

From: wayne price <wayneprice77@earthlink.net>
Date: May 28, 2014 6:58:50 PM MDT
To: Jim.Griswold@state.nm.us
Cc: Mike Slaughter <mslaughter@keyenergy.com>, Dan Gibson
<dgibson@keyenergy.com>
Subject: Key Energy BW-18 MW Closure

Dear Jim,

Thank you for the meeting today concerning the Key BW-18 brine well located on the west side of Hobbs. As we discussed, a formal proposal has already been submitted which we think demonstrates that the site has been properly razed, pit closed, well plugged, and site cleaned up so as it will not impact the environment, and will be ready to turn back over to the SLO for a new commercial operation.

Today's meeting was to reinforce the fact that Key's operations did not impact groundwater, and there is evidence that shows an up gradient source of the contamination.

I have attached some documents to provide this demonstration in part.

ARCADIS

**Key Energy Services
Hobbs, New Mexico
Saltwater Loading Facility**

Samples Collected March 25, 2003

Table C

**MW-1 Groundwater Analytical Results
in mg/L (ppm)**

Analyte	Result
Volatile Organics	
Benzene	<0.001
Toluene	<0.001
Ethylbenzene	<0.001
m,p-Xylene	<0.001
o-Xylene	<0.001
PAHs	
Naphthalene	<0.005
Acenaphthylene	<0.005
Acenaphthene	<0.005
Flourene	<0.005
Phenanthrene	<0.005
Anthracene	<0.005
Fluoranthene	<0.005
Pyrene	<0.005
Benzo(a)anthracene	<0.005
Chrysene	<0.005
Benzo(a)fluoranthene	<0.005
Benzo(k)fluoranthene	<0.005
Benzo(a)pyrene	<0.005
Ideno(1,2,3-cd)Pyrene	<0.005
Dibenzo(a,h)Anthracene	<0.005
Benzo(g,h,i)Perylene	<0.005
Inorganics	
Calcium	129
Magnesium	24.2
Potassium	7.93
Sodium	337
Arsenic	0.012

Page1: Shows the first sample (2003) from the down gradient well which is MW-1 and had a reading of 665 ppm Cl. The well was installed since the loading sump had a small leak.

This loading sump was delineated and no chlorides migrated to groundwater (see main report).

Page 2: Shows the plat that included the 2004 report, which showed the Up-gradient well had a higher Cl content than the now down gradient. MW-2 was 527 ppm Cl, and the MW-1 was now 327 ppm Cl at 70' and 476 ppm Cl at 95' showing a Cl density gradient under the site.

Page 3: Shows the Cl soil results in several borings and MW-3 when it was drilled. All results indicate that Cl's stopped well before groundwater. Also, the main report shows that the soil results of the MW-1 & 2 indicated the same. These can be found in the main report.

Page 4-6: Shows the location of at least two unlined pits located in proximity and up-gradient to the Key site. The large pit appears to have been a very large unlined disposal pit back in the 60's. It is about 1100 ft directly up-gradient.

Page 7: Is an annotated iso-concentration lines of the salt in the groundwater for the year 2011, showing that the up-gradient was actually increasing and was noted to be about 900 ppm Cl's, confirming an up-gradient source.

Page 8: Is the same drawing, but up-dated for the 2014 latest sampling results. It appears the site is cleaning up. In our opinion, the middle elevated salt is the remnant of the up-gradient off-site source, being slightly off-gradient.

Page 9-10: Copy of the latest sampling results:

MW-2 (Up-Gradient) at 284 ppm Cl

MW-3 Middle at 513 ppm Cl

MW-1 (Down-Gradient) at 298 ppm Cl

Concluding:

It appears there was an up-gradient source that caused the underlying groundwater to be impacted and the soil borings taken throughout the site all indicated that chlorides did not migrate to groundwater. The pit contamination has been removed and disposed of at an OCD approved facility, a compacted clay liner has been installed in both the pit and the west loading area. The site has been razed and is ready for release. It also shows that natural attenuation is occurring and probably are seeing the tail end of the off-site contamination, i.e. the end of the salt submarine heading SE.

Therefore, Key respectfully request it be allowed to properly P&A the 3 on-site monitors wells, and as soon as complete, we will forward you the information to obtain final closure.

We would like to start at the end of this week or next week if possible.

Sincerely,

Wayne Price-Price LLC