/L)
					Aluminum CAS 7429-90-5	Antimony CAS 7440-36-0	Arsenic CAS 7440-38-2	Barium CAS 7440-39-3	Beryllium CAS 7440-41-7	Cadmium CAS 7440-43-9	Calcium CAS 7440-70-2	Chromium CAS 7440-47-3	Cobalt CAS 7440-48-4	Copper CAS 7440-50-8	Iron CAS 7439-89-6	Lead CAS 7439-92-1	Magnesium CAS 7439-95-4	Manganese CAS 7439-96-5	Nickel CAS 7440-02-0	Potassium CAS 7440-09-7	Selenium CAS 7782-49-2	Silver CAS 7440-22-4	Sodium CAS 7440-23-5	Thallium CAS 7440-28-0	Zinc CAS 7440-66-6	Mercury CAS 7439-97-6
					Regulatory Limits																				
					[a]200	[b]6	[b]10	[c]1000	[b]4	[b]5	N/A	[c]50	[c]50	[c]1000	[a]300	[b]15	N/A	[a]50	[c]200	N/A	[c]50	[c]50	N/A	[b]2	[a]5000	[c]2
TMW07	TMW07102013	Normal	North Alluvial	10/29/2013	49 J	0.45 J	0.96 J	27	0.24 U	0.14 J	55,000	1.8 J	8.4	3.2	170	0.70 J	9,900	**370**	8.7	6,500	2.0 U	0.10 U	1,300,000	0.20 U	18 J	0.080 U
	TMW07042013	Normal	North Alluvial	4/8/2013	31 U	0.84 J	0.52 J	21	0.24 U	0.12 U	31,000	1.5 U	0.97 J	0.56 J	30 U	0.50 U	5,400	**220**	3.1	5,500	2.0 U	0.10 U	740,000	0.20 U	5.8 J	0.080 U
	TMW07102012	Normal	North Alluvial	11/6/2012	**340 J**	2.9 J	1.1 J	25	0.24 U	0.12 U	55,000	1.4 J	0.70 J	1.3 J	**450**	0.25 J	10,000	**370**	2.9 J	5,900	2.0 U	0.10 U	1,300,000	0.10 U	8.8 J	0.080 U
	TMW07042012	Normal	North Alluvial	4/20/2012	3 J	1.3 J	2.4	15	0.25 U	0.27 U	69,000	7.1 J	0.5 J	17	190	0.24 U	13,000	**310**	2.9 J	2,300	4.7 J	0.18 U	1,500,000	0.16 U	20 J	0.052 U
TMW08	TMW08102013	Normal	North Alluvial	11/8/2013	31 U	0.60 U	0.40 J	10	0.24 U	0.12 U	200,000 J	1.5 U	0.32 J	1.7 J	30 J	0.50 U	59,000	**250**	1.3 J	4,500	40	0.10 U	4,200,000	0.20 U	4.3 J	0.080 U
	DTW08042013	Duplicate	North Alluvial	4/3/2013	31 U	0.60 U	0.46 J	8.5	0.24 UJ	0.12 UJ	210,000	1.5 U	0.34 J	3.1	99 J	0.50 U	62,000	**240 J**	1.4 J	7,300	41	0.083 J	4,400,000	0.20 UJ	4.5 J	0.080 U
	TMW08042013	Normal	North Alluvial	4/3/2013	31 U	0.60 U	1.0 UJ	10	0.21 J	0.21 J	210,000	1.5 U	0.36 J	2.3	110	0.50 U	62,000	**230 J**	1.1 J	7,000	39	0.063 J	4,400,000	0.19 J	4.1 J	0.080 U
	TMW08102012	Normal	North Alluvial	10/24/2012	31 U	0.60 U	1.3 J	11	0.24 U	0.22 J	200,000	1.5 U	0.91 J	2.2	190	0.50 U	63,000	**230**	2.8 J	6,300	**60**	0.10 U	4,100,000	0.10 U	7.7 J	0.080 U
	TMW08042012	Normal	North Alluvial	4/19/2012	1.6 J	0.52 U	**12**	9.5 J	0.25 U	0.27 U	240,000	11	0.53 J	75	**720**	0.28 J	69,000	**210**	6.2 J	1,200	**66**	0.18 U	4,600,000	0.16 U	19 J	0.052 U
TMW10	TMW10102013	Normal	North Alluvial	11/1/2013	31 U	0.60 U	0.69 J	20	0.24 U	0.12 U	86,000	1.5 U	0.10 U	1.6 J	30 U	0.50 U	20,000	**72 J**	1.6 J	2,200 J	0.88 J	0.10 U	2,100,000	0.20 U	6.0 UJ	0.080 U
	TMW10042013	Normal	North Alluvial	4/16/2013	31 U	0.60 U	0.66 J	19	0.24 U	0.12 U	77,000	1.5 U	0.096 J	2.1 U	30 U	0.50 UJ	18,000	**51**	1.1 J	850 J	1.2 J	0.10 U	1,900,000	0.20 UJ	2.0 J	0.080 U
	TMW10102012	Normal	North Alluvial	10/24/2012	31 U	0.60 U	1.0 J	22	0.24 U	0.12 U	80,000	1.5 U	0.70 J	2.7	30 U	0.50 U	20,000	**80**	1.8 J	2,400 J	2.0 U	0.10 U	2,100,000	0.10 U	6.4 J	0.080 U
	TMW10042012	Normal	North Alluvial	4/24/2012	4.4 J	0.52 U	2	23	0.25 U	0.27 U	110,000	7.9 J	0.21 J	38	48 U	0.24 U	27,000	**97**	5.1 J	440 J	6	0.18 U	2,400,000	0.16 U	15 J	0.052 U
TMW11	TMW11102013	Normal	North Alluvial	11/5/2013	31 U	0.60 UJ	1.0 U	21	0.24 U	0.12 U	16,000	0.92 J	0.080 J	1.5 U	30 U	0.50 U	3,200	7.4	0.98 J	550 J	13	0.10 U	590,000	0.20 U	4.4 J	0.080 U
	TMW11042013	Normal	North Alluvial	4/9/2013	31 U	0.87 J	0.37 J	23 J	0.24 U	0.12 U	14,000 J	0.93 J	0.13 J	1.3 J	30 U	0.50 U	2,700	15	1.1 U	630 J	13	0.051 J	530,000	0.15 U	5.1 J	0.080 U
	TMW11102012	Normal	North Alluvial	11/9/2012	31 U	1.2 U	2.0 U	21	0.48 U	0.24 U	17,000	1.1 J	0.20 U	3.0 U	27 J	1.0 U	3,200	2.1 J	1.8 U	860 J	14	0.20 U	580,000	0.20 U	5.5 J	0.080 U
	TMW11042012	Normal	North Alluvial	4/25/2012	2.8 J	0.52 U	2.3	22	0.25 U	0.27 U	19,000	4.1 J	0.12 U	7.4	48 U	0.24 U	3,800	0.84 J	3.7 J	480 J	19	0.18 U	620,000	0.16 U	4.3 J	0.052 U
TMW13	TMW13102013	Normal	North Alluvial	11/5/2013	31 U	0.60 UJ	1.0 U	18	0.24 U	0.12 U	26,000	1.5 U	0.10 U	1.5 U	30 U	0.50 U	5,100	0.90 U	0.90 U	650 J	12	0.10 U	580,000	0.20 U	6.0 U	0.080 U
	TMW13042013	Normal	North Alluvial	4/17/2013	31 U	0.60 U	1.0 U	16	0.24 U	0.12 U	25,000	1.5 U	0.11 J	1.5 U	30 U	0.50 UJ	4,800	0.38 J	0.90 U	860 J	12	0.10 U	280,000	0.20 UJ	6.0 U	0.080 U
	TMW13102012	Normal	North Alluvial	11/8/2012	31 U	1.2 U	2.0 U	17	0.48 U	0.24 U	26,000	3.0 U	0.11 J	1.7 J	30 U	1.0 U	5,000	1.8 U	1.8 U	440 J	12	0.20 UJ	560,000	0.20 U	12 U	0.080 U
	TMW13042012	Normal	North Alluvial	4/23/2012	3 J	0.52 U	2.1	15	0.25 U	0.37 U	23,000	4.8 J	0.12 U	7.7	48 U	0.26 J	4,200	0.36 U	0.63 J	370 J	15	0.18 U	480,000	0.16 U	13 J	0.052 U
TMW15	TMW15102013	Normal	North Alluvial	11/6/2013	31 U	0.60 U	1.0 U	23	0.24 U	0.12 U	19,000	0.88 J	0.10 U	1.5 U	30 U	0.50 UJ	3,400	0.90 U	0.44 J	620 J	14	0.10 UJ	610,000	0.20 U	8.1 J	0.080 U
	TMW15042013	Normal	North Alluvial	4/17/2013	31 U	1.2 U	2.0 U	23	0.48 U	0.24 U	18,000	3.0 U	0.20 U	3.0 U	30 U	1.0 UJ	3,500	1.8 U	1.8 U	840 J	15	0.20 U	300,000	0.40 UJ	10 J	0.080 U
	TMW15102012	Normal	North Alluvial	11/8/2012	31 U	1.2 U	2.0 U	23	0.48 U	0.24 U	17,000	3.0 U	0.20 U	3.0 U	30 U	1.0 U	3,400	1.8 U	1.8 U	960 J	15	0.20 UJ	570,000	0.20 U	13 J	0.080 U
	TMW15042012	Normal	North Alluvial	4/23/2012	2.6 J	0.52 U	2.2	19	0.25 U	0.27 U	7,800	9.6 J	0.12 U	1.1 J	48 U	0.24 U	1,400 J	0.27 U	0.38 J	300 J	19	0.18 U	190,000	0.16 U	22 J	0.052 U
TMW21	TMW21102013	Normal	North Alluvial	11/7/2013	31 U	0.60 U	0.81 J	21	0.24 U	0.12 U	31,000	1.5 U	0.20 J	1.6 J	30 U	0.50 U	6,200	**110**	1.4 J	800 J	2.6 J	0.10 U	660,000	0.20 U	7.5 J	0.080 U
	TMW21042013	Normal	North Alluvial	4/16/2013	31 U	0.60 U	1.0 J	20	0.24 U	0.12 U	32,000	1.5 U	0.061 J	4.4	30 U	0.50 UJ	6,400	**67**	0.90 J	880 J	3.1 J	0.10 U	630,000	0.20 UJ	7.9 J	0.080 U
	TMW21102012	Normal	North Alluvial	11/8/2012	43 J	1.2 U	0.91 J	20	0.48 U	0.24 U	35,000	3.0 U	0.20 J	7.4	27 J	1.0 U	7,400	**95**	0.75 J	1,200 J	3.7 J	0.20 UJ	630,000	0.20 U	12 U	0.080 U
	TMW21042012	Normal	North Alluvial	4/17/2012	1.4 U	0.66 J	1 J	20	0.25 U	0.27 U	31,000	11	0.15 J	12	79 J	0.24 U	5,900	**97**	1.3 J	660	1.8 J	0.18 U	520,000	0.16 U	3.5 J	0.052 U
TMW22	TMW22102013	Normal	North Alluvial	10/29/2013	31 U	0.60 U	0.93 J	20	0.24 U	0.12 U	34,000	1.2 J	0.28 J	2.6	30 U	0.50 U	11,000	3.9	1.3 U	1,300 J	3.0 J	0.10 U	860,000	0.20 U	6.3 J	0.080 U
	TMW22042013	Normal	North Alluvial	4/12/2013	31 U	0.60 U	1.0 J	20	0.24 U	0.12 U	34,000	0.84 J	0.15 J	1.6 J	30 U	0.50 U	10,000	4.3	0.55 J	1,200 J	2.7 J	0.10 U	830,000	0.20 U	4.1 J	0.080 U
	TMW22102012	Normal	North Alluvial	11/6/2012	31 U	0.60 U	1.0 J	21	0.24 U	0.12 U	31,000	1.9 J	0.15 J	2.2	30 U	0.50 U	10,000	1.8 J	0.94 J	930 J	4.3 J	0.10 U	860,000	0.10 U	11 J	0.080 U
	TMW22042012	Normal	North Alluvial	4/18/2012	3.9 J	0.81 J	3.1	19	0.25 U	0.27 U	36,000	7.9 J	0.12 U	9.8	94 J	0.24 U	12,000	1.8 J	1.1 J	660	4.7 J	0.18 U	1,000,000	0.36 U	4.6 J	0.052 U
TMW23	TMW23102013	Normal	North Alluvial	10/29/2013	77 J	0.60 U	1.0 J	21	0.24 U	0.12 U	17,000	1.0 J	0.30 J	1.8 J	52 J	0.50 U	4,600	10	1.5 U	940 J	2.0 U	0.10 U	780,000	0.20 U	2.4 J	0.080 U
	TMW23042013	Normal	North Alluvial	4/8/2013	31 U	0.51 J	0.92 J	22	0.24 U	0.12 U	16,000	0.98 J	0.10 U	2.5	30 U	0.50 U	4,100	2.7 J	0.63 U	900 J	2.0 U	0.10 U	760,000	0.20 U	7.8 J	0.080 U
	TMW23102012	Normal	North Alluvial	11/6/2012	56 J	0.67 J	1.3 J	20	0.24 U	0.12 U	17,000	1.6 J	0.65 J	1.0 J	35 J	0.50 U	4,600	4.3	0.83 J	830 J	2.0 U	0.10 U	860,000	0.10 U	4.2 J	0.080 U
	TMW23042012	Normal	North Alluvial	4/24/2012	7.8 J	0.52 U	1.4 J	18	0.25 U	0.27 U	6,200	8.6 J	0.12 U	2.1 J	48 U	0.24 U	1,600 J	5.5	0.53 J	420 J	3.1 J	0.62 U	240,000	0.16 U	15 J	0.052 U
TMW24	TMW24102013	Normal	North Alluvial	11/8/2013	31 U	0.60 U	1.1 J	37	0.24 U	0.12 U	31,000 J	1.5 U	0.20 J	1.5 U	30 UJ	0.50 U	7,300	**150**	1.2 J	760 J	2.0 U	0.10 U	950,000	0.20 U	2.0 J	0.080 U
	TMW24042013	Normal	North Alluvial	4/4/2013	31 U	0.60 U	0.74 J	34	0.24 U	0.12 U	32,000	1.5 U	0.18 J	1.5 U	49 J	0.50 U	8,100	**130**	0.77 J	670 J	2.0 U	0.10 U	930,000	0.20 U	6.0 U	0.080 U
	TMW24102012	Normal	North Alluvial	10/31/2012	21 J	0.60 U	0.90 J	33 J	0.24 U	0.12 U	30,000	1.5 U	0.90 J	2.2	81 J	0.50 U	7,500	**130 J**	1.6 J	920 J	2.0 U	0.10 U	1,000,000	0.10 U	2.2 J	0.080 U
	TMW24042012	Normal	North Alluvial	4/23/2012	4.4 J	0.63 U	1.9	32	0.25 U	0.37 U	28,000	6.9 J	0.22 J	10	48 U	0.24 U	6,800	**110**	1.8 J	310 J	3.2 J	0.18 U	740,000	**10**	13 J	0.052 U
TMW25	TMW25102013	Normal	North Alluvial	11/4/2013	31 U	0.60 U	0.50 J	12	0.24 U	0.12 U	54,000	1.5 U	0.065 J	1.4 J	29 J	0.50 U	11,000	**120**	0.74 J	780 J	2.0 U	0.10 U	890,000	0.20 U	5.4 J	0.080 U
	TMW25042013	Normal	North Alluvial	4/16/2013	31 U	0.60 U	0.69 J	11	0.24 U	0.12 U	50,000	1.5 U	0.34 J	0.78 U	25 J	0.50 UJ	10,000	**140**	0.79 J	540 J	2.0 U	0.10 U	920,000	0.20 UJ	3.3 J	0.080 U
	TMW25102012	Normal	North Alluvial	11/1/2012	31 U	0.60 U	0.69 J	13	0.24 U	0.12 U	55,000	1.5 U	0.12 J	2.5	30 U	0.50 U	11,000	**120**	1.3 J	810 J	0.79 J	0.10 U	940,000	0.10 U	6.7 J	0.080 U
	TMW25042012	Normal	North Alluvial	4/17/2012	1.4 U	1 J	2.2	12	0.25 U	0.35 J	52,000	11	0.18 J	13	140	0.3 J	9,700	**110**	1.9 J	300 J	6	0.18 U	810,000	1 J	14 J	0.056 J

TABLE 5-7

Summary of Dissolved Metals Analytical Detections (Page 4 of 9)

Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	EPA Method 6010/6020 (µg/L)																				EPA Method 7470 (µg/L)
					Aluminum CAS 7429-90-5	Antimony CAS 7440-36-0	Arsenic CAS 7440-38-2	Barium CAS 7440-39-3	Beryllium CAS 7440-41-7	Cadmium CAS 7440-43-9	Calcium CAS 7440-70-2	Chromium CAS 7440-47-3	Cobalt CAS 7440-48-4	Copper CAS 7440-50-8	Iron CAS 7439-89-6	Lead CAS 7439-92-1	Magnesium CAS 7439-95-4	Manganese CAS 7439-96-5	Nickel CAS 7440-02-0	Potassium CAS 7440-09-7	Selenium CAS 7782-49-2	Silver CAS 7440-22-4	Sodium CAS 7440-23-5	Thallium CAS 7440-28-0	Zinc CAS 7440-66-6	Mercury CAS 7439-97-6
					Regulatory Limits																				
					[a]200	[b]6	[b]10	[c]1000	[b]4	[b]5	N/A	[c]50	[c]50	[c]1000	[a]300	[b]15	N/A	[a]50	[c]200	N/A	[c]50	[c]50	N/A	[b]2	[a]5000	[c]2
TMW26	TMW26102013	Normal	North Alluvial	11/4/2013	31 U	0.76 J	1.1 J	18	0.24 U	0.12 U	19,000	1.5 U	0.32 J	2.1	30 U	0.50 U	7,000	**100**	4.2	860 J	2.0 U	0.10 U	970,000	0.057 J	2.6 J	0.080 U
	DMW26042013	Duplicate	North Alluvial	4/17/2013	**440**	1.2 U	1.2 J	20	0.48 U	0.24 U	18,000	3.0 U	0.43 J	2.1 J	220	1.0 UJ	6,800	**99**	1.9 J	1,200 J	4.0 U	0.20 U	830,000	0.40 UJ	12 U	0.080 U
	TMW26042013	Normal	North Alluvial	4/17/2013	**360**	1.2 U	1.3 J	21	0.48 U	0.24 U	17,000	3.0 U	0.49 J	2.2 J	180	1.0 UJ	6,500	**100**	2.2 J	710 J	4.0 U	0.20 U	860,000	0.40 UJ	12 U	0.080 U
	TMW26102012	Normal	North Alluvial	10/25/2012	**1,100 J**	0.60 U	1.6 J	33	0.24 U	0.12 U	19,000	0.98 J	0.60 J	3.7	**560**	0.26 J	7,300	**120**	2.8 J	850 J	0.74 J	0.070 J	870,000	0.061 J	3.5 J	0.080 U
	TMW26102012DUP	Duplicate	North Alluvial	10/25/2012	**1,100 J**	0.60 U	1.5 J	35	0.24 U	0.12 U	19,000	1.1 J	0.61 J	3.5	**550**	0.24 J	7,300	**120**	2.7 J	810 J	2.0 UJ	0.043 J	920,000	0.10 UJ	2.4 J	0.080 U
	TMW26042012	Normal	North Alluvial	4/20/2012	6 J	0.54 U	2.5	17	0.25 U	0.27 U	17,000 J	3.5 J	0.3 J	12	48 U	0.29 J	6,100 J	**110**	2.4 J	290 J	3.3 J	0.18 U	710,000	0.16 U	13 J	0.052 U
TMW27	TMW27102013	Normal	North Alluvial	11/5/2013	31 U	0.60 UJ	**20**	130	0.24 U	0.12 U	25,000	1.5 U	0.20 J	1.5 U	**580**	0.50 U	6,500	**580**	0.82 J	730 J	2.0 U	0.10 U	360,000	0.20 U	6.0 U	0.080 U
	TMW27042013	Normal	North Alluvial	4/12/2013	31 U	0.60 U	**21**	120	0.24 U	0.12 U	24,000	1.5 U	0.16 J	1.5 U	**530**	0.50 U	5,900	**570**	0.73 J	850 J	2.0 U	0.10 U	340,000	0.20 U	6.0 U	0.080 U
	TMW27102012	Normal	North Alluvial	11/1/2012	31 U	0.60 U	**21**	130	0.24 U	0.12 U	24,000	1.5 U	0.20 J	0.75 J	**590**	0.50 U	6,000	**530**	0.89 J	750 J	2.0 U	0.037 J	360,000	0.10 U	3.0 J	0.080 U
	TMW27042012	Normal	North Alluvial	4/25/2012	2.1 J	0.52 U	**21**	120	0.25 U	0.27 U	27,000	3.9 J	0.21 J	4.6 J	**550**	0.24 U	6,700	**590**	1.2 J	470 J	2.7 J	0.18 U	300,000	0.16 U	2.9 J	0.052 U
TMW28	TMW28102013	Normal	North Alluvial	11/5/2013	31 U	1.1 J	0.36 J	60	0.47 J	0.12 U	220,000	1.5 U	0.56 J	1.5 U	**530**	0.21 J	65,000	**760**	1.1 J	1,600 J	0.97 J	0.067 J	370,000	0.29 J	6.0 U	0.080 U
	TMW28042013	Normal	North Alluvial	4/2/2013	31 U	0.60 U	1.0 U	59	0.24 U	0.12 U	70,000	1.5 U	0.089 J	1.5 U	**360**	0.50 U	22,000	**330**	0.77 J	1,400 J	2.0 U	0.10 U	330,000	0.20 U	30	0.080 U
	TMW28102012	Normal	North Alluvial	10/25/2012	31 U	0.60 U	1.0 U	75	0.24 U	0.12 U	76,000	1.5 U	0.72 J	1.5 U	**420**	0.50 U	25,000	**350**	1.6 J	2,700 J	2.0 U	0.10 U	320,000	0.10 U	8.5 J	0.080 U
	TMW28042012	Normal	North Alluvial	4/21/2012	9.6 J	0.52 U	0.61 U	50	0.25 U	0.27 U	31,000	5.8 J	0.25 J	1.1 J	260	0.24 U	9,100	**290**	2.2 J	1,100	1.5 U	0.18 U	100,000	0.33 U	10 J	0.052 U
TMW29	TMW29102013	Normal	North Alluvial	10/31/2013	**7,100**	0.60 U	2.1 J	77	0.20 J	0.12 U	47,000	4.4 J	1.8	3.7	**4,500**	2.4 J	9,900	**99**	5.4	3,000	20	0.10 U	600,000	0.20 U	13 J	0.080 U
	TMW29042013	Normal	North Alluvial	4/11/2013	30 J	0.60 U	1.3 J	18	0.24 U	0.12 U	40,000	1.5 U	0.086 J	1.0 J	30 U	0.50 UJ	8,000	26 J	0.72 J	1,400 J	18	0.10 U	570,000	0.20 UJ	2.5 J	0.080 U
	TMW29102012	Normal	North Alluvial	10/26/2012	31 U	0.60 U	1.5 J	18 J	0.24 U	0.12 U	37,000	1.5 U	0.079 J	0.88 J	30 U	0.50 UJ	7,200	23 J	1.3 J	1,600 J	21 J	0.10 U	590,000	0.10 U	3.9 J	0.080 U
	TMW29042012	Normal	North Alluvial	4/21/2012	3.9 J	0.52 U	3	14	0.25 U	0.27 U	15,000	9.1 J	0.12 U	2.4 J	48 U	0.34 J	2,900	16	1.4 J	950	21	0.18 U	220,000	0.16 U	12 J	0.052 U
TMW31S	TMW31S102013	Normal	North Alluvial	10/30/2013	28 UJ	0.60 U	0.35 J	17 U	0.24 U	0.12 U	120,000	0.80 J	0.16 U	0.88 J	40 UJ	0.50 U	21,000	**140**	1.6 J	820 J	9.5	0.10 U	540,000 J	0.20 U	3.7 J	0.080 U
	TMW31S042013	Normal	North Alluvial	4/11/2013	31 U	0.60 U	0.35 J	16	0.24 U	0.12 U	110,000	1.1 J	0.11 J	0.67 J	30 U	0.50 UJ	21,000	22 J	0.30 J	970 J	9	0.10 U	540,000	0.20 UJ	2.7 J	0.080 U
	TMW31S102012DUI	Duplicate	North Alluvial	11/5/2012	31 U	0.47 J	0.49 J	20	0.24 U	0.12 U	110,000	1.2 J	0.13 J	1.0 J	30 U	0.50 U	22,000	30	1.6 J	970 J	9.7 J	0.10 U	570,000	0.10 U	4.5 J	0.080 U
	TMW31S102012	Normal	North Alluvial	11/5/2012	31 U	0.48 J	0.45 J	20	0.24 U	0.12 U	110,000	1.2 J	0.58 J	1.1 J	30 U	0.50 U	22,000	30	2.0 J	880 J	9.8 J	0.10 U	570,000	0.10 U	4.8 J	0.080 U
	TMW31S042012	Normal	North Alluvial	4/19/2012	16 J	1.6 J	7.5	18	0.5 U	0.27 U	90,000	11	0.29 J	15	210	0.24 U	2,700	1.3 J	1.9 J	5,000	43	0.18 U	1,500,000	0.16 U	8.7 J	0.052 U
TMW33	TMW33102013	Normal	North Alluvial	10/30/2013	31 U	0.60 U	0.90 J	22	0.24 U	0.12 U	100,000	0.80 J	0.15 U	4.1	30 U	0.50 U	29,000	**120**	2.0 J	1,700 J	1.2 J	0.10 U	2,300,000 J	0.20 U	3.3 J	0.080 U
	TMW33042013	Normal	North Alluvial	4/17/2013	31 U	3.0 U	5.0 U	19	1.2 U	0.60 U	100,000	3.2 J	0.42 J	3.2 J	30 U	2.5 UJ	30,000	**480**	2.3 J	1,900 J	10 U	0.50 U	2,400,000	1.0 UJ	30 U	0.028 J
	TMW33102012DUP	Duplicate	North Alluvial	10/26/2012	120 J	0.60 U	1.2 J	22 J	0.24 UJ	0.17 J	100,000	0.70 J	0.37 J	3.8	77 J	0.50 UJ	26,000	**390 J**	3.7 J	2,300 J	2.0 UJ	0.10 U	2,400,000	0.10 U	18 J	0.080 U
	TMW33102012	Normal	North Alluvial	10/26/2012	120 J	0.60 U	1.5 J	45 J	0.16 J	0.23 J	100,000	9.5 J	1.1 J	4.8	68 J	0.78 J	29,000	**340 J**	8.8 J	1,300 J	0.81 J	0.10 U	2,300,000	0.10 U	39 J	0.080 U
	TMW33042012	Normal	North Alluvial	4/19/2012	2.6 J	0.52 U	4.6	20	0.25 U	0.27 U	130,000	14	0.67 J	32	**320**	0.42 J	32,000	**560**	4.4 J	840	13	0.18 U	2,600,000	0.16 U	11 J	0.052 U
TMW34	TMW34102013	Normal	North Alluvial	11/1/2013	31 U	0.60 UJ	0.36 J	13	0.24 UJ	0.12 U	130,000	1.5 U	0.15 J	0.69 J	30 U	0.50 U	26,000	**160 J**	0.70 J	2,000 J	**110**	0.10 U	1,400,000	0.20 UJ	14 J	0.080 U
	DTW34102013	Duplicate	North Alluvial	11/1/2013	31 U	0.70 J	1.0 UJ	12	0.089 J	0.12 U	130,000	1.5 U	0.19 J	0.96 J	30 U	0.50 U	26,000	**160 J**	1.1 J	1,800 J	**110**	0.10 U	1,400,000	0.082 UJ	6.0 UJ	0.080 U
	TMW34042013	Normal	North Alluvial	4/10/2013	31 U	1.2 U	2.0 U	11	0.48 U	0.24 U	12,0000 J	1.1 J	0.42 J	2.3 J	30 U	1.0 U	25,000	**150**	1.2 J	1,400 J	**120 J**	0.20 U	1,300,000	0.40 U	12 U	0.080 U
	TMW34102012	Normal	North Alluvial	10/23/2012	31 U	0.60 U	0.55 J	12	0.24 U	0.12 U	130,000	1.5 U	0.29 J	1.1 J	30 U	0.50 U	27,000	**170**	2.1 J	1,400 J	**130**	0.10 U	1,400,000 J	0.10 U	6.0 U	0.080 U
	TMW34042012	Normal	North Alluvial	4/24/2012	9.8 J	0.52 U	8.6	13 J	0.25 U	0.27 U	150,000	8.6 J	0.38 J	21	48 U	0.24 U	29,000	**170**	4.7 J	630	**120**	0.18 U	1,400,000	0.16 U	17 J	0.052 U
TMW35	TMW35102013	Normal	North Alluvial	11/4/2013	31 U	0.60 U	0.48 J	13	0.24 U	0.12 U	85,000	1.5 U	0.13 J	1.2 J	30 U	0.50 U	16,000	**150**	1.0 J	1,700 J	35	0.10 U	1,200,000	0.20 U	6.0 U	0.080 U
	DTW35042013	Duplicate	North Alluvial	4/9/2013	31 U	0.60 U	0.53 J	13	0.24 U	0.12 U	83,000 J	1.5 U	0.15 J	1.5 J	30 U	0.50 U	15,000	**160**	1.4 J	870 J	46 J	0.10 U	1,200,000	0.20 U	6.0 U	0.080 U
	TMW35042013	Normal	North Alluvial	4/9/2013	31 U	0.60 U	0.39 J	12 J	0.24 U	0.17 J	82,000 J	1.5 U	0.16 J	1.2 J	30 U	0.50 U	15,000	**150**	0.81 U	700 J	34	0.10 U	1,200,000	0.20 U	6.0 U	0.080 U
	TMW35102012	Normal	North Alluvial	10/23/2012	31 U	0.60 U	0.76 J	14	0.24 U	0.12 U	82,000	1.5 U	0.56 J	1.9 J	30 U	0.50 U	16,000	**160**	2.0 J	660 J	48	0.10 U	1,300,000 J	0.10 U	2.5 J	0.080 U
	TMW35042012	Normal	North Alluvial	4/23/2012	1.6 U	0.52 U	3.3	12	0.25 U	0.27 U	76,000	9.5 J	0.2 J	4.3 J	48 U	0.36 J	13,000	**140**	2.5 J	370 J	45	2	1,000,000	0.16 U	15 J	0.052 U
TMW39S	TMW39S102013	Normal	North Alluvial	11/5/2013	**1,400**	0.60 UJ	0.58 J	32	0.24 U	0.12 U	76,000	2.7 J	0.39 J	1.1 J	**760**	0.45 J	17,000	28	0.94 J	1,200 J	8.2	0.10 U	900,000	0.20 U	3.6 J	0.080 U
	TMW39S042013	Normal	North Alluvial	4/11/2013	31 U	0.60 U	0.53 J	14	0.24 U	0.12 U	73,000	2.7 J	1.4	0.66 J	25 J	0.50 UJ	16,000	3.7 J	0.58 J	1,800 J	10	0.10 U	860,000	0.20 UJ	6.0 U	0.080 U
	TMW39S102012	Normal	North Alluvial	11/1/2012	**350**	0.60 U	0.60 J	19	0.24 U	0.12 U	72,000	2.9 J	1.3	2.1	190	0.50 U	15,000	7.9	0.93 J	1,300 J	9	0.10 U	900,000	0.10 U	6.0 U	0.080 U
	TMW39S042012	Normal	North Alluvial	4/23/2012	2.8 J	0.6 U	2.4	15	0.25 U	0.37 U	68,000	5.6 J	0.12 J	10	48 U	0.24 U	14,000	6.3	1.4 J	920	14	0.18 U	700,000	0.16 U	12 J	0.052 U
TMW40S	TMW40S102013	Normal	North Alluvial	11/1/2013	**2,400**	0.60 U	**14**	53	0.19 J	0.12 U	68,000	1.9 J	0.48 J	1.5 J	**1,300**	2.1 J	10,000	**62 J**	1.4 J	1,700 J	**53**	0.10 U	1,000,000	0.20 U	17 J	0.080 U
	TMW40S042013	Normal	North Alluvial	4/15/2013	35 J	0.66 J	**14**	31	0.24 U	0.12 U	56,000	1.7 J	3.5	1.3 J	26 J	0.50 U	8,500	33	0.82 J	1,700 J	**56**	0.10 U	950,000	0.20 U	4.9 J	0.080 U
	Not sampled previously for metals due to lack of water																									

TABLE 5-7
Summary of Dissolved Metals Analytical Detections (Page 5 of 9)
Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	EPA Method 6010/6020 (µg/L)																				EPA Method 7470 (µg/L)
					Aluminum CAS 7429-90-5	Antimony CAS 7440-36-0	Arsenic CAS 7440-38-2	Barium CAS 7440-39-3	Beryllium CAS 7440-41-7	Cadmium CAS 7440-43-9	Calcium CAS 7440-70-2	Chromium CAS 7440-47-3	Cobalt CAS 7440-48-4	Copper CAS 7440-50-8	Iron CAS 7439-89-6	Lead CAS 7439-92-1	Magnesium CAS 7439-95-4	Manganese CAS 7439-96-5	Nickel CAS 7440-02-0	Potassium CAS 7440-09-7	Selenium CAS 7782-49-2	Silver CAS 7440-22-4	Sodium CAS 7440-23-5	Thallium CAS 7440-28-0	Zinc CAS 7440-66-6	Mercury CAS 7439-97-6
					Regulatory Limits																				
					[a]200	[b]6	[b]10	[c]1000	[b]4	[b]5	N/A	[c]50	[c]50	[c]1000	[a]300	[b]15	N/A	[a]50	[c]200	N/A	[c]50	[c]50	N/A	[b]2	[a]5000	[c]2
TMW41	TMW41102013	Normal	North Alluvial	10/30/2013	31 U	0.60 U	0.56 J	11 U	0.24 U	0.12 U	16,000	2.8 J	0.076 U	0.96 J	30 U	0.50 U	3,800	0.65 U	0.71 J	1,100 J	2.7 J	0.10 U	860,000 J	0.20 U	3.5 J	0.080 U
	TMW41042013	Normal	North Alluvial	4/11/2013	18 J	0.60 U	0.53 J	14	0.24 U	0.12 U	16,000	6.1 J	0.74 J	0.90 J	30 U	0.50 UJ	4,200	1.8 J	0.47 J	1,600 J	3.3 J	0.10 U	860,000	0.20 UJ	4.3 J	0.080 U
	TMW41102012	Normal	North Alluvial	11/6/2012	31 U	0.60 U	0.56 J	13	0.24 U	0.12 U	14,000	2.5 J	0.096 J	1.4 J	30 U	0.50 U	3,600	1.3 J	0.32 J	1,000 J	3.2 J	0.10 U	870,000	0.10 U	11 J	0.080 U
	TMW41042012	Normal	North Alluvial	4/23/2012	5.5 J	0.52 U	2.5	15	0.25 U	0.37 U	20,000	8.3 J	0.12 U	11	48 U	0.26 J	4,300	1 J	0.49 J	800	11	0.18 U	720,000	0.16 U	19 J	0.052 U
TMW43	TMW43102013	Normal	North Alluvial	10/30/2013	31 U	0.60 U	1.0 U	20 U	0.24 U	0.12 U	35,000	1.5 U	0.075 U	1.5 U	30 U	0.50 U	6,500	**51**	0.32 J	1,100 J	6.7	0.10 U	580,000 J	0.20 U	2.6 J	0.080 U
	TMW43042013	Normal	North Alluvial	4/16/2013	31 U	0.60 U	0.35 J	20	0.24 U	0.12 U	34,000	1.5 U	0.070 J	1.5 U	30 U	0.50 UJ	6,000	**50**	0.36 J	1,000 J	7.6 J	0.10 U	590,000	0.20 UJ	4.7 J	0.080 U
	TMW43102012	Normal	North Alluvial	11/8/2012	28 J	1.2 U	2.0 U	23	0.48 U	0.24 U	35,000	3.0 U	0.16 J	3.0 U	30 U	1.0 U	6,700	**51**	0.69 J	930 J	7.0 J	0.20 UJ	610,000	0.20 U	4.3 J	0.080 U
	TMW43042012	Normal	North Alluvial	4/24/2012	3.1 J	0.52 U	1.6	21	0.25 U	0.27 U	12,000	8.6 J	0.12 U	1.6 J	48 U	0.24 U	2,200	39	0.74 J	840	12	0.94 J	200,000	0.16 U	13 J	0.052 U
TMW44	TMW44102013	Normal	North Alluvial	10/29/2013	**1,300**	0.46 J	0.91 J	27	0.24 U	0.12 U	34,000	1.0 J	0.45 J	2.1	**740**	0.60 J	11,000	35	1.0 U	1,100 J	2.2 J	0.10 U	750,000	0.10 J	4.1 J	0.080 U
	TMW44042013	Normal	North Alluvial	4/8/2013	31 U	0.60 U	0.74 J	16	0.24 U	0.12 U	32,000	1.5 U	0.10 U	0.96 J	30 U	0.50 U	10,000	9.2	0.90 U	790 J	2.6 J	0.10 U	720,000	0.20 U	2.2 J	0.080 U
	TMW44102012	Normal	North Alluvial	11/6/2012	21 J	0.60 U	0.88 J	16	0.24 U	0.12 U	31,000	1.5 U	0.12 J	2.2	30 U	0.50 U	11,000	5.1	0.68 J	760 J	2.7 J	0.10 U	730,000	0.10 U	11 J	0.080 U
	TMW44042012	Normal	North Alluvial	4/24/2012	9.5 J	0.52 U	1.6	20	0.25 U	0.27 U	37,000	7.1 J	0.12 J	18	48 U	0.24 U	11,000	29	1.3 J	420 J	6	0.18 U	860,000	0.16 U	14 J	0.052 U
TMW45	TMW45102013	Normal	North Alluvial	11/7/2013	31 U	0.83 J	0.83 J	69	0.24 U	0.12 U	30,000	1.5 U	0.10 U	1.4 J	30 U	0.50 U	7,400	15	2.7 J	870 J	0.70 J	0.10 U	960,000	0.20 U	6.0 U	0.080 U
	TMW45042013	Normal	North Alluvial	4/4/2013	31 U	0.60 U	0.53 J	70	0.24 U	0.12 U	31,000	1.5 U	0.19 J	1.7 J	30 U	0.50 U	7,900	11	1.1 J	770 J	0.80 J	0.050 J	930,000	0.077 U	6.0 U	0.080 U
	TMW45102012DUP	Duplicate	North Alluvial	11/6/2012	31 U	0.60 U	1.0 J	71	0.24 U	0.12 U	30,000	1.5 U	0.059 J	1.9 J	30 U	0.50 U	8,000	17	1.2 J	930 J	1.3 J	0.10 U	1,000,000	0.10 U	6.0 U	0.080 U
	TMW45102012	Normal	North Alluvial	11/6/2012	31 U	0.60 U	1.1 J	71	0.24 U	0.12 U	30,000	1.5 U	0.060 J	2.1	30 U	0.50 U	7,900	17	1.0 J	960 J	1.2 J	0.10 U	1,000,000	0.10 U	6.0 U	0.080 U
	TMW45042012	Normal	North Alluvial	4/24/2012	8.9 J	2.8	1.7	61	0.36 J	0.45 J	31,000	6.5 J	0.52 J	15	50 J	0.96 J	7,800	**100**	2.2 J	630	3.9 J	0.18 U	1,100,000	**3.8 J**	22 J	0.052 U
TMW46	TMW46102013	Normal	North Alluvial	10/30/2013	**3,600 J**	0.60 U	0.86 J	74	0.16 J	0.12 U	71,000	3.1 J	1.2	2.8	**2,100 J**	1.3 J	17,000	**66**	2.4 J	1,600 J	**120**	0.10 U	1,200,000 J	0.20 U	7.9 J	0.080 U
	TMW46042013	Normal	North Alluvial	4/8/2013	31 U	0.60 U	0.44 J	9.8	0.24 U	0.12 U	67,000	0.54 J	0.13 J	0.81 J	30 U	0.50 U	15,000	1.4 J	0.90 U	1,000 J	**110**	0.10 U	1,200,000	0.20 U	4.0 J	0.080 U
	TMW46102012	Normal	North Alluvial	11/6/2012	**800 J**	0.60 U	0.67 J	25	0.24 U	0.12 U	67,000	1.1 J	1.3	1.5 J	**530**	0.36 J	17,000	19	1.3 J	1,000 J	**120**	0.10 U	1,300,000	0.10 U	4.7 J	0.080 U
	TMW46042012	Normal	North Alluvial	4/24/2012	4.8 U	1.2 J	9.1	12	0.25 U	0.27 U	71,000	4.7 J	0.15 J	24	48 U	0.24 U	16,000	3.8 J	1.9 J	200 J	**110**	0.18 U	1,200,000	0.16 U	13 J	0.052 U
TMW47	TMW47102013	Normal	North Alluvial	11/7/2013	31 U	0.60 U	0.39 J	14	0.24 U	0.12 U	5,800	1.5 U	0.059 J	1.5 U	30 U	0.50 U	620	46	0.42 J	1,100 J	2.0 U	0.10 U	560,000	0.20 U	6.0 U	0.080 U
	TMW47042013	Normal	North Alluvial	4/15/2013	180 J	0.60 U	0.69 J	14	0.24 U	0.12 U	6,000	1.5 U	0.54 J	1.5 U	140	0.50 U	750	39	0.32 J	1,500 J	2.0 U	0.10 U	550,000	0.20 U	6.0 U	0.080 U
	TMW47102012	Normal	North Alluvial	11/2/2012	44 J	0.60 U	0.63 J	14 J	0.24 U	0.12 U	6,200	1.5 U	0.62 J	0.63 J	41 J	0.50 U	670	27	0.51 J	1,100 J	2.0 U	0.10 U	580,000	0.10 U	3.6 J	0.080 U
	TMW47042012	Normal	North Alluvial	4/25/2012	16 J	0.52 U	0.9 J	13	0.25 U	0.27 U	12,000	2 J	0.12 U	7.7	48 U	0.24 U	2,000	11	0.32 J	950	2.1 J	0.18 U	520,000	0.16 U	18 J	0.052 U
EMW01	[d] Well not sampled in fall 2013																									
	EMW01042013	Normal	North Bedrock	4/15/2013	31 U	0.75 J	0.72 J	15	0.24 U	0.12 U	73,000	1.5 U	0.063 J	1.5 U	25 J	0.50 U	8,800	**120**	0.69 J	3,600	2.0 U	0.052 J	1,800,000	0.13 J	6.0 U	0.080 U
	EMW01102012	Normal	North Bedrock	10/25/2012	33 J	0.60 U	1.2 J	30	0.24 U	0.13 J	78,000	1.1 J	0.36 J	0.85 J	30 U	0.50 U	6,700	42	1.5 J	5,100	2.0 U	0.10 U	1,900,000	0.10 U	4.5 J	0.080 U
	EMW01042012	Normal	North Bedrock	4/23/2012	18 J	0.55 J	1.3 J	19	0.5 U	0.27 U	66,000	0.75 J	0.12 U	4.6 J	48 U	0.24 J	6,700	**65**	1.6 J	2,700	2.5 J	2	1,700,000	0.16 U	15 J	0.052 U
EMW02	[d] Well not sampled in fall 2013																									
	EMW02042013	Normal	North Bedrock	4/16/2013	31 U	0.40 J	0.45 J	12	0.24 U	0.17 J	61,000	1.5 U	0.095 J	0.56 U	30 U	0.50 UJ	6,700	**92**	0.45 J	2,600 J	0.77 J	0.31 J	1,800,000	0.20 UJ	37	0.080 U
	EMW02102012	Normal	North Bedrock	10/25/2012	31 U	0.60 U	0.37 J	13	0.24 U	0.17 J	64,000	1.5 U	0.13 J	1.5 U	30 U	0.50 U	7,300	**84**	0.45 J	3,400	2.0 U	0.10 U	1,700,000	0.10 U	41	0.080 U
	EMW02042012	Normal	North Bedrock	4/23/2012	3.2 J	0.52 U	1.2 J	11	0.5 U	0.27 U	57,000	1.5 J	0.12 U	4.8 J	48 U	0.24 U	6,200	**78**	1.4 J	1,700	4.5 J	0.83 J	1,400,000	0.16 U	68	0.052 U
EMW03	[d] Well not sampled in fall 2013																									
	EMW03042013	Normal	North Bedrock	4/15/2013	42 J	0.60 U	0.69 J	15	0.24 U	0.12 U	15,000	1.5 U	0.056 J	1.5 U	30 U	0.50 U	1,700	1.1 J	0.35 J	3,600	2.0 U	0.10 U	1,400,000	0.20 U	7.1 J	0.080 U
	EMW03102102	Normal	North Bedrock	10/25/2012	49 J	0.60 U	0.95 J	13	0.24 U	0.18 J	20,000	1.5 U	0.16 J	1.5 U	30 U	0.50 U	1,500	1.7 J	0.50 J	3,000	2.0 U	0.10 U	1,400,000	0.10 U	8.6 J	0.080 U
	EMW03042012	Normal	North Bedrock	4/23/2012	19 J	1.1 J	1.1 J	13	0.25 U	0.27 U	16,000	0.95 J	0.12 U	3.8 J	48 U	0.24 U	2,100	1.2 J	0.44 J	1,800	2.7 J	0.67 J	1,000,000	0.22 U	27 J	0.052 U
EMW04	[d] Well not sampled in fall 2013																									
	EMW04042013	Normal	North Bedrock	4/15/2013	31 U	0.60 U	0.56 J	19	0.24 U	0.12 U	170,000	12	5.5	1.5 U	260	0.50 U	21,000	**190**	**360**	7,600	2.0 U	0.10 U	3,000,000	0.20 U	3.3 J	0.080 U
	EMW04102012DUP	Duplicate	North Bedrock	10/25/2012	31 U	0.60 U	1.9 J	21	0.24 U	0.12 J	180,000	8.1 J	3.5	0.62 J	140	0.50 U	22,000	**170**	190	6,900	0.70 J	0.10 J	3,000,000	0.10 U	27	0.080 U
	EMW04102012	Normal	North Bedrock	10/25/2012	31 U	0.60 U	2.0 J	21	0.24 U	0.15 J	180,000	5.7 J	2.7	0.61 J	110	0.50 U	22,000	**140**	170	6,300	0.80 J	0.052 J	3,100,000	0.10 U	21	0.080 U
	EMW04042012	Normal	North Bedrock	4/25/2012	1.4 J	0.52 U	3.7	23	1 U	0.27 U	190,000	12	8.5	45	**730**	0.24 U	22,000	**190**	**520**	3,100	10	0.18 U	3,200,000	0.16 U	18 J	0.052 U

TABLE 5-7

Summary of Dissolved Metals Analytical Detections (Page 6 of 9)

Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	EPA Method 6010/6020 (µg/L)																				EPA Method 7470 (µg/L)
					Aluminum CAS 7429-90-5	Antimony CAS 7440-36-0	Arsenic CAS 7440-38-2	Barium CAS 7440-39-3	Beryllium CAS 7440-41-7	Cadmium CAS 7440-43-9	Calcium CAS 7440-70-2	Chromium CAS 7440-47-3	Cobalt CAS 7440-48-4	Copper CAS 7440-50-8	Iron CAS 7439-89-6	Lead CAS 7439-92-1	Magnesium CAS 7439-95-4	Manganese CAS 7439-96-5	Nickel CAS 7440-02-0	Potassium CAS 7440-09-7	Selenium CAS 7782-49-2	Silver CAS 7440-22-4	Sodium CAS 7440-23-5	Thallium CAS 7440-28-0	Zinc CAS 7440-66-6	Mercury CAS 7439-97-6
					Regulatory Limits																				
					[a]200	[b]6	[b]10	[c]1000	[b]4	[b]5	N/A	[c]50	[c]50	[c]1000	[a]300	[b]15	N/A	[a]50	[c]200	N/A	[c]50	[c]50	N/A	[b]2	[a]5000	[c]2
TMW02	TMW02102013	Normal	North Bedrock	11/4/2013	31 U	0.60 U	1.1 J	8.3	0.24 U	0.12 U	22,000	0.57 J	0.10 U	1.5 U	30 U	0.50 U	2,500	0.90 U	0.90 U	2,500 J	**74**	0.10 U	1,000,000	0.20 U	6.0 U	0.080 U
	TMW02042013	Normal	North Bedrock	4/16/2013	18 J	0.60 U	1.4 J	8.3	0.24 U	0.12 U	21,000	0.86 J	0.39 J	0.63 U	25 J	0.50 UJ	2,400	1.0 U	0.90 U	1,800 J	91 J	0.10 U	1,100,000	0.20 UJ	3.2 J	0.080 U
	TMW02102012	Normal	North Bedrock	10/31/2012	31 U	0.60 U	1.4 J	9.1 J	0.24 U	0.12 U	22,000	2.1 J	0.55 J	2.7	30 U	0.50 U	2,500	1.0 J	0.90 U	2,100 J	**91**	0.10 U	1,100,000	0.10 U	6.0 U	0.080 U
	TMW02042012	Normal	North Bedrock	4/24/2012	3.2 J	0.52 U	6.6	9.1 J	0.25 U	0.27 U	9,200	8 J	0.12 U	2.7 J	48 U	0.24 U	1,300 J	1.6 J	0.73 J	1,200	**82**	2	310,000	0.16 U	11 J	0.052 U
TMW14A	TMW14A102013	Normal	North Bedrock	11/6/2013	31 U	0.60 U	0.68 J	17	0.24 U	0.12 U	3,400	1.5 U	0.10 U	1.5 U	30 U	0.50 UJ	370 J	12	0.85 J	730 J	2.0 U	0.10 UJ	460,000	0.20 U	6.0 U	0.080 U
	TMW14A042013	Normal	North Bedrock	4/17/2013	170 J	0.60 U	0.63 J	34	0.24 U	0.12 U	4,100	23	1.5	39	**440**	1.0 J	450 J	32	71	1,000 J	2.0 U	0.53 J	230,000	0.20 UJ	22	0.080 U
	TMW14A102012	Normal	North Bedrock	11/8/2012	22 J	1.2 U	0.70 J	16	0.48 U	0.24 U	3,300	3.0 U	0.14 J	3.2 J	27 J	1.0 U	400 J	13	2.1 J	1,000 J	4.0 U	0.20 UJ	440,000	0.20 U	12 U	0.080 U
	TMW14A042012	Normal	North Bedrock	4/21/2012	16 J	0.52 U	1.1 J	16	0.25 U	0.27 U	3,600	4.5 J	0.12 U	1.4 J	48 U	0.24 U	400 J	16	1.5 J	550	2.7 J	0.18 U	380,000	0.16 U	11 J	0.052 U
TMW16	TMW16102013	Normal	North Bedrock	10/31/2013	31 U	0.60 U	1.0 U	16	0.24 U	0.12 U	4,100	1.5 U	0.071 U	9.5	30 U	0.50 U	420 J	6.2	3.1	1,000 J	2.0 U	0.10 U	470,000	0.20 U	8.4 U	0.080 U
	TMW16042013	Normal	North Bedrock	4/18/2013	130 J	1.0 J	1.0 U	16	0.24 U	0.12 U	3,800	1.5 U	1.1	1.5 U	61 U	0.50 U	440 J	11	1.9 J	680 J	2.0 U	0.10 U	420,000	0.20 U	5.5 J	0.080 U
	TMW16102012	Normal	North Bedrock	11/6/2012	85 J	0.60 U	0.66 J	19	0.24 U	0.12 U	3,700	1.5 U	1.6	2.2	40 J	0.50 U	440 J	15	1.8 J	780 J	2.0 U	0.10 U	470,000	0.10 U	23	0.080 U
	TMW16042012	Normal	North Bedrock	4/21/2012	6.1 J	0.52 U	0.61 U	14	0.25 U	0.27 U	2,200	4.4 J	0.12 U	3.3 J	48 U	0.24 U	180 J	9	1.3 J	530	1.5 U	0.35 J	160,000	**8.1**	15 J	0.052 U
TMW17	TMW17102013	Normal	North Bedrock	11/6/2013	67 J	0.60 U	1.0 U	14	0.24 U	0.12 U	3,000	1.5 U	0.10 U	1.5 U	30 U	0.50 UJ	430 J	5	0.71 J	890 J	2.0 U	0.10 UJ	440,000	0.20 U	6.0 U	0.080 U
	TMW17042013	Normal	North Bedrock	4/9/2013	99 J	0.60 U	1.0 U	15 J	0.080 J	0.12 U	3,100 J	1.5 U	0.17 J	0.89 J	37 J	0.52 J	430 J	9.6	0.69 U	900 J	2.0 U	0.10 U	410,000	0.20 U	19 J	0.080 U
	TMW17102012	Normal	North Bedrock	11/9/2012	150 J	1.2 U	2.0 U	21	0.48 U	0.24 U	3,600	3.0 U	0.67 J	1.5 J	92 J	1.2 J	490 J	11	0.80 J	1,200 J	4.0 U	0.20 U	430,000	0.20 U	370	0.080 U
	TMW17042012	Normal	North Bedrock	4/24/2012	83	0.52 U	0.61 U	16	0.25 U	0.27 U	4,500	2 J	0.12 U	8.5	48 U	0.28 J	520 J	7.2	0.8 J	780	1.5 U	0.18 U	460,000	0.16 U	14 J	0.052 U
TMW18	TMW18102013	Normal	North Bedrock	10/31/2013	89 J	0.60 U	1.3 J	13	0.24 U	0.12 U	6,100	1.5 U	0.10 U	0.81 J	30 U	0.21 J	900	0.75 J	0.32 J	4,600	2.0 U	0.10 U	710,000	0.20 U	6.0 U	0.080 U
	TMW18042013	Normal	North Bedrock	4/12/2013	120 J	0.60 U	1.2 J	14	0.24 U	0.12 U	5,600	1.5 U	0.099 J	0.58 J	23 J	0.29 J	910	1.3 J	0.37 J	5,300	2.0 U	0.10 U	730,000	0.20 U	6.0 U	0.080 U
	TMW18102012	Normal	North Bedrock	11/5/2012	50 J	0.60 U	0.78 J	15	0.24 U	0.12 U	4,900	1.5 U	0.15 J	0.81 J	30 U	0.35 J	1,000	1.3 J	0.90 U	4,000	2.0 U	0.10 U	720,000	0.10 U	6.0 U	0.080 U
	TMW18102012DUP	Duplicate	North Bedrock	11/5/2012	50 J	0.60 U	0.92 J	14	0.24 U	0.12 U	4,800	1.5 U	0.10 UJ	1.5 J	30 U	0.32 J	960	0.97 J	0.90 U	4,000	2.0 U	0.10 U	700,000	0.10 U	6.0 U	0.080 U
	TMW18042012	Normal	North Bedrock	4/23/2012	54	0.52 U	1 J	14	0.25 U	0.37 U	6,800	1.9 J	0.12 U	8.2	48 U	1.2	1,000 J	1.3 J	0.27 J	3,800	1.5 U	0.18 U	560,000	0.16 U	13 J	0.052 U
TMW19	TMW19102013	Normal	North Bedrock	10/31/2013	28 J	0.60 U	1.0 U	8	0.24 U	0.12 U	12,000	1.5 U	0.10 U	1.5 U	66 J	0.50 U	1,200	43	0.57 J	1,500 J	2.0 U	0.10 U	750,000	0.20 U	6.0 U	0.080 U
	TMW19042013	Normal	North Bedrock	4/12/2013	31 J	0.60 U	1.0 U	7.9	0.24 U	0.12 U	11,000	1.5 U	0.74 J	1.5 U	31 J	0.50 U	1,200	44	4.2	1,300 J	2.0 U	0.10 U	730,000	0.20 U	6.0 U	0.080 U
	TMW19102012	Normal	North Bedrock	11/5/2012	31 U	0.60 U	0.54 J	8.6	0.24 U	0.12 U	8,800	1.5 U	0.10 U	1.4 J	74 J	0.50 U	1,100	34	0.90 U	1,200 J	2.0 U	0.10 U	700,000	0.10 U	6.0 U	0.080 U
	TMW19042012	Normal	North Bedrock	4/21/2012	5.5 J	0.52 U	0.61 U	8.7 J	0.25 U	0.27 U	4,800	3.9 J	0.23 J	2.5 J	48 U	0.28 J	460 J	43	9.1 J	940	1.5 U	0.18 U	250,000	0.16 U	23 J	0.052 U
TMW30	TMW30102013	Normal	North Bedrock	10/30/2013	31 U	0.60 U	0.87 J	5.1 U	0.24 U	0.12 U	61,000	1.5 U	0.12 U	1.4 J	30 U	0.50 U	13,000	0.79 U	1.1 J	880 J	8.2	0.10 U	470,000 J	0.20 U	2.4 J	0.080 U
	TMW30042013	Normal	North Bedrock	4/11/2013	31 U	0.60 U	0.91 J	10	0.24 U	0.12 U	60,000	1.5 U	0.10 U	0.92 J	30 U	0.50 UJ	13,000	1.9 J	0.33 J	1,100 J	8	0.10 U	480,000	0.20 UJ	2.2 J	0.080 U
	TMW30102012DUP	Duplicate	North Bedrock	11/5/2012	31 U	0.55 J	0.99 J	10	0.24 U	0.12 U	52,000	0.55 J	0.14 J	1.1 J	30 U	0.50 U	12,000	4	1.3 J	1,200 J	8.6 J	0.10 U	520,000	0.10 U	14 J	0.080 U
	TMW30102012	Normal	North Bedrock	11/5/2012	31 U	0.52 J	0.96 J	9.9	0.24 U	0.12 U	49,000	0.52 J	0.59 J	1.1 J	30 U	0.50 U	11,000	4.2	1.2 J	1,200 J	8.3 J	0.10 U	470,000	0.10 U	14 J	0.080 U
	TMW30042012	Normal	North Bedrock	4/20/2012	3.1 J	0.52 U	3.6	10	0.25 U	0.27 U	60,000	3.7 J	0.12 J	9.2	180	0.24 U	13,000	6.6	2.6 J	820	13	0.18 U	560,000	0.16 U	18 J	0.052 U
TMW31D	DTW31D102013	Duplicate	North Bedrock	11/6/2013	31 U	0.60 U	0.46 J	8.5	0.24 U	0.12 U	62,000	1.5 U	0.10 U	1.4 J	64 J	0.50 UJ	10,000	0.43 J	0.90 U	1,400 J	8.4	0.10 UJ	550,000	0.20 U	22	0.080 U
	TMW31D102013	Normal	North Bedrock	11/6/2013	31 U	0.60 U	0.44 J	8.1	0.24 U	0.12 U	64,000	1.5 U	0.10 U	1.3 J	30 UJ	0.50 UJ	11,000	0.43 J	0.90 U	1,400 J	8.5	0.10 UJ	550000	0.20 U	22	0.080 U
	DTW31D042013	Duplicate	North Bedrock	4/10/2013	31 U	0.60 U	0.49 J	8.6	0.24 U	0.12 U	60,000 J	1.5 U	0.10 U	1.5 J	30 U	0.50 U	10,000	0.90 UJ	0.90 U	1,600 J	9.8 J	0.10 U	530,000	0.20 U	24	0.080 U
	TMW31D042013	Normal	North Bedrock	4/10/2013	31 U	0.60 U	0.49 J	8.6	0.24 U	0.12 U	58,000 J	1.5 U	0.10 U	1.6 J	30 U	0.50 U	10,000	0.34 J	0.90 U	1,500 J	9.8 J	0.10 U	530,000	0.20 U	24	0.080 U
	TMW31D102012	Normal	North Bedrock	10/30/2012	31 U	0.60 U	1.0 U	8.8	0.24 U	0.12 U	60,000	1.5 U	0.088 J	1.4 J	30 U	0.50 U	10,000	0.53 J	0.43 J	1,700 J	8	0.10 U	540,000	0.10 U	24	0.080 U
	TMW31D042012	Normal	North Bedrock	4/23/2012	4.6 J	0.52 U	1.9	8.6 J	0.25 U	0.27 U	26,000	5.2 J	0.12 U	3.3 J	48 U	0.24 U	4,600	13	1.3 J	1,100	14	0.18 U	160,000	0.16 U	33 J	0.052 U
TMW32	TMW32102013	Normal	North Bedrock	11/7/2013	31 U	0.60 U	1.0 J	9.6	0.24 U	0.12 U	11,000	1.5 U	0.10 U	1.5 U	30 U	0.50 U	1,100	30	0.90 U	1,100 J	3.5 J	0.10 U	750,000	0.20 U	3.0 J	0.080 U
	TMW32042013	Normal	North Bedrock	4/11/2013	31 U	0.60 U	0.89 J	9.5	0.24 U	0.12 U	12,000	1.5 U	0.10 U	1.5 U	30 U	0.50 UJ	1,300	27 J	0.90 U	1,500 J	4.6 J	0.10 U	760,000	0.20 UJ	2.4 J	0.080 U
	TMW32102012DUP	Duplicate	North Bedrock	10/30/2012	31 U	0.60 U	0.54 J	8.9	0.24 U	0.12 U	11,000	1.5 U	0.10 U	1.5 U	30 U	0.50 U	1,200	26	0.90 U	1,600 J	4.0 J	0.10 U	760,000	0.10 U	7.4 J	0.080 U
	TMW32102012	Normal	North Bedrock	10/30/2012	31 U	0.60 U	0.56 J	9.9	0.24 U	0.12 U	11,000	1.5 U	0.10 U	1.5 U	30 U	0.50 U	1,200	26	0.90 U	1,500 J	3.6 J	0.10 U	740,000	0.10 U	4.0 J	0.080 U
	TMW32042012	Normal	North Bedrock	4/24/2012	14 J	0.52 U	3.2	12	0.25 U	0.27 U	14,000	2.6 J	0.12 U	15	48 U	0.24 U	1,800 J	35	0.83 J	930	6	0.18 U	860,000	0.16 U	15 J	0.052 U

TABLE 5-7
Summary of Dissolved Metals Analytical Detections (Page 7 of 9)
Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	EPA Method 6010/6020 (µg/L)																				EPA Method 7470 (µg/L)
					Aluminum CAS 7429-90-5	Antimony CAS 7440-36-0	Arsenic CAS 7440-38-2	Barium CAS 7440-39-3	Beryllium CAS 7440-41-7	Cadmium CAS 7440-43-9	Calcium CAS 7440-70-2	Chromium CAS 7440-47-3	Cobalt CAS 7440-48-4	Copper CAS 7440-50-8	Iron CAS 7439-89-6	Lead CAS 7439-92-1	Magnesium CAS 7439-95-4	Manganese CAS 7439-96-5	Nickel CAS 7440-02-0	Potassium CAS 7440-09-7	Selenium CAS 7782-49-2	Silver CAS 7440-22-4	Sodium CAS 7440-23-5	Thallium CAS 7440-28-0	Zinc CAS 7440-66-6	Mercury CAS 7439-97-6
					Regulatory Limits																				
					[a]200	[b]6	[b]10	[c]1000	[b]4	[b]5	N/A	[c]50	[c]50	[c]1000	[a]300	[b]15	N/A	[a]50	[c]200	N/A	[c]50	[c]50	N/A	[b]2	[a]5000	[c]2
TMW36	TMW36102013	Normal	North Bedrock	11/5/2013	31 U	0.60 UJ	1.0 U	7.7	0.24 U	0.12 U	9,100	1.5 U	0.10 U	1.5 U	30 U	0.50 U	980	21	0.67 J	1,100 J	2.0 U	0.10 U	710,000	0.20 U	2.3 J	0.080 U
	TMW36042013	Normal	North Bedrock	4/15/2013	21 J	0.60 U	0.41 J	8.5	0.24 U	0.12 U	8,800	1.5 U	0.16 J	1.5 U	30 U	0.50 U	950	16	0.75 J	1,300 J	2.0 U	0.10 U	670,000	0.20 U	2.4 J	0.080 U
	TMW36102012	Normal	North Bedrock	11/5/2012	26 J	0.60 U	0.55 J	9.6	0.24 U	0.12 U	8,700	1.5 U	0.10 J	0.61 J	30 U	0.42 J	1,100	31	0.65 J	1,000 J	2.0 U	0.10 U	710,000	0.10 U	3.2 J	0.080 U
	TMW36042012	Normal	North Bedrock	4/20/2012	17 J	0.7 J	2.2	11	0.25 U	0.27 U	20,000	4.1 J	0.73 J	14	70 J	0.24 J	3,000	**120**	31	1,100	2.7 J	0.18 U	880,000	0.16 U	13 J	0.052 U
TMW37	TMW37102013	Normal	North Bedrock	10/31/2013	31 U	0.60 U	1.0 U	9.4	0.24 U	0.12 U	6,100	1.5 U	0.10 U	1.5 U	30 U	0.50 U	660	12	1.3 J	1,100 J	2.0 U	0.10 U	570,000	0.20 U	3.6 U	0.080 U
	TMW37042013	Normal	North Bedrock	4/12/2013	31 U	0.60 U	0.44 J	10	0.24 U	0.12 U	6,300	1.5 U	0.29 J	1.5 U	30 U	0.50 U	700	17	0.40 J	1,200 J	2.0 U	0.10 U	560,000	0.20 U	6.0 U	0.080 U
	TMW37102012	Normal	North Bedrock	11/2/2012	37 J	0.60 U	0.55 J	13 J	0.24 U	0.12 U	5,700	1.5 U	0.19 J	1.8 J	22 J	0.50 U	630	14	1.3 J	850 J	2.0 U	0.10 U	540,000	0.10 U	5.9 J	0.080 U
	TMW37042012	Normal	North Bedrock	4/23/2012	10 J	0.52 U	0.99 J	11	0.25 U	0.27 U	7,700	2.8 J	0.12 U	7.1	48 U	0.24 U	960 J	17	2 J	650	1.7 J	0.18 U	430,000	0.16 U	13 J	0.052 U
TMW38	TMW38102013	Normal	North Bedrock	10/31/2013	31 U	0.60 U	0.68 J	21	0.24 U	0.12 U	10,000	1.5 U	0.081 U	1.5 U	59 J	0.50 U	1,300	**85**	0.36 J	1,400 J	2.0 U	0.10 U	710,000	0.20 U	9.1 U	0.080 U
	TMW38042013	Normal	North Bedrock	4/11/2013	31 U	0.60 U	0.74 J	24	0.24 U	0.12 U	10,000	1.5 U	0.080 J	1.5 U	75 J	0.50 UJ	1,600	**99 J**	0.35 J	1,300 J	2.0 U	0.10 U	690,000	0.20 UJ	6.0 U	0.080 U
	TMW38102012	Normal	North Bedrock	11/8/2012	31 U	1.2 U	0.82 J	21	0.48 U	0.24 U	8,000	3.0 U	0.14 J	3.0 U	85 J	1.0 U	1,400	**82**	1.8 U	1,100 J	4.0 U	0.20 UJ	600,000	0.20 U	12 U	0.080 U
	TMW38042012	Normal	North Bedrock	4/20/2012	35 J	0.91 J	1.8	23	0.25 U	0.37 J	7,400 J	1.4 J	0.21 J	7.4	68 J	0.36 J	1,300 J	**84**	0.96 J	940	1.5 U	0.18 U	470,000	0.16 U	14 J	0.052 U
TMW39D	TMW39D102013	Normal	North Bedrock	11/6/2013	31 U	0.60 U	1.0 U	9.4	0.24 U	0.12 U	19,000	1.5 U	0.10 U	1.0 J	30 U	0.50 UJ	2,000	**56**	0.90 U	1,300 J	2.0 U	0.10 UJ	750,000	0.20 U	6.0 U	0.080 U
	TMW39D042013	Normal	North Bedrock	4/10/2013	31 U	0.60 U	0.33 J	11	0.24 U	0.12 U	27,000 J	1.5 U	0.061 J	1.5 U	30 U	0.50 U	3,600	**58**	0.90 U	1,500 J	1.4 J	0.10 U	700,000	0.20 U	6.0 U	0.080 U
	TMW39D102012	Normal	North Bedrock	10/31/2012	31 U	0.60 U	0.49 J	13 J	0.24 U	0.12 U	21,000	1.5 U	0.13 J	0.96 J	30 U	0.50 U	2,200	**66 J**	3.7	1,500 J	0.83 J	0.10 U	770,000	0.10 U	2.1 J	0.080 U
	TMW39D042012	Normal	North Bedrock	4/23/2012	16 J	0.52 U	1.7	15	0.25 U	0.27 U	59,000	2 J	0.13 J	8	48 U	0.24 U	9,600	16	1.5 J	1,500	8	0.18 U	490,000	0.16 U	16 J	0.052 U
TMW40D	TMW40D102013	Normal	North Bedrock	11/7/2013	31 U	0.44 J	0.38 J	11	0.24 U	0.12 U	13,000	1.5 U	0.10 U	1.5 J	30 U	0.50 U	1,700	**52**	0.90 U	1,300 J	3.7 J	0.10 U	760,000	0.20 U	4.4 J	0.080 U
	TMW40D042013	Normal	North Bedrock	4/11/2013	31 U	0.60 U	0.58 J	12	0.24 U	0.12 U	15,000	1.5 U	0.055 J	0.81 J	30 U	0.50 UJ	2,100	48 J	0.90 U	1,400 J	3.8 J	0.10 U	710,000	0.20 UJ	5.2 J	0.080 U
	TMW40D102012	Normal	North Bedrock	11/1/2012	28 J	0.60 U	0.64 J	14	0.24 U	0.12 U	15,000	1.5 U	0.13 J	1.8 J	30 U	0.50 U	2,000	**50**	0.38 J	1,500 J	4.5 J	0.10 U	780,000	0.10 U	9.6 J	0.080 U
	TMW40D042012	Normal	North Bedrock	4/23/2012	13 J	0.52 U	2	14	0.25 U	0.27 U	17,000	1.2 J	0.12 U	11	48 U	0.24 U	2,200	**52**	0.66 J	1,100	8	0.18 U	730,000	**4 J**	18 J	0.052 U
TMW48	TMW48102013	Normal	North Bedrock	10/31/2013	31 U	0.60 U	0.55 J	11	0.24 U	0.12 U	78,000	1.5 U	0.10 U	0.67 J	30 U	0.50 U	16,000	5	0.33 J	1,400 J	7.8	0.10 U	520,000	0.078 U	11 U	0.080 U
	DTW48102013	Duplicate	North Bedrock	10/31/2013	31 U	0.60 U	0.54 J	12	0.24 U	0.12 U	80,000	1.5 U	0.10 U	0.88 J	30 U	0.50 U	16,000	7.4	0.66 J	1,400 J	7.5	0.10 U	550,000	0.10 U	11 U	0.080 U
	DTW48042013	Duplicate	North Bedrock	4/10/2013	31 U	0.60 U	0.76 J	11	0.24 U	0.12 U	73,000 J	1.5 U	0.10 U	1.2 J	30 U	0.50 U	15,000	1.6 J	0.46 J	1,300 J	9.4 J	0.10 U	510,000	0.20 U	10 J	0.080 U
	TMW48042013	Normal	North Bedrock	4/10/2013	31 U	0.60 U	0.68 J	11	0.24 U	0.12 U	73,000 J	1.5 U	0.10 U	1.0 J	30 U	0.50 U	15,000	1.5 J	0.43 J	1,300 J	9.5 J	0.10 U	500,000	0.20 U	11 J	0.080 U
	TMW48102012	Normal	North Bedrock	11/2/2012	31 U	0.60 U	0.77 J	14 J	0.24 U	0.12 U	75,000	1.5 U	0.27 J	1.7 J	30 U	0.50 U	16,000	1.7 J	1.1 J	1,200 J	9	0.10 U	530,000	0.10 U	12 J	0.080 U
	TMW48042012	Normal	North Bedrock	4/25/2012	4 J	0.52 U	2.9	12	0.25 U	0.27 U	74,000	3.5 J	0.12 U	8.3	48 U	0.24 U	15,000	1.2 J	1.8 J	940	17	0.18 U	490,000	0.16 U	23 J	0.052 U
TMW49	DTW49102013	Duplicate	North Bedrock	11/6/2013	31 U	0.60 U	0.57 J	11	0.24 U	0.12 U	75,000	1.8 J	0.10 U	1.2 J	30 U	0.50 UJ	12,000	0.33 J	0.45 J	1,500 J	20	0.10 UJ	610,000	0.20 U	6.5 J	0.080 U
	TMW49102013	Normal	North Bedrock	11/6/2013	31 U	0.60 U	0.55 J	11	0.24 U	0.12 U	71,000	1.5 UJ	0.10 U	0.99 J	30 U	0.50 UJ	12,000	0.90 UJ	0.32 J	1,400 J	19	0.10 UJ	610,000	0.20 U	5.9 J	0.080 U
	DTW49042013	Duplicate	North Bedrock	4/15/2013	31 U	0.60 U	0.79 J	12	0.24 U	0.12 U	69,000	0.58 J	0.10 U	0.76 J	30 U	0.50 U	12,000	0.90 U	0.39 J	1,700 J	18	0.10 U	570,000	0.064 J	6.2 J	0.080 U
	TMW49042013	Normal	North Bedrock	4/15/2013	31 U	0.60 U	0.52 J	11	0.24 U	0.12 U	67,000	0.61 J	0.10 U	0.68 J	30 U	0.50 U	12,000	0.90 U	0.44 J	1,700 J	18	0.10 U	580,000	0.20 UJ	5.4 J	0.080 U
	TMW49102012	Normal	North Bedrock	10/31/2012	31 U	0.60 U	0.75 J	18 J	0.24 U	0.12 U	69,000	0.50 J	0.11 J	1.3 J	30 U	0.50 U	12,000	0.50 J	1.2 J	1,500 J	19	0.10 U	590,000	0.10 U	9.9 J	0.080 U
	TMW49042012	Normal	North Bedrock	4/25/2012	10 J	1.5 J	4.1	15	0.25 U	0.28 J	63,000 J	2.2 J	0.16 J	9.4	48 U	0.4 J	10,000	0.58 J	1.7 J	1,200	24	0.18 U	460,000	0.16 U	19 J	0.052 U
CMW02	[e] Well not sampled in fall 2013																									
	CMW02042013	Normal	OBOD	4/2/2013	31 U	0.60 U	4.8 J	30	0.24 U	0.12 U	6,100	1.5 U	0.18 J	0.60 J	30 U	0.50 U	1,100	1.1 J	0.90 U	770 J	4.0 J	0.10 U	200,000	0.20 U	3.2 J	0.080 U
	CMW02102012	Normal	OBOD	10/29/2012	31 U	0.60 U	4.1 J	30	0.24 U	0.12 U	6,000	1.5 U	0.10 U	1.5 U	30 U	0.50 U	1,100	1.5 J	0.90 U	1,200 J	4.0 J	0.10 U	190,000	0.10 U	3.3 J	0.080 U
	CMW02042012	Normal	OBOD	4/16/2012	4.1 J	1.1 J	3.8	28	0.25 U	0.27 U	5,500	3.3 J	0.12 U	3.3 J	48 U	0.24 U	930 J	2.6 J	0.48 J	730	4.4 J	0.18 U	150,000	1.5 J	11 J	0.18 J
CMW04	[e] Well not sampled in fall 2013																									
	CMW04042013	Normal	OBOD	4/2/2013	31 U	0.60 U	1.0 U	10	0.24 U	0.12 U	41,000	1.5 U	0.33 J	1.5 U	100	0.50 U	4,600	**210**	0.90 U	2,300 J	2.0 U	0.10 U	1,300,000	0.20 U	6.0 U	0.080 U
	CMW04102012	Normal	OBOD	10/29/2012	31 U	0.60 U	1.0 U	7.8	0.24 U	0.12 U	36,000	1.5 U	0.23 J	1.5 U	160	0.50 U	4,400	**180 J**	0.90 U	4,500	0.84 J	0.10 U	1,200,000	0.10 U	2.3 J	0.080 U
	CMW04042012	Normal	OBOD	4/17/2012	4.4 J	0.52 U	1.5	8.3 J	0.5 U	0.32 J	52,000	1.1 J	0.32 J	14	180	0.24 U	7,400	**170**	1.1 J	1,800	3.3 J	0.18 U	1,400,000	0.16 U	12 J	0.052 U

TABLE 5-7

Summary of Dissolved Metals Analytical Detections (Page 8 of 9)

Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	EPA Method 6010/6020 (µg/L)																				EPA Method 7470 (µg/L)
					Aluminum CAS 7429-90-5	Antimony CAS 7440-36-0	Arsenic CAS 7440-38-2	Barium CAS 7440-39-3	Beryllium CAS 7440-41-7	Cadmium CAS 7440-43-9	Calcium CAS 7440-70-2	Chromium CAS 7440-47-3	Cobalt CAS 7440-48-4	Copper CAS 7440-50-8	Iron CAS 7439-89-6	Lead CAS 7439-92-1	Magnesium CAS 7439-95-4	Manganese CAS 7439-96-5	Nickel CAS 7440-02-0	Potassium CAS 7440-09-7	Selenium CAS 7782-49-2	Silver CAS 7440-22-4	Sodium CAS 7440-23-5	Thallium CAS 7440-28-0	Zinc CAS 7440-66-6	Mercury CAS 7439-97-6
					Regulatory Limits																				
					[a]200	[b]6	[b]10	[c]1000	[b]4	[b]5	N/A	[c]50	[c]50	[c]1000	[a]300	[b]15	N/A	[a]50	[c]200	N/A	[c]50	[c]50	N/A	[b]2	[a]5000	[c]2
CMW07	[e.] Well not sampled in fall 2013																								
	CMW07042013	Normal	OBOD	4/4/2013	31 U	0.60 U	1.1 J	21	0.24 U	0.12 U	12,000	1.5 U	0.14 J	0.57 J	190	0.50 U	2,200	13	0.82 J	1,500 J	2.0 U	0.10 U	400,000	0.20 U	6.0 U	0.080 U
	CMW07102012	Normal	OBOD	10/30/2012	31 U	0.60 U	0.82 J	20	0.24 U	0.12 U	12,000	1.5 U	0.23 J	1.5 U	260	0.50 U	2,100	12	0.52 J	1,500 J	2.0 U	0.10 U	370,000	0.10 U	6.0 U	0.080 U
	CMW07042012	Normal	OBOD	4/19/2012	6.8 J	0.52 U	1.8	19	0.25 U	0.37 U	16,000	4.3 J	0.21 J	5.6	71 J	0.3 J	3,000	11	0.94 J	1,300	2.9 J	0.18 U	340,000	0.16 U	11 J	0.052 U
CMW10	[e.] Well not sampled in fall 2013																								
	CMW10042013	Normal	OBOD	4/3/2013	41 J	0.60 U	2.6 J	20	0.14 J	0.12 U	77,000	11	0.18 J	4.2	30 U	0.50 U	350 J	0.35 J	0.30 J	6,900	35	0.10 U	1,300,000	0.20 U	6.0 U	0.080 U
	CMW10102012	Normal	OBOD	11/7/2012	31 U	0.60 U	3.3 J	20	0.24 U	0.11 J	79,000	12	0.71 J	1.3 J	30 U	0.50 U	1,600	1.1 J	0.67 J	5,800	48	0.10 U	1,300,000	0.10 U	2.3 J	0.080 U
	CMW10042012	Normal	OBOD	4/19/2012	1.4 J	0.52 U	3.1	17	0.25 U	0.27 U	130,000	4.6 J	0.19 J	7.8	**320**	0.24 U	24,000	44	2.8 J	610	14	0.18 U	660,000	0.16 U	13 J	0.052 U
CMW14	[e.] Well not sampled in fall 2013																								
	CMW14042013	Normal	OBOD	4/3/2013	**450**	0.60 U	0.84 J	29	0.24 U	0.12 U	40,000	25	0.21 J	1.1 J	30 U	0.50 U	200 J	0.45 J	0.97 J	5,600	2.0 U	0.10 U	1,300,000	0.20 U	2.1 J	0.080 U
	CMW14102012	Normal	OBOD	11/6/2012	**430 J**	0.60 U	0.91 J	26	0.24 U	0.15 J	41,000	28	0.48 J	1.0 J	30 U	0.50 U	210 J	1.1 J	1.1 J	4,700	2.0 U	0.10 U	1,300,000	0.10 U	2.9 J	0.080 U
	CMW14042012	Normal	OBOD	4/24/2012	110	0.52 U	1.5	27	0.5 U	0.27 U	25,000	**60**	0.23 J	30	48 U	0.24 U	1,200 J	0.47 J	1.1 J	3,600	3.7 J	0.18 U	1,400,000	0.16 U	26 J	0.052 U
CMW17	[e.] Well not sampled in fall 2013																								
	CMW17042013	Normal	OBOD	4/3/2013	89 J	0.60 U	5.9	29	0.24 U	0.12 U	2,900	1.5 U	0.10 U	0.68 J	49 J	0.32 J	1,200	4.6 J	0.34 J	1,600 J	1.8 J	0.10 U	270,000	0.084 J	7.1 J	0.080 U
	CMW17102012DUP	Duplicate	OBOD	11/6/2012	**1,100 J**	0.60 U	7.7	31	0.082 J	0.12 U	2,300	2.0 J	1.5 J	0.79 J	**580**	0.32 J	1,400	8.6	1.0 J	1,500 J	2.0 J	0.10 UJ	280,000	0.10 U	5.3 J	0.080 U
	CMW17102012	Normal	OBOD	11/6/2012	**1,000 J**	0.60 U	7.9	34	0.095 J	0.12 U	2,700	1.7 J	0.50 J	1.1 J	**530**	0.39 J	1,400	11	1.3 J	1,300 J	2.2 J	0.049 J	270,000	0.10 U	6.3 J	0.080 U
	CMW17042012	Normal	OBOD	4/17/2012	4.1 J	0.74 J	6.3	22	0.25 U	0.27 U	1,400	4.8 J	0.12 U	4.2 J	48 U	0.24 U	660 J	4.2 J	0.27 J	1,100	1.5 U	0.18 U	140,000	0.16 U	8.9 J	0.052 U
CMW18	[e.] Well not sampled in fall 2013																								
	CMW18042013	Normal	OBOD	4/4/2013	31 U	0.60 U	0.68 J	50	0.24 U	0.12 U	49,000	1.5 U	0.10 UJ	0.64 J	30 U	0.50 U	14,000	0.90 U	0.31 J	1,100 J	2.3 J	0.10 U	140,000	0.20 UJ	5.9 J	0.080 U
	DCW18042013	Duplicate	OBOD	4/4/2013	31 U	0.60 U	0.93 J	49	0.24 U	0.12 U	49,000	1.5 U	0.063 J	1.5 UJ	30 U	0.50 U	15,000	0.90 U	0.90 UJ	1,100 J	2.5 J	0.10 U	150,000	0.15 UJ	6.7 J	0.080 U
	CMW18102012	Normal	OBOD	11/6/2012	31 U	0.60 U	1.1 J	53	0.24 U	0.12 U	47,000	1.5 U	0.20 J	0.60 J	30 U	0.50 U	14,000	0.65 J	0.84 J	1,100 J	2.7 J	0.10 U	160,000	0.10 U	7.4 J	0.080 U
	CMW18042012	Normal	OBOD	4/17/2012	1.4 U	0.52 U	0.89 J	52	0.25 U	0.27 U	48,000	5 J	0.12 U	2.5 J	120	0.24 U	12,000	1.8 J	1.1 J	1,200	1.5 U	0.18 U	150,000	0.16 U	14 J	0.052 U
CMW19	[e.] Well not sampled in fall 2013																								
	CMW19042013	Normal	OBOD	4/4/2013	**300**	0.60 U	1.3 J	25	0.24 U	0.12 U	4,200	1.5 U	0.60 J	0.66 J	39 J	0.50 U	1,300	7.9	2.4 J	2,600 J	2.0 U	0.15 J	390,000	0.20 U	3.8 J	0.080 U
	CMW19102012	Normal	OBOD	10/30/2012	**220 J**	0.60 U	1.1 J	23	0.24 U	0.12 U	3,900	1.5 U	0.096 J	1.5 U	30 U	0.50 U	1,200	5.2	3.6	2,400 J	2.0 U	0.044 J	360,000	0.10 U	2.3 J	0.080 U
	CMW19042012	Normal	OBOD	4/24/2012	71	0.52 U	1.6	44	0.25 U	0.27 U	28,000	2.2 J	0.15 J	22	48 U	0.24 U	6,700	25	1.4 J	2,000	3.6 J	0.18 U	610,000	0.16 U	17 J	0.052 U
CMW22	[e.] Well not sampled in fall 2013																								
	CMW22042013	Normal	OBOD	4/5/2013	**360**	0.60 U	0.37 J	110	0.24 U	0.12 U	4,900	1.2 J	0.61 J	0.57 J	140	0.22 J	800	8.1	0.33 J	890 J	2.0 U	0.10 U	180,000	0.20 U	6.0 U	0.080 U
	CMW22102012	Normal	OBOD	11/1/2012	31 U	0.60 U	0.70 J	140	0.24 U	0.12 U	4,700	0.76 J	0.16 J	1.1 J	30 U	0.43 J	650	18	0.63 J	810 J	2.0 U	0.053 J	180,000	0.10 U	3.6 J	0.080 U
	CMW22042012	Normal	OBOD	4/18/2012	3.2 J	0.52 U	0.61 U	43	0.25 U	0.27 J	15,000	4.3 J	0.12 U	2.8 J	48 U	0.24 U	3,500	23	0.7 J	960	1.5 U	0.18 U	150,000	0.16 U	13 J	0.052 U
CMW23	[e.] Well not sampled in fall 2013																								
	CMW23042013	Normal	OBOD	4/8/2013	**1100**	0.60 U	4.8 J	6.3	0.24 U	0.12 U	28,000	1.5 J	0.60 J	1.6 J	**340**	0.40 J	2,900	41	0.75 U	2,000 J	2.4 J	0.10 U	690,000	0.20 U	7.3 J	0.080 U
	CMW23102012	Normal	OBOD	10/30/2012	**1200**	0.40 J	2.7 J	33	0.29 J	0.10 J	7,200	1.1 J	0.79 J	5.2	**580**	1.1 J	1,000	41	0.96 J	1,200 J	0.98 J	0.041 J	290,000	0.10 U	39	0.080 U
	CMW23042012	Normal	OBOD	4/18/2012	2 J	1 J	4.8	4.7 J	0.25 U	0.3 J	29,000	3.3 J	0.12 U	8.9	83 J	0.24 U	2,700	38	1.2 J	1,500	1.5 U	0.18 U	600,000	0.16 U	14 J	0.052 U
CMW24	[e.] Well not sampled in fall 2013																								
	CMW24042013	Normal	OBOD	4/5/2013	64 J	0.60 U	1.0 U	28	0.24 U	0.12 U	6,100	1.5 U	0.18 J	1.5 U	50 J	0.50 U	1,100	**88**	1.5 J	1,900 J	2.0 U	0.10 U	630,000	0.20 U	3.7 J	0.080 U
	CMW24102012	Normal	OBOD	11/1/2012	**2200**	0.60 U	0.73 J	52	0.082 J	0.10 J	6,700	3.3 J	1.1	2.5	**1,500**	1.3 J	1,700	**130**	3.7	1,800 J	2.0 U	0.077 J	660,000	0.10 U	760	0.080 U
	CMW24042012	Normal	OBOD	4/24/2012	15 J	0.52 U	0.86 J	40	0.25 U	0.27 U	7,800	2.4 J	0.12 U	8.5	48 U	0.24 U	1,200 J	**150**	0.46 J	1,200	2.7 J	0.18 U	630,000	0.16 U	11 J	0.052 U
CMW25	[e.] Well not sampled in fall 2013																								
	CMW25042013	Normal	OBOD	4/8/2013	**250 J**	0.60 U	0.87 J	27	0.24 U	0.12 U	3,200	1.5 U	0.33 J	0.63 J	83 J	0.50 U	620	21	0.90 U	840 J	2.0 U	0.10 U	260,000	0.20 U	4.0 J	0.080 U
	CMW25102012	Normal	OBOD	11/7/2012	**390**	0.60 U	0.90 J	29	0.24 U	0.12 U	3,400	1.5 U	0.16 J	1.5 U	150	0.50 U	740	17	0.90 U	610 J	2.0 U	0.10 U	260,000	0.10 U	6.0 U	0.080 U
	CMW25042012	Normal	OBOD	4/20/2012	18 J	0.52 U	0.91 J	25	0.25 U	0.27 U	8,900	4.4 J	0.12 U	1.2 J	48 U	0.24 U	1,600 J	25	0.2 U	460 J	1.8 J	0.57 J	270,000	0.16 U	7.9 J	0.052 U

TABLE 5-7
Summary of Dissolved Metals Analytical Detections (Page 9 of 9)
Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	EPA Method 6010/6020 (µg/L)																				EPA Method 7470 (µg/L)
					Aluminum CAS 7429-90-5	Antimony CAS 7440-36-0	Arsenic CAS 7440-38-2	Barium CAS 7440-39-3	Beryllium CAS 7440-41-7	Cadmium CAS 7440-43-9	Calcium CAS 7440-70-2	Chromium CAS 7440-47-3	Cobalt CAS 7440-48-4	Copper CAS 7440-50-8	Iron CAS 7439-89-6	Lead CAS 7439-92-1	Magnesium CAS 7439-95-4	Manganese CAS 7439-96-5	Nickel CAS 7440-02-0	Potassium CAS 7440-09-7	Selenium CAS 7782-49-2	Silver CAS 7440-22-4	Sodium CAS 7440-23-5	Thallium CAS 7440-28-0	Zinc CAS 7440-66-6	Mercury CAS 7439-97-6
					Regulatory Limits																				
					[a]200	[b]6	[b]10	[c]1000	[b]4	[b]5	N/A	[c]50	[c]50	[c]1000	[a]300	[b]15	N/A	[a]50	[c]200	N/A	[c]50	[c]50	N/A	[b]2	[a]5000	[c]2
					[e.] Well not sampled in fall 2013																				
KMW09	KMW09042013	Normal	OBOD	4/4/2013	31 U	0.60 U	0.64 J	8.9	0.24 U	0.12 U	190,000	1.5 U	0.24 J	1.5 U	230	0.50 U	41,000	**210**	0.34 J	14,000	2.0 U	0.10 U	640,000	0.20 U	6.0 U	0.080 U
	KMW09102012	Normal	OBOD	10/26/2012	20 J	0.60 U	0.73 J	12 J	0.24 U	0.12 U	180,000	1.5 U	0.22 J	1.5 U	240	0.50 UJ	34,000	**180 J**	3.5	14,000	2.0 U	0.10 U	630,000	0.10 U	31	0.080 U
	KMW09042012	Normal	OBOD	4/18/2012	7.4 J	0.52 U	1.3 J	9.2 J	0.25 U	0.27 U	210,000	1.1 J	0.27 J	7.8	**680**	0.24 U	44,000	**190**	4.1 J	11,000	1.5 U	0.18 U	1,500,000	0.16 U	11 J	0.052 U
					[e.] Well not sampled in fall 2013																				
KMW10	KMW10042013	Normal	OBOD	4/5/2013	31 U	0.60 U	1.6 J	16	0.24 U	0.12 U	120,000	2.9 J	0.11 J	1.8 J	30 U	0.50 U	28,000	1.1 J	0.66 J	2,500 J	23	0.10 U	50,000	0.20 U	9.7 J	0.080 U
	KMW10102012	Normal	OBOD	10/29/2012	31 U	0.60 U	1.9 J	15	0.24 U	0.12 U	110,000	1.5 U	0.12 J	1.5 U	30 U	0.50 U	26,000	0.91 J	0.90 U	2,000 J	21	0.12 J	46,000	0.10 U	3.8 J	0.080 U
	KMW10042012	Normal	OBOD	4/20/2012	22 J	1.2 J	3.4	15	0.25 U	0.37 U	110,000	0.59 J	0.16 J	2 J	48 U	0.24 U	22,000	3.4 J	2.4 J	1,900	26	0.18 U	75,000	0.16 U	15 J	0.052 U
					[e.] Well not sampled in fall 2013																				
KMW11	KMW11042013	Normal	OBOD	4/4/2013	31 U	0.60 U	**27**	25	0.24 U	0.12 U	2,500	1.5 U	0.10 U	1.5 U	30 U	0.50 U	1,200	1.8 J	0.90 U	1,000 J	4.3 J	0.10 U	270,000	0.20 U	2.6 J	0.080 U
	KMW11102012	Normal	OBOD	11/1/2012	31 U	0.60 U	**30**	27	0.24 U	0.12 U	2,200	1.5 U	0.18 J	1.5 U	30 U	0.50 U	970	1.7 J	0.90 U	700 J	5	0.10 U	260,000	0.10 U	3.0 J	0.080 U
	KMW11042012	Normal	OBOD	4/18/2012	8.9 J	0.96 J	**26**	25	0.25 U	0.27 U	2,400	2 J	0.12 U	3 J	48 U	0.24 U	1,200	2 J	0.33 J	750	1.5 J	0.26 J	290,000	**2.1 J**	11 J	0.052 U
					[e.] Well not sampled in fall 2013																				
KMW12	KMW12042013	Normal	OBOD	4/5/2013	31 U	0.60 U	1.0 U	12	0.24 U	0.12 U	250,000	0.56 J	2.7	1.5 U	30 U	0.50 U	69,000	**870**	20	15,000	2.0 U	0.10 U	720,000	0.20 U	8.2 J	0.080 U
	KMW12102012	Normal	OBOD	10/29/2012	31 U	0.60 U	1.0 U	13	0.24 U	0.12 U	300,000	2.5 J	2.5	1.5 U	88 J	0.50 U	90,000	**880 J**	12	15,000	2.0 U	0.10 U	660,000	0.10 U	7.6 J	0.080 U
	KMW12042012	Normal	OBOD	4/18/2012	1.4 U	0.52 U	0.61 U	12	0.25 U	0.27 U	210,000	4.2 J	2.5	8	**710**	0.24 U	56,000	**720**	13	13,000	1.5 U	0.18 U	510,000	0.16 U	16 J	0.052 U

Acronyms and Abbreviations

CAS: Chemical Abstract Services (registry number)

J: analyte was positively identified; reported value is estimated

µg/L: microgram per liter

N/A: not applicable

NA : not analyzed

NS: not sampled

R: result is unusable for any purpose

U : Non-detected result reported at the limit of detection

UJ : The analyte was not detected; however the result is estimated because of discrepancies in meeting certain analyte-specific quality control criteria

Regulatory Limits:

[a.] New Mexico Water Quality Control Commission - New Mexico Title 20, Chapter 6, Part 2, Section 3103

[b.] EPA Maximum Contaminant Level - Code of Federal Regulations Title 40, Parts 141, 142, and 143

[c.] EPA 2012. EPA Region 6, Regional Screening Levels (Formerly Human Health Medium Specific Screening Levels)

[d.] Wells in the East Landfill were not sampled due to landfill excavation and removal

[e.] Wells in the OB/OD area were not accessible during active remediation of the area

Note:

Bold indicates analyte was positively detected above regulatory limits

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TABLE 5-8
Summary of Total Metals Analytical Detections (Page 1 of 9)
Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	EPA Method 6010/6020 (µg/L)																				EPA Method 7470 (µg/L)
					Aluminum CAS 7429-90-5	Antimony CAS 7440-36-0	Arsenic CAS 7440-38-2	Barium CAS 7440-39-3	Beryllium CAS 7440-41-7	Cadmium CAS 7440-43-9	Calcium CAS 7440-70-2	Chromium CAS 7440-47-3	Cobalt CAS 7440-48-4	Copper CAS 7440-50-8	Iron CAS 7439-89-6	Lead CAS 7439-92-1	Magnesium CAS 7439-95-4	Manganese CAS 7439-96-5	Nickel CAS 7440-02-0	Potassium CAS 7440-09-7	Selenium CAS 7782-49-2	Silver CAS 7440-22-4	Sodium CAS 7440-23-5	Thallium CAS 7440-28-0	Zinc CAS 7440-66-6	Mercury CAS 7439-97-6
					Regulatory Limits																				
					[a]200	[b]6	[b]10	[c]1000	[b]4	[b]5	N/A	[c]50	[c]50	[c]1000	[a]300	[b]15	N/A	[a]50	[c]200	N/A	[c]50	[c]50	N/A	[b]2	[a]5000	[c]2
BGMW01	BGMW01102013	Normal	North Alluvial	11/8/2013	62 J	0.60 U	0.82 J	16	0.24 U	0.12 U	38000	1.5 U	0.34 J	0.79 J	**47 J**	0.50 U	21000	**160**	3.5	650 J	2.0 U	0.10 U	830000	0.20 U	6.0 U	0.080 U
	BGMW01042013	Normal	North Alluvial	4/2/2013	**130 J**	0.60 U	1.0 J	25	0.24 U	0.12 U	59,000	1.5 U	0.73 J	2.9	97 J	0.50 U	31,000	**310**	3	1,000 J	2.0 U	0.10 U	770,000	0.20 U	6.0 U	0.080 U
	BGMW01102012	Normal	North Alluvial	10/26/2012	**250 J**	1.2 U	0.95 J	18	0.48 U	0.24 U	52,000	3.0 U	0.42 J	1.4 J	150	1.0 UJ	27,000	190 J	1.8 J	1,100 J	4.0 U	0.20 UJ	850,000 J	0.20 U	12 U	0.080 U
	BGMW01042012	Normal	North Alluvial	4/25/2012	54	0.52 U	1.7	25	0.25 U	0.37 J	60,000	0.62 J	0.4 J	8.7	70 J	0.64 J	27,000	**190**	3.4 J	420 J	4.6 J	0.18 U	810,000	0.16 U	40 J	0.027 U
BGMW02	BGMW02102013	Normal	North Alluvial	11/5/2013	28 J	0.60 U	0.78 J	22	0.24 U	0.12 U	89000	1.5 U	0.12 J	1.1 J	**22 J**	0.50 U	130000	**110**	0.54 J	970 J	**87**	0.10 U	1000000	0.11 J	4.5 J	0.080 U
	BGMW02042013	Normal	North Alluvial	4/3/2013	**310**	0.60 U	1.1 J	22	0.24 U	0.12 U	100,000	0.61 J	0.097 J	2.3	160	0.24 J	120,000	**99**	0.52 J	920 J	**84**	0.10 U	1,100,000	0.11 U	2.4 J	0.080 U
	BGMW02102012	Normal	North Alluvial	10/30/2012	97 J	0.60 U	0.87 J	22	0.24 U	0.12 U	100,000	1.5 U	0.073 J	0.83 J	55 J	0.50 U	130,000	**90**	0.31 J	730 J	**79**	0.10 U	1,000,000	0.056 J	6.0 U	0.080 U
	BGMW02042012	Normal	North Alluvial	4/25/2012	37 J	0.52 U	8.9	21	0.25 U	0.27 U	120,000	1.1 J	0.22 J	6	52 J	0.47 J	120,000	**100**	3 J	570	**95**	0.18 U	1,000,000	0.16 U	32 J	0.027 U
BGMW03	BGMW03102013	Normal	North Alluvial	11/5/2013	**2500**	0.87 J	2.1 J	70	0.30 J	0.12 U	75000	2.4 J	1.1	4.6	**1800**	1.8 J	18000	**100**	1.8 J	2800 J	29	0.051 J	800000	0.18 J	10 J	0.080 U
	DBW03102013	Duplicate	North Alluvial	11/5/2013	**4000**	0.60 UJ	2.0 J	79	0.27 J	0.12 U	88000	2.8 J	1.1	4.4	**2700**	2.4 J	20000	**100**	1.8 J	3500	29	0.10 UJ	770000	0.20 UJ	12 J	0.080 U
	DBW03042013	Duplicate	North Alluvial	4/8/2013	**5,200**	0.60 UJ	1.5 J	83	0.19 J	0.12 U	92,000	3.0 J	1.5	4.1	**3,400**	2.8 J	18,000	**86**	1.8 J	4,300	28	0.10 U	660,000	0.20 UJ	9.4 J	0.080 U
	BGMW03042013	Normal	North Alluvial	4/8/2013	**5,000**	0.60 UJ	1.8 J	100	0.25 J	0.12 U	89,000	4.1 J	1.4	4.6	**3,200**	3.3	18,000	**93**	2.2 J	4,100	30	0.10 U	650,000	0.086 J	14 J	0.080 U
	BGMW03102012	Normal	North Alluvial	10/31/2012	**26,000 J**	0.60 U	4.9 J	200 J	1.3	0.27 J	48,000	15	7.1	17	**15,000 J**	11	16,000	**320**	11	5,800	40	0.055 J	830,000	0.20 J	52	0.028 J
	BGMW03042012	Normal	North Alluvial	4/24/2012	91	0.82 J	5.8	36	0.25 U	0.27 U	63,000	2.4 J	0.3 U	4.8 J	59 J	0.3 U	12,000	**55**	2.1 J	1,700	47	0.18 U	610,000	0.16 U	13 J	0.027 U
FW31	FW31102013	Normal	North Alluvial	11/1/2013	**12000**	0.60 U	7.7	480	0.46 J	0.12 J	13000	8.0 J	4.0	8.6	**4400**	4.7	5300	**490 J**	7.4	4100	2.0 U	0.13 J	540000	0.13 U	53	0.080 U
	FW31042013	Normal	North Alluvial	4/12/2013	**1,400**	0.60 U	9.2	50	0.24 U	0.12 U	7,300	7.6 J	0.45 J	4.5	**610**	0.58 J	2,800	33	4	1,800 J	2.0 U	0.10 U	520,000	0.20 U	12 J	0.080 U
	FW31102012	Normal	North Alluvial	11/5/2012	**240 J**	0.60 U	6.5	20	0.24 U	0.12 U	5,800	0.77 J	0.10 U	1.5 U	96 J	0.50 U	2,600	8	0.90 U	1,600 J	2.0 U	0.10 U	540,000	0.10 U	6.3 J	0.080 U
	FW31042012	Normal	North Alluvial	4/20/2012	**2,100**	1.3 J	7.4	51	0.25 U	0.44 J	14,000	0.95 J	1.1 J	11	**580**	1.4	3,000	**220**	2.3 J	2,000	1.5 U	0.18 U	480,000	0.16 U	23 J	0.027 U
FW35	FW35102013	Normal	North Alluvial	10/29/2013	**5900 J**	0.51 J	1.0 J	210 J	0.25 J	0.12 U	280000	6.0 J	3.6	5.7	**3200 J**	2.6 U	100000	**300 J**	6.2	1700 J	1.4 J	0.14 J	610000	0.19 U	220	0.080 U
	FW35042013	Normal	North Alluvial	4/11/2013	**2,400**	0.60 U	0.59 J	55 J	0.13 J	0.12 UJ	270,000	2.3 J	0.73 J	2.5	**1,500**	1.1 J	100,000	**220 J**	2.5 J	1,400 J	2.4 J	0.10 UJ	600,000	0.20 UJ	170	0.080 U
	FW35102012	Normal	North Alluvial	11/7/2012	**51,000**	0.60 U	9.8	**1,500**	3.1	0.57 J	310,000	33	18	67	**30,000**	**29**	120,000	**3,200**	38	6,700	6	0.30 J	600,000	0.46 J	3,300	0.049 J
	FW35042012	Normal	North Alluvial	4/20/2012	86	0.56 J	0.61 U	16	0.25 U	0.27 U	290,000	1.5 J	0.55 J	14	**1,000**	0.24 U	98,000	**77**	8.4 J	430 J	6	0.18 U	580,000	0.16 U	75	0.027 U
MW01	MW01102013	Normal	North Alluvial	11/1/2013	**74000**	0.60 U	**15**	**1100**	**4.0**	0.56 J	120000	41	26	43	**54000**	**38**	30000	**3400 J**	48	11000	16	0.21 J	940000	0.44 J	530	0.12 J
	MW01042013	Normal	North Alluvial	4/15/2013	**6,600**	0.60 R	1.5 J	81	0.32 J	0.12 U	31,000	5.0 J	1.8	4.4	**3,800**	2.9 J	8,100	**150**	4	2,200 J	17	0.069 J	930,000	0.050 U	45	0.080 U
	MW01102012	Normal	North Alluvial	10/24/2012	**830**	0.60 U	1.1 J	56	0.17 J	0.12 U	30,000	2.5 J	1.1	3	**570**	1.5 J	7,000	**100**	2.4 J	1,000 J	17	0.10 U	930,000	0.10 U	28	0.080 U
	MW01042012	Normal	North Alluvial	4/20/2012	**940**	0.62 J	3.9	31	0.25 U	0.27 U	48,000	0.54 J	1.9 J	14	**590**	2.9	7,500	**400**	3.1 J	720	23	0.18 U	810,000	0.16 U	45 J	0.027 U
MW02	MW02102013	Normal	North Alluvial	11/1/2013	**68000**	0.60 U	**13**	**1200**	3.9	0.44 J	260000	32	24	30	**45000**	**36**	59000	**3100 J**	40	10000	7.1	0.17 J	430000	0.53 J	580	0.046 J
	MW02042013	Normal	North Alluvial	4/12/2013	**7,100**	0.60 U	1.2 J	91	0.30 J	0.12 U	220,000	5.0 J	2	3.3	**4,300**	2.4 J	43,000	**310**	6	2,000 J	5	0.10 U	330,000	0.090 J	29	0.080 U
	MW02102012	Normal	North Alluvial	10/24/2012	**39,000**	0.60 U	**26**	**2,600**	**7.4**	0.75 J	330,000	**67**	**52**	62	**22,000**	**78**	48,000	**6,900**	87	6,100	13	0.46 J	380,000	0.86 J	610	0.19 J
	MW02042012	Normal	North Alluvial	4/21/2012	**1,400**	0.83 J	3.9	52	0.42 J	0.34 J	220,000	1.1 J	3.2 J	4.2 J	**2,900**	7.3	36,000	**1,700**	8.5 J	530	3.2 J	0.18 U	310,000	0.16 U	1,300	0.027 U
MW03	MW03102013	Normal	North Alluvial	11/5/2013	31 U	0.60 U	1.0 U	11	0.24 U	0.12 U	67000	1.5 U	0.12 J	1.0 J	**31 J**	0.50 U	14000	46	0.52 J	730 J	24	0.10 U	1200000	0.20 U	5.1 J	0.080 U
	MW03042013	Normal	North Alluvial	4/4/2013	31 U	0.60 U	1.0 U	11 J	0.24 U	0.12 U	67,000	1.5 U	0.14 J	0.56 J	30 U	0.50 U	12,000	48	0.71 J	1,000 J	19	0.036 J	1,200,000	0.12 U	5.6 J	0.080 U
	MW03102012	Normal	North Alluvial	10/23/2012	31 U	0.60 U	0.37 J	10	0.24 U	0.12 U	64,000	1.5 U	0.10 J	0.98 J	26 J	0.50 U	13,000	46	0.53 J	880 J	19	0.10 U	1,200,000	0.10 U	9.9 J	0.080 U
	MW03042012	Normal	North Alluvial	4/20/2012	9.4 J	0.52 U	0.64 J	10	0.25 U	0.27 U	89,000	1.4 J	0.24 J	18	**330**	0.24 U	20,000	46	2.7 J	330 J	15	0.18 U	1,100,000	0.16 U	26 J	0.027 U
MW18D	MW18D102013	Normal	North Alluvial	11/1/2013	31 U	1.0 J	0.95 J	19	0.24 U	0.12 U	82000	1.5 U	0.81 J	0.89 J	**130**	0.50 U	21000	**650 J**	3.7	2600 J	2.0 U	0.046 J	2300000	0.17 U	7.9 J	0.080 U
	MW18D042013	Normal	North Alluvial	4/17/2013	**240 J**	0.60 U	0.74 J	20 J	0.24 U	0.12 U	68,000	0.77 J	0.82 J	1.1 J	**310**	0.33 J	18,000	**720 J**	3	1,100 J	2.0 U	0.036 J	2,100,000	0.20 U	29	0.080 U
	MW18D102012	Normal	North Alluvial	11/8/2012	**530**	0.48 J	1.1 J	21	0.24 U	0.12 U	67,000	0.65 J	0.81 J	1.9 J	290	0.57 J	19,000	**660**	4	2,100 J	1.1 J	0.10 U	2,100,000	0.10 U	88	0.080 U
	MW18D042012	Normal	North Alluvial	4/19/2012	20 J	0.6 J	1.1 J	5.3 J	0.25 U	0.27 U	67,000	1.1 J	0.18 J	26	**1,700**	0.4 J	17,000	**110**	2.3 J	1,100	10	0.18 U	1,000,000	0.16 U	27 J	0.027 U

TABLE 5-8
Summary of Total Metals Analytical Detections (Page 2 of 9)
Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	EPA Method 6010/6020 (µg/L)																				EPA Method 7470 (µg/L)
					Aluminum CAS 7429-90-5	Antimony CAS 7440-36-0	Arsenic CAS 7440-38-2	Barium CAS 7440-39-3	Beryllium CAS 7440-41-7	Cadmium CAS 7440-43-9	Calcium CAS 7440-70-2	Chromium CAS 7440-47-3	Cobalt CAS 7440-48-4	Copper CAS 7440-50-8	Iron CAS 7439-89-6	Lead CAS 7439-92-1	Magnesium CAS 7439-95-4	Manganese CAS 7439-96-5	Nickel CAS 7440-02-0	Potassium CAS 7440-09-7	Selenium CAS 7782-49-2	Silver CAS 7440-22-4	Sodium CAS 7440-23-5	Thallium CAS 7440-28-0	Zinc CAS 7440-66-6	Mercury CAS 7439-97-6
					Regulatory Limits																				
					[a]200	[b]6	[b]10	[c]1000	[b]4	[b]5	N/A	[c]50	[c]50	[c]1000	[a]300	[b]15	N/A	[a]50	[c]200	N/A	[c]50	[c]50	N/A	[b]2	[a]5000	[c]2
MW20	MW20102013	Normal	North Alluvial	11/8/2013	37 J	0.60 U	0.41 J	16	0.24 U	0.15 J	360000	1.7 J	1.5	2.8	**2800**	0.50 U	72000	**1500**	3.3	5000	110	0.10 J	7900000	0.20 U	230	0.080 U
	DW20042013	Duplicate	North Alluvial	4/10/2013	31 U	3.0 U	5.0 U	14 J	1.2 U	0.60 U	330,000	4.9 J	2.0 J	2.9 J	79 J	2.5 U	73,000	**2,500**	6.1 J	2,800 J	**160**	0.50 U	3,900,000	1.0 U	130	0.080 U
	MW20042013	Normal	North Alluvial	4/10/2013	31 U	3.0 U	5.0 U	14 J	1.2 U	0.60 U	360,000	4.9 J	1.8 J	7.5 UJ	76 J	2.5 U	77,000	**2,200**	6.1 J	3,600	**150**	0.50 U	4,200,000	1.0 U	120	0.080 U
	MW20102012	Normal	North Alluvial	10/29/2012	31 U	3.0 U	5.0 U	14 J	1.2 U	0.60 U	440,000	7.5 U	2.0 J	7.5 U	59 UJ	2.5 U	90,000	**2,000**	6.0 J	7,200	**160**	0.50 U	4,100,000	0.50 U	130	0.080 U
	MW20042012	Normal	North Alluvial	4/24/2012	8.4 U	0.52 U	**21**	16	0.25 U	0.27 U	440,000 J	1.2 J	2.2 J	7.4	150	0.35 J	88,000 J	**2,100**	12	870	**210**	0.18 U	4,200,000	0.16 U	130	0.027 U
MW22D	DMW22D102013	Duplicate	North Alluvial	11/1/2013	31 U	0.60 U	1.0 UJ	11	0.24 U	0.12 U	79000	1.5 U	0.19 J	0.73 J	**25 J**	0.50 U	17000	**130 J**	1.0 J	1100 J	37	0.12 J	1200000	0.20 U	44	0.080 U
	MW22D102013	Normal	North Alluvial	11/1/2013	31 U	0.60 U	0.34 J	11	0.24 U	0.12 U	80000	1.5 U	0.18 J	0.69 J	**25 J**	0.50 U	17000	**130 J**	0.93 J	1100 J	37	0.062 J	1200000	0.20 U	33	0.080 U
	MW22D042013	Normal	North Alluvial	4/9/2013	31 U	0.60 U	0.37 J	12	0.24 U	0.12 U	79,000	1.5 U	0.18 J	0.75 J	160	0.50 U	15,000	**120**	1.2 J	520 J	38	0.10 U	1,200,000	0.092 U	14 J	0.080 U
	MW22D102012	Normal	North Alluvial	11/8/2012	31 U	0.60 U	1.0 U	11	0.24 U	0.12 U	75,000	1.5 U	0.14 J	1.5 U	160	0.50 U	16,000	**110**	0.75 J	1,200 J	35	0.10 U	1,200,000	0.10 U	15 J	0.080 U
	MW22D042012	Normal	North Alluvial	4/19/2012	5.6 J	0.58 J	5.6	10	0.25 U	0.37 U	81,000	0.3 U	0.29 J	13	48 U	0.24 U	16,000	**130**	2.1 J	360 J	48	0.18 U	870,000	0.16 U	74	0.027 U
MW22S	MW22S102013	Normal	North Alluvial	11/1/2013	**14000**	0.42 J	3.7 J	190	0.88 J	0.12 U	110000	6.8 J	3.1	7.5	**7000**	13	26000	**250 J**	6.5	2600 J	28	0.076 J	970000	0.10 U	25	0.080 U
	MW22S042013	Normal	North Alluvial	4/16/2013	**11,000**	0.60 U	3.5 J	170	0.75 J	0.17 J	110,000	5.6 J	3.3	7.3	**6,300**	9.2 J	22,000	**300**	7	2,600 J	34 J	0.11 J	930,000 J	0.089 J	27 J	0.080 U
	MW22S102012	Normal	North Alluvial	10/26/2012	**35,000**	1.2 U	14 J	410	2.9	0.54 J	130,000	10 J	6.4	19	**20,000**	51 J	31,000	**570 J**	13	3,300	37 J	0.25 J	980,000 J	0.32 J	91	0.080 U
	MW22S042012	Normal	North Alluvial	4/20/2012	**1,300**	0.86 J	6.4	42	1.2	0.32 J	91,000	0.54 J	2 J	20	**1,900**	14	17,000	**380**	8.9 J	560	45	0.18 U	720,000	0.16 U	39 J	0.027 U
MW23	DMW23102013	Duplicate	North Alluvial	11/8/2013	**2000**	0.60 U	1.3 J	160	0.15 J	0.12 U	11000	2.7 J	1.6	1.5 J	**930**	0.93 J	4700	**100**	6.0	2000 J	2.0 U	0.14 J	510000	0.20 U	2.9 J	0.080 U
	MW23102013	Normal	North Alluvial	11/8/2013	**2100**	0.60 U	1.2 J	150	0.24 J	0.12 U	11000	4.8 J	1.7	1.5 J	**960**	0.95 J	4700	**110**	6.3	2000 J	2.0 U	0.092 J	520000	0.20 U	4.3 J	0.080 U
	DMW23042013	Duplicate	North Alluvial	4/8/2013	**9,000**	0.60 UJ	1.8 J	180	0.25 J	0.12 U	12,000	8.2 J	4.1	4.3	**5,300**	3.4	5,700	**180**	11	3,500	2.0 U	7	480,000	0.097 J	13 J	0.080 U
	MW23042013	Normal	North Alluvial	4/8/2013	**9,500**	0.62 J	1.5 J	160	0.35 J	0.12 U	12,000	8.7 J	3.9	4.3	**5,500**	3	6,000	**170**	11	3,500	2.0 U	7	490,000	0.19 J	14 J	0.080 U
	MW23102012DUP	Duplicate	North Alluvial	10/31/2012	**1,500 J**	0.60 U	1.1 J	170 J	0.24 U	0.12 U	15,000	10 J	2	0.99 J	**890 J**	0.66 J	5,900	**120**	7	1,600 J	2.0 U	0.042 J	480,000	0.10 U	5.0 J	0.080 U
	MW23102012	Normal	North Alluvial	10/31/2012	**1,200 J**	0.60 U	1.2 J	190 J	0.24 U	0.12 U	15,000	3.5 J	2.3	1.3 J	**760 J**	0.78 J	5,700	**130**	9	1,600 J	2.0 U	0.34 J	480,000	0.10 U	8.3 J	0.080 U
	MW23042012	Normal	North Alluvial	4/26/2012	**4,000**	0.66 J	2.6	460	0.9 J	0.78 J	46,000	2.3 J	3.8 J	11	**1,800**	11	8,100	**460**	10	2,700	1.5 U	0.18 U	480,000	0.5 J	54	0.027 U
MW24	DMW24102013	Duplicate	North Alluvial	11/7/2013	98 J	0.67 J	0.88 J	320	0.24 U	0.12 U	33000	1.5 U	0.070 J	1.5 U	**2100**	0.50 U	10000	**420**	0.50 J	960 J	2.0 U	0.10 U	270000	0.14 J	6.0 U	0.080 U
	MW24102013	Normal	North Alluvial	11/7/2013	95 J	2.0 J	0.88 J	320	0.24 U	0.12 U	32000	1.5 U	0.10 J	1.5 U	**2000**	0.50 U	10000	**430**	0.52 J	880 J	2.0 U	0.10 U	270000	0.16 J	6.0 U	0.080 U
	DMW24042013	Duplicate	North Alluvial	4/8/2013	110 J	0.60 UJ	0.88 J	300	0.24 U	0.12 U	29,000	0.60 J	0.088 J	1.5 U	**1,800**	0.50 U	9,300	**460**	0.90 U	850 J	2.0 U	0.10 U	250,000	0.084 J	6.0 U	0.080 U
	MW24042013	Normal	North Alluvial	4/8/2013	84 J	0.60 UJ	0.86 J	280	0.24 U	0.12 U	31,000	0.71 J	0.13 J	1.5 U	**2,000**	0.50 U	9,900	**430**	0.90 U	1,000 J	2.0 U	0.10 U	260,000	0.17 J	6.0 U	0.080 U
	MW24102012	Normal	North Alluvial	10/31/2012	22 J	0.60 U	0.76 J	280 J	0.24 U	0.12 U	31,000	1.5 U	0.10 U	1.5 U	**1,900 J**	0.50 U	10,000	**430**	0.90 U	960 J	2.0 U	0.10 U	260,000	0.10 U	6.0 U	0.080 U
	MW24042012	Normal	North Alluvial	4/26/2012	**320**	0.7 J	0.69 J	310	0.25 U	0.27 U	39,000	0.54 J	0.32 J	1.1 J	**2,300**	1.2	10,000	**490**	1.3 J	860	1.5 U	0.18 U	250,000	**14**	8.8 J	0.027 U
SMW01	SMW01102013	Normal	North Alluvial	11/8/2013	31 U	0.60 U	1.1 J	23	0.24 U	0.12 U	18000	1.5 U	0.38 J	1.5 U	**44 J**	0.50 U	5500	**230**	1.6 J	340 J	2.0 U	0.10 U	640000	0.062 J	6.0 U	0.080 U
	SMW01042013	Normal	North Alluvial	4/12/2013	31 U	0.60 U	0.68 J	17	0.24 U	0.12 U	19,000	1.5 U	0.13 J	1.5 U	30 U	0.50 U	5,700	**92**	1.1 J	270 J	2.0 U	0.10 U	490,000	0.20 U	6.0 U	0.080 U
	SMW01102012	Normal	North Alluvial	11/1/2012	22 J	0.60 U	0.64 J	18	0.24 U	0.12 U	19,000	1.5 U	0.14 J	0.95 J	30 U	0.50 U	5,600	**80**	1.4 U	580 J	2.0 U	0.10 U	490,000	0.10 U	6.0 U	0.080 U
	SMW01042012	Normal	North Alluvial	4/20/2012	32 J	0.53 J	0.89 J	17	0.25 U	0.27 U	22,000	0.3 U	0.12 U	6.5	48 U	0.24 U	6,200	**78**	1.6 J	110 U	1.5 U	0.18 U	440,000	0.16 U	10 J	0.027 U
TMW01	TMW01102013	Normal	North Alluvial	11/6/2013	31 U	0.60 U	0.67 J	11	0.24 U	0.12 U	110000	1.5 U	0.10 U	9.5	**30 U**	0.50 U	18000	12	0.57 J	480 J	6.3	0.10 U	590000	0.20 U	6.0 U	0.080 U
	TMW01042013	Normal	North Alluvial	4/15/2013	31 U	0.60 R	0.63 J	10	0.24 U	0.12 U	98,000	0.86 J	0.10 U	14	30 U	0.50 U	17,000	15	0.35 J	550 J	6	0.10 U	580,000	0.20 U	6.0 U	0.080 U
	TMW01102012	Normal	North Alluvial	10/31/2012	31 U	0.60 U	0.69 J	12 J	0.24 U	0.12 U	100,000	0.59 J	0.10 U	2	30 U	0.50 U	18,000	18	0.32 J	290 J	5	0.10 U	600,000	0.10 U	2.7 J	0.080 U
	TMW01042012	Normal	North Alluvial	4/24/2012	11 J	0.52 U	3.3	12	0.25 U	0.27 U	110,000	0.83 J	0.16 U	3 U	48 U	0.24 U	18,000	17	2.5 J	220 J	13	0.18 U	510,000	0.16 U	14 J	0.027 U
TMW03	TMW03102013	Normal	North Alluvial	11/4/2013	21 J	0.60 U	0.51 J	13	0.24 U	0.12 U	51000	1.5 U	0.063 J	1.5 U	**49 J**	0.50 U	11000	5.6	0.90 U	1600 J	**58**	0.10 U	950000 J	0.20 U	10 J	0.080 U
	TMW03042013	Normal	North Alluvial	4/16/2013	31 U	0.79 J	0.55 J	15 J	0.14 J	0.12 U	48,000	1.5 U	0.14 J	0.70 J	48 J	0.24 J	11,000	7.8 J	0.90 U	680 J	**61**	0.10 U	1,000,000	0.27 J	16 J	0.080 U
	TMW03102012	Normal	North Alluvial	11/7/2012	19 J	0.60 U	0.60 J	13	0.24 U	0.12 U	46,000	1.5 U	0.10 U	0.67 J	30 U	0.50 U	11,000	7	0.90 U	840 J	**54**	0.10 U	990,000	0.10 U	12 J	0.080 U
	TMW03042012	Normal	North Alluvial	4/25/2012	14 J	0.52 U	7	14	0.25 U	0.27 U	58,000	0.54 J	0.16 J	2.5 J	76 J	0.24 U	11,000	7	1.5 J	340 J	**70**	0.18 U	1,100,000	0.16 U	19 J	0.027 U
TMW04	TMW04102013	Normal	North Alluvial	11/4/2013	31 U	0.60 U	0.84 J	7.0	0.24 U	0.12 U	29000	1.6 J	0.10 U	1.5 U	**33 J**	0.50 U	5100	0.46 J	0.90 U	1700 J	**83**	0.10 U	870000 J	0.20 U	4.7 J	0.080 U
	TMW04042013	Normal	North Alluvial	4/16/2013	180 J	0.60 U	2.2 J	14 J	0.24 U	0.12 U	31,000	4.1 J	0.32 J	0.91 J	**2,300**	0.49 J	5,600	4.6 J	1.3 J	980 J	**90**	0.19 J	930,000	0.20 U	40	0.080 U
	TMW04102012	Normal	North Alluvial	11/7/2012	31 U	0.60 U	0.76 J	7.4	0.24 U	0.12 U	29,000	1.6 J	0.10 U	1.5 U	22 J	0.50 U	5,700	0.38 J	0.90 U	1,100 J	**81**	0.10 U	960,000	0.10 U	6.0 U	0.080 U
	TMW04042012	Normal	North Alluvial	4/25/2012	13 J	0.52 U	9.9	7.7 J	0.25 U	0.27 U	40,000	1.8 J	0.2 J	17	85 J	0.36 J	6,100	0.72 J	1.1 J	590	**96**	0.18 U	830,000	0.24 U	15 J	0.027 U

TABLE 5-8
Summary of Total Metals Analytical Detections (Page 3 of 9)
Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	EPA Method 6010/6020 (µg/L)																				EPA Method 7470 (µg/L)
					Aluminum CAS 7429-90-5	Antimony CAS 7440-36-0	Arsenic CAS 7440-38-2	Barium CAS 7440-39-3	Beryllium CAS 7440-41-7	Cadmium CAS 7440-43-9	Calcium CAS 7440-70-2	Chromium CAS 7440-47-3	Cobalt CAS 7440-48-4	Copper CAS 7440-50-8	Iron CAS 7439-89-6	Lead CAS 7439-92-1	Magnesium CAS 7439-95-4	Manganese CAS 7439-96-5	Nickel CAS 7440-02-0	Potassium CAS 7440-09-7	Selenium CAS 7782-49-2	Silver CAS 7440-22-4	Sodium CAS 7440-23-5	Thallium CAS 7440-28-0	Zinc CAS 7440-66-6	Mercury CAS 7439-97-6
					Regulatory Limits																				
					[a]200	[b]6	[b]10	[c]1000	[b]4	[b]5	N/A	[c]50	[c]50	[c]1000	[a]300	[b]15	N/A	[a]50	[c]200	N/A	[c]50	[c]50	N/A	[b]2	[a]5000	[c]2
TMW06	TMW06102013	Normal	North Alluvial	11/7/2013	23 J	0.60 U	0.74 J	14	0.24 U	0.12 U	32000	1.5 U	0.10 U	3.1	**24 J**	0.50 U	6900	14	0.48 J	730 J	1.4 J	0.10 U	930000	0.20 U	6.0 U	0.080 U
	TMW06042013	Normal	North Alluvial	4/15/2013	24 J	0.60 R	0.65 J	13	0.24 U	0.12 U	31,000	0.69 J	0.085 J	4	30 U	0.50 U	7,000	18	0.75 J	460 J	1.8 J	0.10 U	930,000	0.20 U	6.0 U	0.080 U
	TMW06102012	Normal	North Alluvial	11/8/2012	18 J	0.60 U	0.59 J	14	0.24 U	0.12 U	37,000	0.55 J	0.065 J	5	30 U	0.50 U	8,900	27	0.59 J	910 J	3.5 J	0.10 U	1,000,000	0.10 U	6.0 U	0.080 U
	TMW06042012	Normal	North Alluvial	4/18/2012	13 J	0.52 U	1.2 J	15	0.25 U	0.27 U	41,000	1.2 J	0.12 J	23	220	0.25 J	9,500	33	1.9 J	320 J	5	0.18 U	890,000	0.16 U	15 J	0.027 U
TMW07	TMW07102013	Normal	North Alluvial	10/29/2013	**730 J**	0.72 J	0.86 J	32 J	0.24 U	0.12 U	52000	7.5 J	13	5.1	**790 J**	0.65 U	9600	**370 J**	7.9	6100	2.0 U	0.10 J	1200000	0.20 U	15 J	0.080 U
	TMW07042013	Normal	North Alluvial	4/8/2013	**250 J**	1.0 J	0.70 J	22	0.24 U	0.12 U	33,000	3.4 J	0.57 J	1.2 J	240	0.38 J	5,800	**260**	4	4,700	2.0 U	0.10 U	810,000	0.20 U	8.0 J	0.080 U
	TMW07102012	Normal	North Alluvial	11/6/2012	**340**	2.5 J	0.93 J	23	0.24 U	0.12 U	57,000	1.2 J	0.49 J	0.96 J	**460**	0.24 J	10,000	**330 J**	2.1 J	6,700	2.0 U	0.10 U	1,300,000	0.10 U	7.0 J	0.080 U
	TMW07042012	Normal	North Alluvial	4/20/2012	94	2.1 J	1.1 J	17	0.25 U	0.27 U	70,000	1.5 J	0.68 J	23	**400**	0.36 J	12,000	**320**	3.2 J	2,400	3.5 J	0.18 U	1,500,000	0.16 U	28 J	0.027 U
TMW08	TMW08102013	Normal	North Alluvial	11/8/2013	31 U	0.60 U	0.43 J	10	0.24 U	0.12 U	210000	1.5 U	0.29 J	1.5 J	**930**	0.50 U	60000	**240**	1.1 J	5000	40	0.10 U	8200000	0.20 U	4.2 J	0.080 U
	DTW08042013	Duplicate	North Alluvial	4/3/2013	31 U	0.60 U	0.66 J	9.7	0.24 U	0.12 UJ	220,000	1.5 UJ	0.32 J	1.8 J	**6,000**	0.50 UJ	63,000	**240**	1.4 J	7,100	45	0.10 U	3,800,000	0.20 UJ	14 J	0.080 U
	TMW08042013	Normal	North Alluvial	4/3/2013	31 U	0.60 U	0.60 J	11	0.24 U	0.18 J	210,000	0.50 J	0.35 J	2.3	**7,800**	0.36 J	62,000	**240**	1.3 J	5,800	45	0.10 U	3,200,000	0.067 UJ	17 J	0.080 U
	TMW08102012	Normal	North Alluvial	10/24/2012	31 U	0.60 U	0.61 J	11	0.24 U	0.12 U	210,000	1.5 U	0.30 J	2	**2,500**	0.50 U	63,000	**240**	1.1 J	5,700	**57**	0.10 U	4,200,000	0.10 U	12 J	0.080 U
	TMW08042012	Normal	North Alluvial	4/19/2012	8.2 J	0.9 J	4.7	11	0.25 U	0.44 J	230,000	1.4 J	0.61 J	50	**2,600**	0.39 J	64,000	**230**	6.4 J	1,200	**59**	0.18 U	3,700,000	0.16 U	26 J	0.027 U
TMW10	TMW10102013	Normal	North Alluvial	11/1/2013	31 U	0.60 U	0.54 J	18	0.24 U	0.12 U	83000	1.5 U	0.10 U	2.3	**36 J**	0.50 U	21000	**75 J**	0.96 J	2000 J	2.0 U	0.10 U	2100000	0.20 U	6.0 U	0.080 U
	TMW10042013	Normal	North Alluvial	4/16/2013	31 U	0.60 U	0.74 J	19	0.24 U	0.12 U	80,000	0.67 J	0.10 U	3.5	30 U	0.50 UJ	18,000	**52**	1.4 J	800 J	0.94 J	0.10 U	2,100,000 J	0.20 UJ	7.6 J	0.080 U
	TMW10102012	Normal	North Alluvial	10/24/2012	31 U	0.60 U	0.65 J	22	0.24 U	0.12 U	82,000	1.3 J	0.10 U	7.7	30 U	0.50 U	20,000	**81**	1.0 J	2,000 J	2.0 U	0.10 U	2,000,000	0.10 U	3.0 J	0.080 U
	TMW10042012	Normal	North Alluvial	4/24/2012	7.8 J	0.52 U	0.61 U	23	0.25 U	0.27 U	120,000	1 J	0.22 J	6.2	48 J	0.24 U	29,000	**95**	4 J	460 J	1.9 J	0.18 U	2,500,000	**37**	23 J	0
TMW11	TMW11102013	Normal	North Alluvial	11/5/2013	51 J	0.60 U	0.39 J	23	0.081 J	0.12 U	16000	0.97 J	0.10 U	1.5 U	**38 J**	0.50 U	3200	12	0.73 J	560 J	14	0.10 U	570000	0.20 U	5.6 J	0.080 U
	TMW11042013	Normal	North Alluvial	4/9/2013	47 J	0.53 J	0.38 J	21	0.24 U	0.12 U	14,000	0.93 J	0.075 J	1.5 U	27 J	0.50 U	2,700	7	0.75 J	600 J	13	0.10 U	520,000	0.17 U	2.4 J	0.080 U
	TMW11102012	Normal	North Alluvial	11/9/2012	**200 J**	0.60 U	0.35 J	21	0.24 U	0.12 U	16,000	1.3 J	0.10 U	1.5 U	95 J	0.50 U	3,200	4	0.58 J	520 J	15	0.10 U	570,000	0.10 U	15 J	0.080 U
	TMW11042012	Normal	North Alluvial	4/25/2012	40 J	0.52 U	2	21	0.25 U	0.27 U	21,000	1.3 J	0.12 U	1.2 J	51 J	0.24 U	3,900	1.5 J	2.6 J	410 J	19	0.18 U	610,000	0.16 U	5.4 J	0.027 U
TMW13	TMW13102013	Normal	North Alluvial	11/5/2013	31 U	0.60 U	0.35 J	19	0.24 U	0.12 U	26000	0.74 J	0.10 U	1.5 U	**30 U**	0.50 U	5000	0.90 U	0.90 U	560 J	12	0.10 U	570000	0.20 U	6.0 U	0.080 U
	TMW13042013	Normal	North Alluvial	4/17/2013	31 U	0.60 U	1.0 U	17 J	0.24 U	0.12 U	25,000	0.73 J	0.10 U	1.5 U	30 U	0.50 U	4,700	0.55 J	0.90 U	530 J	10	0.10 U	570,000	0.20 U	6.0 U	0.080 U
	TMW13102012	Normal	North Alluvial	11/8/2012	31 U	0.60 U	0.34 J	15	0.14 J	0.12 J	25,000	0.72 J	0.15 J	1.5 U	30 U	0.18 J	5,200	0.90 U	0.90 U	700 J	10	0.10 U	590,000	0.087 J	6.0 U	0.080 U
	TMW13042012	Normal	North Alluvial	4/23/2012	11 J	0.52 U	2	17	0.25 U	0.37 U	26,000	0.53 J	0.12 U	8.4	48 U	0.46 J	4,700	1.3 J	0.61 J	370 J	15	0.18 U	510,000	0.16 U	13 J	0.027 UJ
TMW15	TMW15102013	Normal	North Alluvial	11/6/2013	31 U	0.60 U	1.0 U	23	0.24 U	0.12 U	19000	0.93 J	0.10 U	1.5 U	**30 U**	0.50 U	3400	0.90 U	0.46 J	640 J	13	0.10 U	610000	0.20 U	8.3 J	0.080 U
	TMW15042013	Normal	North Alluvial	4/17/2013	31 U	0.60 U	1.0 U	23 J	0.24 U	0.12 U	17,000	1.2 J	0.10 U	1.5 U	30 U	0.50 U	3,300	0.58 J	0.41 J	460 J	14	0.10 U	580,000	0.20 U	11 J	0.080 U
	TMW15102012	Normal	North Alluvial	11/8/2012	31 U	0.60 U	1.0 U	22	0.24 U	0.12 U	16,000	1.1 J	0.10 U	1.5 U	30 U	0.50 U	3,600	0.90 U	0.90 U	730 J	13	0.10 U	610,000	0.10 U	8.6 J	0.080 U
	TMW15042012	Normal	North Alluvial	4/23/2012	10 J	0.52 U	1.5	21	0.25 U	0.27 U	20,000	1.2 J	0.12 U	1.4 U	48 U	0.24 U	3,400	0.57 U	0.37 U	300 J	16	0.18 U	480,000	0.16 U	23 J	0.027 U
TMW21	TMW21102013	Normal	North Alluvial	11/7/2013	31 U	0.60 U	0.84 J	20	0.24 U	0.12 U	33000	1.5 U	0.071 J	4.0	**30 U**	0.50 U	6200	31	0.93 J	900 J	3.0 J	0.047 J	630000	0.20 U	6.0 U	0.080 U
	TMW21042013	Normal	North Alluvial	4/16/2013	50 J	0.60 U	0.95 J	20	0.24 U	0.12 U	32,000	0.62 J	0.075 J	6	39 J	0.50 UJ	6,300	31	0.99 J	730 J	3.4 J	0.18 J	1,100,000 J	0.20 UJ	8.2 J	0.080 U
	TMW21102012	Normal	North Alluvial	11/8/2012	68 J	0.60 U	0.83 J	18	0.24 U	0.12 U	32,000	0.69 J	0.12 J	7.7	43 J	0.50 U	7,400	**90**	0.90 J	1,100 J	3.3 J	0.14 J	650,000	0.10 U	4.1 J	0.080 U
	TMW21042012	Normal	North Alluvial	4/17/2012	170	0.52 U	3	22	0.25 U	0.27 U	34,000	0.82 J	0.16 J	9.5	160	0.52 J	7,500	**110**	1.2 J	570	2.8 J	0.18 U	720,000	0.16 U	25 J	0.027 U
TMW22	TMW22102013	Normal	North Alluvial	10/29/2013	**930 J**	0.44 J	1.0 J	32 J	0.24 U	0.12 U	35000	3.2 J	0.79 J	5.2	**470 J**	0.37 U	11000	17 J	2.7 J	1400 J	2.9 J	0.10 U	870000	0.20 U	13 J	0.051 J
	TMW22042013	Normal	North Alluvial	4/12/2013	**540**	0.60 U	1.1 J	25	0.24 U	0.11 J	34,000	1.6 J	0.18 J	2.1	**310**	0.42 J	10,000	13	1.1 J	930 J	3.0 J	0.10 U	790,000	0.20 U	9.2 J	0.080 U
	TMW22102012	Normal	North Alluvial	11/6/2012	**4,200**	0.60 UJ	1.1 J	73	0.24 J	0.12 U	37,000	4.4 J	0.87 J	2.1	**2,100**	1.0 J	12,000	54 J	2.2 J	1,700 J	3.4 J	0.10 U	840,000	0.052 J	16 J	0.080 U
	TMW22042012	Normal	North Alluvial	4/18/2012	**790**	0.52 U	2	30	0.25 U	0.29 J	33,000	1.9 J	0.31 J	9.2	**490**	0.36 J	9,800	25	1.6 J	800	1.6 J	0.18 U	780,000	0.16 U	12 J	0.027 U
TMW23	TMW23102013	Normal	North Alluvial	10/29/2013	**3900 J**	0.60 UJ	1.3 J	63 J	0.10 J	0.12 U	20000	4.6 J	1.5	2.8	**2200 J**	1.3 U	5500	**66 J**	3.1	1600 J	2.0 U	0.10 U	800000	0.20 U	9.3 J	0.080 U
	TMW23042013	Normal	North Alluvial	4/8/2013	**8,100**	0.62 J	2.1 J	130	0.34 J	0.12 U	21,000	8.4 J	2.4	5.2	**4,800**	2.9 J	6,100	**130**	5	2,400 J	2.0 U	0.037 J	760,000	0.20 U	18 J	0.080 U
	TMW23102012	Normal	North Alluvial	11/6/2012	**6,900**	0.69 J	2.3 J	110	0.32 J	0.12 U	23,000	6.3 J	1.8	3.4	**4,200**	2.3 J	6,400	120 J	4.2 J	2,300 J	2.0 U	0.10 U	790,000	0.051 J	12 J	0.080 U
	TMW23042012	Normal	North Alluvial	4/24/2012	180	1.8 J	1.4 J	21	0.25 U	0.27 U	20,000 J	0.88 J	0.12 U	1.9 J	150	0.25 J	4,800 J	5	1 J	390 J	2.3 J	0.18 U	890,000	0.29 U	12 J	0.027 U

TABLE 5-8
Summary of Total Metals Analytical Detections (Page 4 of 9)
Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	EPA Method 6010/6020 (µg/L)																				EPA Method 7470 (µg/L)
					Aluminum CAS 7429-90-5	Antimony CAS 7440-36-0	Arsenic CAS 7440-38-2	Barium CAS 7440-39-3	Beryllium CAS 7440-41-7	Cadmium CAS 7440-43-9	Calcium CAS 7440-70-2	Chromium CAS 7440-47-3	Cobalt CAS 7440-48-4	Copper CAS 7440-50-8	Iron CAS 7439-89-6	Lead CAS 7439-92-1	Magnesium CAS 7439-95-4	Manganese CAS 7439-96-5	Nickel CAS 7440-02-0	Potassium CAS 7440-09-7	Selenium CAS 7782-49-2	Silver CAS 7440-22-4	Sodium CAS 7440-23-5	Thallium CAS 7440-28-0	Zinc CAS 7440-66-6	Mercury CAS 7439-97-6
					Regulatory Limits																				
					[a]200	[b]6	[b]10	[c]1000	[b]4	[b]5	N/A	[c]50	[c]50	[c]1000	[a]300	[b]15	N/A	[a]50	[c]200	N/A	[c]50	[c]50	N/A	[b]2	[a]5000	[c]2
TMW24	TMW24102013	Normal	North Alluvial	11/8/2013	18 J	0.60 U	1.2 J	38	0.24 U	0.12 U	32000	1.5 U	0.19 J	1.5 U	**43 J**	0.50 U	7500	**130**	0.78 J	660 J	2.0 U	0.10 U	1000000	0.20 U	6.0 U	0.080 U
	TMW24042013	Normal	North Alluvial	4/4/2013	31 U	0.60 U	1.1 J	36 J	0.24 U	0.12 U	31,000	1.5 U	0.20 J	1.5 J	74 J	0.50 U	7,500	**140**	0.85 J	720 J	2.0 U	0.10 U	940,000	0.20 U	2.1 J	0.080 U
	TMW24102012	Normal	North Alluvial	10/31/2012	41 J	0.60 U	0.75 J	31 J	0.24 U	0.12 U	28,000	1.5 U	0.16 J	0.86 J	83 J	0.50 U	7,100	**110**	1.1 J	630 J	2.0 U	0.10 U	930,000	0.10 U	3.7 J	0.080 U
	TMW24042012	Normal	North Alluvial	4/23/2012	44 J	0.62 J	2.4	34	0.25 U	0.37 U	29,000	0.58 J	0.2 J	13	94 J	0.34 J	7,200	**110**	2.1 J	330 J	4.8 J	0.18 U	830,000	0.16 U	15 J	0.027 UJ
TMW25	TMW25102013	Normal	North Alluvial	11/4/2013	24 J	0.60 U	0.56 J	15	0.24 U	0.12 U	55000	1.5 U	1.2	0.69 J	**150**	0.50 U	11000	**870**	1.5 J	760 J	2.0 U	0.10 U	890000 J	0.20 U	8.3 J	0.080 U
	TMW25042013	Normal	North Alluvial	4/16/2013	32 J	0.60 U	0.69 J	13	0.24 U	0.12 U	51,000	1.5 U	0.71 J	0.96 J	150	0.50 UJ	10,000	**710**	1.2 J	410 J	2.0 U	0.10 U	940,000 J	0.20 UJ	9.0 J	0.080 U
	TMW25102012	Normal	North Alluvial	11/1/2012	24 J	0.60 U	0.75 J	16	0.24 U	0.12 U	53,000	1.5 U	0.91 J	1.4 J	160	0.50 U	10,000	**690**	1.6 U	600 J	2.0 U	0.052 J	930,000	0.10 U	10 J	0.080 U
	TMW25042012	Normal	North Alluvial	4/17/2012	100	0.52 U	2.9	13	0.25 U	0.27 U	54,000	1 J	0.38 J	11	**300**	0.58 J	16,000	**280**	2.6 J	260 J	1.6 J	1.1 J	960,000	0.16 U	26 J	0.027 U
TMW26	TMW26102013	Normal	North Alluvial	11/4/2013	**1400 J**	0.60 U	1.4 J	40	0.24 U	0.12 U	19000	0.98 J	0.49 J	3.4	**840**	0.34 J	7300	**120**	2.2 J	980 J	2.0 U	0.034 J	860000 J	0.066 J	2.7 J	0.080 U
	DMW26042013	Duplicate	North Alluvial	4/17/2013	**1,200 J**	0.60 UJ	1.2 J	33 J	0.24 U	0.12 UJ	19,000	0.87 J	0.41 J	3.9	**540**	0.29 J	7,300	120 J	2.2 J	690 J	2.0 U	0.10 UJ	880,000	0.20 UJ	4.9 J	0.080 U
	TMW26042013	Normal	North Alluvial	4/17/2013	**1,600 J**	0.82 J	1.2 J	28 J	1.2 U	0.11 J	19,000	0.84 J	0.38 J	3.7	**810**	0.42 J	7,500	120 J	2.3 J	700 J	10 U	0.11 J	880,000	0.071 J	11 J	0.080 U
	TMW26102012	Normal	North Alluvial	10/25/2012	**1,500 J**	0.42 J	1.3 J	45	0.088 J	0.12 U	20,000	1.3 J	0.58 J	3.9	**820 J**	0.41 J	7,300	**120**	2.6 J	1,300 J	2.0 U	0.10 UJ	900,000 J	0.10 U	4.3 J	0.080 U
	TMW26102012DUP	Duplicate	North Alluvial	10/25/2012	**1,700 J**	0.60 UJ	1.4 J	49	0.22 J	0.12 U	18,000	1.6 J	0.63 J	4.6	**890 J**	0.42 J	6,900	**130**	2.6 J	1,100 J	2.0 U	0.047 J	880,000 J	0.10 U	5.1 J	0.080 U
	TMW26042012	Normal	North Alluvial	4/20/2012	61	0.69 J	2.2	19	0.25 U	0.27 U	18,000	0.3 U	0.37 J	12	48 U	0.24 U	6,600	**120**	2.6 J	300 J	3.8 J	0.18 U	760,000	0.16 U	10 J	0.027 U
TMW27	TMW27102013	Normal	North Alluvial	11/5/2013	31 U	0.60 U	**20**	130	0.24 U	0.12 U	24000	1.5 U	0.16 J	1.5 U	**580**	0.50 U	6500	**560**	0.55 J	630 J	2.0 U	0.10 U	350000	0.20 U	6.4 J	0.080 U
	TMW27042013	Normal	North Alluvial	4/12/2013	31 U	0.60 U	**21**	130	0.24 U	0.12 U	25,000	1.5 U	0.20 J	1.5 U	**600**	0.50 U	6,100	**610**	0.64 J	610 J	2.0 U	0.10 U	330,000	0.20 U	7.9 J	0.080 U
	TMW27102012	Normal	North Alluvial	11/1/2012	31 U	0.60 U	**19**	130	0.24 U	0.12 U	24,000	1.5 U	0.18 J	1.5 U	**610**	0.50 U	5,900	**530**	0.99 U	610 J	2.0 U	0.10 U	370,000	0.10 U	4.8 J	0.080 U
	TMW27042012	Normal	North Alluvial	4/25/2012	4.7 U	0.96 J	**19**	130	0.25 U	0.27 U	28,000	0.3 U	0.25 J	9.9	**1,500**	0.24 U	6,200	**650**	1.3 J	430 J	1.5 U	0.18 U	340,000	0.16 U	55	0.027 U
TMW28	TMW28102013	Normal	North Alluvial	11/5/2013	31 U	0.60 U	1.0 U	64	0.18 J	0.12 U	210000	1.5 U	0.46 J	0.82 J	**550**	0.50 U	64000	**790**	0.75 J	1500 J	2.0 U	0.10 U	360000	0.21 J	8.9 J	0.080 U
	TMW28042013	Normal	North Alluvial	4/2/2013	30 J	0.60 U	1.0 U	64	0.24 U	0.12 U	74,000	1.5 U	0.10 J	1.5 U	**420**	0.50 U	23,000	**320**	0.37 J	1,400 J	2.0 U	0.10 U	330,000	0.20 U	120	0.080 U
	TMW28102012	Normal	North Alluvial	10/25/2012	31 U	0.60 U	1.0 U	76	0.24 U	0.12 U	75,000	1.5 U	0.15 J	1.5 U	**450 J**	0.50 U	23,000	**350**	0.76 J	2,400 J	2.0 U	0.10 U	320,000 J	0.10 U	21	0.080 U
	TMW28042012	Normal	North Alluvial	4/21/2012	26 J	0.62 J	0.61 U	52	0.25 U	0.27 U	76,000	0.44 J	0.32 J	1.6 J	**330**	0.24 U	20,000	**300**	2.3 J	1,100	1.5 U	0.18 U	250,000	0.16 U	22 J	0.027 U
TMW29	TMW29102013	Normal	North Alluvial	10/31/2013	**150000**	0.60 U	**32**	**3800**	**10**	1.3	340000	110	**65**	79	**100000**	**91**	55000	**5600**	160	20000	33	0.53 J	570000	0.87 J	340	0.052 J
	TMW29042013	Normal	North Alluvial	4/11/2013	**23,000**	0.60 U	6.1	440 J	1.8	0.22 J	72,000	22	10	14	**14,000**	12 J	15,000	**680 J**	24	5,100	23	0.10 J	540,000	0.17 J	63	0.080 U
	TMW29102012	Normal	North Alluvial	10/26/2012	**230,000**	1.2 U	47 J	**5,800**	**17**	2.7	470,000	**190**	**110**	120	**170,000**	140 J	89,000	**7,200 J**	**260**	31,000	33 J	0.71 J	640,000 J	1.4 J	520	0
	TMW29042012	Normal	North Alluvial	4/21/2012	**2,300**	1.7 J	4.5	85	0.72 J	0.31 J	64,000	2.6 J	3.4 J	8.7	**1,600**	3.6	8,100	**430**	11	1,200	21	0.18 U	460,000	**6**	37 J	0.027 U
TMW31S	TMW31S102013	Normal	North Alluvial	10/30/2013	**10000**	0.60 U	0.80 J	120	0.38 J	0.14 J	130000	8.8 J	2.8	4.7	**4000**	3.3	25000	**280**	7.4	2100 J	9.8	0.034 J	590000	0.057 J	20	0.080 U
	TMW31S042013	Normal	North Alluvial	4/11/2013	**210 J**	0.60 U	0.40 J	18 J	0.24 U	0.12 UJ	110,000	1.3 J	0.10 J	0.76 J	96 J	0.24 J	20,000	30 J	0.55 J	1,000 J	10	0.10 UJ	520,000	0.20 UJ	7.8 J	0.080 U
	TMW31S102012DUP	Duplicate	North Alluvial	11/5/2012	**480**	0.50 J	0.36 J	25	0.24 U	0.12 U	100,000	2.0 J	0.21 J	0.89 J	230	0.49 J	21,000	40	0.75 J	980 J	9	0.10 U	550,000	0.10 UJ	7.5 J	0.080 U
	TMW31S102012	Normal	North Alluvial	11/5/2012	**400**	0.91 J	0.34 J	25	0.24 U	0.12 U	100,000	1.8 J	0.25 J	1.4 J	200	0.91 J	21,000	41	0.96 J	850 J	8	0.10 U	550,000	0.082 UJ	9.1 J	0.080 U
	TMW31S042012	Normal	North Alluvial	4/19/2012	**440**	0.58 J	0.88 J	27	0.25 U	0.27 U	120,000	4.2 J	0.4 J	6.7	**500**	1.1	20,000	**78**	3.6 J	780	9	0.18 U	530,000	0.16 U	18 J	0.027 U
TMW33	TMW33102013	Normal	North Alluvial	10/30/2013	**8400**	0.60 U	2.8 J	170	0.47 J	0.17 J	110000	9.6 J	2.9	11	**7100**	5.1	30000	**500**	6.7	4400	2.5 J	0.094 J	2400000	0.18 J	23	0.080 U
	TMW33042013	Normal	North Alluvial	4/17/2013	**3,400 J**	0.60 U	1.3 J	46 J	0.24 J	0.20 J	110,000	6.9 J	1.5	4.1	**1,700**	1.7 J	29,000	**730 J**	4	2,500 J	2.0 U	0.049 J	2,500,000	0.20 U	11 J	0.080 U
	TMW33102012DUP	Duplicate	North Alluvial	10/26/2012	**640 J**	1.2 U	1.3 J	39	0.48 U	0.24 UJ	110,000	6.6 J	0.94 J	4.5	**610**	0.64 J	29,000	**530 J**	7	4200 J	4.0 U	0.20 UJ	2,500,000 J	0.20 U	25 J	0.080 U
	TMW33102012	Normal	North Alluvial	10/26/2012	**1100 J**	1.2 U	1.3 J	36	0.48 U	0.21 J	110,000	6.7 J	0.94 J	4.1	**860**	0.41 J	30,000	**390 J**	7	2,200 J	4.0 U	0.20 UJ	2,500,000 J	0.20 U	33 J	0.080 U
	TMW33042012	Normal	North Alluvial	4/19/2012	150	1.5 J	3.1	23	0.25 U	0.52 J	110,000	0.9 J	0.9 J	36	**420**	0.66 J	28,000	**700**	4.7 J	720	10	0.18 U	2,100,000	**4**	15 J	0.027 U
TMW34	TMW34102013	Normal	North Alluvial	11/1/2013	52 J	0.60 UJ	0.39 J	12	0.24 U	0.12 U	120000	1.5 U	0.23 J	0.88 J	**33 J**	0.50 U	27000	**180 J**	0.64 J	1700 J	**100**	0.10 U	1400000	0.20 UJ	6.0 U	0.080 U
	DTW34102013	Duplicate	North Alluvial	11/1/2013	150 J	0.47 J	0.35 J	13	0.24 U	0.12 U	120000	1.5 U	0.27 J	0.60 J	**89 J**	0.50 U	27000	**210 J**	0.67 J	1500 J	**100**	0.10 U	1400000	0.051 UJ	6.0 U	0.080 U
	TMW34042013	Normal	North Alluvial	4/10/2013	150 J	1.2 U	2.0 U	14	0.48 U	0.24 U	120,000	1.4 J	0.32 J	3.0 U	100	1.0 U	24,000	**190**	1.4 J	1,300 J	**120**	0.20 U	1,300,000	0.40 U	12 U	0.080 U
	TMW34102012	Normal	North Alluvial	10/23/2012	24 J	0.60 U	0.33 J	13	0.24 U	0.12 U	130,000	1.5 U	0.23 J	0.98 J	30 U	0.50 U	27,000	**190**	0.74 J	1,200 J	**130**	0.10 U	1,400,000	0.10 U	6.0 U	0.080 U
	TMW34042012	Normal	North Alluvial	4/24/2012	34 J	0.52 U	**11**	13 J	0.25 U	0.27 U	160,000	0.71 J	0.43 J	3.7 J	54 J	0.3 J	30,000	**200**	4 J	590	**110**	0.18 U	1,800,000	0.16 U	16 J	0.052 U

TABLE 5-8
Summary of Total Metals Analytical Detections (Page 5 of 9)
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Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	EPA Method 6010/6020 (µg/L)																				EPA Method 7470 (µg/L)
					Aluminum CAS 7429-90-5	Antimony CAS 7440-36-0	Arsenic CAS 7440-38-2	Barium CAS 7440-39-3	Beryllium CAS 7440-41-7	Cadmium CAS 7440-43-9	Calcium CAS 7440-70-2	Chromium CAS 7440-47-3	Cobalt CAS 7440-48-4	Copper CAS 7440-50-8	Iron CAS 7439-89-6	Lead CAS 7439-92-1	Magnesium CAS 7439-95-4	Manganese CAS 7439-96-5	Nickel CAS 7440-02-0	Potassium CAS 7440-09-7	Selenium CAS 7782-49-2	Silver CAS 7440-22-4	Sodium CAS 7440-23-5	Thallium CAS 7440-28-0	Zinc CAS 7440-66-6	Mercury CAS 7439-97-6
					Regulatory Limits																				
					[a]200	[b]6	[b]10	[c]1000	[b]4	[b]5	N/A	[c]50	[c]50	[c]1000	[a]300	[b]15	N/A	[a]50	[c]200	N/A	[c]50	[c]50	N/A	[b]2	[a]5000	[c]2
TMW35	TMW35102013	Normal	North Alluvial	11/4/2013	31 U	0.60 U	0.49 J	12	0.24 U	0.12 U	88000	1.5 U	0.11 J	0.80 J	**30 U**	0.50 U	16000	**150**	0.98 J	1900 J	33	0.10 U	1200000 J	0.20 U	6.0 U	0.080 U
	DTW35042013	Duplicate	North Alluvial	4/9/2013	31 U	0.60 U	0.59 J	12	0.24 U	0.12 U	73,000	1.5 U	0.15 J	1.4 J	30 U	0.50 U	14,000	**140**	1.2 J	730 J	43	0.10 U	1,200,000	0.20 U	6.0 U	0.080 U
	TMW35042013	Normal	North Alluvial	4/9/2013	31 U	0.60 U	0.42 J	11	0.24 U	0.12 U	83,000	1.5 U	0.17 J	1.3 J	30 U	0.50 U	15,000	**160**	1.0 J	680 J	35	0.10 U	1,300,000	0.20 U	6.0 U	0.080 U
	TMW35102012	Normal	North Alluvial	10/23/2012	31 U	0.60 U	0.55 J	14	0.24 U	0.12 U	81,000	1.5 U	0.16 J	1.2 J	30 U	0.50 U	16,000	**150**	1.0 J	500 J	43	0.10 U	1,200,000	0.10 U	3.4 J	0.080 U
	TMW35042012	Normal	North Alluvial	4/23/2012	11 J	0.57 J	4.1	13	0.25 U	0.27 U	87,000	0.57 J	0.27 J	4.9 J	48 U	0.47 J	15,000	**160**	2.9 J	400 J	**50**	0.18 U	1,100,000	0.16 U	18 J	0.027 U
TMW39S	TMW39S102013	Normal	North Alluvial	11/5/2013	**9900**	0.60 U	1.2 J	180	0.43 J	0.12 U	79000	8.3 J	2.8	4.4	**4800**	3.6	20000	**240**	5.6	2300 J	8.2	0.10 U	850000	0.20 U	17 J	0.080 U
	TMW39S042013	Normal	North Alluvial	4/11/2013	**3,400**	0.60 U	0.70 J	48 J	0.11 J	0.12 UJ	74,000	4.5 J	0.81 J	1.4 J	**1,700**	0.75 J	17,000	55 J	1.9 J	2,300 J	8	0.10 UJ	830,000	0.20 UJ	5.2 J	0.080 U
	TMW39S102012	Normal	North Alluvial	11/1/2012	**15,000**	0.60 U	2.0 J	270	0.62 J	0.21 J	85,000	14	4.8	6.7	**7,500**	4.8	19,000	**330**	10	3,400	9	0.034 J	880,000	0.094 J	24	0.080 U
	TMW39S042012	Normal	North Alluvial	4/23/2012	**3,400**	1 J	3.2	88	0.25 U	0.37 U	80,000	4.9 J	1.4 J	13	**1,900**	2.4	16,000	**190**	4.1 J	1,400	14	0.18 U	740,000	0.16 U	21 J	0.027 UJ
TMW40S	TMW40S102013	Normal	North Alluvial	11/1/2013	**22000**	0.60 U	**16**	310	2.0	0.17 J	78000	10	4.4	7.5	**11000**	**19**	15000	**430 J**	9.5	3400	51	0.043 J	1000000	0.12 U	150	0.080 U
	TMW40S042013	Normal	North Alluvial	4/15/2013	**36,000**	0.60 R	**18**	530	3.7	0.23 J	78,000	16	7.2	13	**20,000**	**36**	17,000	**850**	16	4,500	**55**	0.060 J	940,000	0.17 U	280	0.080 U
	Not sampled previously for metals due to lack of avialable water																									
TMW41	TMW41102013	Normal	North Alluvial	10/30/2013	**640**	0.60 U	0.53 J	15	0.24 U	0.12 U	15000	3.6 J	0.20 J	1.3 J	**300**	0.26 J	4000	9.5	0.89 J	1200 J	2.6 J	0.10 U	890000	0.20 U	9.6 J	0.080 U
	TMW41042013	Normal	North Alluvial	4/11/2013	**540**	0.60 U	0.61 J	16 J	0.24 U	0.12 UJ	17,000	6.6 J	0.16 J	1.7 J	**340**	0.29 J	4,500	9.6 J	0.97 J	1,800 J	4.5 J	0.10 UJ	850,000	0.20 UJ	12 J	0.080 U
	TMW41102012	Normal	North Alluvial	11/6/2012	**790**	0.60 UJ	0.56 J	15	0.24 U	0.29 J	16,000	2.4 J	0.078 J	1.2 J	**360**	0.22 J	4,000	7.8 J	0.56 J	1,400 J	2.1 J	0.10 U	880,000	0.10 U	5.8 J	0.080 U
	TMW41042012	Normal	North Alluvial	4/23/2012	**420**	0.62 J	3.1	21	0.25 U	0.37 U	25,000	5.5 J	0.15 J	12	170	0.68 J	5,300	27	0.84 J	820	11	0.18 U	810,000	0.16 U	13 J	0.027 UJ
TMW43	TMW43102013	Normal	North Alluvial	10/30/2013	100 J	0.60 U	0.35 J	21	0.24 U	0.12 U	36000	1.5 U	0.10 J	0.65 J	**56 J**	0.50 U	6700	**53**	0.30 J	1200 J	6.8	0.10 U	630000	0.20 U	2.2 J	0.029 J
	TMW43042013	Normal	North Alluvial	4/16/2013	**1,500**	0.60 U	0.48 J	33	0.24 U	0.12 U	34,000	1.4 J	0.47 J	1.7 J	**830**	0.63 J	6,200	**64**	1.2 J	1,200 J	6.3 J	0.10 U	600,000 J	0.20 UJ	8.0 J	0.080 U
	TMW43102012	Normal	North Alluvial	11/8/2012	**130 J**	0.60 U	0.39 J	23	0.24 U	0.12 U	33,000	0.55 J	0.16 J	0.62 J	79 J	0.50 U	6,800	**55**	0.83 J	1,300 J	4.9 J	0.10 U	600,000	0.10 U	4.0 J	0.080 U
	TMW43042012	Normal	North Alluvial	4/24/2012	**110**	0.52 U	1.8	23	0.25 U	0.27 U	36,000 J	0.3 U	0.3 J	1.8 J	83 J	0.53 J	6,300 J	39	1.5 J	690	10	0.18 U	530,000	1.2 U	14 J	0.027 U
TMW44	TMW44102013	Normal	North Alluvial	10/29/2013	**12000 J**	0.88 J	2.3 J	130 J	0.72 J	0.12 U	46000	7.9 J	3.9	5.0	**6800 J**	4.9	15000	**350 J**	6.4	2900 J	2.1 J	0.033 J	780000	0.23 U	22	0.080 U
	TMW44042013	Normal	North Alluvial	4/8/2013	**8,800**	0.47 J	1.8 J	77	0.19 J	0.12 U	37,000	4.3 J	2	3.9	**5,300**	2.9 J	12,000	**240**	4	2,400 J	2.6 J	0.10 U	700,000	0.20 U	20	0.080 U
	TMW44102012	Normal	North Alluvial	11/6/2012	**19,000**	0.60 UJ	4.0 J	210	0.87 J	0.13 J	57,000	11	6.5	8.4	**12,000**	9	16,000	**640 J**	11 J	4,100	2.3 J	0.037 J	710,000	0.15 J	47	0.080 U
	TMW44042012	Normal	North Alluvial	4/24/2012	**1,500**	0.52 U	2.9	44	0.53 J	0.27 U	78,000	0.96 J	1.6 J	3.6 J	**470**	3	12,000	**540**	3.3 J	520	5	0.18 U	760,000	0.16 U	18 J	0.027 U
TMW45	TMW45102013	Normal	North Alluvial	11/7/2013	**770**	1.0 J	1.3 J	97	0.24 U	0.12 U	31000	0.85 J	1.5	3.9	**460**	0.71 J	7500	**1400**	8.7	1200 J	2.0 U	0.67 J	940000	0.20 U	4.1 J	0.080 U
	TMW45042013	Normal	North Alluvial	4/4/2013	91 J	0.60 U	1.1 J	74 J	0.24 U	0.12 U	29,000	1.5 U	0.19 J	1.9 J	60 J	0.50 U	7,200	**110**	1.1 J	1,200 J	0.75 J	0.10 U	910,000	0.056 U	6.0 U	0.080 U
	TMW45102012DUP	Duplicate	North Alluvial	11/6/2012	160 J	0.60 UJ	0.84 J	70	0.24 U	0.12 U	32,000	0.60 J	0.13 J	1.7 J	97 J	0.50 UJ	8,300	50 J	0.86 J	1,800 J	0.77 J	0.10 U	990,000	0.10 U	6.0 UJ	0.080 U
	TMW45102012	Normal	North Alluvial	11/6/2012	170 J	0.60 UJ	1.0 J	71	0.24 U	0.12 U	30,000	0.66 J	0.085 J	2.1	94 J	0.18 J	8,300	51 J	1.2 J	1,600 J	0.85 J	0.10 U	940,000	0.10 U	6.3 J	0.080 U
	TMW45042012	Normal	North Alluvial	4/24/2012	**2,100**	0.62 J	1.4 J	90	0.25 U	0.27 U	36,000 J	2.7 J	1.1 J	5.6	**1,300**	1.7	8,600 J	**160**	2.9 J	1,000	3.7 J	0.18 U	970,000	0.16 U	19 J	0.027 U
TMW46	TMW46102013	Normal	North Alluvial	10/30/2013	**23000**	0.60 U	6.2	760	1.5	0.21 J	120000	20	12	16	**15000**	**15**	23000	**960**	17	4600	**120**	0.11 J	1200000	0.23 J	57	0.080 U
	TMW46042013	Normal	North Alluvial	4/8/2013	**6,100**	0.60 UJ	1.1 J	89	0.22 J	0.12 U	68,000	4.1 J	3.1	5.7	**4,200**	3.2	15,000	**120**	4	1,900 J	**97**	0.10 U	1,100,000	0.20 U	12 J	0.080 U
	TMW46102012	Normal	North Alluvial	11/6/2012	**18,000**	0.60 UJ	4.1 J	320	0.91 J	0.14 J	110,000	13	7	9.7	**12,000**	9.2	22,000	**560 J**	9.4 J	4,300	**93**	0.10 U	1,200,000	0.16 J	36	0.080 U
	TMW46042012	Normal	North Alluvial	4/24/2012	**1,900**	0.84 J	**11**	41	0.25 U	0.27 U	78,000 J	2.1 J	0.76 J	5.7	**1,000**	1	16,000 J	46	2.8 J	550	**110**	0.18 U	1,100,000	0.16 U	15 J	0.027 U
TMW47	TMW47102013	Normal	North Alluvial	11/7/2013	19 J	0.60 U	0.53 J	16	0.24 U	0.12 U	6100	1.5 U	0.077 J	1.5 U	**22 J**	0.50 U	630	43	0.34 J	1200 J	2.0 U	0.10 U	580000	0.20 U	6.0 U	0.080 U
	TMW47042013	Normal	North Alluvial	4/15/2013	73 J	0.60 R	0.58 J	15	0.24 U	0.12 U	5,900	1.5 U	0.078 J	0.78 J	62 J	0.50 U	660	40	0.58 J	1,400 J	2.0 U	0.10 U	560,000	0.20 U	4.0 J	0.080 U
	TMW47102012	Normal	North Alluvial	11/2/2012	75 J	0.60 U	0.56 J	16 J	0.24 U	0.12 U	5,900	1.5 U	0.090 J	1.7 J	48 J	0.50 U	630	32	0.75 U	1,300 J	2.0 U	0.10 U	580,000	0.10 U	6.8 J	0.080 U
	TMW47042012	Normal	North Alluvial	4/25/2012	97	0.52 U	0.61 U	14	0.25 U	0.27 U	16,000	0.46 J	0.12 U	20	86 J	0.42 J	2,300	13	0.96 J	930	1.5 U	0.18 U	500,000	0.16 U	23 J	0.027 U
EMW01	[d] Well not sampled in fall 2013																									
	EMW01042013	Normal	North Bedrock	4/15/2013	37 J	0.61 J	0.59 J	19	0.24 U	0.12 U	79,000	0.50 J	0.082 J	1.5 U	59 J	0.50 U	9,000	**130**	0.74 J	4,200	2.0 U	0.10 U	1,900,000	0.12 U	11 J	0.080 U
	EMW01102012	Normal	North Bedrock	10/25/2012	36 J	0.60 U	0.91 J	31	0.24 U	0.18 J	78,000	1.0 J	0.077 J	0.93 J	32 UJ	0.50 U	6,700	**50**	1.6 J	4,900	2.0 U	0.10 U	1,900,000 J	0.10 U	13 J	0.080 U
	EMW01042012	Normal	North Bedrock	4/23/2012	40 J	0.52 U	2.8	22	0.5 U	0.32 J	76,000	0.67 J	0.16 J	5.2	63 J	0.39 J	7,200	**77**	0.90 U	3,200	7	0.18 U	1,600,000	0.16 U	30 J	0.027 U

TABLE 5-8
Summary of Total Metals Analytical Detections (Page 6 of 9)
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Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	EPA Method 6010/6020 (µg/L)																				EPA Method 7470 (µg/L)
					Aluminum CAS 7429-90-5	Antimony CAS 7440-36-0	Arsenic CAS 7440-38-2	Barium CAS 7440-39-3	Beryllium CAS 7440-41-7	Cadmium CAS 7440-43-9	Calcium CAS 7440-70-2	Chromium CAS 7440-47-3	Cobalt CAS 7440-48-4	Copper CAS 7440-50-8	Iron CAS 7439-89-6	Lead CAS 7439-92-1	Magnesium CAS 7439-95-4	Manganese CAS 7439-96-5	Nickel CAS 7440-02-0	Potassium CAS 7440-09-7	Selenium CAS 7782-49-2	Silver CAS 7440-22-4	Sodium CAS 7440-23-5	Thallium CAS 7440-28-0	Zinc CAS 7440-66-6	Mercury CAS 7439-97-6
					Regulatory Limits																				
					[a]200	[b]6	[b]10	[c]1000	[b]4	[b]5	N/A	[c]50	[c]50	[c]1000	[a]300	[b]15	N/A	[a]50	[c]200	N/A	[c]50	[c]50	N/A	[b]2	[a]5000	[c]2
EMW02	[d] Well not sampled in fall 2013																								
	EMW02042013	Normal	North Bedrock	4/16/2013	36 J	0.41 J	0.34 J	13	0.24 U	0.18 J	60,000	1.5 U	0.10 J	0.59 J	30 U	0.50 UJ	6,600	**100**	1.0 J	2,300 J	2.0 U	0.41 J	1,700,000 J	0.20 UJ	43 J	0.080 U
	EMW02102012	Normal	North Bedrock	10/25/2012	31 J	0.60 U	1.0 U	14	0.24 U	0.16 J	66,000	1.5 U	0.072 J	1.5 U	30 UJ	0.50 U	7,300	**89**	0.90 U	2,900 J	2.0 U	0.10 U	1,700,000 J	0.10 U	58	0.080 U
	EMW02042012	Normal	North Bedrock	4/23/2012	6.7 J	0.52 U	2.4	12	0.5 U	0.29 J	69,000	0.69 J	0.18 J	5.1	48 U	0.27 J	7,000	**86**	1.6 J	1,900	6	0.18 U	1,400,000	0.16 U	83	0.027 U
EMW03	[d] Well not sampled in fall 2013																								
	EMW03042013	Normal	North Bedrock	4/15/2013	**310**	0.60 R	1.1 J	16	0.24 U	0.10 J	34,000	0.83 J	0.088 J	1.5 U	30 U	0.50 U	760	0.32 J	1.0 J	4,100	2.0 U	0.10 U	1,500,000	0.20 U	36	0.080 U
	EMW03102102	Normal	North Bedrock	10/25/2012	55 J	0.60 U	0.69 J	14	0.24 U	0.12 U	20,000	1.5 U	0.10 U	1.5 U	30 U	0.50 U	1,500	1.7 J	0.48 J	3,000	2.0 U	0.10 U	1,400,000 J	0.10 U	17 J	0.080 U
	EMW03042012	Normal	North Bedrock	4/23/2012	22 J	0.84 J	2.3	14	0.86 J	1.1	17,000	1.4 J	1 J	4.6 J	48 U	0.82 J	2,200	2.4 J	1.6 J	2,000	3.9 J	0.18 U	1,000,000	0.6 U	29 J	0.027 U
EMW04	[d] Well not sampled in fall 2013																								
	EMW04042013	Normal	North Bedrock	4/15/2013	190 J	0.60 R	0.83 J	21	0.24 U	0.12 U	170,000	**200**	6.9	2	**1,300**	0.24 J	21,000	**210**	**430**	6,200	2.0 U	2.7 J	2,700,000	0.20 U	5.7 J	0.080 U
	EMW04102012DUP	Duplicate	North Bedrock	10/25/2012	**330 J**	0.60 U	0.96 J	29	0.24 U	0.12 UJ	180,000	340 J	4.4	1.0 J	**1,900 J**	0.45 J	21,000	**230**	**250**	6,200	2.0 U	0.68 J	2,900,000 J	0.10 U	31	0.080 U
	EMW04102012	Normal	North Bedrock	10/25/2012	**200 J**	0.60 U	1.1 J	28	0.24 U	0.11 J	180,000	**150 J**	3.5	0.97 J	**1,100 J**	0.29 J	20,000	**180**	**200**	5,900	2.0 U	0.51 J	3,000,000 J	0.10 U	34	0.080 U
	EMW04042012	Normal	North Bedrock	4/25/2012	15 J	0.52 U	2.2	24	0.5 U	0.34 J	180,000	**190**	8.2	8	**2,200**	0.42 J	18,000	**180**	**500**	3,100	7	0.7 J	2,500,000	0.6 J	21 J	0.027 U
TMW02	TMW02102013	Normal	North Bedrock	11/4/2013	31 U	0.60 U	1.3 J	8.6	0.24 U	0.12 U	21000	0.63 J	0.10 U	1.5 U	**30 U**	0.50 U	2500	0.32 J	0.90 U	2600 J	**73**	0.10 U	1000000 J	0.20 U	6.0 U	0.080 U
	TMW02042013	Normal	North Bedrock	4/16/2013	130 J	0.60 U	1.3 J	9.7	0.24 U	0.12 U	20,000	1.1 J	0.10 U	1.5 U	65 J	0.50 UJ	2,300	1.8 J	0.90 U	1,600 J	**86 J**	0.10 U	1,100,000 J	0.20 UJ	4.2 J	0.080 U
	TMW02102012	Normal	North Bedrock	10/31/2012	31 U	0.60 U	1.2 J	8.5 J	0.24 U	0.12 U	22,000	2.0 J	0.10 U	1.5 U	30 U	0.50 U	2,500	0.32 J	0.90 U	1,800 J	**69**	0.10 U	1,100,000	0.10 U	6.0 U	0.080 U
	TMW02042012	Normal	North Bedrock	4/24/2012	11 J	0.52 U	8	9.1 J	0.25 U	0.27 U	25,000	3.1 J	0.12 U	3 U	48 U	0.43 U	3,100	2.4 J	0.6 U	1,200	**80**	0.18 U	920,000	0.16 U	7.7 J	0.027 U
TMW14A	TMW14A102013	Normal	North Bedrock	11/6/2013	27 J	0.60 U	0.67 J	16	0.24 U	0.12 U	3300	1.5 U	0.10 U	1.7 J	**37 J**	0.50 U	380 J	12	1.1 J	690 J	2.0 U	0.10 U	460000	0.20 U	6.0 U	0.080 U
	TMW14A042013	Normal	North Bedrock	4/17/2013	120 J	0.60 U	0.54 J	21 J	0.24 U	0.12 U	3,300	1.5 U	0.26 J	0.74 J	58 J	0.50 U	430 J	15 J	0.65 J	690 J	2.0 U	0.10 U	450,000	0.20 U	6.0 U	0.080 U
	TMW14A102012	Normal	North Bedrock	11/8/2012	36 J	0.60 U	0.53 J	17	0.24 U	0.12 U	3,200	1.5 U	0.10 U	4.1	40 J	0.50 U	440 J	13	2.6 J	910 J	0.86 J	0.069 J	460,000	0.10 U	6.0 U	0.080 U
	TMW14A042012	Normal	North Bedrock	4/21/2012	31 J	0.52 U	2.2	18	0.25 U	0.27 U	4,600	0.65 J	0.12 U	2.5 J	48 U	0.24 U	440 J	17	2 J	550	3.6 J	0.18 U	400,000	0.16 U	13 J	0.027 U
TMW16	TMW16102013	Normal	North Bedrock	10/31/2013	**1600**	0.60 U	0.33 J	32	0.080 J	0.12 U	4200	3.3 J	0.55 U	6.3	**830**	0.69 J	890	19	5.0	1500 J	2.0 U	1.3 J	460000	0.20 U	13 U	0.080 U
	TMW16042013	Normal	North Bedrock	4/18/2013	**3,000**	0.92 J	0.46 J	32	0.24 U	0.12 U	4,800	4.1 J	0.74 J	8.2	**1,200**	1.4 J	1,200	26	5	1,300 J	2.0 U	0.81 J	480,000	0.20 U	18 J	0.080 U
	TMW16102012	Normal	North Bedrock	11/6/2012	**4,400**	0.60 UJ	0.76 J	81	0.20 J	0.12 U	5,500	3.8 J	0.81 J	9.2	**2,100**	1.4 J	1,700	48 J	5.8 J	1,500 J	2.0 U	0.21 J	440,000	0.074 J	65	0.080 U
	TMW16042012	Normal	North Bedrock	4/21/2012	**260**	0.63 J	0.78 J	19	0.25 U	0.27 U	5,800	0.4 J	0.18 J	6.9	140	0.46 J	560 J	17	2.4 J	600	1.7 J	0.18 U	410,000	0.16 U	23 J	0.027 U
TMW17	TMW17102013	Normal	North Bedrock	11/6/2013	**220 J**	0.60 U	0.34 J	16	0.24 U	0.12 U	3500	1.5 U	0.10 U	1.1 J	**74 J**	0.60 J	500	9.6	0.45 J	980 J	2.0 U	0.047 J	450000	0.20 U	60	0.080 U
	TMW17042013	Normal	North Bedrock	4/9/2013	**300**	0.60 U	0.38 J	16	0.24 U	0.12 U	3,600	0.50 J	0.093 J	1.9 J	130	1.5 J	530	17	0.76 J	910 J	2.0 U	0.13 J	430,000	0.20 U	1,100	0.080 U
	TMW17102012	Normal	North Bedrock	11/9/2012	**3,000**	0.68 J	5.1	64	0.18 J	0.53 J	14,000	5.6 J	1.5	28	**2,300**	**22**	2,100	**200**	6	1,000 J	1.0 J	1.7 J	420,000	0.10 U	**54,000**	0.080 U
	TMW17042012	Normal	North Bedrock	4/24/2012	190	0.52 U	0.61 U	16	0.25 U	0.27 U	4,600	0.64 J	0.12 U	2.3 J	120	1.5	540 J	15	0.84 J	660	2.2 J	0.18 U	420,000	0.16 U	100	0.027 U
TMW18	TMW18102013	Normal	North Bedrock	10/31/2013	**370**	0.60 U	2.6 J	16	0.24 U	0.12 U	6200	0.94 J	0.068 U	1.5 J	**160**	0.58 J	870	6.3	0.53 J	4500	0.76 J	0.079 J	680000	0.20 U	3.0 U	0.080 U
	TMW18042013	Normal	North Bedrock	4/12/2013	**320**	0.60 U	2.6 J	19	0.24 U	0.12 U	6,400	0.90 J	0.10 U	1.9 J	120	0.97 J	1,000	6	0.77 J	4,500	2.0 U	0.041 J	680,000	0.20 U	5.7 J	0.080 U
	TMW18102012	Normal	North Bedrock	11/5/2012	80 J	0.60 U	0.57 J	15	0.24 U	0.12 U	5,000	1.5 U	0.10 U	0.57 J	34 J	0.51 J	1,000	2.1 J	0.32 J	3,800	2.0 U	0.10 U	720,000	0.063 UJ	6.0 U	0.080 U
	TMW18102012DUP	Duplicate	North Bedrock	11/5/2012	77 J	0.60 U	0.60 J	15	0.24 U	0.12 U	5,000	1.5 U	0.10 U	1.5 UJ	29 J	0.47 J	1,000	2.4 J	0.36 J	4,100	2.0 U	0.10 U	720,000	0.10 UJ	6.0 U	0.080 U
	TMW18042012	Normal	North Bedrock	4/23/2012	110	1 J	1.4 J	16	0.25 U	0.37 U	6,900	0.3 U	0.12 U	11	75 J	1.3	980 J	3.2 J	0.44 J	3,900	1.5 U	0.18 U	560,000	0.16 U	16 J	0.027 UJ
TMW19	TMW19102013	Normal	North Bedrock	10/31/2013	**780**	0.60 U	0.36 J	10	0.24 U	0.12 U	9900	0.79 J	0.13 U	0.73 J	**420**	0.44 J	1200	38	0.97 J	1700 J	2.0 U	0.84 J	710000	0.20 U	2.6 U	0.080 U
	TMW19042013	Normal	North Bedrock	4/12/2013	**9,800**	0.60 U	0.86 J	44	0.43 J	0.12 U	13,000	6.6 J	2.2	11	**5,100**	3	3,600	**120**	7	2200 J	0.77 J	0.90 J	680,000	0.20 U	16 J	0.080 U
	TMW19102012	Normal	North Bedrock	11/5/2012	190 J	0.60 U	0.39 J	8.3	0.24 U	0.12 U	9,000	1.5 U	0.11 J	1.5 U	140	0.50 U	1,100	37	0.43 J	1,200 J	2.0 U	0.10 U	710,000	0.10 U	6.0 U	0.080 U
	TMW19042012	Normal	North Bedrock	4/21/2012	**460**	1.2 J	0.61 U	15	0.25 U	0.27 U	17,000	0.81 J	0.52 J	4.2 J	**350**	1.2	1,800 J	**73**	12	1,100	2.1 J	0.18 U	610,000	0.21 U	43 J	0.027 U

TABLE 5-8
Summary of Total Metals Analytical Detections (Page 7 of 9)
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Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	EPA Method 6010/6020 (µg/L)																				EPA Method 7470 (µg/L)
					Aluminum CAS 7429-90-5	Antimony CAS 7440-36-0	Arsenic CAS 7440-38-2	Barium CAS 7440-39-3	Beryllium CAS 7440-41-7	Cadmium CAS 7440-43-9	Calcium CAS 7440-70-2	Chromium CAS 7440-47-3	Cobalt CAS 7440-48-4	Copper CAS 7440-50-8	Iron CAS 7439-89-6	Lead CAS 7439-92-1	Magnesium CAS 7439-95-4	Manganese CAS 7439-96-5	Nickel CAS 7440-02-0	Potassium CAS 7440-09-7	Selenium CAS 7782-49-2	Silver CAS 7440-22-4	Sodium CAS 7440-23-5	Thallium CAS 7440-28-0	Zinc CAS 7440-66-6	Mercury CAS 7439-97-6
					Regulatory Limits																				
					[a]200	[b]6	[b]10	[c]1000	[b]4	[b]5	N/A	[c]50	[c]50	[c]1000	[a]300	[b]15	N/A	[a]50	[c]200	N/A	[c]50	[c]50	N/A	[b]2	[a]5000	[c]2
TMW30	TMW30102013	Normal	North Bedrock	10/30/2013	5000	0.43 J	1.9 J	100	0.30 J	0.12 U	66000	4.2 J	2.1	6.2	**4600**	4.2	14000	**150**	3.6	2000 J	8.9	0.11 J	510000	0.059 J	49	0.080 U
	TMW30042013	Normal	North Bedrock	4/11/2013	**320**	0.60 U	0.94 J	12 J	0.24 U	0.12 UJ	58,000	0.84 J	0.17 J	1.3 J	**480**	0.33 J	12,000	15 J	0.71 J	1,300 J	7	0.10 UJ	480,000	0.20 UJ	7.9 J	0.080 U
	TMW30102012DUP	Duplicate	North Bedrock	11/5/2012	**420 J**	1.6 J	1.4 J	35	0.24 UJ	0.12 U	51,000	2.3 J	0.66 J	2.9	**500**	2.0 J	12,000	35	1.5 J	1,200 J	7	0.045 J	470,000	0.16 UJ	26	0.080 U
	TMW30102012	Normal	North Bedrock	11/5/2012	**720 J**	1.5 J	1.2 J	31	0.10 J	0.12 U	53,000	2.0 J	0.53 J	2.4	**820**	1.1 J	12,000	34	1.5 J	1,200 J	7	0.035 J	480,000	0.10 UJ	22	0.080 U
	TMW30042012	Normal	North Bedrock	4/20/2012	180	0.52 U	0.97 J	13	0.25 U	0.27 U	62,000	1.4 J	0.3 J	11	**380**	0.82 J	12,000	22	1.9 J	890	9	0.18 U	480,000	0.16 U	33 J	0.027 U
TMW31D	DTW31D102013	Duplicate	North Bedrock	11/6/2013	31 U	0.60 U	0.46 J	8.9	0.24 U	0.12 U	60000	1.5 U	0.10 U	2.3	**30 U**	0.50 U	10000	0.81 J	0.90 UJ	1400 J	7.9	0.10 U	550000	0.20 U	24	0.080 U
	TMW31D102013	Normal	North Bedrock	11/6/2013	31 U	0.60 U	0.46 J	8.6	0.24 U	0.12 U	59000	1.5 U	0.10 U	2.2	**30 U**	0.50 U	9800	0.93 J	0.37 J	1300 J	7.9	0.10 U	540000	0.20 U	24	0.080 U
	DTW31D042013	Duplicate	North Bedrock	4/10/2013	31 U	0.60 U	0.45 J	8.2	0.24 U	0.12 U	57,000	1.5 U	0.10 U	1.6 J	30 U	0.50 U	9,800	0.38 J	0.31 J	1,300 J	9	0.10 U	500,000	0.20 U	23	0.080 U
	TMW31D042013	Normal	North Bedrock	4/10/2013	31 U	0.60 U	0.45 J	7.8	0.24 U	0.12 U	50,000	1.5 U	0.10 U	1.7 J	30 U	0.50 U	8,600	0.54 J	0.43 J	1,400 J	10	0.10 U	520,000	0.20 U	23	0.080 U
	TMW31D102012	Normal	North Bedrock	10/30/2012	31 U	0.60 U	0.43 J	9.4	0.24 U	0.12 U	62,000	1.5 U	0.10 U	1.7 J	30 U	0.50 U	10,000	0.32 J	0.90 U	1,400 J	7	0.10 U	530,000	0.10 U	24	0.080 U
	TMW31D042012	Normal	North Bedrock	4/23/2012	53	0.52 U	2.2	10	0.25 U	0.27 U	74,000	0.68 J	0.17 J	3.9 J	120	0.41 J	12,000	45	1.8 J	1,300	12	0.18 U	450,000	0.16 U	73	0.027 U
TMW32	TMW32102013	Normal	North Bedrock	11/7/2013	31 U	0.50 J	1.5 J	9.5	0.24 U	0.12 U	10000	1.5 U	0.061 J	1.5 U	**30 U**	0.50 U	1000	31	0.90 U	1100 J	3.1 J	0.10 U	710000	0.20 U	2.0 J	0.080 U
	TMW32042013	Normal	North Bedrock	4/11/2013	31 U	0.60 U	1.1 J	8.1 J	0.24 U	0.12 UJ	11,000	1.5 U	0.075 J	1.5 U	30 U	0.50 UJ	1,300	35 J	0.46 J	1,600 J	0.78 J	0.10 UJ	660,000	0.20 UJ	6.0 U	0.080 U
	TMW32102012DUP	Duplicate	North Bedrock	10/30/2012	31 U	0.60 U	0.69 J	9.7	0.24 U	0.12 U	11,000	1.5 U	0.10 U	0.58 J	30 U	0.50 U	1,200	27	0.90 U	1,200 J	3.9 J	0.10 U	710,000	0.10 U	4.3 J	0.080 U
	TMW32102012	Normal	North Bedrock	10/30/2012	31 U	0.60 U	0.50 J	10	0.24 U	0.12 U	11,000	1.5 U	0.10 U	0.72 J	30 U	0.50 U	1,200	25	0.90 U	1,000 J	3.9 J	0.10 U	710,000	0.10 U	2.7 J	0.080 U
	TMW32042012	Normal	North Bedrock	4/24/2012	150	0.52 U	2.2	14	0.25 U	0.27 U	17,000	0.55 J	0.2 J	3.1 J	63 J	0.46 J	1,900 J	**64**	0.83 J	820	3.7 J	0.18 U	730,000	0.16 U	23 J	0.027 U
TMW36	TMW36102013	Normal	North Bedrock	11/5/2013	**1900**	0.60 U	1.5 J	23	0.13 J	0.12 U	15000	5.8 J	1.2	3.1	**1300**	8.2	2200	**120**	19	1800 J	2.0 U	1.1 J	830000	0.20 U	280	0.080 U
	TMW36042013	Normal	North Bedrock	4/15/2013	160 J	0.60 R	0.35 J	11	0.24 U	0.12 U	8,400	0.50 J	0.12 J	1.5 U	79 J	0.53 J	920	14	0.69 J	1,200 J	2.0 U	0.062 J	690,000	0.062 U	13 J	0.080 U
	TMW36102012	Normal	North Bedrock	11/5/2012	180 J	0.60 U	0.47 J	9.3	0.24 U	0.12 U	8,900	1.5 U	0.12 J	1.5 U	110	0.66 J	1,100	33	0.63 J	1,000 J	2.0 U	0.13 J	720,000	0.10 U	16 J	0.080 U
	TMW36042012	Normal	North Bedrock	4/20/2012	34 J	0.52 U	0.61 U	10	0.25 U	0.27 U	17,000	1.2 J	0.15 J	12	87 J	0.38 J	2,600	30	1.2 J	900	1.7 J	0.18 U	830,000	0.16 U	10 J	0.027 U
TMW37	TMW37102013	Normal	North Bedrock	10/31/2013	**250 J**	0.60 U	0.41 J	12	0.24 U	0.12 U	5600	0.58 J	0.14 U	0.98 J	**120**	0.71 J	650	15	2.3 J	1200 J	2.0 U	0.077 J	550000	0.20 U	28	0.080 U
	TMW37042013	Normal	North Bedrock	4/12/2013	**210 J**	0.60 U	0.57 J	16	0.24 U	0.12 U	9,600	0.60 J	0.13 J	1.2 J	140	1.0 J	1,100	41	1.6 J	1,000 J	2.0 U	0.10 U	650,000	0.20 U	30	0.080 U
	TMW37102012	Normal	North Bedrock	11/2/2012	**110 J**	0.60 U	0.48 J	13 J	0.24 U	0.12 U	5,800	1.5 U	0.12 J	0.63 J	70 J	0.60 J	640	15	1.9 U	1,000 J	2.0 U	0.033 J	560,000	0.10 U	21	0.080 U
	TMW37042012	Normal	North Bedrock	4/23/2012	160	0.57 J	1.3 J	13	0.25 U	0.27 U	7,900	2.4 J	0.21 J	2.2 J	120	1.3	960 J	19	2.7 J	650	2.2 J	0.21 J	480,000	0.16 U	51	0.027 U
TMW38	TMW38102013	Normal	North Bedrock	10/31/2013	31 U	0.60 U	0.75 J	22	0.24 U	0.12 U	10000	1.5 U	0.080 U	1.5 U	**89 J**	0.50 U	1300	**89**	0.90 U	1600 J	2.0 U	0.10 U	720000	0.20 U	2.1 U	0.080 U
	TMW38042013	Normal	North Bedrock	4/11/2013	38 J	0.46 J	0.75 J	22 J	0.24 U	0.12 UJ	11,000	1.5 U	0.12 J	0.57 J	110	0.50 UJ	1,600	**93 J**	0.33 J	1,400 J	2.0 U	0.10 UJ	730,000	0.20 UJ	5.3 J	0.080 U
	TMW38102012	Normal	North Bedrock	11/8/2012	22 J	0.60 U	0.73 J	20	0.24 U	0.12 U	8,200	1.5 U	0.12 J	1.5 U	130	0.50 U	1,400	**83**	0.36 J	1,200 J	0.86 J	0.10 U	660,000	0.10 U	2.3 J	0.080 U
	TMW38042012	Normal	North Bedrock	4/20/2012	42 J	2.9	1.8	24	0.25 U	0.31 J	8,600	0.3 U	0.16 J	7.4	160	0.24 U	1,500 J	**93**	0.66 J	970	2.1 J	0.18 U	520,000	0.16 U	17 J	0.027 U
TMW39D	TMW39D102013	Normal	North Bedrock	11/6/2013	31 U	0.60 U	1.0 U	8.7	0.24 U	0.12 U	19000	1.5 U	0.10 U	1.5 U	**30 U**	0.50 U	1900	**54**	0.33 J	1400 J	2.0 U	0.10 U	800000	0.20 U	6.0 U	0.080 U
	TMW39D042013	Normal	North Bedrock	4/10/2013	31 U	0.60 U	1.0 U	11	0.24 U	0.12 U	28,000	1.5 U	0.10 U	1.5 U	30 U	0.50 U	4,100	49	0.90 U	1,300 J	2.0 J	0.10 U	640,000	0.20 U	6.0 U	0.080 U
	TMW39D102012	Normal	North Bedrock	10/31/2012	31 U	0.60 U	0.46 J	11 J	0.24 U	0.12 U	19,000	1.5 U	0.056 J	1.5 U	30 U	0.50 U	2,100	**61**	0.90 U	1,200 J	0.74 J	0.10 U	780,000	0.10 U	6.0 U	0.080 U
	TMW39D042012	Normal	North Bedrock	4/23/2012	11 J	0.68 J	2.1	16	0.25 U	0.27 U	57,000	0.3 U	0.18 J	2.4 J	48 U	0.24 U	8,900	21	1.6 J	1,500	8	0.18 U	500,000	0.16 U	17 J	0.1 J
TMW40D	TMW40D102013	Normal	North Bedrock	11/7/2013	31 U	0.60 U	0.48 J	11	0.24 U	0.12 U	15000	1.5 U	0.10 U	1.5 U	**30 U**	0.50 U	1900	49	0.90 U	1400 J	3.1 J	0.10 U	750000	0.062 J	4.1 J	0.080 U
	TMW40D042013	Normal	North Bedrock	4/11/2013	59 J	0.60 U	0.53 J	11 J	0.24 U	0.12 UJ	15,000	1.5 U	0.10 U	1.5 U	35 J	0.50 UJ	2,100	49 J	0.90 U	1700 J	3.5 J	0.10 UJ	690,000	0.20 UJ	7.7 J	0.080 U
	TMW40D102012	Normal	North Bedrock	11/1/2012	**740**	0.60 U	0.76 J	21	0.24 U	0.12 U	15,000	0.98 J	0.32 J	2.3	**460**	0.51 J	2,100	**62**	1.4 U	1700 J	4.2 J	0.088 J	750,000	0.10 U	43	0.080 U
	TMW40D042012	Normal	North Bedrock	4/23/2012	21 J	0.52 U	2.2	16	0.25 U	0.27 U	28,000	0.58 J	0.14 J	2.8 J	48 U	0.24 U	4,200	**57**	1 J	990	8	0.18 U	810,000	0.84 U	25 J	0.027 U
TMW48	TMW48102013	Normal	North Bedrock	10/31/2013	21 U	0.60 U	0.69 J	12	0.24 U	0.12 U	77000	1.5 U	0.10 U	0.77 J	**30 U**	0.50 U	16000	6.3	0.58 J	1400 J	8.6	0.10 U	540000	0.20 U	12 U	0.080 U
	DTW48102013	Duplicate	North Bedrock	10/31/2013	30 U	0.60 U	0.69 J	12	0.24 U	0.12 U	76000	1.5 U	0.10 U	0.82 J	**30 U**	0.50 U	15000	6.3	0.87 J	1500 J	8.6	0.10 U	540000	0.20 U	12 U	0.080 U
	DTW48042013	Duplicate	North Bedrock	4/10/2013	31 U	0.60 U	0.66 J	11	0.24 U	0.15 J	71,000	1.5 U	0.10 U	0.96 J	30 U	0.50 UJ	15,000	1.6 J	0.40 J	1100 J	9	0.10 U	500,000	0.20 U	9.4 J	0.080 U
	TMW48042013	Normal	North Bedrock	4/10/2013	31 U	0.60 U	0.71 J	11	0.24 U	0.12 UJ	71,000	1.5 U	0.10 U	0.80 J	30 U	0.18 J	15,000	1.5 J	0.43 J	1,300 J	8	0.10 U	500,000	0.20 U	9.5 J	0.080 U
	TMW48102012	Normal	North Bedrock	11/2/2012	31 U	0.60 U	0.85 J	16 J	0.24 U	0.12 U	74,000	0.55 J	0.071 J	1.2 J	30 U	0.50 U	15,000	1.8 J	1.0 U	1,400 J	9	0.10 U	530,000	0.10 U	12 J	0.080 U
	TMW48042012	Normal	North Bedrock	4/25/2012	7.3 J	0.52 U	1.5	12	0.25 U	0.27 U	84,000	0.72 J	0.15 J	20	48 J	0.34 J	15,000	1.9 J	1.9 J	870	9	0.18 U	500,000	0.16 U	28 J	0.027 U

TABLE 5-8
Summary of Total Metals Analytical Detections (Page 8 of 9)
Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	EPA Method 6010/6020 (µg/L)																				EPA Method 7470 (µg/L)
					Aluminum CAS 7429-90-5	Antimony CAS 7440-36-0	Arsenic CAS 7440-38-2	Barium CAS 7440-39-3	Beryllium CAS 7440-41-7	Cadmium CAS 7440-43-9	Calcium CAS 7440-70-2	Chromium CAS 7440-47-3	Cobalt CAS 7440-48-4	Copper CAS 7440-50-8	Iron CAS 7439-89-6	Lead CAS 7439-92-1	Magnesium CAS 7439-95-4	Manganese CAS 7439-96-5	Nickel CAS 7440-02-0	Potassium CAS 7440-09-7	Selenium CAS 7782-49-2	Silver CAS 7440-22-4	Sodium CAS 7440-23-5	Thallium CAS 7440-28-0	Zinc CAS 7440-66-6	Mercury CAS 7439-97-6
					Regulatory Limits																				
					[a]200	[b]6	[b]10	[c]1000	[b]4	[b]5	N/A	[c]50	[c]50	[c]1000	[a]300	[b]15	N/A	[a]50	[c]200	N/A	[c]50	[c]50	N/A	[b]2	[a]5000	[c]2
TMW49	DTW49102013	Duplicate	North Bedrock	11/6/2013	47 J	0.60 U	0.60 J	12	0.24 U	0.12 U	74000	0.51 J	0.10 U	1.1 J	**24 J**	0.50 U	12000	1.3 J	0.46 J	1400 J	19	0.10 U	610000	0.20 U	6.5 J	0.080 U
	TMW49102013	Normal	North Bedrock	11/6/2013	45 J	0.60 U	0.60 J	12	0.24 U	0.12 U	74000	0.60 J	0.10 U	1.2 J	**52 J**	0.50 U	12000	1.3 J	0.35 J	1400 J	19	0.10 U	590000	0.20 U	6.5 J	0.080 U
	DTW49042013	Duplicate	North Bedrock	4/15/2013	**210 J**	0.60 R	0.65 J	13	0.24 U	0.12 U	65,000	0.70 J	0.098 J	1.1 J	74 J	0.50 U	11,000	1.3 J	0.65 J	1,600 J	18	0.099 J	570,000	0.20 U	6.3 J	0.080 U
	TMW49042013	Normal	North Bedrock	4/15/2013	**210 J**	0.60 R	0.73 J	13	0.24 U	0.12 U	65,000	0.86 J	0.058 J	0.88 J	73 J	0.50 U	11,000	1.3 J	0.33 J	1,600 J	18	0.10 UJ	580,000	0.20 U	5.0 J	0.080 U
	TMW49102012	Normal	North Bedrock	10/31/2012	18 J	0.60 U	0.71 J	19 J	0.24 U	0.12 U	67,000	0.69 J	0.10 U	1.8 J	30 U	0.50 U	11,000	0.75 J	1.6 J	1,300 J	15	0.10 U	580,000	0.10 U	16 J	0.080 U
	TMW49042012	Normal	North Bedrock	4/25/2012	10 J	0.52 U	2.6	16	0.25 U	0.27 U	85,000	7.3 J	0.38 J	3.9 J	120	0.42 J	12,000	7	19	1,300	21	0.18 U	660,000	0.16 U	19 J	0.027 U
CMW02	[e] Well not sampled in fall 2013																								
	CMW02042013	Normal	OBOD	4/2/2013	31 U	0.60 U	4.6 J	32	0.24 U	0.12 U	6,300	1.5 U	0.10 U	0.56 J	30 U	0.47 J	1,100	0.76 U	0.90 U	780 J	4.3 J	0.10 U	200,000	0.20 U	3.3 J	0.080 U
	CMW02102012	Normal	OBOD	10/29/2012	31 U	0.60 U	4.5 J	35	0.24 U	0.12 U	6,600	1.5 U	0.10 U	1.5 U	30 U	0.50 U	1,100	2.0 J	0.90 U	1,000 J	3.5 J	0.10 U	180,000	0.10 U	3.8 J	0.080 U
	CMW02042012	Normal	OBOD	4/16/2012	14 J	0.54 J	4.3	29	0.25 U	0.27 U	35,000	1.6 J	0.12 U	2.9 J	69 J	0.24 U	75,000	4.4 J	0.61 J	720	4.9 J	0.18 U	190,000	0.16 U	16 J	0.027 U
CMW04	[e] Well not sampled in fall 2013																								
	CMW04042013	Normal	OBOD	4/2/2013	25 J	0.60 U	1.0 U	11	0.24 U	0.12 U	41,000	1.5 U	0.18 J	1.5 U	170	0.18 J	4,700	**210**	0.90 U	2200 J	2.0 U	0.10 U	1,100,000	0.20 U	4.2 J	0.080 U
	CMW04102012	Normal	OBOD	10/29/2012	31 U	0.60 U	0.36 J	9.8	0.24 U	0.12 U	39,000	1.5 U	0.26 J	1.5 U	210 UJ	0.50 U	4,400	**170**	0.33 J	4,400	2.0 U	0.20 U	1,200,000	0.20 U	6.6 J	0.080 U
	CMW04042012	Normal	OBOD	4/17/2012	7 J	0.52 U	0.61 U	9.6 J	1 U	0.44 J	56,000	0.92 J	0.35 J	12	260	0.24 U	7,900	**180**	1.2 J	2,100	1.5 U	0.18 U	1,100,000	0.16 U	11 J	0.027 U
CMW07	[e] Well not sampled in fall 2013																								
	CMW07042013	Normal	OBOD	4/4/2013	31 U	0.60 U	1.1 J	21 J	0.24 U	0.12 U	11,000	1.5 U	0.16 J	1.5 U	210	0.50 U	2,000	15	0.73 J	1,600 J	2.0 U	0.10 U	360,000	0.20 U	6.0 U	0.080 U
	CMW07102012	Normal	OBOD	10/30/2012	31 U	0.60 U	0.81 J	22	0.24 U	0.12 U	12,000	1.5 U	0.11 J	1.5 U	290	0.50 U	2,100	11	0.45 J	1,200 J	2.0 U	0.10 U	370,000	0.10 U	6.0 U	0.080 U
	CMW07042012	Normal	OBOD	4/19/2012	8.9 J	0.94 J	1.1 J	20	0.25 U	0.37 U	13,000	0.3 U	0.14 J	4.9 J	130	0.26 J	2,400	7	0.54 J	1,400	1.5 U	0.18 U	320,000	0.16 U	5.9 J	0.027 U
CMW10	[e] Well not sampled in fall 2013																								
	CMW10042013	Normal	OBOD	4/3/2013	**1,200**	0.60 U	3.4 J	31	0.24 U	0.10 J	80,000	15	0.50 J	5.1	**550**	0.49 J	2,000	27	1.8 J	7,400	34	0.10 U	1,300,000	0.20 U	32	0.080 U
	CMW10102012	Normal	OBOD	11/7/2012	**1,200**	0.60 U	2.9 J	34	0.24 U	0.22 J	69,000	11	0.49 J	0.93 J	**490**	0.39 J	2,800	28	1.4 J	6,000	34	0.10 U	1,300,000	0.10 U	30	0.080 U
	CMW10042012	Normal	OBOD	4/19/2012	170	2.5	5.1	18	1 U	0.27 U	74,000	12	0.3 J	14	280	0.24 J	2,300	26	1.9 J	4,700	47	0.2 J	990,000	0.16 U	23 J	0.027 U
CMW14	[e] Well not sampled in fall 2013																								
	CMW14042013	Normal	OBOD	4/3/2013	**500**	0.60 U	0.67 J	25	0.24 U	0.10 J	41,000	18	0.18 J	1.1 J	30 U	0.50 U	65 J	0.46 J	0.63 J	5,800	0.71 J	0.10 U	1,300,000	0.20 U	6.5 J	0.080 U
	CMW14102012	Normal	OBOD	11/6/2012	**450**	0.60 UJ	0.67 J	25	0.24 U	0.12 U	41,000	25	0.16 J	0.74 J	56 J	0.50 U	120 J	0.39 J	0.57 J	5,100	2.0 U	0.10 U	1,200,000	0.10 U	4.4 J	0.080 U
	CMW14042012	Normal	OBOD	4/19/2012	**25 J**	0.52 U	1.1 J	26	1 U	0.27 U	29,000	**78**	0.32 J	14	48 U	0.24 U	2,800	1.9 J	1.3 J	3,600	3.7 J	0.71 J	1,900,000	0.16 U	33 J	0.027 U
CMW17	[e] Well not sampled in fall 2013																								
	CMW17042013	Normal	OBOD	4/3/2013	**210 J**	0.60 U	7.3	22	0.24 U	0.12 U	2,300	0.57 J	0.064 J	1.1 J	98 J	0.50 U	1,100	1.5 J	0.32 J	1,600 J	2.1 J	0.10 U	270,000	0.20 U	2.1 J	0.080 U
	CMW17102012DUP	Duplicate	OBOD	11/6/2012	**40,000**	0.60 UJ	5.3	450 J	1.3 J	0.12 J	46,000	6.8 J	4.2	3.6	**20,000**	6.1	15,000	**370 J**	5.7 J	8,800	1.4 J	1.1 J	280,000	0.19 J	28	0.080 U
	CMW17102012	Normal	OBOD	11/6/2012	**29,000**	0.60 UJ	6.6	170 J	0.66 J	0.14 J	33,000	14 J	6.2	5.9	**13,000**	6.5	11,000	**330 J**	12 J	6,600	1.7 J	2.7 J	260,000	0.21 J	42	0.080 U
	CMW17042012	Normal	OBOD	4/17/2012	**3,000**	0.92 J	8.4	46	0.25 U	0.27 U	5,800	3 J	0.84 J	4.9 J	**1,900**	1.5	2,900	35	1.9 J	1,700	1.7 J	0.27 J	290,000	0.16 U	24 J	0.027 U
CMW18	[e] Well not sampled in fall 2013																								
	CMW18042013	Normal	OBOD	4/4/2013	33 J	0.60 UJ	0.84 J	49 J	0.24 U	0.12 U	48,000	0.60 J	0.10 UJ	1.5 U	23 J	0.50 U	13,000	0.70 J	0.90 U	1,200 J	2.8 J	0.10 UJ	140,000	0.080 UJ	4.4 J	0.080 U
	DCW18042013	Duplicate	OBOD	4/4/2013	31 UJ	0.40 J	1.0 J	56 J	0.24 U	0.12 U	47,000	0.56 J	0.074 J	1.5 U	30 UJ	0.50 U	13,000	0.57 J	0.90 U	1,300 J	2.5 J	0.061 J	130,000	0.18 UJ	6.2 J	0.080 U
	CMW18102012	Normal	OBOD	11/6/2012	31 U	0.60 UJ	1.0 J	46	0.24 U	0.12 U	51,000	0.65 J	0.10 U	1.5 U	30 U	0.50 U	15,000	0.60 J	1.1 J	1,100 J	2.3 J	0.10 U	150,000	0.10 U	4.9 J	0.080 U
	CMW18042012	Normal	OBOD	4/17/2012	11 J	0.52 U	2.2	52	0.25 U	0.27 U	52,000	0.7 J	0.12 U	2.3 J	97 J	0.24 U	16,000	4.2 J	1.3 J	980	1.5 U	0.18 U	160,000	0.16 U	17 J	0.027 U
CMW19	[e] Well not sampled in fall 2013																								
	CMW19042013	Normal	OBOD	4/4/2013	**2,600**	0.60 U	0.93 J	37 J	0.18 J	0.12 U	4,600	1.4 J	0.45 J	2	**980**	0.81 J	1,800	17	4	3,200	2.0 U	1.6 J	350,000	0.20 U	45	0.080 U
	CMW19102012	Normal	OBOD	10/30/2012	**880**	0.60 U	1.0 J	28	0.24 U	0.12 U	4,200	0.90 J	0.20 J	1.1 J	200	0.31 J	1,300	8	4	2,400 J	2.0 U	1.4 J	350,000	0.10 U	25	0.080 U
	CMW19042012	Normal	OBOD	4/24/2012	**890**	0.52 U	1.6	44	0.25 U	0.27 U	32,000	1.2 J	0.38 J	3 J	**420**	0.67 J	7,100	**100**	2 J	2,200	9	0.18 U	610,000	0.16 U	33 J	0.027 U

TABLE 5-8
Summary of Total Metals Analytical Detections (Page 9 of 9)
Groundwater Periodic Monitoring Report July through December 2013

Well Identifier	Sample Identifier	Sample Type	Groundwater Zone	Sample Date	EPA Method 6010/6020 (µg/L)																				EPA Method 7470 (µg/L)
					Aluminum CAS 7429-90-5	Antimony CAS 7440-36-0	Arsenic CAS 7440-38-2	Barium CAS 7440-39-3	Beryllium CAS 7440-41-7	Cadmium CAS 7440-43-9	Calcium CAS 7440-70-2	Chromium CAS 7440-47-3	Cobalt CAS 7440-48-4	Copper CAS 7440-50-8	Iron CAS 7439-89-6	Lead CAS 7439-92-1	Magnesium CAS 7439-95-4	Manganese CAS 7439-96-5	Nickel CAS 7440-02-0	Potassium CAS 7440-09-7	Selenium CAS 7782-49-2	Silver CAS 7440-22-4	Sodium CAS 7440-23-5	Thallium CAS 7440-28-0	Zinc CAS 7440-66-6	Mercury CAS 7439-97-6
					Regulatory Limits																				
					[a]200	[b]6	[b]10	[c]1000	[b]4	[b]5	N/A	[c]50	[c]50	[c]1000	[a]300	[b]15	N/A	[a]50	[c]200	N/A	[c]50	[c]50	N/A	[b]2	[a]5000	[c]2
CMW22	[e] Well not sampled in fall 2013																								
	CMW22042013	Normal	OBOD	4/5/2013	**5,900**	0.60 U	1.5 J	450	0.58 J	0.12 U	14,000	3.6 J	1.5	3.6	**2,800**	4.4	2,300	**250**	5	1,800 J	2.0 U	0.57 J	170,000	0.20 U	17 J	0.080 U
	CMW22102012	Normal	OBOD	11/1/2012	**550**	0.60 U	0.65 J	140	0.24 U	0.12 U	5,300	0.85 J	0.17 J	0.86 J	250	0.43 J	800	18	0.69 U	1,000 J	2.0 U	0.053 J	180,000	0.10 U	3.7 J	0.080 U
	CMW22042012	Normal	OBOD	4/18/2012	**240**	0.52 U	0.61 U	120	0.25 U	0.27 U	20,000	1.4 J	0.28 J	3.1 J	210	0.29 J	4,900	**59**	1.1 J	920	1.5 U	0.18 U	170,000	0.16 U	17 J	0.027 U
CMW23	[e] Well not sampled in fall 2013																								
	CMW23042013	Normal	OBOD	4/8/2013	**4,500**	0.60 UJ	4.1 J	16	0.26 J	0.12 U	12,000	2.6 J	0.84 J	4.9	**1,700**	1.7 J	2,000	43	1.3 J	1,300 J	2.2 J	0.042 J	420,000	0.20 U	30	0.080 U
	CMW23102012	Normal	OBOD	10/30/2012	**16,000**	0.60 U	3.4 J	97	1.1	0.12 U	17,000	6.9 J	2.4	16	**5,800**	7.1	4,100	**160**	5	1,900 J	1.1 J	0.17 J	310,000	0.085 J	92	0.048 J
	CMW23042012	Normal	OBOD	4/20/2012	**670**	1.1 J	5.8	5.8 J	0.25 U	0.27 U	40,000	0.39 J	0.32 J	12	**310**	1.5	5,000	**61**	1.5 J	1,600	2.7 J	0.18 U	760,000	0.16 U	27 J	0.027 U
CMW24	[e] Well not sampled in fall 2013																								
	CMW24042013	Normal	OBOD	4/5/2013	**240 J**	0.60 U	1.0 U	29	0.24 U	0.12 U	5,900	0.65 J	0.11 J	1.5 U	160	0.21 J	1,100	**84**	1.7 J	2,000 J	2.0 U	0.10 U	630,000	0.20 U	68	0.080 U
	CMW24102012	Normal	OBOD	11/1/2012	**6,100**	0.60 U	1.4 J	83	0.22 J	0.36 J	8,300	9.5 J	2.1	6.6	**3,900**	3.5	2,700	**180**	9	2,700 J	2.0 U	0.31 J	660,000	0.058 J	2,200	0.080 U
	CMW24042012	Normal	OBOD	4/24/2012	**480**	0.52 U	0.64 J	41	0.25 U	0.27 U	8,500	1.3 J	0.27 J	19	**990**	1.3	1,300 J	**180**	1.9 J	1,200	1.5 U	0.18 U	560,000	0.16 U	850	0.027 U
CMW25	[e] Well not sampled in fall 2013																								
	CMW25042013	Normal	OBOD	4/8/2013	**410**	0.60 UJ	0.82 J	25	0.24 U	0.12 U	3,300	0.58 J	0.11 J	1.5 U	170	0.29 J	690	21	0.90 U	650 J	2.0 U	0.10 U	250,000	0.20 U	5.6 J	0.080 U
	CMW25102012	Normal	OBOD	11/7/2012	**420**	0.60 U	0.74 J	29	0.24 U	0.12 U	3,500	1.5 U	0.079 J	1.5 U	170	0.48 J	810	22	0.39 J	800 J	2.0 U	0.10 U	290,000	0.10 U	6.6 J	0.080 U
	CMW25042012	Normal	OBOD	4/20/2012	**580**	0.52 U	0.98 J	35	0.25 U	0.27 U	9,000	0.55 J	0.16 J	1.7 J	220	0.59 J	1,600 J	35	0.48 J	540	1.5 U	0.18 U	270,000	0.16 U	14 J	0.027 U
KMW09	[e] Well not sampled in fall 2013																								
	KMW09042013	Normal	OBOD	4/4/2013	31 U	0.60 U	0.75 J	11 J	0.24 U	0.12 U	190,000	1.5 U	0.071 J	1.5 U	230	0.50 U	37,000	**220**	0.54 J	14,000	2.0 U	0.10 U	630,000	0.20 U	12 J	0.080 U
	KMW09102012	Normal	OBOD	10/26/2012	24 J	0.60 U	0.82 J	11	0.24 U	0.12 U	190,000	1.5 U	0.11 J	1.5 U	270	0.50 UJ	38,000	190 J	0.96 J	14,000	2.0 U	0.10 UJ	650,000 J	0.10 U	6.0 U	0.080 U
	KMW09042012	Normal	OBOD	4/18/2012	26 J	0.52 U	0.82 J	11	0.25 U	0.27 U	190,000	0.75 J	0.28 J	6.9	**860**	0.24 U	36,000	**200**	5.3 J	12,000	1.5 U	0.18 U	570,000	0.16 U	16 J	0.027 U
KMW10	[e] Well not sampled in fall 2013																								
	KMW10042013	Normal	OBOD	4/5/2013	**700**	0.60 U	1.8 J	24	0.24 U	0.10 J	120,000	5.2 J	0.38 J	2.7	**440**	1.1 J	25,000	18	1.7 J	3,000	20	0.35 J	45,000	0.20 U	20	0.080 U
	KMW10102012	Normal	OBOD	10/29/2012	140 J	0.60 U	1.8 J	17	0.24 U	0.25 J	120,000	1.5 U	0.17 J	0.56 J	97 UJ	0.50 U	25,000	3.2 J	0.74 J	2,300 J	23	0.16 J	44,000	0.10 U	3.8 J	0.080 U
	KMW10042012	Normal	OBOD	4/21/2012	110	4.8	3.7	18	0.25 U	0.37 U	120,000	0.36 J	0.44 J	2.7 J	220	0.54 J	24,000	25	2.8 J	2,100	27	0.18 U	84,000	0.16 U	18 J	0.027 U
KMW11	[e] Well not sampled in fall 2013																								
	KMW11042013	Normal	OBOD	4/4/2013	31 U	0.60 U	**26**	30 J	0.24 U	0.12 U	2,300	1.5 U	0.10 U	1.5 U	28 J	0.50 U	1,000	2.1 J	0.90 U	1,000 J	3.7 J	0.10 U	250,000	0.20 U	3.1 J	0.080 U
	KMW11102012	Normal	OBOD	11/1/2012	31 U	0.60 U	**29**	27	0.24 U	0.12 U	2,300	1.5 U	0.10 U	1.5 U	30 U	0.50 U	1,000	1.8 J	0.32 U	1,100 J	4.9 J	0.10 U	260,000	0.10 U	3.7 J	0.080 U
	KMW11042012	Normal	OBOD	4/18/2012	15 J	0.52 U	**28**	27	0.25 U	0.27 U	2,400	1.1 J	0.12 U	2.2 J	48 U	0.24 U	1,100 J	2.2 J	0.61 J	800	2.9 J	0.18 U	220,000	0.16 U	14 J	0.027 U
KMW12	[e] Well not sampled in fall 2013																								
	KMW12042013	Normal	OBOD	4/5/2013	31 U	0.60 U	1.0 U	13	0.24 U	0.12 U	250,000	25	3.2	0.88 J	**500**	0.23 J	66,000	**820**	71	15,000	2.0 U	0.12 J	670,000	0.052 U	9.4 J	0.080 U
	KMW12102012	Normal	OBOD	10/29/2012	**2500 J**	1.2 U	0.73 J	29	0.48 U	0.24 U	350,000	8.4 J	2.8	1.6 J	**3,100 J**	1.5 J	100,000	**850 J**	15	17,000	4.0 U	0.20 U	650,000	0.20 U	15 J	0.080 U
	KMW12042012	Normal	OBOD	4/18/2012	**230**	0.83 J	0.61 U	14	0.25 U	0.54 J	270,000	4 J	3 J	7	**1,200**	1.5	73,000	**680**	15	13,000	1.5 J	0.18 U	580,000	0.52 U	25 J	0.027 U

Acronyms and Abbreviations

CAS: Chemical Abstract Services (registry number)
J: analyte was positively identified; reported value is estimated
µg/L: microgram per liter
N/A: not applicable
NA : not analyzed
NS: not sampled
R: result is unusable for any purpose
U : Non-detected result reported at the limit of detection
UJ : The analyte was not detected; however the result is estimated because of discrepancies in meeting certain analyte-specific quality control criteria

Regulatory Limits:

[a] New Mexico Water Quality Control Commission - New Mexico Title 20, Chapter 6, Part 2, Section 3103
[b] EPA Maximum Contaminant Level - Code of Federal Regulations Title 40, Parts 141, 142, and 143
[c] EPA 2012. EPA Region 6, Regional Screening Levels (Formerly Human Health Medium Specific Screening Levels)
[d] Wells in the East Landfill were not sampled due to landfill excavation and removal
[e] Wells in the OB/OD area were not accessible during active remediation of the area

Note:

Bold indicates analyte was positively detected above regulatory limits

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MW24
Nitrate▫ND
Nitrite▫ND

Wingate 91
Nitrate▫NS
Nitrite▫NS

Wingate 90
Nitrate▫NS
Nitrite▫NS

Wingate 89
Nitrate▫NS
Nitrite▫NS

MW23
Nitrate▫ND
Nitrite▫ND

BGMW03
Nitrate▫4.7 mg/L
Nitrite▫0.15 J mg/L

BGMW02
Nitrate▫13 mg/L
Nitrite▫ND

TMW28
Nitrate▫NS
Nitrite▫NS

BGMW01
Nitrate▫ND
Nitrite▫ND

10A

10B

South Fork Rio Puerco

12

TMW27
Nitrate▫NS
Nitrite▫NS

SMW01
Nitrate▫ND
Nitrite▫ND

TMW26
Nitrate▫ND
Nitrite▫ND

TMW10
Nitrate▫0.25 J mg/L
Nitrite▫ND

MW22S
Nitrate▫19 mg/L
Nitrite▫ND

MW22D
Nitrate▫26 J mg/L
Nitrite▫ND

TMW35
Nitrate▫15 mg/L
Nitrite▫ND

TMW33
Nitrate▫ND
Nitrite▫ND

09

07

TMW46
Nitrate▫86 mg/L
Nitrite▫ND

11

TMW08
Nitrate▫4.4 J mg/L
Nitrite▫ND

TMW24
Nitrate▫ND
Nitrite▫ND

TMW34
Nitrate▫57 J mg/L
Nitrite▫ND

CISTERN

Administration Area

TMW23
Nitrate▫32 mg/L
Nitrite▫0.69 J mg/L

18

MW20
Nitrate▫11 mg/L
Nitrite▫0.62 J mg/L

TMW45
Nitrate▫ND
Nitrite▫ND

East Landfill

QAL

TMW25
Nitrate▫0.47 J mg/L
Nitrite▫ND

MW18D
Nitrate▫ND
Nitrite▫ND

TMW07
Nitrate▫ND
Nitrite▫ND

TMW22
Nitrate▫12 J mg/L
Nitrite▫ND

24

MW02
Nitrate▫1.6 mg/L
Nitrite▫ND

TMW44
Nitrate▫48 mg/L
Nitrite▫0.68 J mg/L

MW01
Nitrate▫7.3 mg/L
Nitrite▫ND

QCL

TMW03
Nitrate▫130 mg/L
Nitrite▫0.72 J mg/L

MW03
Nitrate▫9.6 mg/L
Nitrite▫ND

TMW47
Nitrate▫ND
Nitrite▫ND

FW35
Nitrate▫0.28 J mg/L
Nitrite▫ND

06

TMW21
Nitrate▫8.8 mg/L
Nitrite▫ND

TMW04
Nitrate▫43 mg/L
Nitrite▫ND

TMW06
Nitrate▫14 mg/L
Nitrite▫ND

TNT LEACHING BEDS

TMW40S
Nitrate▫140 mg/L
Nitrite▫0.22 J mg/L

TMW43
Nitrate▫9.4 mg/L
Nitrite▫ND

21

TMW41
Nitrate▫5.9 mg/L
Nitrite▫ND

TRPP

Workshop Area

TMW39S
Nitrate▫8.4 mg/L
Nitrite▫ND

13 TRPP

TMW11
Nitrate▫3.5 mg/L
Nitrite▫ND

TMW29
Nitrate▫3.3 mg/L
Nitrite▫ND

TMW31S
Nitrate▫7.7 mg/L
Nitrite▫ND

TMW15
Nitrate▫8.9 mg/L
Nitrite▫ND

TRPP

BUILDING 528 COMPLEX

TMW01
Nitrate▫9.3 mg/L
Nitrite▫ND

23

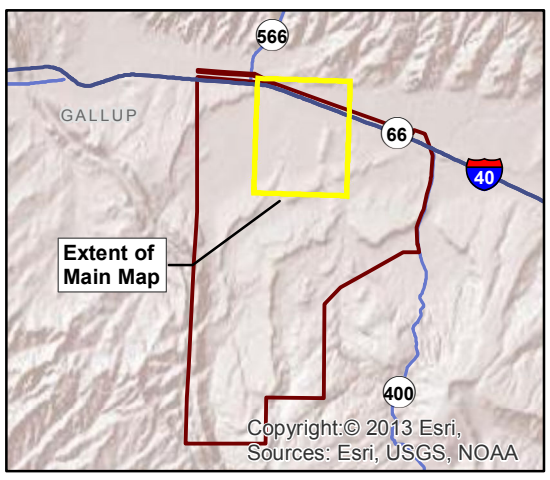
TMW13
Nitrate▫ND
Nitrite▫ND

16

TRPP

22

19 TRPP



Legend

- Alluvial Monitoring Well
- Bedrock Monitoring Well
- Piezometer
- Dry Well
- Water Supply Well 69
- Nitrate 12 mg/L — Bold data indicate analytical detection above the regulatory limit
- Fort Wingate Installation Boundary
- Building
- 10A — Property Transfer Parcel
- AOC and SWMU
- Arroyo
- Stream
- **Fall 2013 Isoconcentration Contour** (Dashed Where Inferred)
- Nitrate (10 mg/L)

Surface Geology

- QAL — QAL - Quaternary Alluvial Deposits
- QCL — QCL - Quaternary Colluvial and Gravel Deposits
- TRPP — TRPP - Petrified Forest Formation, Painted Desert Member

State Plane Coordinate System, New Mexico West, North American Datum 1983, US Feet.

Data Sources:
Roads, Railroad: Tele Atlas GDT-Dynamap, 2008;
Populated Places: ESRI 2005;
Fort Wingate Environmental Restoration Detail: USACE.

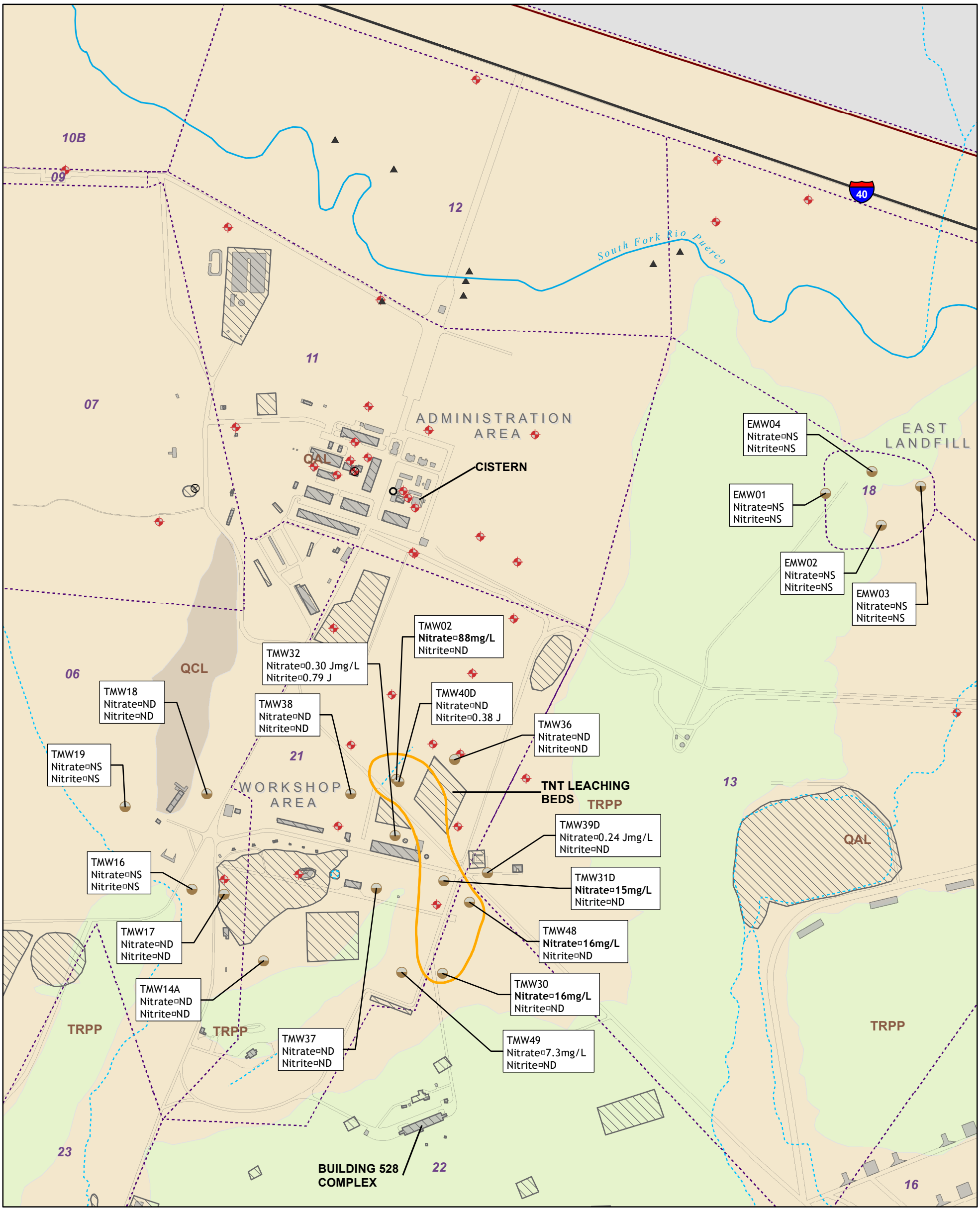
FIGURE 5-1
Fall 2013 Northern Area Nitrate and Nitrite Concentrations in Alluvial Groundwater

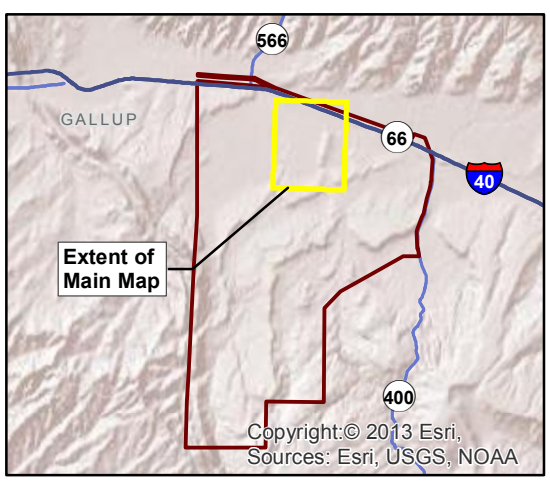
Groundwater Periodic Monitoring Report for July to December 2013
Fort Wingate Depot Activity, McKinley County, New Mexico

Notes:
ND = Not Detected
NS = Not Sampled
Nitrate was detected at well FW31 at 0.098 J mg/L (FW31 is approximately 5000 feet southeast of map view)

0 500 1,000 1,500 2,000 ft
0 100 200 300 400 500 m

N





State Plane Coordinate System, New Mexico West, North American Datum 1983, US Feet.

Data Sources:
Roads, Railroad: Tele Atlas GDT-Dynamap, 2008;
Populated Places: ESRI 2005;
Fort Wingate Environmental Restoration Detail: USACE.

Legend

- Alluvial Well
- Bedrock Monitoring Well
- Piezometer
- Dry Well
- Water Supply Well 69
- Nitrate 16 mg/L — Bold data indicate analytical detection above the regulatory limit
- Building
- 10A — Property Transfer Parcel
- Fort Wingate Installation Boundary

Surface Geology

- QAL - Quaternary Alluvial Deposits
- QCL - Quaternary Colluvial and Gravel Deposits
- TRPP - Petrified Forest Formation, Painted Desert Member
- Arroyo
- Stream
- AOC and SWMU

Fall 2013 Isoconcentration Contours
(Dashed where inferred)

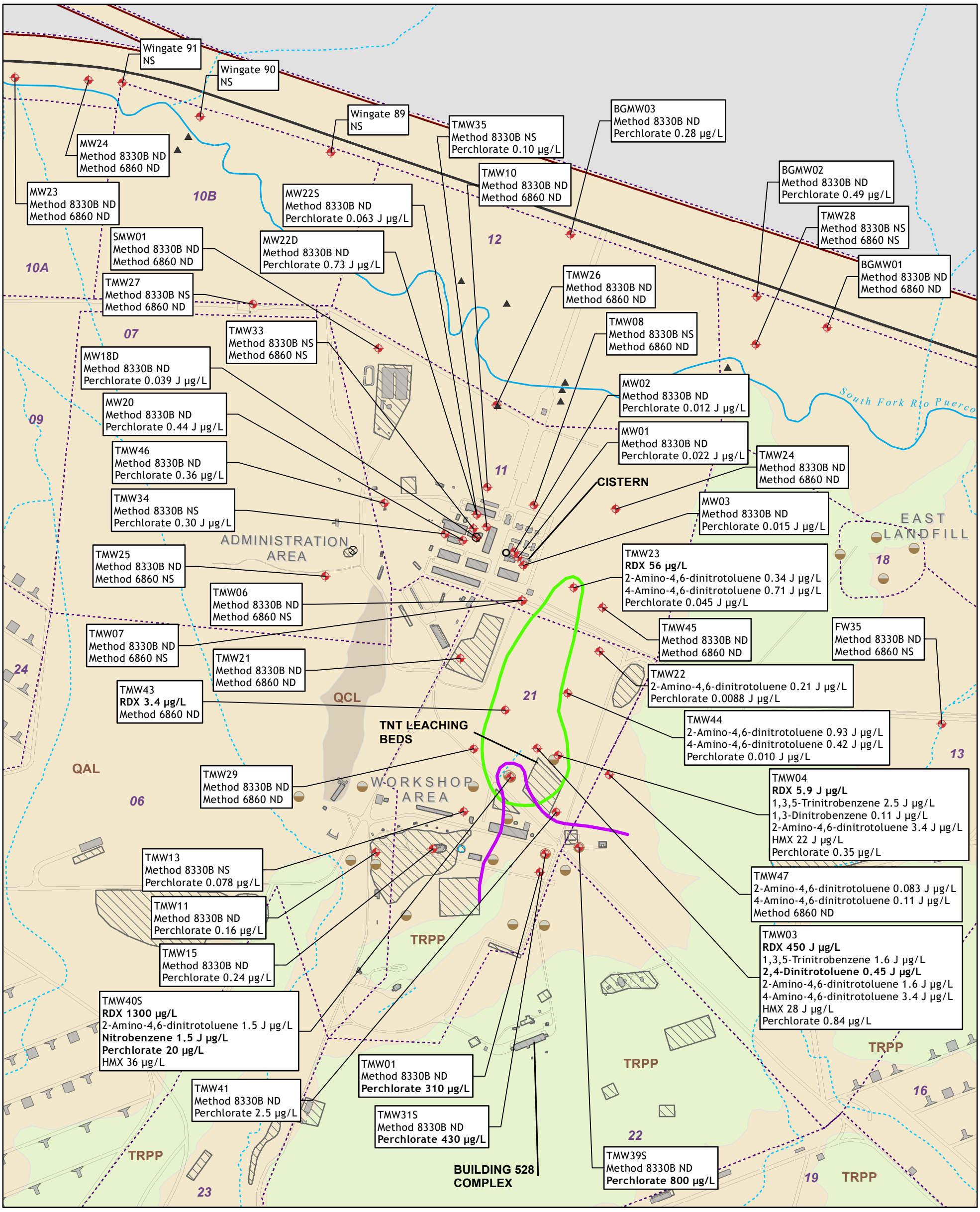
- Nitrate (10 mg/L)

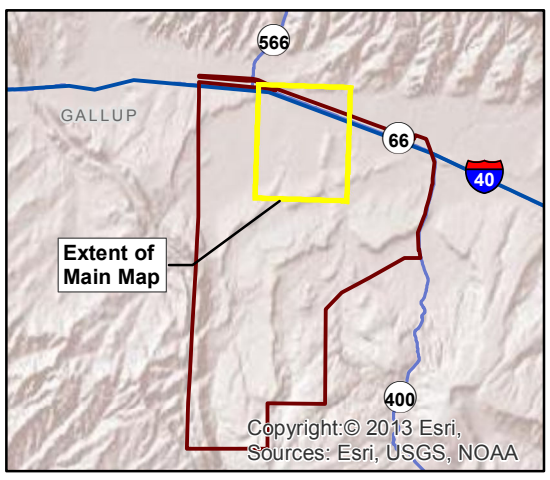
FIGURE 5-2
Fall 2013 Northern Area Nitrate and Nitrite Concentrations in Bedrock Groundwater

Groundwater Periodic Monitoring Report for July to December 2013
Fort Wingate Depot Activity, McKinley County, New Mexico

Notes:
ND = Not Detected
NS = Not Sampled

0 500 1,000 1,500 2,000 ft
0 100 200 300 400 500 m
N





State Plane Coordinate System, New Mexico West, North American Datum 1983, US Feet.

Data Sources:
Roads, Railroad: Tele Atlas GDT-Dynamap, 2008;
Populated Places: ESRI 2005;
Fort Wingate Environmental Restoration Detail: USACE.

Legend

- Alluvial Monitoring Well
- Bedrock Monitoring Well
- Piezometer
- Dry Well
- Water Supply Well 69
- RDX 56 — Bold data indicate an analytical detection above the regulatory limit
- Fort Wingate Installation Boundary
- Building
- AOC and SWMU
- 10A — Property Transfer Parcel
- Arroyo
- Stream

Fall 2013 Isoconcentration Contour
(Dashed Where Inferred)

- Perchlorate (6 µg/L)
- RDX (0.61 µg/L)

Surface Geology

- QAL — QAL - Quaternary Alluvial Deposits
- QCL — QCL - Quaternary Colluvial and Gravel Deposits
- TRPP — TRPP - Petrified Forest Formation, Painted Desert Member

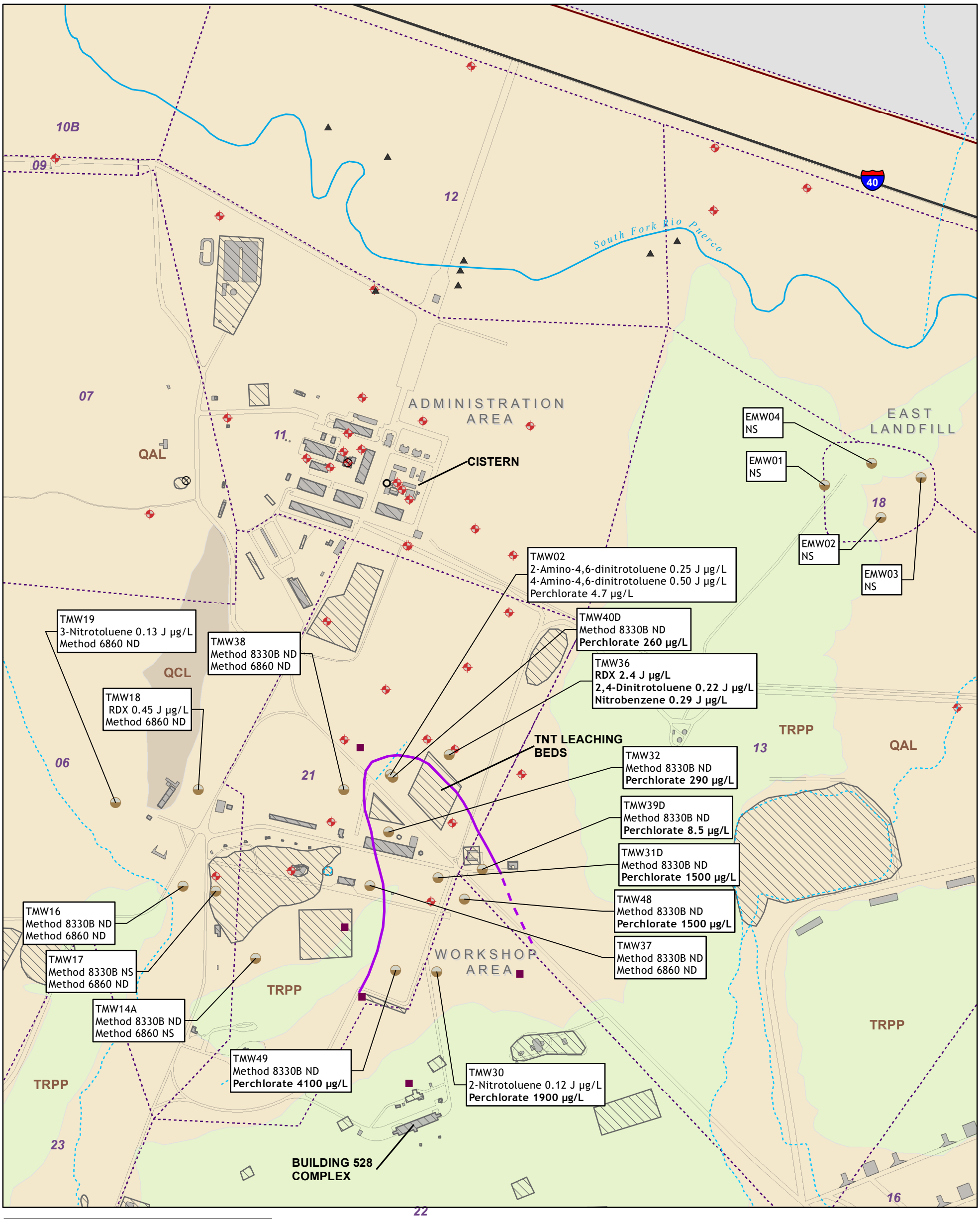
FIGURE 5-3
Fall 2013 Northern Area Explosives and Perchlorate Concentrations in Alluvial Groundwater

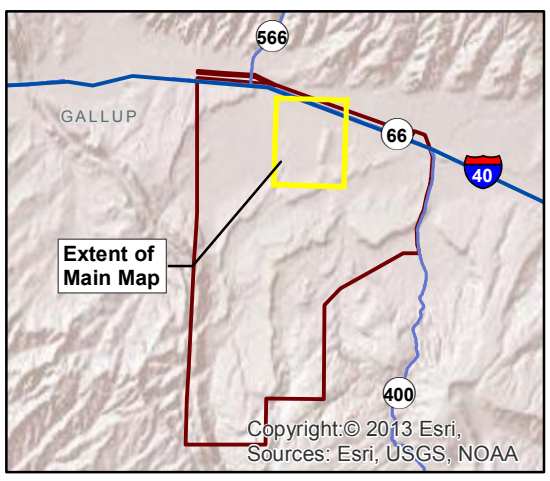
Groundwater Periodic Monitoring Report for July to December 2013
Fort Wingate Depot Activity, McKinley County, New Mexico

Notes:
ND = Not Detected
NS = Not Sampled
No explosives compounds were detected at well FW31, which is approximately 5000 feet southeast of map view

0 500 1,000 1,500 2,000 ft
0 100 200 300 400 500 m

N





State Plane Coordinate System, New Mexico West, North American Datum 1983, US Feet.

Data Sources:
Roads, Railroad: Tele Atlas GDT-Dynamap, 2008;
Populated Places: ESRI 2005;
Fort Wingate Environmental Restoration Detail: USACE.

Legend

- Alluvial Monitoring Well
- Bedrock Monitoring Well
- Piezometer
- Dry Well
- Dry Sandstone Borings
- Water Supply Well 69
- RDX 2.0 — Bold data indicate analytical detection above the regulatory limit
- Building
- 10A — Property Transfer Parcel
- Fort Wingate Installation Boundary

Surface Geology

- QAL — QAL - Quaternary Alluvial Deposits
- QCL — QCL - Quaternary Colluvium and Gravel Deposits
- TRPP — TRPP - Petrified Forest Formation, Painted Desert Member
- AOC and SWMU

- Arroyo
- Stream

Fall 2013 Isoconcentration Contours
(Dashed where inferred)

- Perchlorate (6.0 µg/L)

Notes:
ND = Not Detected
NS = Not Sampled

0 500 1,000 1,500 2,000 ft
0 100 200 300 400 500 m
N

FIGURE 5-4
Fall 2013 Northern Area Explosives and Perchlorate Concentrations in Bedrock Groundwater

Groundwater Periodic Monitoring Report for July to December 2013
Fort Wingate Depot Activity, McKinley County, New Mexico

MW23
Acetone 4.7 J µg/L
Toluene 20 µg/L
Bis(2-ethylhexyl) Phthalate 3.0 J µg/L

Wingate 91
NS

Wingate 90
NS

Wingate 89
NS

MW24
Toluene 0.61 J µg/L
Method 8270 ND

SMW01
Acetone 1.9 J µg/L
Benzo(g,h,i)perylene 0.62 J µg/L
Bis(2-ethylhexyl) Phthalate 2.8 J µg/L
Chrysene 0.82 J µg/L
Fluoranthene 0.71 J µg/L
Pyrene 0.77 J µg/L

BGMW03
Method 8260 ND
Caprolactam 18 J µg/L

BGMW02
Acetone 13 µg/L
Method 8270 ND

TMW28
Acetone 21 µg/L
Carbon Disulfide 0.82 J µg/L
Method 8270 NS

BGMW01
Method 8260 ND
Method 8270 ND

MW22D
1,2-Dichloroethane 1.4 µg/L
Acetone 3.0 J µg/L
Method 8270 ND
Diesel Range Organics 49 J µg/L

10A

10B

MW22S
1,1,1-Trichloroethane 2.7 µg/L
1,1-Dichloroethane 0.76 J µg/L
1,1-Dichloroethene 0.27 J µg/L
Method 8270 ND
Diesel Range Organics 120 J µg/L

TMW10
Method 8260 ND
Method 8270 NS

MW02
Method 8260 ND
Method 8270 NS
Diesel Range Organics 87 J µg/L

TMW27
Method 8260 ND
Method 8270 NS

TMW26
Method 8260 ND
Method 8270 NS

12

TMW08
Acetone 4.3 J µg/L
Method 8270 NS

TMW35
1,2-Dichloroethane 2.0 µg/L
Method 8270 ND

MW01
1,2-Dichloroethane 1.3 µg/L
Method 8270 NS
Diesel Range Organics 85 J µg/L

40

TMW33
1,2-Dichloroethane 37 µg/L
Benzoic Acid 12 J µg/L
Diesel Range Organics 190 J µg/L
Gasoline Range Organics 27 µg/L

MW03
Method 8260 ND
Method 8270 NS

South Fork Rio Puerco

09

MW18D
1,2-Dichloroethane 80 J µg/L
Carbon Disulfide 0.53 J µg/L
Method 8270 NS

TMW24
Carbon Disulfide 0.72 J µg/L
Method 8270 NS

TMW06
Method 8260 ND
Method 8270 ND

EMW01
NS

EMW04
NS

EMW03
NS

EMW02
NS

07

TMW46
Method 8260 ND
Benzoic Acid 11 J µg/L

11

CISTERN

TMW07
Method 8260 ND
Benzoic Acid 11 J µg/L
Bis(2-ethylhexyl) Phthalate 1.4 J µg/L

TMW34
Acetone 3.9 J µg/L
Method 8270 NS

TMW23
Method 8260 ND
Method 8270 NS

18

TMW25
Carbon Disulfide 0.80 J µg/L
Method 8270 NS

TMW45
Method 8260 ND
Method 8270 ND

MW20
1,2-Dichloroethane 6.1 µg/L
Acetone 3.9 J µg/L
Method 8270 NS
Gasoline Range Organics 37 µg/L

ADMINISTRATION AREA

EAST LANDFILL

TMW22
Method 8260 ND
2,4-Dinitrophenol 22 J µg/L
Benzoic Acid 17 J µg/L

TMW21
Method 8260 ND
Method 8270 NS

FW35
Method 8260 ND
Method 8270 ND

TMW44
Method 8260 ND
Benzoic Acid 13 J µg/L

TMW43
Method 8260 ND
1,2-Diphenylhydrazine 0.22 J µg/L

21

TMW04
Method 8260 ND
Method 8270 ND

TMW29
Method 8260 ND
Method 8270 NS

TMW36
Toluene 0.47 J µg/L
Bis(2-ethylhexyl) Phthalate 3.2 J µg/L
Diethyl Phthalate 1.0 J µg/L

TMW03
Method 8260 ND
2,4-Dinitrophenol 13 J µg/L

06

TMW19
Method 8260 ND
Acetophenone 1.2 J µg/L
Bis(2-ethylhexyl) Phthalate 1.2 J µg/L

TNT LEACHING BEDS

13

TMW47
Carbon Disulfide 0.82 J µg/L
Method 8270 ND

TMW41
Method 8260 ND
Benzoic Acid 13 J µg/L
Bis(2-ethylhexyl) Phthalate 0.88 J µg/L

TMW18
Toluene 120 µg/L
Acetophenone 3.3 J µg/L
Bis(2-ethylhexyl) Phthalate 1.5 J µg/L

TMW39S
Method 8260 ND
Caprolactam 83 µg/L

TMW16
Toluene 3.7 µg/L
Acetophenone 0.82 J µg/L
Bis(2-ethylhexyl) Phthalate 1.1 J µg/L

TMW39D
Method 8260 ND
Method 8270 ND

TMW48
Method 8260 ND
Method 8270 ND

TMW11
Method 8260 ND
Method 8270 NS

WORKSHOP AREA

TMW31D
Method 8260 ND
Method 8270 ND

TMW17
Carbon Disulfide 2.7 µg/L
Chloromethane 0.54 J
Method 8270 NS

TMW30
Method 8260 ND
Benzoic Acid 11 J µg/L

TMW31S
Method 8260 ND
Benzoic Acid 12 J µg/L

TMW14A
Carbon Disulfide 0.47 J µg/L
Method 8270 ND

TMW40S
Method 8260 ND
2,4-Dinitrophenol 22 J µg/L

16

TMW15
Method 8260 ND
Method 8270 ND

TMW37
Method 8260 ND
Method 8270 ND

TMW01
Acetone 8.9 J µg/L
Method 8270 NS

23

TMW13
Method 8260 ND
Method 8270 NS

TMW40D
Method 8260 ND
Method 8270 ND

22

TMW32
Method 8260 ND
Method 8270 ND

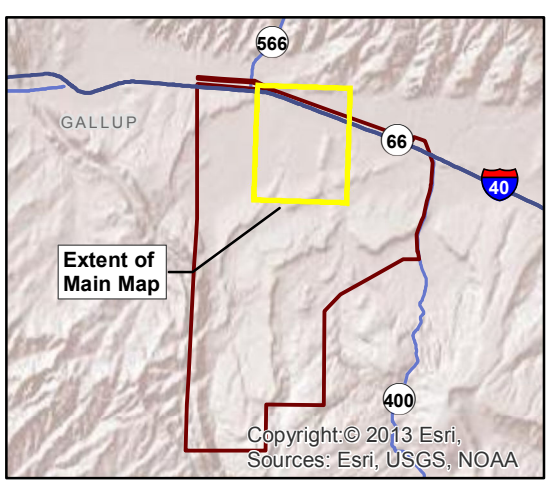
TMW38
Carbon Disulfide 4.8 µg/L
Diethyl Phthalate 0.60 J µg/L

TMW02
Method 8260 ND
Method 8270 NS

TMW49
Chloroform 0.18 J µg/L
Method 8270 ND

BUILDING 528 COMPLEX

19



State Plane Coordinate System, New Mexico West, North American Datum 1983, US Feet.

Data Sources:
Roads, Railroad: Tele Atlas GDT-Dynamap, 2008;
Populated Places: ESRI 2005;
Fort Wingate Environmental Restoration Detail: USACE.

Legend

- Piezometer
- Alluvial Monitoring Well
- Bedrock Monitoring Well
- Dry Well
- Water Supply Well 69
- 1,2-DCA 93 Bold data indicate analytical detection above the regulatory limit
- Fort Wingate Installation Boundary
- Building
- AOC and SWMU
- 10A Property Transfer Parcel
- Arroyo
- Stream

Surface Geology

- QAL - QAL - Quaternary Alluvial Deposits
- QCL - QCL - Quaternary Colluvium and Gravel Deposits
- TRPP - TRPP - Petrified Forest Formation, Painted Desert Member

Notes:
ND = Not Detected
NS = Not Sampled
1) No VOCs or SVOCs were detected at well FW31
(FW31 is located approximately 4,800 feet southeast of map view)
2) Organochlorine pesticides (by Method SW8081A) were not detected in any monitoring well. For list of wells, seeTable 2-1.
3) Only wells adjacent to the former fueling facility and newly installed wells were analyzed for total petroleum hydrocarbon compounds. For list of wells, seeTable 2-1.

0 500 1,000 1,500 2,000 ft
0 100 200 300 400 500 m

N

FIGURE 5-5
Fall 2013 Northern Area VOC, SVOC and TPH Concentrations in Alluvial and Bedrock Groundwater

Groundwater Periodic Monitoring Report for July to December 2013
Fort Wingate Depot Activity, McKinley County, New Mexico

6.0 Summary and Recommendations

6.1 Summary

Two groundwater elevation surveys and one groundwater-sampling event were performed during the monitoring period from July through December 2013. Groundwater elevation surveys were conducted on 9 July and 28 October 2013. The groundwater-sampling event was conducted from 29 October to 8 November 2013.

Shallow groundwater in the Northern Area of the FWDA is present in both the unconsolidated alluvium and bedrock. The groundwater flow direction in the alluvium is from potentiometric highs in the east, north, and south towards a potentiometric low west of the Administration Area. A small groundwater mound is present in the Administration Area near monitoring wells MW1, MW2, and MW3. This groundwater mound has been previously attributed to a leaking water storage cistern in the Administration Area. The cistern is no longer in service. Hydraulic gradients ranged from 0.003 ft/ft to 0.03 ft/ft in the alluvial groundwater unit. Groundwater flow in the shallow bedrock is to the west in the Workshop Area and to the northwest in the East Landfill Area. Hydraulic gradients in the bedrock unit were approximately 0.009 ft/ft in the Workshop Area and 0.15 ft/ft in the East Landfill area. The groundwater elevation in the bedrock groundwater unit area is slightly higher than in the alluvial groundwater unit and exists under hydraulically confined conditions under most of the Northern Area.

Nitrate, perchlorate, explosives, one VOCs, one SVOC, and metals were detected in groundwater samples at concentrations above the health-based screening levels. Groundwater contaminant plumes at the FWDA appear to be limited to the Northern Area of the installation. Six groundwater contaminant plumes have been identified: two nitrate plumes, one in the alluvial groundwater unit and one in the bedrock groundwater unit; two perchlorate plumes, one in the alluvial groundwater unit and one in the bedrock groundwater unit; an explosives plume in the alluvial groundwater unit; and a 1,2-dichloroethane plume in the alluvial groundwater unit.

Highest concentrations of nitrate contamination occur in shallow groundwater units of the Northern Area. The nitrate plume in the alluvial groundwater unit appears to originate from the TNT Leaching Beds and extends downgradient to the Administration Area. The groundwater concentrations in the alluvial nitrate plume decline in the vicinity of the leaking water storage cistern (MW01 and MW02). The extent of the alluvial nitrate plume is not defined to the west of the Administration Area. The bedrock nitrate plume is also present at the TNT Leaching Beds, but extends cross-gradient from this solid waste management unit (SWMU) to the south. A portion of the bedrock nitrate plume is collocated with the bedrock perchlorate plume and may have a common source.

The highest perchlorate concentrations were detected in groundwater samples from the bedrock groundwater unit in the Work Shop Area. The extent of the bedrock perchlorate plume has not been defined on the northern plume boundary. The alluvial perchlorate plume is located in the same vicinity as the bedrock plume.

The compound hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) is the primary explosive compound of interest. This compound is consistently detected above screening levels in the Workshop and eastern Administrative areas as well as in one area of the OB/OD. The explosives plume in the alluvial groundwater unit appears to originate from the TNT Leaching Beds in the Work Shop Area. Groundwater concentrations of explosive compounds (primarily RDX) attenuate to levels below the screening criteria within 2,500 feet downgradient of the TNT Leaching Beds.

The only VOC detected in groundwater samples above regulatory cleanup standards was the chlorinated solvent 1,2-dichloroethane. The 1,2-dichloroethane plume in the alluvial groundwater unit is limited to a group of wells near a former fueling facility in the Administration Area. Groundwater samples collected from three alluvial monitoring wells had concentrations above the U.S. Environmental Protection Agency (EPA) maximum contaminant level (MCL) of 5 micrograms per liter (µg/L). No VOCs were detected above cleanup standards in bedrock wells of the Northern Area, or in the OB/OD area.

Dissolved aluminum, arsenic, iron, manganese, and selenium were detected above regulatory cleanup levels in multiple groundwater samples. Since background groundwater concentrations have not yet been established for

the FWDA, it cannot clearly be demonstrated if the detected concentrations are a result of natural conditions or anthropogenic sources of contamination.

6.2 Recommendations

Based on a review of the monitoring activities and results, several recommendations were developed to address data gaps and optimize the groundwater-monitoring program at the FWDA. The following recommendations are made for field sampling procedures:

- Suspend groundwater-sampling activities at monitoring wells containing less than 1 foot of saturated well screen. The stagnant water present in the well sump cannot be effectively purged and groundwater samples collected from these wells are not believed to be representative of formation water.

The following recommendations are made for the analytical program, data analysis, and investigation:

- Perform an evaluation of the historic pesticide and SVOC detections in groundwater at the FWDA to determine whether they can be eliminated from the analytical suite without compromising the data quality objectives of the monitoring program. Recommendations based on this evaluation should be presented for regulatory approval in an update of the Facility-Wide Groundwater Monitoring Plan.
- Perform a statistical evaluation of groundwater dissolved metals concentrations to define background metals concentrations. A background study is needed to determine whether dissolved metals concentrations detected above cleanup standards are naturally occurring or the result of waste management activities at the FWDA.
- Perform additional investigation of the alluvial nitrate plume to define the western plume boundary.
- Perform additional investigation of the bedrock perchlorate plume to define the northern plume boundary.

These recommendations will not be implemented prior to regulatory review and approval.

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