

September 7, 2012

VIA FedEx

Charles Maguire, Director
Radioactive Materials Division
Texas Commission on Environmental Quality
P.O. Box 13087, Mail Code – 233
Austin, Texas 78711-3087

- References: (1) Radioactive Material License No. R04100, Amendment 17
CN600616890 / RN101702439.
- (2) Letter to Kelly Cook. (TCEQ), from J. Scott Kirk, CHP (WCS), re:
“Proposed Action for Area of Interest Regarding the Water in Ogallala-
Antlers-Gatuna (OAG) Wells in Federal Facility Waste Disposal
Facility (FWF) Buffer Zone, Radioactive Material License No. R04100”,
dated June 8, 2012.

**Subject: Monthly Report of Water Level Measurements from FWF-1A, FWF-6A,
FWF-27A, OW-3, OW-4, and OW-5.**

Dear Mr. Maguire,

Waste Control Specialists LLC (WCS) is providing the results of the water level measurements from FWF-1A, FWF-6A, FWF-27A, OW-3, OW-4, and OW-5 in accordance with the June 8, 2012 letter to Mr. Kelly Cook of the Texas Commission on Environmental Quality (TCEQ) (Reference 2).

Radioactive Material License No. R04100 (Reference 1), Amendment 17, License Condition (LC) 67 states the following:

67. “The Licensee shall maintain an individual buffer zone for both the Compact Waste Disposal Facility and the Federal Facility Waste Disposal Facility in a lateral perimeter of at least 100 feet around all disposed waste to allow monitoring for early detection of releases and to allow for remediation, if

Corporate
5430 LBJ Freeway, Ste. 1700
Three Lincoln Centre
Dallas, TX 75240
Ph. 972.715.9800
Fx. 972.448.1419

Facility
P.O. Box 1129
Andrews, TX 79714
Ph. 888.789.2783
Fx. 575.394.3427

necessary. In the event that saturated conditions are detected in the buffer zone, the Licensee shall cease all waste disposal operations and notify the executive director immediately."

WCS notes that the intent and context of the LC does not consider the presence of water a concern. Rather, as stated in the LC, the perimeter buffer zone around all disposed waste is intended "... to allow monitoring for early detection of releases and to allow for remediation, if necessary. ..." These potentially required activities may occur if saturated conditions migrate *from* the disposal area *to* the perimeter buffer zone. At present, the OAG is unsaturated in an area greater than 100 feet around the disposal areas.

The area of interest discussed in the letter to Mr. Cook (TCEQ) is limited to the southwestern corner of the FWF perimeter buffer zone. The closest saturated perimeter OAG monitoring well (FWF-6A) is more than 700 feet west of the existing FWF excavated cell(s). The initial wells of interest are FWF-1A, FWF-6A, and FWF-27A. Saturated conditions within the OAG area of interest have been observed and discussed with the TCEQ since these wells were installed in February 2008. Saturation in the area of interest was caused by surface water ponding during construction of the adjacent By-Product Disposal Facility. During that time, there was little effort to minimize surface water infiltration. There is no similar LC in the By-Product License (RML No. 5807) that requires a dry perimeter buffer zone.

To demonstrate the limited extent of the perched water, WCS installed three (3) additional temporary observation wells, in an area unaffected by the perched water conditions. The new wells (OW-3, OW-4, and OW-5) are located over one-hundred feet from the western most constructed cells of the FWF to show that saturated conditions do not exist within a hundred feet of the disposal unit. However, if there is sufficient groundwater for a complete analysis, the temporary observation wells will be sampled quarterly for the parameters identified for FWF-1A, FWF-6A, and FWF-27A in Attachment B of RML 04100.

Hydraulic conductivity associated with FWF-6A is sufficient to allow groundwater pumping; while FWA-1A and FWF-27A do not appear to recharge at a rate sufficient to provide effective evacuation of water. Hydrographs for FWF-1A, FWF-6A, and FWF-27A include water level measurements beginning in January 2012; while those for OW-3, OW-4, and OW-5 begin in July 2012 (installation date). Hydrographs of water level measurements for wells OW-3, OW-4, OW-5, FWF-1A, FWF-6A, and FWF-27A are provided in Attachment A of this report.

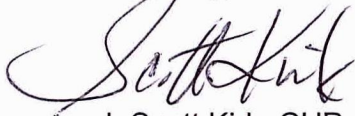
The hydrographs for FWF-1A and FWF-27A show what appears to be a natural declining trend. At present, water levels in both wells are below the Dockum/OAG interface and are therefore unsaturated. Temporary observation wells OW-3, OW-4, and OW-5 remain dry and the OAG formation remains unsaturated at these locations.

As of August 31, 2012, after removing about 1,165 gallons of water, the average height of the perched groundwater column above the Dockum/OAG contact has been reduced to slightly more than 2.65 ft above the red bed in FWF-6A since active pumping began in June 2012. Water production from FWF-6A is around 5 gallons per hour. WCS proposes to

continue pumping the water from FWF-6A while seeking ways to improve the water production rate in FWF-6A.

WCS requests that a copy of all correspondence regarding this matter be directly emailed (skirk@valhi.net) to my attention as soon as possible after issuance. If you have any questions or need additional information, please call me at 432-525-8500.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Scott Kirk". The signature is fluid and cursive, with the first name "J." and last name "Kirk" clearly distinguishable.

J. Scott Kirk, CHP

Vice President, Licensing, Corporate Compliance and Radiation Safety Officer

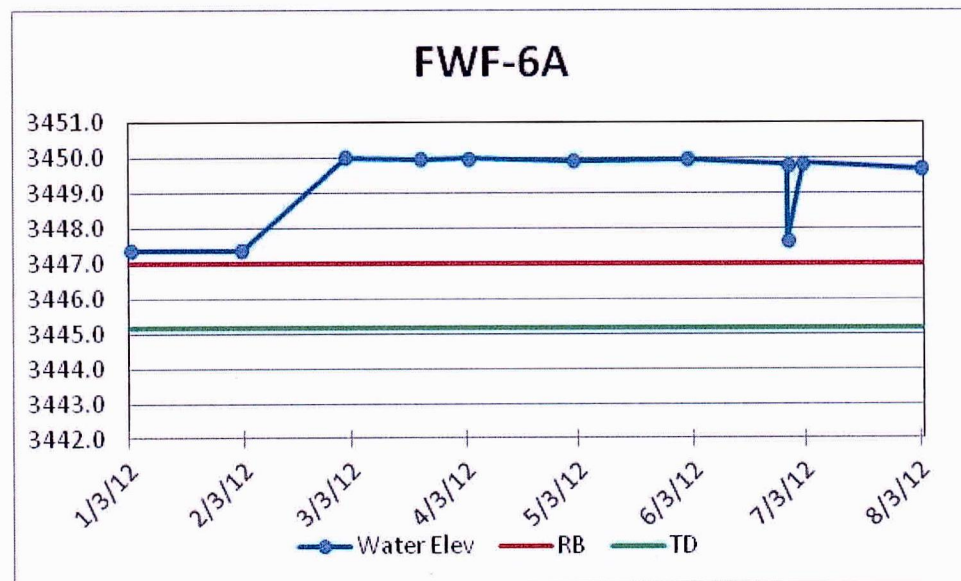
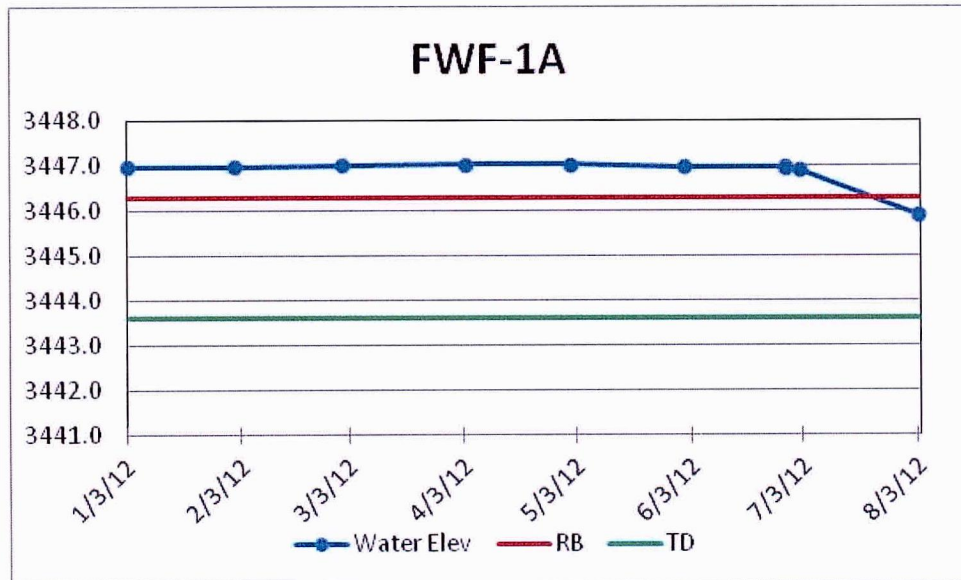
Enclosure

cc: Kelly Cook, TCEQ
William Dornsife, P.E., WCS
Jim Van Vliet, WCS
Linda Beach, WCS
Jane Grimm, WCS
Pam Giblin, Baker Botts
WCS Regulatory Compliance
WCS Records Management

ATTACHMENT A

Hydrographs through August 31, 2012 for
FWF-1A, FWF-6A, FWF-27A, OW-3, OW-4, and OW-5,

HYDROGRAPHS



Note:

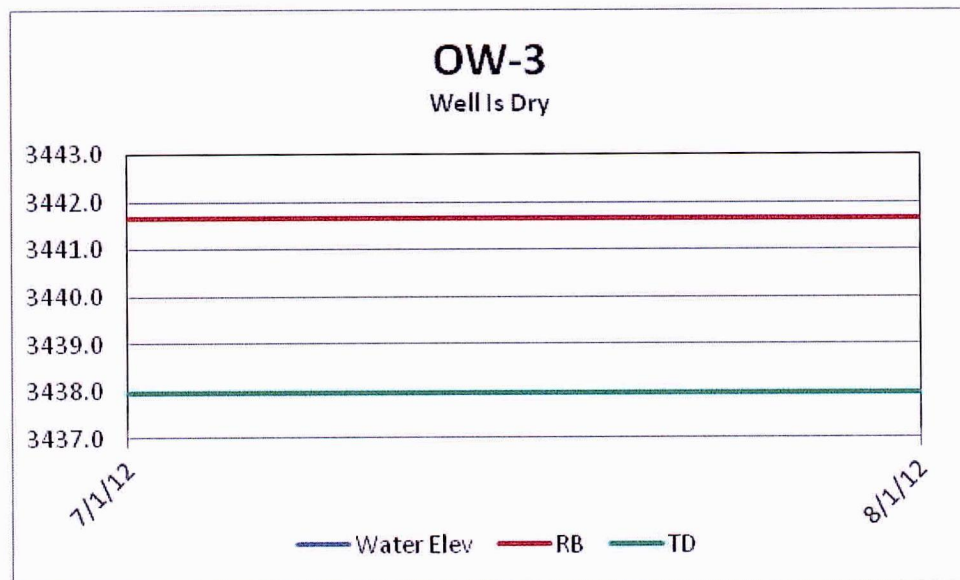
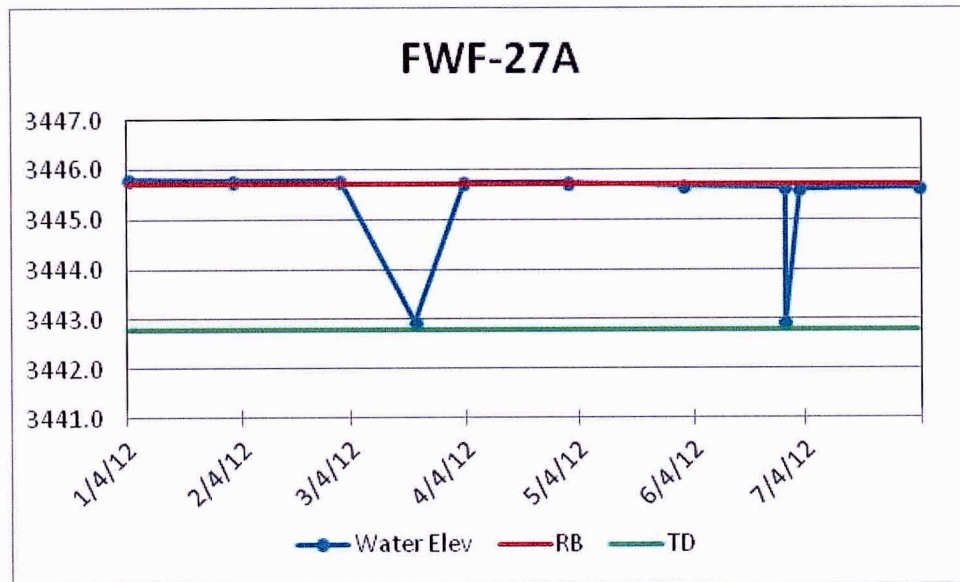
Downward spike water level illustrates a sample event in FWF-6A.

Explanation:

RB = Top of Red Bed

TD = Total Well Depth

HYDROGRAPHS



Note:

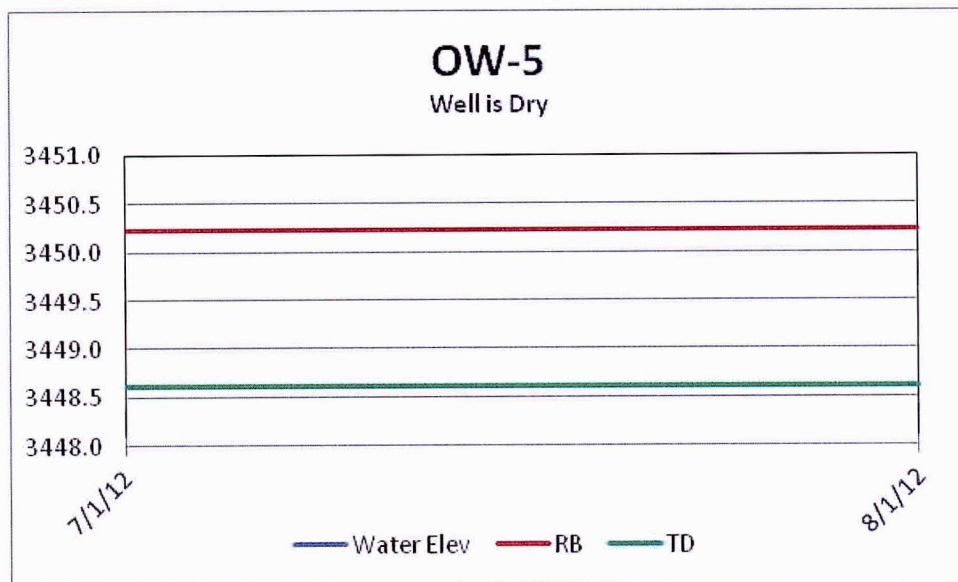
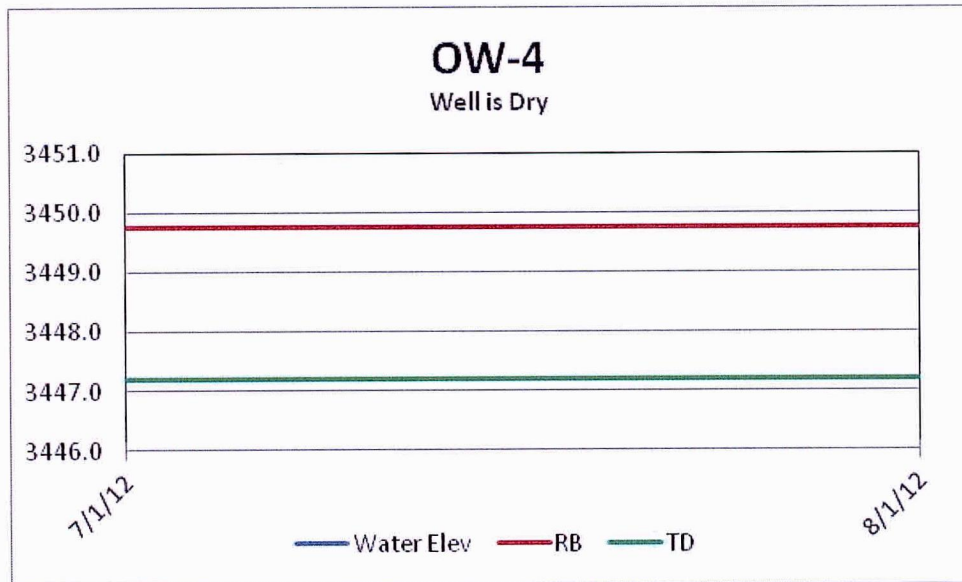
Downward spikes water levels illustrate a sample event in FWF-27A.

Explanation:

RB = Top of Red Bed

TD = Total Well Depth

HYDROGRAPHS



Explanation:

RB = Top of Red Bed

TD = Total Well Depth