

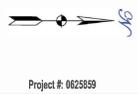
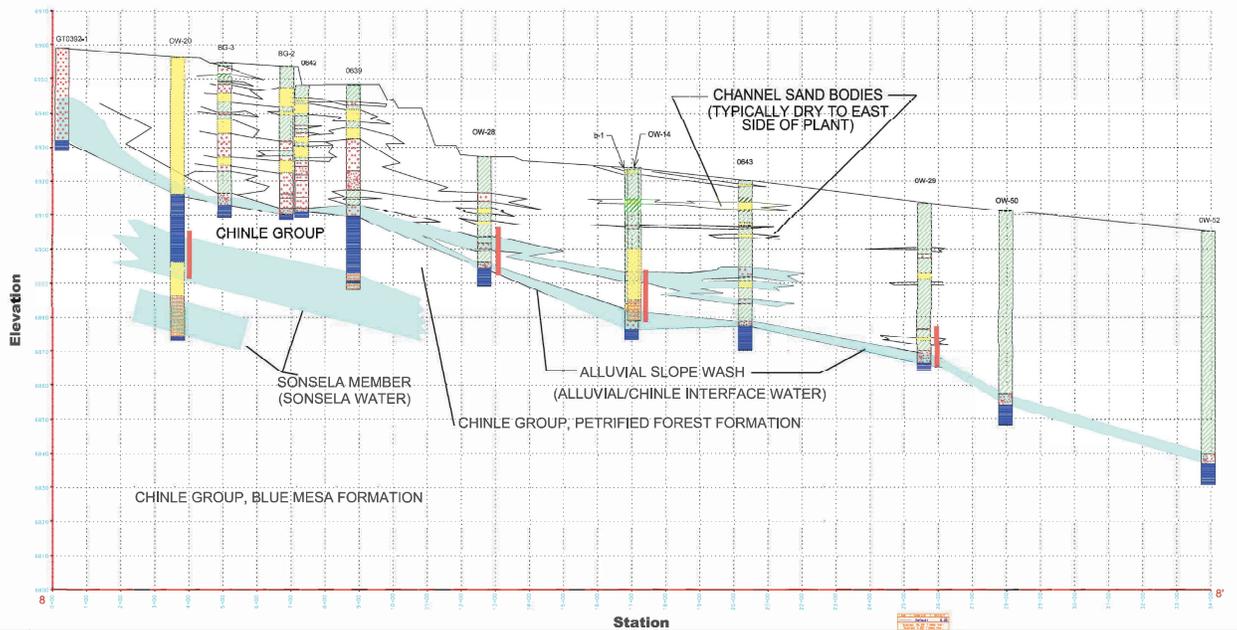
**AP - 111**

**ANNUAL GW  
MONITORING REPORT  
(27 of 29)**

**2016**



Profile East 8-8'



**Figure 7**  
**TYPICAL SOUTH-NORTH GEOLOGIC PROFILE (E. PLANT)**  
**WESTERN REFINING - GALLUP REFINERY**

Western Refining - Gallup Refinery  
 92 Giant Crossing Road  
 Gallup, New Mexico 87301  
 Date: August 30, 2017





4601 Ripley  
El Paso, Texas  
79922  
915-386-1317



1"=500'

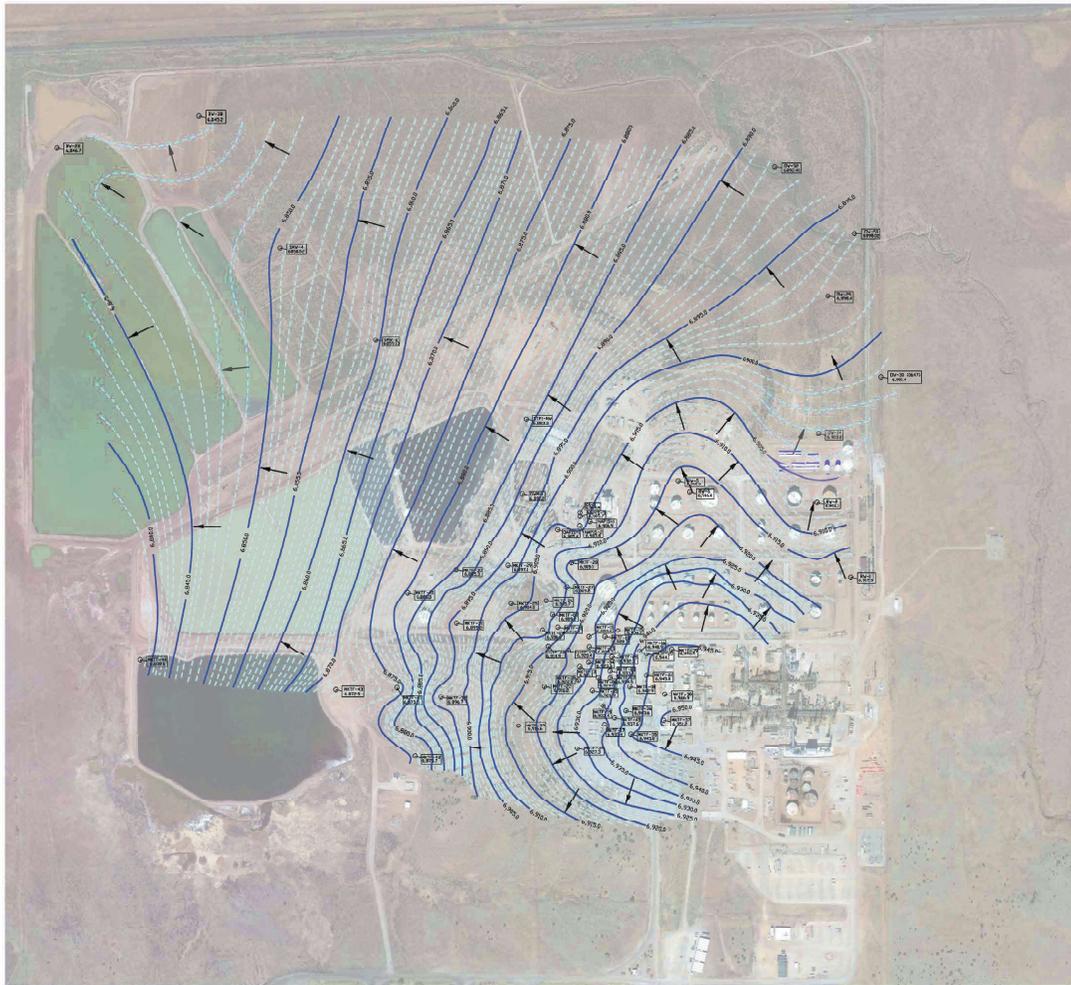
Project #: 06251318

**Figure 9**

**Sonsela Water Elevation Map 2016**

**WESTERN REFINING - GALLUP REFINERY**

Western Refining - Gallup Refinery  
92 Giant Crossing Road  
Gallup, New Mexico 87301  
Date: August 4, 2017



CHINLE/ALLUVIUM INTERFACE WELLS  
 FLOW DIRECTION: →

**psi**  
 4601 Ripley  
 El Paso, Texas  
 79922  
 915-384-1317

1"=500'  
 Project #: 06251318

**Figure 10**  
**2016**  
**Alluvium/Chinle Gp Interface Water Elevation Map**  
 WESTERN REFINING - GALLUP REFINERY

Western Refining - Gallup Refinery  
 92 Giant Crossing Road  
 Gallup, New Mexico 87301  
 Date: August 1, 2017

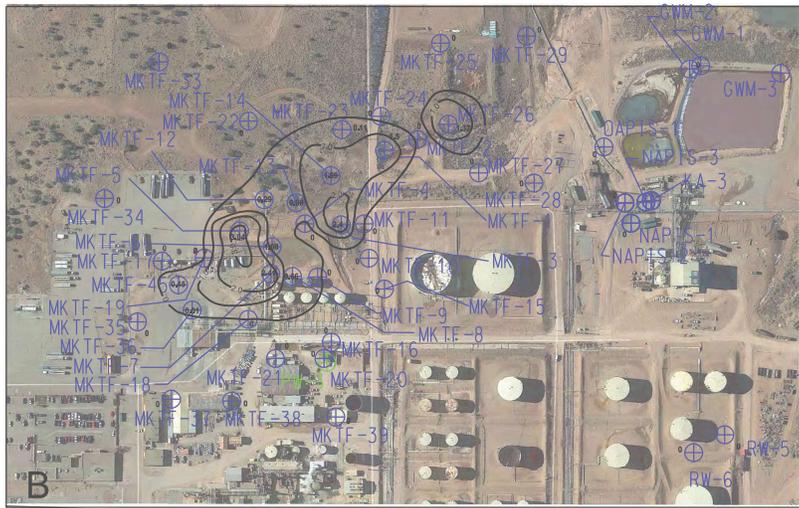


**psi**  
 4601 Ripley  
 El Paso, Texas  
 79922  
 915-384-1317

  
 1"=500'  
 Project #: 06251318

**Figure 12**  
**Alluvial/Fluvial Upper Sand Water 2016**  
**WESTERN REFINING - GALLUP REFINERY**

Western Refining - Gallup Refinery  
 92 Giant Crossing Road  
 Gallup, New Mexico 87301  
 Date: August 5, 2017



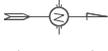
—— SPH Contour Thickness (in feet)

Contour Interval: 1.0'

Scale: Image A - Not to scale  
Image B - 1" = 200'  
Image C - 1" = 200'



4601 Ripley  
El Paso, Texas  
79922  
915-384-1317



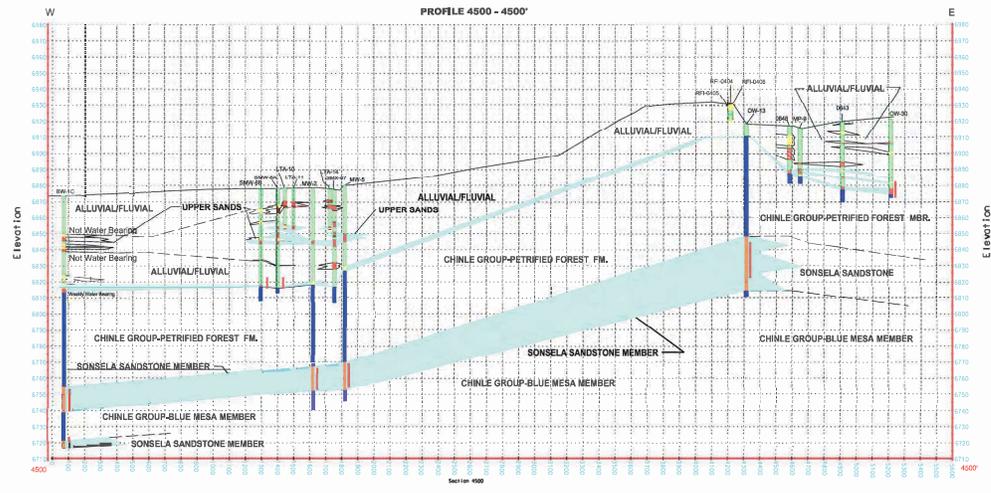
Line is 1 inch long  
on original  
Project #: 06251318

**Figure 13**  
**Product Thickness Map (SPH for 09/16)**  
**WESTERN REFINING - GALLUP REFINERY**

Western Refining - Gallup Refinery  
92 Giant Crossing Road  
Gallup, New Mexico 87301  
Date: August 8, 2017



- LEGEND**
- █ CLAY
  - █ SANDY CLAY OR CLAYEY SAND
  - █ SAND
  - █ SILT
  - █ SHALE (CHINLE FORMATION)
  - █ SANDSTONE (CHINLE FORMATION)
  - PROFILE LINE
  - █ WATER BEARING ZONE
  - █ SCREENED INTERVAL



**Figure 14**  
**TYPICAL WEST - EAST GEOLOGIC PROFILE**  
**WESTERN REFINING - GALLUP REFINERY**

Western Refining - Gallup Refinery  
 92 Giant Crossing Road  
 Gallup, New Mexico 87301  
 Date: August 8, 2017

### Benzene (September 2016)

Contour Interval = 0.05



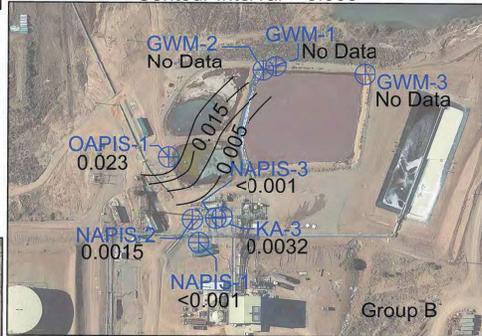
### Total Xylenes (September 2016)

Contour Interval = 0.005



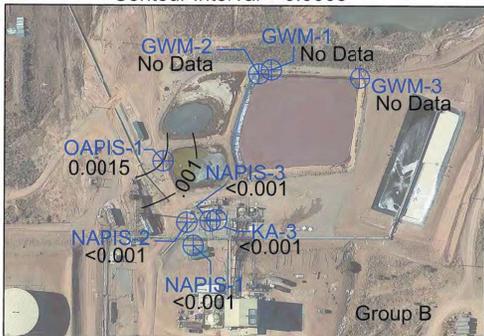
### Ethyl Benzene (September 2016)

Contour Interval = 0.005



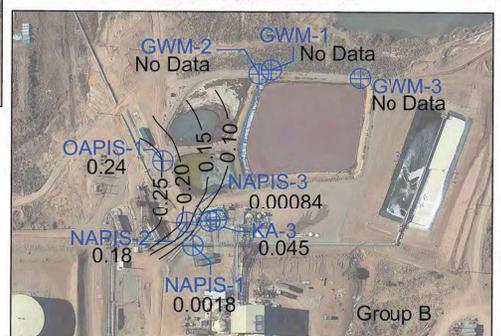
### Toluene (September 2016)

Contour Interval = 0.0005

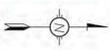


### MTBE (September 2016)

Contour Interval = 0.05



4601 Ripley  
El Paso, Texas  
79922  
915-384-1317



NTS

Project #: 062511-04

## Figure 15

# WELL GROUP B CONSTITUENTS WESTERN REFINING - GALLUP REFINERY

Western Refining - Gallup Refinery  
92 Giant Crossing Road  
Gallup, New Mexico 87301  
Date: August 22, 2017