Appendix U
Constituent of Concern (COC) Distribution in Groundwater
LEGEND:
- Monitoring Wells
- Surface Water Stations
- Total Antimony Contours (mg/L)
  (Dashed where inferred)
- Historical Arroyo Trace Lines
- Property Boundary
- Historical Drainage Divide

Note:
Antimony Screening Level = 0.006 mg/L (EPA Drinking Water MCL)
EPA = Environmental Protection Agency
J = The reported value was obtained from a reading that was less
  than the reporting limit but greater than or equal to the method detection limit
MCL = Maximum Contaminant Level
mg/L = milligrams per liter
< = Non detect at the reporting limit shown
*Actual location of SEP-6 is approximately one mile further
downstream on the American Canal.
**Well not used to construct contours

FORMER EL PASO SMELTER SITE
EL PASO, TEXAS

ANTIMONY DISTRIBUTION IN GROUNDWATER
SPRING 2011

FIGURE 1

Rio Grande
American Canal

EP-75
<0.00161 / <0.00161

Well ID
Dissolved Antimony/Total Antimony (mg/L)

0 600 1,200 Feet

GRAPHIC SCALE
**LEGEND:**
- Monitoring Wells
- Surface Water Stations
- Historical Arroyo Trace Lines
- Property Boundary
- Historical Drainage Divide

**Total Antimony Contours (mg/L)**
(Dashed where inferred)

**Note:**
- Antimony Screening Level = 0.006 mg/L (EPA Drinking Water MCL)
- EPA = Environmental Protection Agency
- J = The reported value was obtained from a reading that was less than the reporting limit but greater than or equal to the method detection limit
- mg/L = milligrams per liter
- = Non detect at the reporting limit shown
- *Actual location of SEP-8 is approximately one mile further downstream on the American Canal.
- ***TxDOT monitoring well not sampled

**EP-81**
- Well ID
- 0.0033 J / 0.00342 J Dissolved Antimony/Total Antimony (mg/L)

**FORMER EL PASO SMELTER SITE**
**EL PASO, TEXAS**

**ANTIMONY DISTRIBUTION IN GROUNDWATER**
**SPRING 2012**

**FIGURE 3**

**GRAPHIC SCALE**
0 600 1,200 Feet
**Note:** Antimony Screening Level = 0.006 mg/L (EPA Drinking Water MCL)
EPA = Environmental Protection Agency
J = The reported value was obtained from a reading that was less than the reporting limit but greater than or equal to the method detection limit
MCL = Maximum Contaminant Level
mg/L = milligrams per liter
< = Non detect at the reporting limit shown
*Actual location of SEP-6 is approximately one mile further downstream on the American Canal
**Data collected in October 2012
***TxDOT monitoring well not sampled
This figure is a duplicate of the associated RI figure 4-62
LEGEND:
- Monitoring Wells
- Surface Water Stations
- Historical Arroyo Trace Lines
- Property Boundary
- Historical Drainage Divide

Total Arsenic Contours (mg/L) (Dashed where inferred)

Note:
Arsenic Screening Level = 0.01 mg/L (EPA Drinking Water MCL)
EPA = Environmental Protection Agency
MCL = Maximum Contaminant Level
mg/L = milligrams per liter
< = Non detect at the reporting limit shown
*Actual location of SEP 6 is approximately one mile further downstream on the American Canal.

FORMER EL PASO SMELTER SITE
EL PASO, TEXAS

ARSENIC DISTRIBUTION IN GROUNDWATER
FALL 2010

FIGURE 5
<table>
<thead>
<tr>
<th>Well ID</th>
<th>Dissolved Arsenic/Total Arsenic (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-75</td>
<td>55 / 51.1</td>
</tr>
</tbody>
</table>

**Legend:**
- Monitoring Wells
- Surface Water Stations
- Historical Arroyo Trace Lines
- Property Boundary
- Historical Drainage Divide

**Note:**
- Arsenic Screening Level = 0.01 mg/L (EPA Drinking Water MCL)
- EPA = Environmental Protection Agency
- J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
- UI = Estimated reporting limit
- MCL = Maximum Contaminant Level
- mg/L = milligrams per liter
- NA = Not analyzed
- < = Non detect at the reporting limit shown
- * = Actual location of SEP-6 is approximately one mile further downstream on the American Canal
- *** = TxDOT monitoring well sampled June 2011; dissolved concentrations used for contouring
Note:
Arsenic Screening Level = 0.01 mg/L (EPA Drinking Water MCL)
EPA = Environmental Protection Agency
J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
UJ = Estimated reporting limit
MCL = Maximum Contaminant Level
mg/L = milligrams per liter
< = Non detect at the reporting limit shown
*Actual location of SEP-6 is approximately one mile further downstream on the American Canal.
***TxDOT monitoring well not sampled
LEGEND:

- Monitoring Wells
- Surface Water Stations
- Historical Arroyo Trace Lines
- Property Boundary
- Historical Drainage Divide

Total Arsenic Contours (mg/L) (Dashed where inferred)

Note:
- Arsenic Screening Level = 0.01 mg/L (EPA Drinking Water MCL)
- J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
- UJ = Estimated reporting limit
- mg/L = milligrams per liter
- < = Non detect at the reporting limit shown

EP-75 WELL ID
51.2 / 53.3 Dissolved Arsenic/Total Arsenic (mg/L)

ASARCO-4***

**Data collected October 2012
***TxDOT monitoring well not sampled
****Data collected August 2009

*Actual location of SEP-6 is approximately one mile further downstream on the American Canal.

**This figure is a duplicate of the associated RI figure 4-63

FORMER EL PASO SMELTER SITE
EL PASO, TEXAS

ARSENIC DISTRIBUTION IN GROUNDWATER
FALL 2012

FIGURE 9

LEGEND:

Monitoring Wells
Surface Water Stations
Historical Arroyo Trace Lines
Property Boundary
Historical Drainage Divide

Total Arsenic Contours (mg/L) (Dashed where inferred)

Note:
- Arsenic Screening Level = 0.01 mg/L (EPA Drinking Water MCL)
- J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
- UJ = Estimated reporting limit
- mg/L = milligrams per liter
- < = Non detect at the reporting limit shown

EP-75 WELL ID
51.2 / 53.3 Dissolved Arsenic/Total Arsenic (mg/L)

ASARCO-4***

**Data collected October 2012
***TxDOT monitoring well not sampled
****Data collected August 2009

*Actual location of SEP-6 is approximately one mile further downstream on the American Canal.

**This figure is a duplicate of the associated RI figure 4-63

LEGEND:

Monitoring Wells
Surface Water Stations
Historical Arroyo Trace Lines
Property Boundary
Historical Drainage Divide

Total Arsenic Contours (mg/L) (Dashed where inferred)

Note:
- Arsenic Screening Level = 0.01 mg/L (EPA Drinking Water MCL)
- J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
- UJ = Estimated reporting limit
- mg/L = milligrams per liter
- < = Non detect at the reporting limit shown

EP-75 WELL ID
51.2 / 53.3 Dissolved Arsenic/Total Arsenic (mg/L)

ASARCO-4***

**Data collected October 2012
***TxDOT monitoring well not sampled
****Data collected August 2009

*Actual location of SEP-6 is approximately one mile further downstream on the American Canal.

**This figure is a duplicate of the associated RI figure 4-63
LEGEND:
- Monitoring Wells
- Surface Water Stations
- Total Cadmium Contours (mg/L)
  (Dashed where inferred)
- Historical Arroyo Trace Lines
- - Property Boundary
- Historical Drainage Divide

EP-85
<0.005 / <0.005
Well ID
Dissolved Cadmium/Total Cadmium (mg/L)

Note:
- Cadmium Screening Level = 0.005 mg/L (EPA Drinking Water MCL)
- EPA = Environmental Protection Agency
- MCL = Maximum Contaminant Level
- mg/L = milligrams per liter
- J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
- < = Non detect at the reporting limit shown
- Actual location of SEP-6 is approximately one mile further downstream on the American Canal.

FORMER EL PASO SMELTER SITE
EL PASO, TEXAS

CADMIUM DISTRIBUTION IN GROUNDWATER
FALL 2010

FIGURE 10

Note:
- Cadmium Screening Level = 0.005 mg/L (EPA Drinking Water MCL)
- EPA = Environmental Protection Agency
- MCL = Maximum Contaminant Level
- mg/L = milligrams per liter
- J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
- < = Non detect at the reporting limit shown
- Actual location of SEP-6 is approximately one mile further downstream on the American Canal.
LEGEND:

- Monitoring Wells
- Surface Water Stations
- Total Cadmium Contours (mg/L)
- (Dashed where inferred)
- Historical Arroyo Trace Lines
- Property Boundary
- Historical Drainage Divide

Note:
- Cadmium Screening Level = 0.005 mg/L (EPA Drinking Water MCL)
- EPA = Environmental Protection Agency
- J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
- MCL = Maximum Contaminant Level
- mg/L = milligrams per liter
- < = Non detect at the reporting limit shown
*Actual location of SEP-6 is approximately one mile further downstream on the American Canal.
**Well not used to construct contours

FORMER EL PASO SMELTER SITE
EL PASO, TEXAS

CADMIUM DISTRIBUTION IN GROUNDWATER
SPRING 2011

FIGURE 11
LEGEND:

- Monitoring Wells
- Surface Water Stations
- Total Cadmium Contours (mg/L) (Dashed where inferred)
- Historical Arroyo Trace Lines
- Property Boundary
- Historical Drainage Divide

Note:
- Cadmium Screening Level = 0.005 mg/L (EPA Drinking Water MCL)
- EPA = Environmental Protection Agency
- J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
- MCL = Maximum Contaminant Level
- mg/L = milligrams per liter
- NA = Not analyzed
- < = Non detect at the reporting limit shown
- *Actual location of SEP-6 is approximately one mile further downstream on the American Canal.
- ***TxDOT monitoring well sampled June 2011; dissolved concentrations used for contouring.
LEGEND:

- Monitoring Wells
- Surface Water Stations
- Total Cadmium Contours (mg/L) (Dashed where inferred)
- Historical Arroyo Trace Lines
- Property Boundary
- Historic Drainage Divide

Note:

- Cadmium Screening Level = 0.005 mg/L (EPA Drinking Water MCL)
- EPA = Environmental Protection Agency
- J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
- MCL = Maximum Contaminant Level
- mg/L = milligrams per liter
- NA = Not analyzed
- < = Non detect at the reporting limit shown

* Actual location of SEP-6 is approximately one mile further downstream on the American Canal.

**TxDOT monitoring well not sampled
LEGEND:

- Monitoring Wells
- Surface Water Stations
- Historical Arroyo Trace Lines
- Property Boundary
- Historical Drainage Divide

Total Cadmium Contours (mg/L) (Dashed where inferred)

Note:
- Cadmium Screening Level = 0.005 mg/L (EPA Drinking Water MCL)
- EPA = Environmental Protection Agency
- J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
- < = Non detect at the reporting limit shown
- *Actual location of SEP-6 is approximately one mile further downstream on the American Canal
- This figure is a duplicate of the associated RI figure 4-64
- **Data collected October 2012
- ***TxDOT monitoring well not sampled
**LEGEND:**
- Monitoring Wells
- Surface Water Stations
- Historical Arroyo Trace Lines
- Property Boundary
- Historical Drainage Divide
- Total Chromium Contours (mg/L, Fall 2012)

**Note:**
- Chromium Screening Level = 0.1 mg/L (EPA Drinking Water MCL)
- EPA = Environmental Protection Agency
- J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
- UJ = Estimated reporting limit
- MCL = Maximum Contaminant Level
- mg/L = milligrams per liter
- ≤ = Non detect at the reporting limit shown
- -- = No Result

**Chromium Distribution in Groundwater**

**FORMER EL PASO SMELTER SITE**

**EL PASO, TEXAS**

**CHROMIUM DISTRIBUTION IN GROUNDWATER**

**FALL 2010 - FALL 2012**

**FIGURE 15**
LEGEND:

<table>
<thead>
<tr>
<th>Monitoring Wells</th>
<th>Surface Water Stations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Historical Arroyo Trace Lines

Property Boundary

Historical Drainage Divide

Total Fluoride Contours (mg/L; Fall 2012) (Dashed where inferred)

Note:
Fluoride Screening Level = 4.0 mg/L (EPA Drinking Water MCL)
J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
UJ = Estimated reporting limit

Bolded Value = result exceeds PCL

*Actual location of SEP-6 is approximately one mile further downstream on the American Canal.
**Data collected in October 2012
This figure is a duplicate of the associated RI figure 4-68

Graph: [Legend Image]
LEGEND:
- Monitoring Wells
- Surface Water Stations
- Historical Arroyo Trace Lines
- Property Boundary
- Historical Drainage Divide

Note:
- Lead Screening Level = 0.015 mg/L (EPA Drinking Water MCL)
- EPA = Environmental Protection Agency
- J: The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
- MCL = Maximum Contaminant Level
- mg/L = milligrams per liter
- < = Non detect at the reporting limit shown
- *Actual location of SEP-6 is approximately one mile further downstream on the American Canal.

FORMER EL PASO SMELTER SITE
EL PASO, TEXAS

LEAD DISTRIBUTION IN GROUNDWATER
FALL 2010

FIGURE 17

PATH: I:\ASARCO_ElPaso\GIS\MXD\RI_Revised\Appendix U\Fig 17 Lead_GW_Fall2010.mxd
DATE: 9/13/2013 TIME: 1:18:04 PM
LEGEND:
- Monitoring Wells
- Surface Water Stations
- Historical Arroyo Trace Lines
- Property Boundary
- Historical Drainage Divide

Total Lead Contours (mg/L)
(Dashed where Inferred)

Historical Drainage Divide

Note:
Lead Screening Level = 0.015 mg/L (EPA Drinking Water MCL)
EPA = Environmental Protection Agency
J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
UJ = Estimated reporting limit
MCL = Maximum Contaminant Level
mg/L = milligrams per liter
< = Non detect at the reporting limit shown
*Actual location of SEP 6 is approximately one mile further downstream on the American Canal.
LEGEND:

- Monitoring Wells
- Surface Water Stations
- Total Lead Contours (mg/L)
- Dashed where Inferred
- Historical Arroyo Trace Lines
- Property Boundary
- Historical Drainage Divide

Note:
- Lead Screening Level = 0.015 mg/L (EPA Drinking Water MCL)
- EPA = Environmental Protection Agency
- J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
- MCL = Maximum Contaminant Level
- mg/L = milligrams per liter
- NA = Not Analyzed
- < = Non detect at the reporting limit shown
- * = Actual location of SEP-6 is approximately one mile further downstream on the American Canal
- *** = TxDOT monitoring well sampled June 2011; dissolved concentrations used for contouring

Note: Lead Screening Level = 0.015 mg/L (EPA Drinking Water MCL)
EPA = Environmental Protection Agency
J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
MCL = Maximum Contaminant Level
mg/L = milligrams per liter
NA = Not Analyzed
< = Non detect at the reporting limit shown
* = Actual location of SEP-6 is approximately one mile further downstream on the American Canal
*** = TxDOT monitoring well sampled June 2011; dissolved concentrations used for contouring

FORMER EL PASO SMELTER SITE
EL PASO, TEXAS

LEAD DISTRIBUTION IN GROUNDWATER
FALL 2011

FIGURE 19
LEGEND:
- Monitoring Wells
- Surface Water Stations
- Historical Arroyo Trace Lines
- Property Boundary
- Historical Drainage Divide

Total Lead Contours (mg/L) (Dashed where Inferred)

- Well ID
- Dissolved Lead/Total Lead (mg/L)

Note:
- Lead Screening Level = 0.015 mg/L (EPA Drinking Water MCL)
- EPA = Environmental Protection Agency
- J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
- MCL = Maximum Contaminant Level
- mg/L = milligrams per liter
- NA = Not Analyzed
- < = Non detect at the reporting limit shown

***TxDOT monitoring well not sampled
*Actual location of SEP-6 is approximately one mile further downstream on the American Canal.
LEAD DISTRIBUTION IN GROUNDWATER
FALL 2012

LEGEND:
- Monitoring Wells
- Surface Water Stations
- Total Lead Contours (mg/L)
- Historical Arroyo Trace Lines
- Property Boundary
- Historical Drainage Divide

Note:
- Lead Screening Level = 0.015 mg/L (EPA Drinking Water MCL)
- EPA = Environmental Protection Agency
- J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
- MCL = Maximum Contaminant Level
- mg/L = milligrams per liter
- < = Non detect at the reporting limit shown
- *= Actual location of SEP-6 is approximately one mile further downstream on the American Canal.
- **= Data collected October 2012
- ***= TxDOT monitoring well not sampled
- This figure is a duplicate of the associated RI figure 4-69

EP-81
-0.000733 / 0.00099 J Dissolved Lead/Total Lead (mg/L)

CITY: Highlands Ranch  DIV/GROUP: GIS DB: BG

FORMER EL PASO SMELTER SITE
EL PASO, TEXAS

FIGURE 21
LEGEND:

- Monitoring Wells
- Surface Water Stations
- Historical Arroyo Trace Lines
- Property Boundary

Note:
- Mercury Screening Level = 0.002 mg/L (EPA Drinking Water MCL)
- EPA = Environmental Protection Agency
- J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
- MCL = Maximum Contaminant Level
- mg/L = milligrams per liter
- -- = No Result
- < = Non detect at the reporting limit shown
- Bolded Value = result exceeds MCL

*Actual location of SEP-6 is approximately one mile further downstream on the American Canal.
**Data collected October 2012
LEGEND:
- Monitoring Wells
- Surface Water Stations
- Property Boundary
- Historical Drainage Divide

Total Molybdenum Contours (mg/L)
(Dashed where inferred)

EP-81 Well ID
0.277 / 0.48 Dissolved Molybdenum/Total Molybdenum (mg/L)

Note:
- Molybdenum Screening Level = 0.51 mg/L (RRR Groundwater Industrial)
- \( J \) = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
- \( U \) = Estimated reporting limit
- mg/L = milligrams per liter
- RRR = Texas Risk Reduction Rules
- < = Non detect at the reporting limit shown
- *Actual location of SEP-6 is approximately one mile further downstream on the American Canal.

FORMER EL PASO SMELTER SITE
EL PASO, TEXAS

MOLYBDENUM DISTRIBUTION IN GROUNDWATER
SPRING 2011

FIGURE 23
LEGEND:

Monitoring Wells
Surface Water Stations
Historical Arroyo Trace Lines
Property Boundary
Historical Drainage Divide

Total Molybdenum Contours (mg/L)  
(Dashed where inferred)

Note:

Molybdenum Screening Level = 0.51 mg/L (RRR Groundwater Industrial)
J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
UJ = Estimated Reporting Limit
mg/L = milligrams per liter
NA = Not analyzed
RRR = Texas Risk Reduction Rules
< = Non detect at the reporting limit shown
* = Actual location of SEP-6 is approximately one mile further downstream on the American Canal.
***TxDOT monitoring well sampled June 2011; dissolved concentrations used for contouring

EP-81  Well ID
0.244 / 0.25 Dissolved Molybdenum/Total Molybdenum (mg/L)

FORMER EL PASO SMELTER SITE
EL PASO, TEXAS

MOLYBDENUM DISTRIBUTION IN GROUNDWATER
FALL 2011

FIGURE 24
LEGEND:
- Monitoring Wells
- Historical Arroyo Trace Lines
- Property Boundary
- Historical Drainage Divide

Note:
- Molybdenum Screening Level = 0.51 mg/L (RRR Groundwater Industrial)
- mg/L = milligrams per liter
- RRR = Texas Risk Reduction Rules

*Actual location of SEP-6 is approximately one mile further downstream on the American Canal.
***TxDOT monitoring well not sampled

FORMER EL PASO SMELTER SITE
EL PASO, TEXAS
MOLYBDENUM DISTRIBUTION IN GROUNDWATER
SPRING 2012
FIGURE 25

EP-81  Well ID
0.295 / 0.32  Dissolved Molybdenum/Total Molybdenum (mg/L)
Note:
Molybdenum Screening Level = 0.51 mg/L (RRR Groundwater Industrial)
J = The reported value was obtained from a reading that
was less than reporting limit but greater than or equal to the
method detection limit.
UJ = Estimated Reporting Limit
mg/L = milligrams per liter
RRR = Texas Risk Reduction Rules
< = Non detect at the reporting limit shown
*Actual location of SEP-6 is approximately one mile further
downstream on the American Canal.
**Data collected in October 2012
***TxDOT monitoring well not sampled
This figure is a duplicate of the associated RI figure 4-70.
LEGEND:
- Monitoring Wells
- Surface Water Stations
- Historical Arroyo Trace Lines
- Property Boundary
- Historical Drainage Divide
- Total Nickel Contours (mg/L; Fall 2012)

Note:
- Nickel Screening Level = 2.0 mg/L (RRR Groundwater Industrial)
- \( \leq \) The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
- \( \leq \) Estimated reporting limit
- mg/L = milligrams per liter
- RRR = Risk Reduction Rules
- J = Reporting Limit
- UJ = Estimated reporting limit
- \(< \) = Non detect at the reporting limit shown
- \(- \) = No Result

**Bolded Value** = result exceeds PCL
*Actual location of SEP-6 is approximately one mile further downstream on the American Canal.
**Data collected October 2012
***TxDOT monitoring well sampled June 2011; dissolved concentrations used for contouring
This figure is a duplicate of the associated R1 figure 4-72

**Path:** I:\ASARCO_ElPaso\GIS\MXD\RI_Revised\Appendix U\Fig 27 Nickel_2011to2012.mxd  **Date:** 9/13/2013  **Time:** 2:17:06 PM

**ASARCO-4***
- **Graphical Scale:**
- **Formed El Paso Smelter Site**
- **El Paso, Texas**
- **Nickel Distribution in Groundwater Spring 2011 - Fall 2012**
- **Figure 27**

**Atypical location of SEP-6 is approximately one mile further downstream on the American Canal.**
**Data collected October 2012.**
**TxDOT monitoring well sampled June 2011; dissolved concentrations used for contouring.**
This figure is a duplicate of the associated RI figure 4-72.
LEGEND:
- Monitoring Wells
- Surface Water Stations
- Property Boundary
- Historical Arroyo Trace Lines
- Historical Drainage Divide

Note:
- Nitrate Screening Level = 10 mg/L (EPA Secondary Drinking Water MCL)
- EPA = Environmental Protection Agency
- J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
- MCL = Maximum Contaminant Level
- mg/L = milligrams per liter
- <= Non detect at the reporting limit shown
- *Actual location of SEP-6 is approximately one mile further downstream on the American Canal.

EP-81 Well ID
4.11 Total Nitrate (mg/L)
LEGEND:
- Monitoring Wells
- Surface Water Stations
- Property Boundary
- Historical Drainage Divide
- Historical Arroyo Trace Lines

Note:
- Nitrate Screening Level = 10 mg/L (EPA Secondary Drinking Water MCL)
- EPA = Environmental Protection Agency
- J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
- UJ = Estimated reporting limit
- mg/L = milligrams per liter
- < = Non detect at the reporting limit shown
- *Actual location of SEP-6 is approximately one mile further downstream on the American Canal.

Graph: NITRATE DISTRIBUTION IN GROUNDWATER
SPRING 2011
FORMER EL PASO SMELTER SITE
EL PASO, TEXAS

FIGURE 29

Graph: NITRATE DISTRIBUTION IN GROUNDWATER
SPRING 2011
FORMER EL PASO SMELTER SITE
EL PASO, TEXAS

FIGURE 29
LEGEND:
- Monitoring Wells
- Surface Water Stations
- Historical Arroyo Trace Lines
- Property Boundary
- Historical Drainage Divide

Total Nitrate Contours (mg/L)
(Dashed where Inferred)

Note:
- Nitrates Screening Level = 10 mg/L (EPA Secondary Drinking Water MCL)
- EPA = Environmental Protection Agency
- J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
- UJ = Estimated reporting limit
- MCL = Maximum Contaminant Level
- mg/L = milligrams per liter
- < = Non detect at the reporting limit shown

- Actual location of SEP-6 is approximately one mile further downstream on the American Canal.
- This figure is a duplicate of the associated RI figure 4-73

FORMER EL PASO SMELTER SITE
EL PASO, TEXAS

NITRATE DISTRIBUTION IN GROUNDWATER
FALL 2011

FIGURE 30

Path: I:\ASARCO_ElPaso\GIS\MXD\RI_Revised\Appendix U\Fig 30 Nitrate_GW_Fall2011.mxd Date: 9/13/2013 Time: 2:23:33 PM

Rio Grande
LEGEND:
- Monitoring Wells
- Surface Water Stations
- Historical Arroyo Trace Lines
- Property Boundary
- Historical Drainage Divide

Total Selenium Contours (mg/L)
(Dashed where inferred)

Historical Drainage Divide

Selenium Screening Level = 0.05 mg/L (EPA Drinking Water MCL)
EPA = Environmental Protection Agency
MCL = Maximum Contaminant Level
mg/L = milligrams per liter
< = Non detect at the reporting limit shown
*Actual location of SEP-6 is approximately one mile further downstream on the American Canal.

Note:

<table>
<thead>
<tr>
<th>Well ID</th>
<th>Dissolved Selenium/Total Selenium (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-81</td>
<td>0.094 / 0.123</td>
</tr>
</tbody>
</table>
LEGEND:
- Monitoring Wells
- Historical Arroyo Trace Lines
- Surface Water Stations
- Property Boundary
- Historical Drainage Divide

Total Selenium Contours (mg/L)
(Dashed where inferred)

Note:
- Selenium Screening Level = 0.05 mg/L (EPA Drinking Water MCL)
- EPA = Environmental Protection Agency
- J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit
- MCL = Maximum Contaminant Level
- mg/L = milligrams per liter
- < = Non-detect at the reporting limit shown

- Actual location of SEP-6 is approximately one mile further downstream on the American Canal.

EP-81 Well ID
0.124 / 0.219 Dissolved Selenium/Total Selenium (mg/L)
LEGEND:
- Monitoring Wells
- Historical Arroyo Trace Lines
- Surface Water Stations
- Property Boundary
- Historical Drainage Divide

Note:
- Selenium Screening Level = 0.05 mg/L (EPA Drinking Water MCL)
- EPA = Environmental Protection Agency
- J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
- UJ = Estimated reporting limit
- MCL = Maximum Contaminant Level
- NA = Not analyzed
- mg/L = milligrams per liter
- < = Non detect at the reporting limit shown
- *Actual location of SEP-6 is approximately one mile further downstream on the American Canal.
- ***TxDOT monitoring well sampled June 2011; dissolved concentrations used for contouring.
LEGEND:

- Monitoring Wells
- Surface Water Stations
- Historical Arroyo Trace Lines
- Property Boundary
- Historical Drainage Divide

Note:
- Selenium Screening Level = 0.05 mg/L (EPA Drinking Water MCL)
- EPA = Environmental Protection Agency
- J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
- MCL = Maximum Contaminant Level
- mg/L = milligrams per liter
- NA = Not analyzed
- < = Non detect at the reporting limit shown
*Actual location of SEP 6 is approximately one mile further downstream on the American Canal.
**Not used in contouring
***TxDOT monitoring well not sampled

Historical Drainage Divide

Path: I:\ASARCO_ElPaso\GIS\MXD\GroundwaterDelineation\Selenium_GW_Spring2012.mxd Date: 10/29/2012 Time: 5:11:00 PM

FORMER EL PASO SMELTER SITE
EL PASO, TEXAS

SELENIUM DISTRIBUTION IN GROUNDWATER
SPRING 2012

FIGURE 35

CITY: Highlands Ranch  DIV/GROUP: GIS DB: BG

GRAPHIC SCALE

0 600 1,200 feet
LEGEND:

- Monitoring Wells (Dashed where inferred)
- Historical Arroyo Trace Lines
- Property Boundary
- Historical Drainage Divide

Total Selenium Contours (mg/L)

- Dissolved Selenium/Total Selenium (mg/L)

Note:

- Selenium Screening Level = 0.05 mg/L (EPA Drinking Water MCL)
- EPA = Environmental Protection Agency
- J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
- MCL = Maximum Contaminant Level mg/L = milligrams per liter
- < = Non detect at the reporting limit shown

- Actual location of SEP-6 is approximately one mile further downstream on the American Canal.
- **Data collected October 2012
- ***TxDOT monitoring well not sampled
- ****Not used in contouring
- *****Data collected in August 2009

This figure is a duplicate of the associated RI figure 4-74.
THALLIUM DISTRIBUTION IN GROUNDWATER
SPRING 2011

LEGEND:
- Monitoring Wells
- Historical Arroyo Trace Lines
- Property Boundary
- Historical Drainage Divide

Total Thallium Contours (mg/L)
(Dashed where inferred)

Note:
- Thallium Screening Level = 0.002 mg/L (EPA Drinking Water MCL)
- EPA = Environmental Protection Agency
- J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
- UJ = Estimated reporting limit
- MCL = Maximum Contaminant Level
- mg/L = milligrams per liter
- < = Non detect at the reporting limit shown
- *Actual location of SEP-6 is approximately one mile further downstream on the American Canal.

FORMER EL PASO SMELTER SITE
EL PASO, TEXAS

GRAPHIC SCALE

0 600 1,200 Feet

FIGURE 37

Rio Grande
American Canal
**LEGEND:**
- Monitoring Wells
- Surface Water Stations
- Historical Arroyo Trace Lines
- Property Boundary
- Historical Drainage Divide

**Total Thallium Contours (mg/L)**
(Dashed where inferred)

**Note:**
- Thallium Screening Level = 0.002 mg/L (EPA Drinking Water MCL)
- EPA = Environmental Protection Agency
- J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
- N = Maximum Contaminant Level
  - mg/L = milligrams per liter
  - < = Non detect at the reporting limit shown

*Actual location of SEP-6 is approximately one mile further downstream on the American Canal.*

**FORMER EL PASO SMELTER SITE**
**EL PASO, TEXAS**

**THALLIUM DISTRIBUTION IN GROUNDWATER**
**FALL 2011**

**FIGURE 38**

**Well ID**
- EP-81

**Dissolved Thallium/Total Thallium (mg/L)**
- <0.000693 / <0.000693
Note:
Thallium Screening Level = 0.002 mg/L (EPA Drinking Water MCL)
EPA = Environmental Protection Agency
J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
UJ = Estimated reporting limit
MCL = Maximum Contaminant Level
mg/L = milligrams per liter
< = Non detect at the reporting limit shown
* Actual location of SEP-6 is approximately one mile further downstream on the American Canal.
LEGEND:
- Monitoring Wells
- Surface Water Stations
- Historical Arroyo Trace Lines
- Property Boundary
- Historical Drainage Divide

Total Thallium Contours (mg/L)
(Dashed where inferred)

Note:
- Thallium Screening Level = 0.002 mg/L (EPA Drinking Water MCL)
- EPA = Environmental Protection Agency
- J = The reported value was obtained from a reading that was less than reporting limit but greater than or equal to the method detection limit.
- MCL = Maximum Contaminant Level
- mg/L = milligrams per liter
- < = Non detect at the reporting limit shown

This figure is a duplicate of the associated RI figure 4-75

*Actual location of SEP-6 is approximately one mile further downstream on the American Canal.

**Data collected October 2012