

THE TEXAS SOLUTION

October 2, 2012

VIA Fed Ex

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 18
CN600616890 / RN101702439.
- (2) Letter to Kelly Cook. (TCEQ), from J. Scott Kirk, CHP (WCS), re:
"Proposed Action for Area of Concern Regarding the Detection of
Water in Ogallala-Antlers-Gatufia (OAG) Wells in Compact Waste
Facility (CWF) Buffer Zone, Radioactive Material License No.
R04100", dated December 22, 2011.
- (3) Letter to Kelly Cook. (TCEQ), from J. Scott Kirk, CHP (WCS), re:
"Completed Activities for Area of Concern Regarding the Detection of
Water in OAG Wells in CWF Buffer Zone, Radioactive Material
License No. R04100", dated February 3, 2012.

Subject: Monthly Report of Water Level Measurements from OW-1, OW-2, OAG-21, OAG-22, and TP-173.

Dear Mr. Maguire,

Waste Control Specialists LLC (WCS) is providing the results of the water level measurements from OW-1, OW-2, OAG-21, OAG-22, and TP-173 in accordance with the December 22, 2011 letter to Mr. Kelly Cook of the Texas Commission on Environmental Quality (TCEQ) (Reference 2).

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

Radioactive Material License No. R04100 (Reference 1), Amendment 18, 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 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."

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* a perimeter buffer zone.

OAG monitor wells OAG-21, OAG-22 and temporary piezometer TP-173 are located in the former small playa on the eastern boundary of the CWF within the perimeter buffer zone. Saturated conditions within the OAG were anticipated and forecast in the vicinity of the former playa due to the inherent geologic nature of playas as localized, closed depressions. The perched groundwater in this playa is a small, isolated pocket of water that is not connected to a zone of continuous saturation. Playas serve as focused recharge features both regionally and at the WCS facility. WCS notes that the existence of the small playa was identified and documented in the initial license application almost 10 years ago and documented in geologic studies since 1994. Additionally, this minor feature and its saturated condition were discussed with TCEQ staff several years before waste was accepted at the CWF on April 27, 2012.

To provide additional hydrogeologic information near the former small playa, WCS installed temporary observation wells OW-1 and OW-2 on January 4, 2012. Both wells are located east of the CWF disposal unit and west of monitor wells OAG-21 and OAG-22, and are located outside the former small playa. These wells are intended to help demonstrate that the OAG is unsaturated in an area greater than 100 feet around the disposal areas.

Hydraulic conductivity associated with OAG-21 is sufficient to allow groundwater pumping; while OAG-22 and TP-173 do not recharge at a rate sufficient to provide effective evacuation of water. Hydrographs of water level measurements for wells OW-1, OW-2, OAG-21, OAG-22, and TP-173 are provided in Attachment A. As of September 28, 2012, about 28,872 gallons of water have been removed from OAG-21 since November 2011. For the month of September, the average height of the perched water column above the Dockum/OAG contact has been reduced to slightly more than 2.79 ft and 1.0 ft in OAG-21 and OAG-22, respectively. The OAG unit at TP-173 remains dry. OW-1 and OW-2 have been dry since their installation in January 2012. As shown on the attached hydrograph,

Mr. Charles Maguire, Director
October 2, 2012
Page 3 of 3

water levels in OW-2 continue to fluctuate but the OAG formation remains unsaturated at that location.

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,



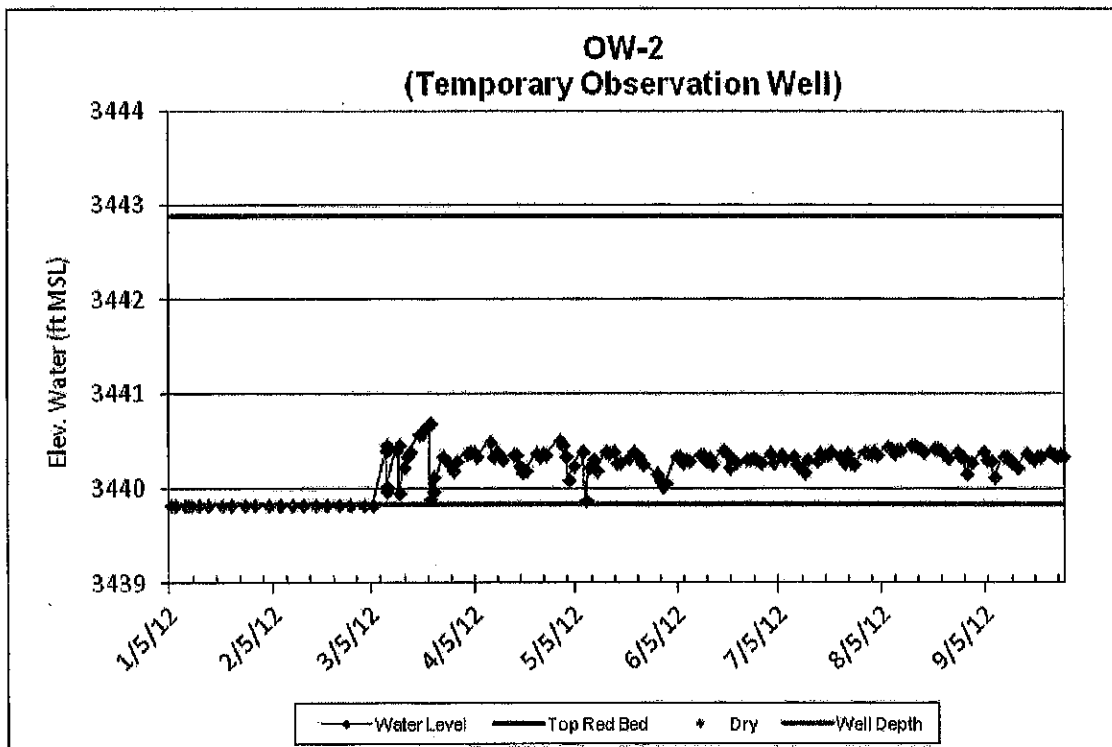
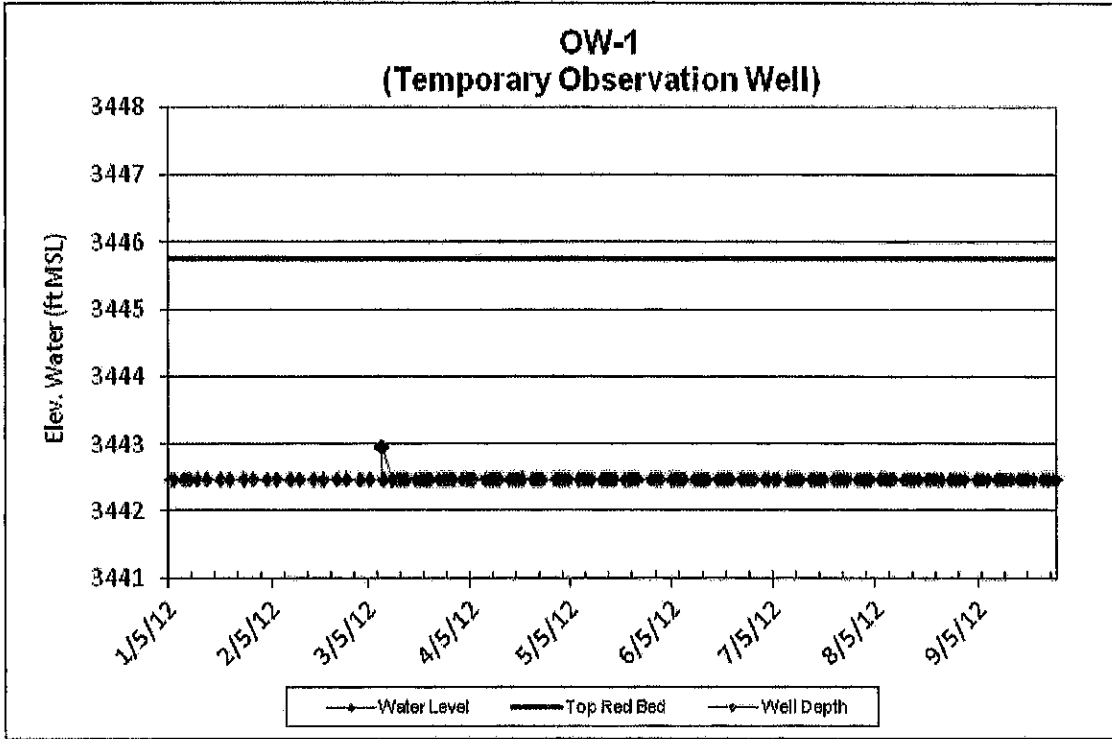
J. Scott Kirk, CHP
Vice President, Licensing, Corporate Compliance and Radiation Safety Officer

Enclosure

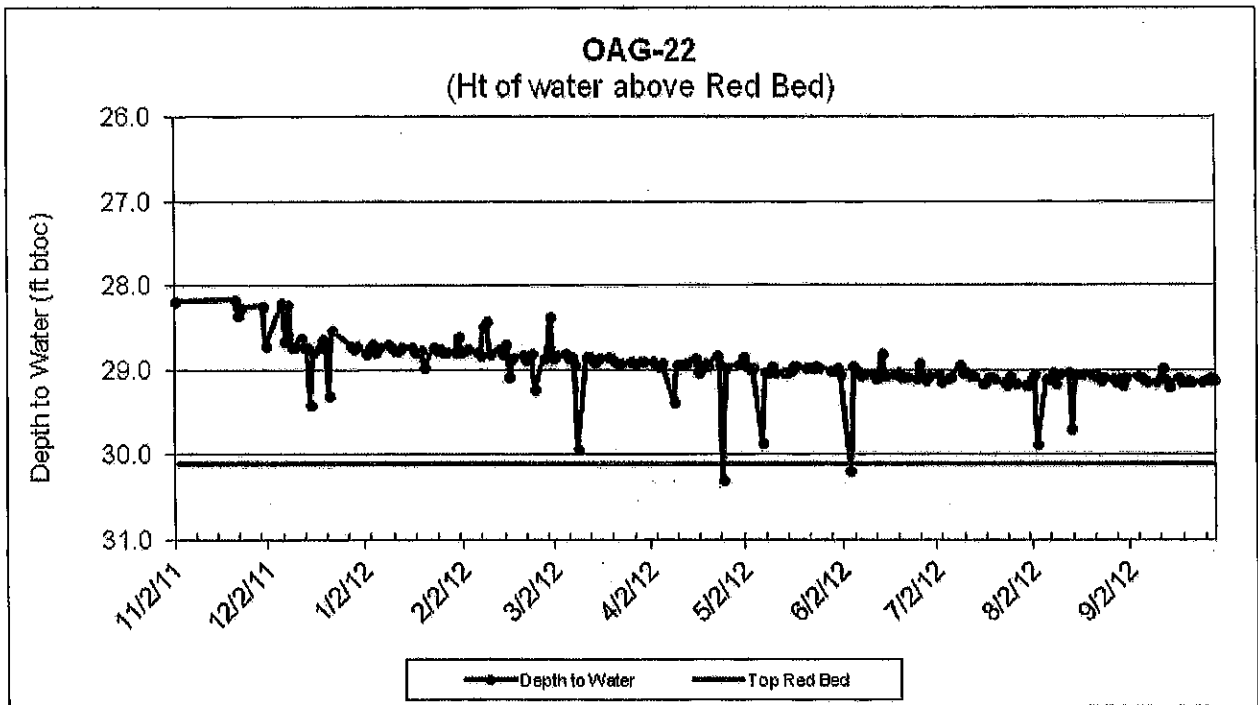
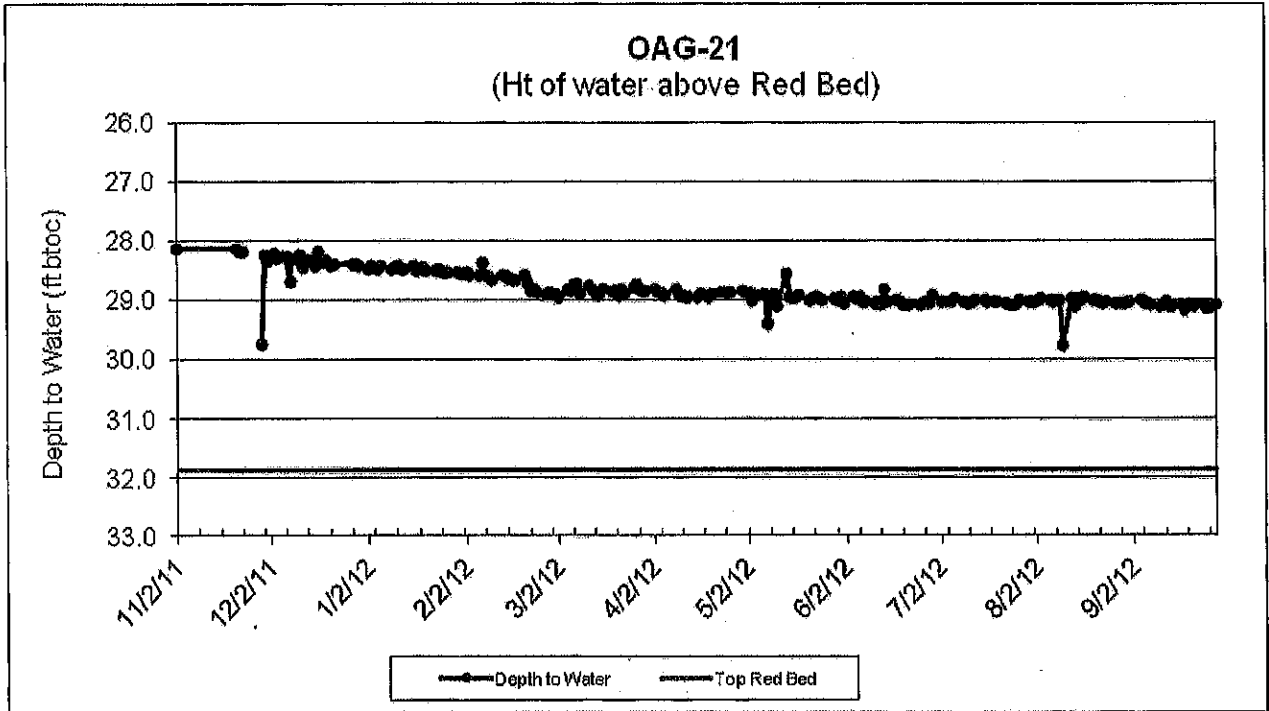
cc: Kelly Cook, TCEQ
William Dornsife, P.E., WCS
Jim Van Vliet, WCS
Linda Beach, WCS
Jane Grimm, WCS
Pam Giblin, Baker Botts
WCS Regulatory Compliance
WCS Records Management

ATTACHMENT A
Hydrographs for OW-1, OW-2, OAG-21, OAG-22, and TP-173
through September 28, 2012

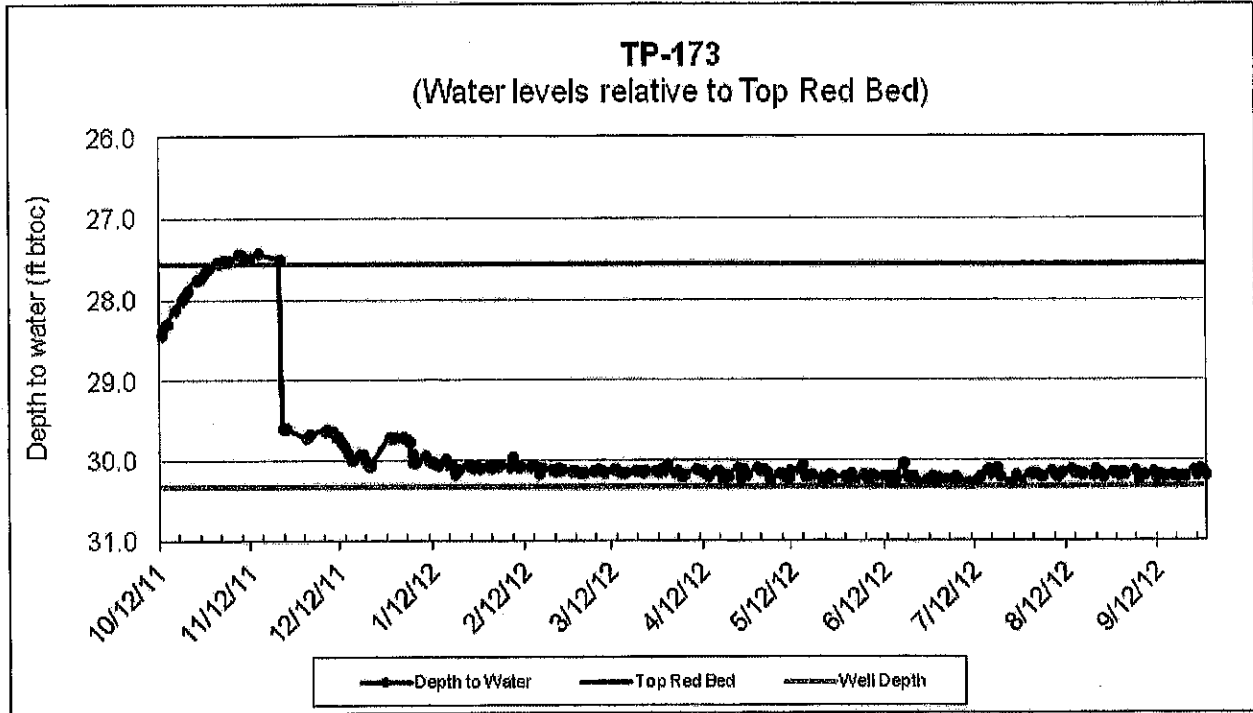
HYDROGRAPHS



HYDROGRAPHS



HYDROGRAPHS



C

C

C

**WASTECONTROL
SPECIALISTS LLC**

August 2, 2012

VIA Fed Ex

Mr. Kelly Cook, Director (MC-172)
Critical Infrastructure Division
Office of Compliance and Enforcement
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 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 Concern Regarding the Detection of
Water in Ogallala-Antlers-Gatuña (OAG) Wells in Compact Waste
Facility (CWF) Buffer Zone, Radioactive Material License No.
R04100", dated December 22, 2011.
- (3) Letter to Kelly Cook. (TCEQ), from J. Scott Kirk, CHP (WCS), re:
"Completed Activities for Area of Concern Regarding the Detection of
Water in OAG Wells in CWF Buffer Zone, Radioactive Material
License No. R04100", dated February 3, 2012.

**Subject: Monthly Report of Water Level Measurements from OW-1, OW-2, OAG-
21, OAG-22, and TP-173.**

Dear Mr. Cook,

Waste Control Specialists LLC (WCS) is providing the results of the water level measurements from OW-1, OW-2, OAG-21, OAG-22, and TP-173 in accordance with the December 22, 2011 letter to Mr. Kelly Cook of the Texas Commission on Environmental Quality (TCEQ) (Reference 2).

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

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 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."

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.

OAG monitor wells OAG-21, OAG-22 and temporary piezometer TP-173 are located in the former small playa on the eastern boundary of the CWF within the perimeter buffer zone. Saturated conditions within the OAG were anticipated and forecast in the vicinity of the former playa due to the inherent geologic nature of playas as localized, closed depressions. The perched groundwater in this playa is a small, isolated pocket of water that is not connected to a zone of continuous saturation. Playas serve as focused recharge features both regionally and at the WCS facility. WCS notes that the existence of the small playa was identified and documented in the initial license application almost 10 years ago and documented in geologic studies since 1994. Additionally, this minor feature and its saturated condition were discussed with TCEQ staff several years before waste was accepted at the CWF on April 27, 2012.

To provide additional hydrogeologic information near the former small playa, WCS installed temporary observation wells OW-1 and OW-2 on January 4, 2012. Both wells are located east of the CWF disposal unit and west of monitor wells OAG-21 and OAG-22, and are located outside the former small playa on the eastern boundary of the CWF. These wells help demonstrate that the OAG is unsaturated in an area greater than 100 feet around the disposal areas.

Hydraulic conductivity associated with OAG-21 is sufficient to allow groundwater pumping; while OAG-22 and TP-173 do not recharge at a rate sufficient to provide effective evacuation of water. Hydrographs of water level measurements for wells OW-1, OW-2, OAG-21, OAG-22, and TP-173 are provided in Attachment A. As of July 31, 2012, about 27,075 gallons of water have been removed from OAG-21 since November 2011. Height of the perched water column above the Dockum/OAG contact has been reduced to slightly more than 2.86 ft and 0.93 ft in OAG-21 and OAG-22, respectively. The OAG unit at TP-173 remains dry. OW-1 and OW-2 have been dry since their installation in January 2012. As shown on the attached hydrograph, water levels in OW-2 continue to fluctuate but the OAG formation remains unsaturated at that location.

Mr. Kelly Cook, TCEQ
August 2, 2012
Page 3 of 3

Pumping operations at OAG-21 were abbreviated this month as a result of bladder pump controller failures and minimal equipment availability during low-flow purge and sample requirements in the CWF. Five (5) malfunctioning controller devices are being sent to the manufacturer for repair and should be returned within approximately two (2) weeks after receipt. Pumping at OAG-21 will resume once CWF sampling has ended or the bladder pump controllers are repaired. In the interim, water level measurement will continue to be recorded daily in OW-1, OW-2, OAG-21, OAG-22, and TP-173.

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,



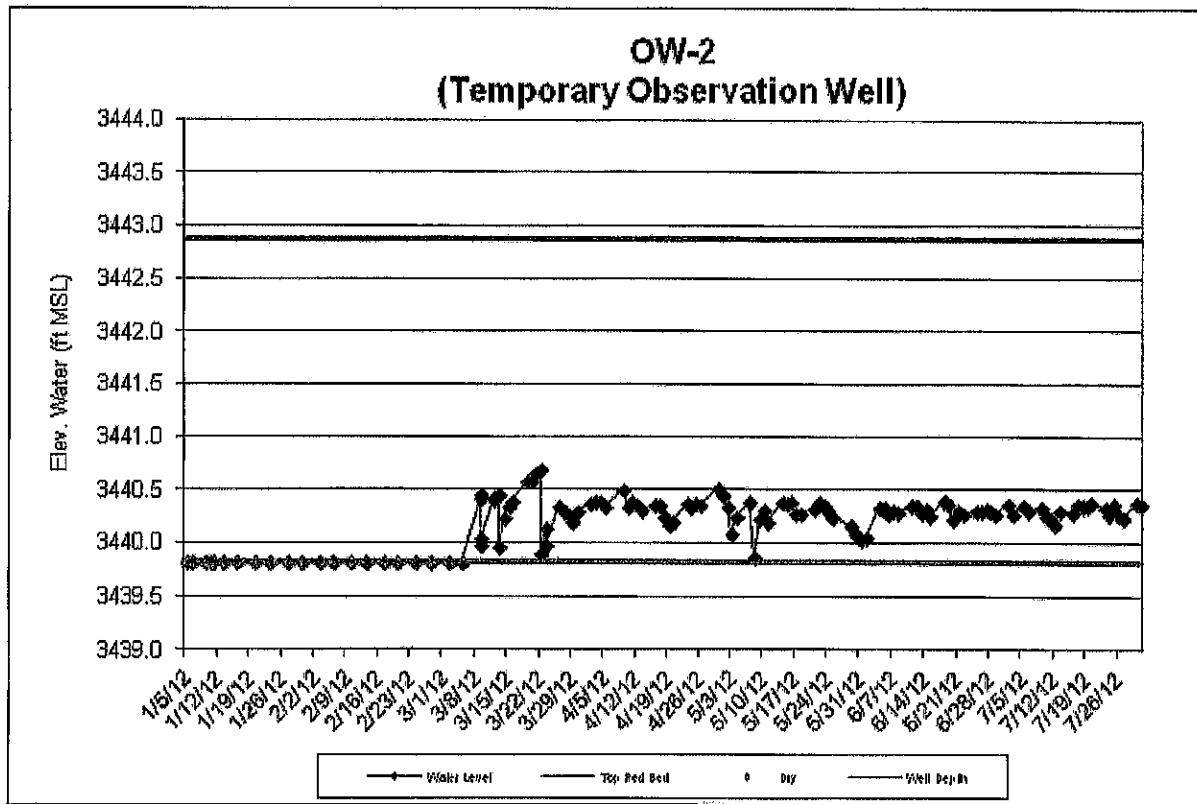
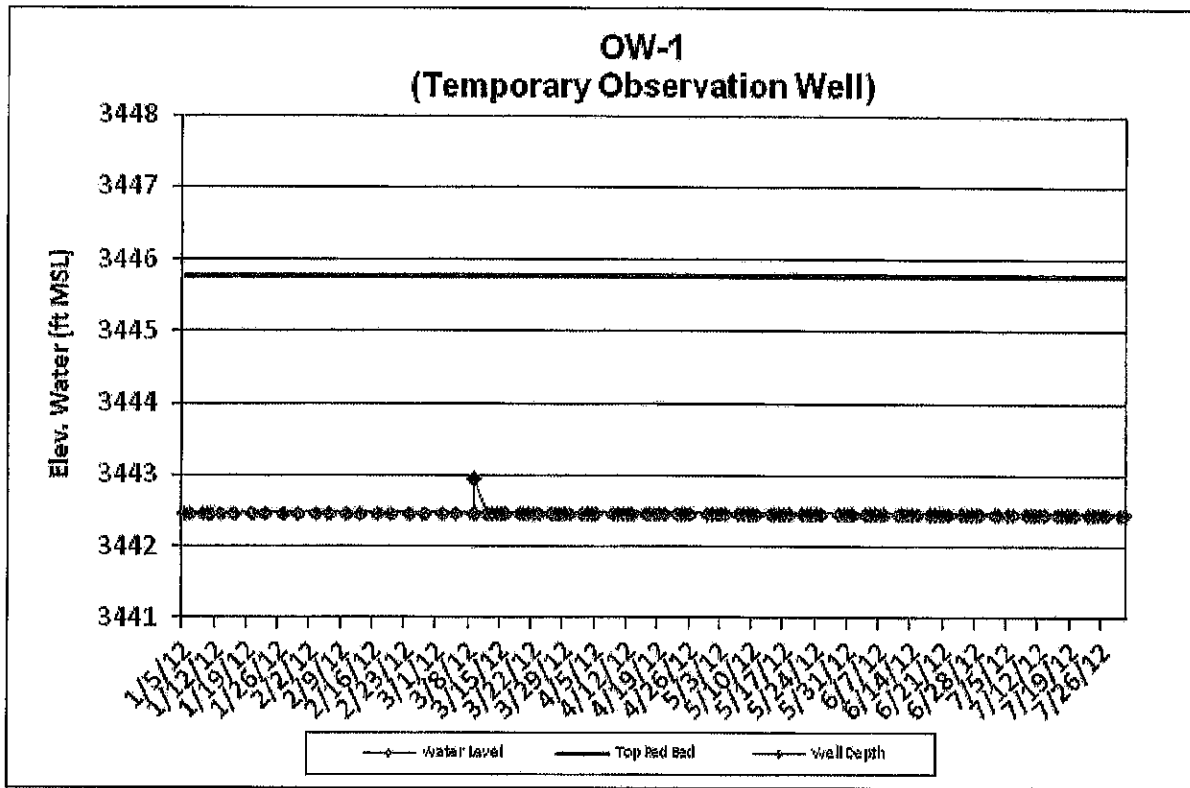
J. Scott Kirk, CHP
Vice President, Licensing, Corporate Compliance and Radiation Safety Officer

Enclosure

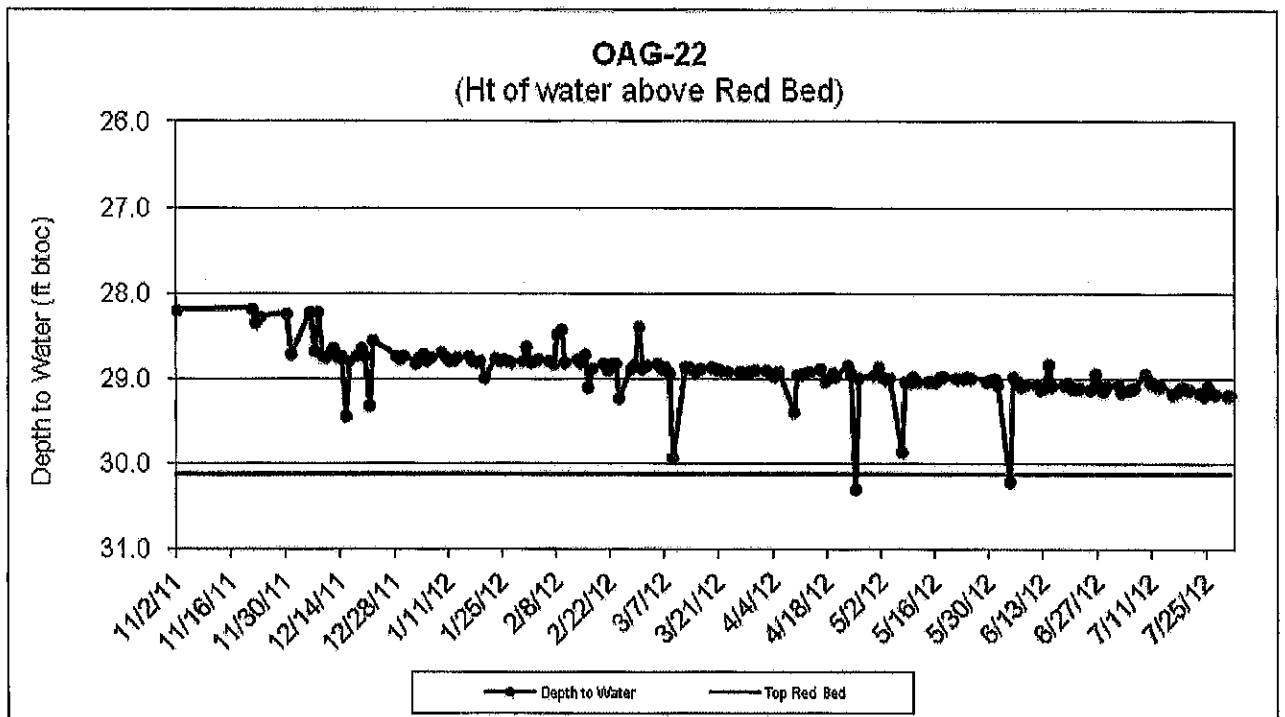
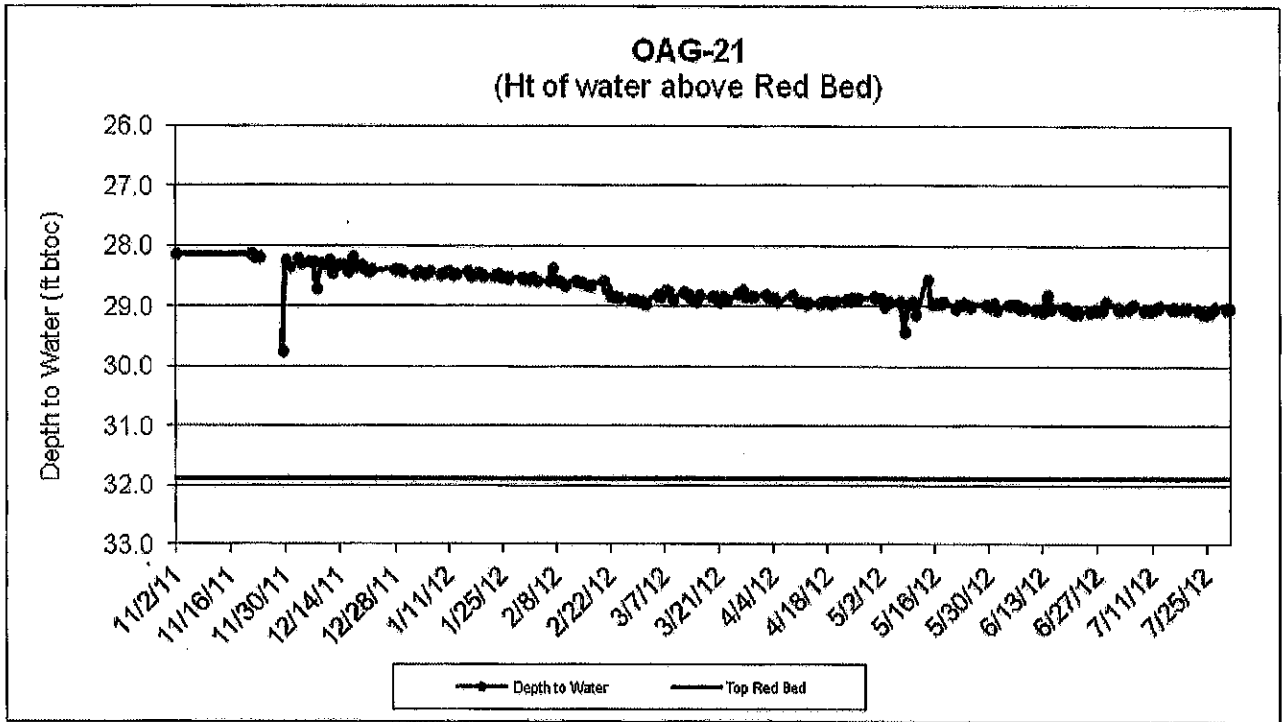
cc: Charles Maguire, TCEQ
William Dornsife, P.E., WCS
Jim Van Vliet, WCS
Linda Beach, WCS
Jane Grimm, WCS
Pam Giblin, Baker Botts
WCS Regulatory Compliance
WCS Records Management

ATTACHMENT A
Hydrographs for OW-1, OW-2, OAG-21, OAG-22, and TP-173
through July 31, 2012

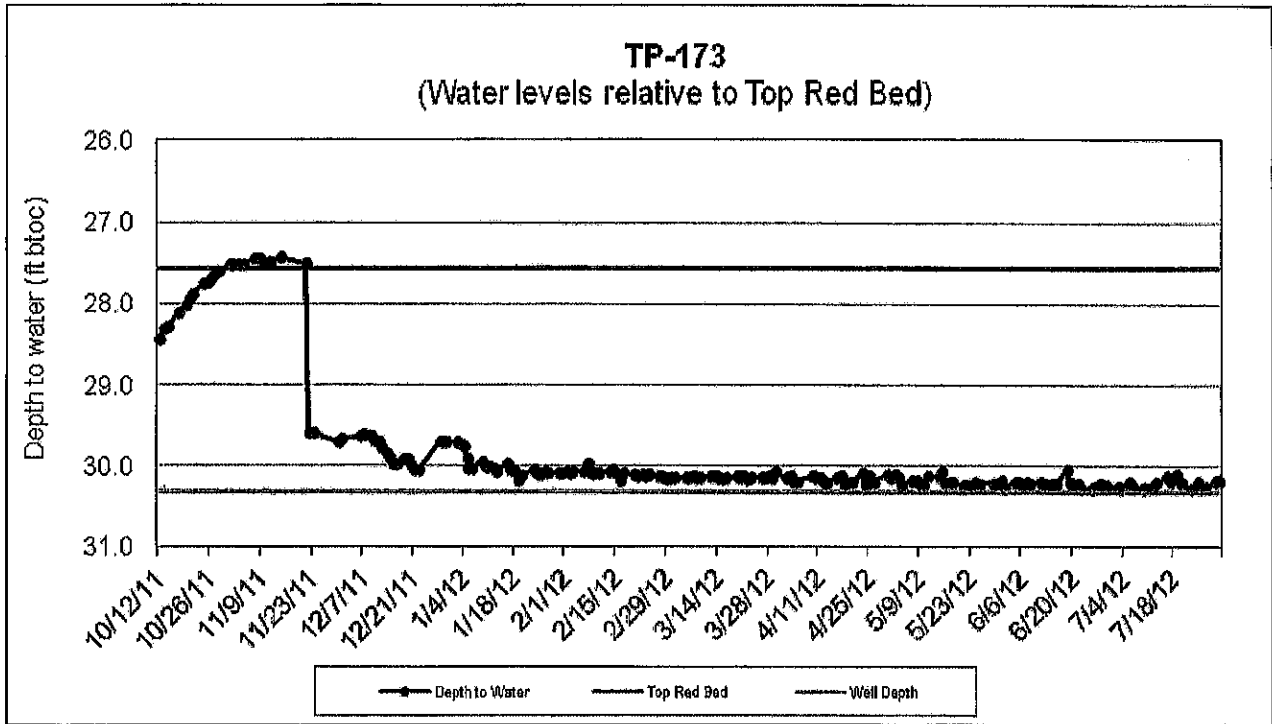
HYDROGRAPHS



HYDROGRAPHS



HYDROGRAPHS



C

C

C

RECEIVED
JUL 11 2012

Critical Infrastructure Division

**WASTECONTROL
SPECIALISTS LLC**

July 9, 2012

VIA Express Mail
EG 728508931 US

Mr. Kelly Cook, Director (MC-172)
Critical Infrastructure Division
Office of Compliance and Enforcement
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

- References: (1) Radioactive Material License No. R04100, Amendment 15
CN600616890 / RN101702439.
- (2) Letter to Kelly Cook. (TCEQ), from J. Scott Kirk, CHP (WCS), re:
"Proposed Action for Area of Concern Regarding the Detection of
Water in Ogallala-Antlers-Gatufia (OAG) Wells in Compact Waste
Facility (CWF) Buffer Zone, Radioactive Material License No.
R04100", dated December 22, 2011.
- (3) Letter to Kelly Cook. (TCEQ), from J. Scott Kirk, CHP (WCS), re:
"Completed Activities for Area of Concern Regarding the Detection of
Water in OAG Wells in CWF Buffer Zone, Radioactive Material
License No. R04100", dated February 3, 2012.

Subject: Monthly Report of Water Level Measurements from OW-1, OW-2, OAG-21, OAG-22, and TP-173.

Dear Mr. Cook,

Waste Control Specialists LLC (WCS) is providing the results of the water level measurements from OW-1, OW-2, OAG-21, OAG-22, and TP-173 in accordance with the December 22, 2011 letter to Mr. Kelly Cook of the Texas Commission on Environmental Quality (TCEQ) (Reference 2). On April 27, 2012, WCS accepted and disposed of its first waste shipment to the CWF.

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

Radioactive Material License No. R04100 (Reference 1), Amendment 15, 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 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."

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.

OAG monitor wells OAG-21, OAG-22 and temporary piezometer TP-173 are located in the former small playa on the eastern boundary of the CWF within the perimeter buffer zone. Saturated conditions within the OAG were anticipated and forecast in the vicinity of the former playa due to the inherent geologic nature of playas as localized, closed depressions. The perched groundwater in this playa is a small, isolated pocket of water that is not connected to a zone of continuous saturation. Playas serve as focused recharge features both regionally and at the WCS facility. WCS notes that the existence of the small playa was identified and documented in the initial license application almost 10 years ago and documented in geologic studies since 1994. Additionally, this minor feature was discussed with TCEQ staff several years before waste was accepted at the CWF.

To provide additional hydrogeologic information near the former small playa, WCS installed temporary observation wells OW-1 and OW-2 on January 4, 2012. Both wells are located east of the CWF disposal unit and west of monitor wells OAG-21 and OAG-22, and are expected to be located outside the former small playa on the eastern boundary of the CWF. These wells help demonstrate that the OAG is unsaturated in an area greater than 100 feet around the disposal areas.

Hydraulic conductivity associated with OAG-21 is sufficient to allow groundwater pumping; while OAG-22 and TP-173 do not recharge at a rate sufficient to provide effective evacuation of water. Hydrographs of water level measurements for wells OW-1, OW-2, OAG-21, OAG-22, and TP-173 are provided in Attachment A. As of June 29, 2012, after removing about 26,330 gallons of water, the height of the perched groundwater column above the Dockum/OAG contact has been reduced to slightly more than 2.95 ft and 1.05 ft in OAG-21 and OAG-22, respectively. The OAG hydraulic unit at TP-173 remains dry. OW-1 and OW-2 have been dry since their installation in January 2012. As shown on the attached hydrograph, water levels in OW-2 continue to fluctuate but the OAG formation remains unsaturated at that location.

Mr. Kelly Cook, TCEQ
July 9, 2012
Page 3 of 3

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,



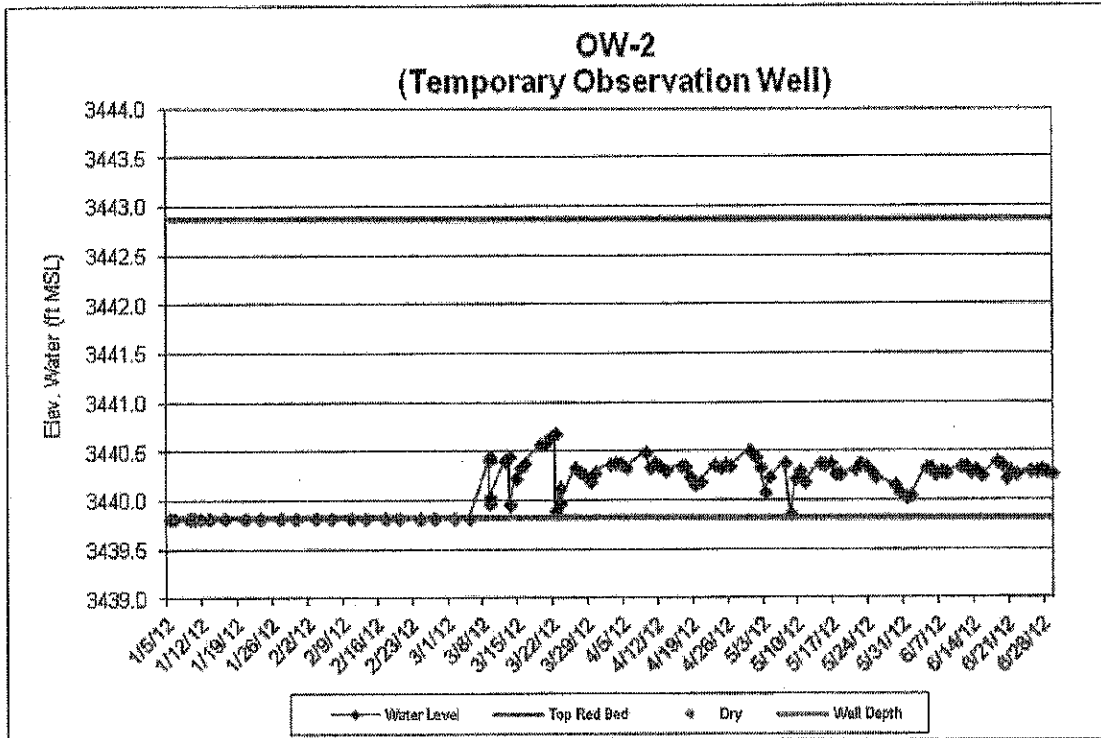
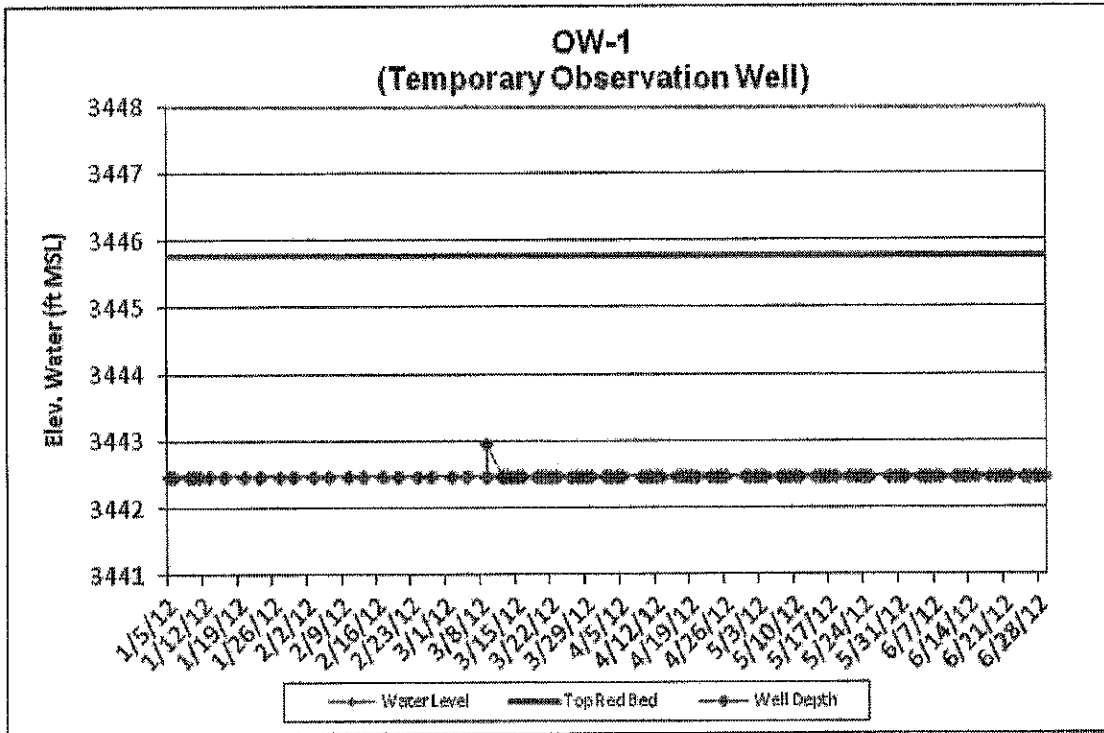
J. Scott Kirk, CHP
Vice President, Licensing, Corporate Compliance and Radiation Safety Officer

Enclosure

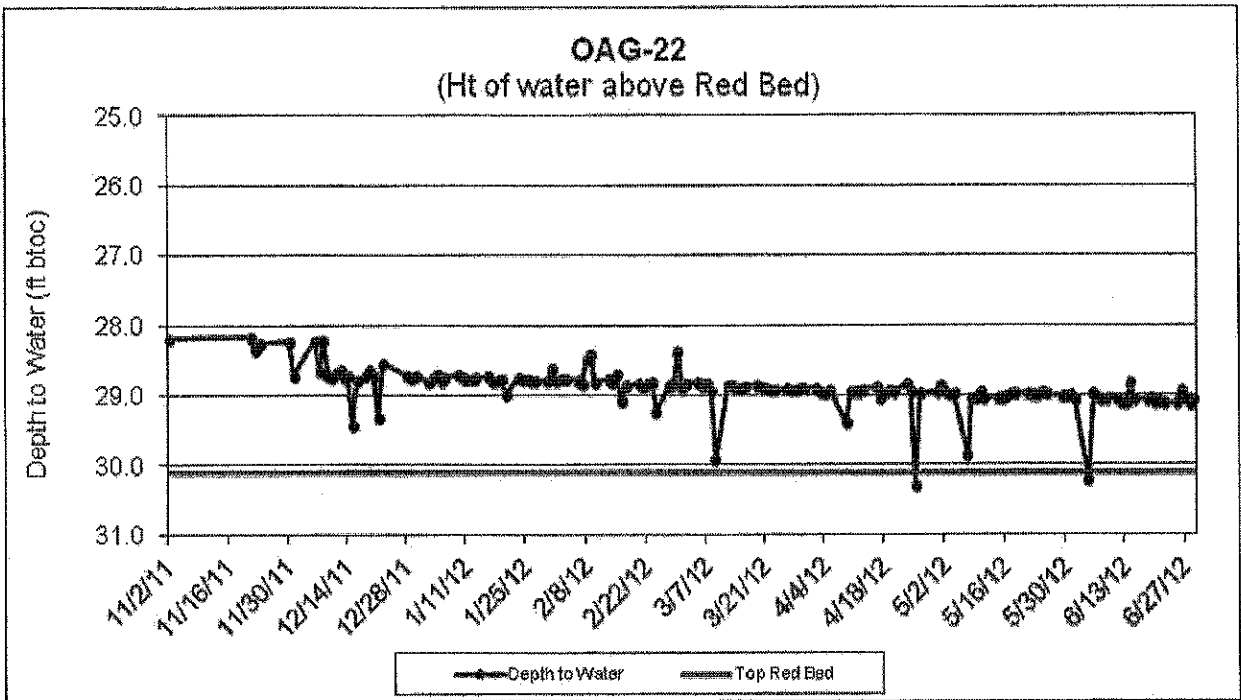
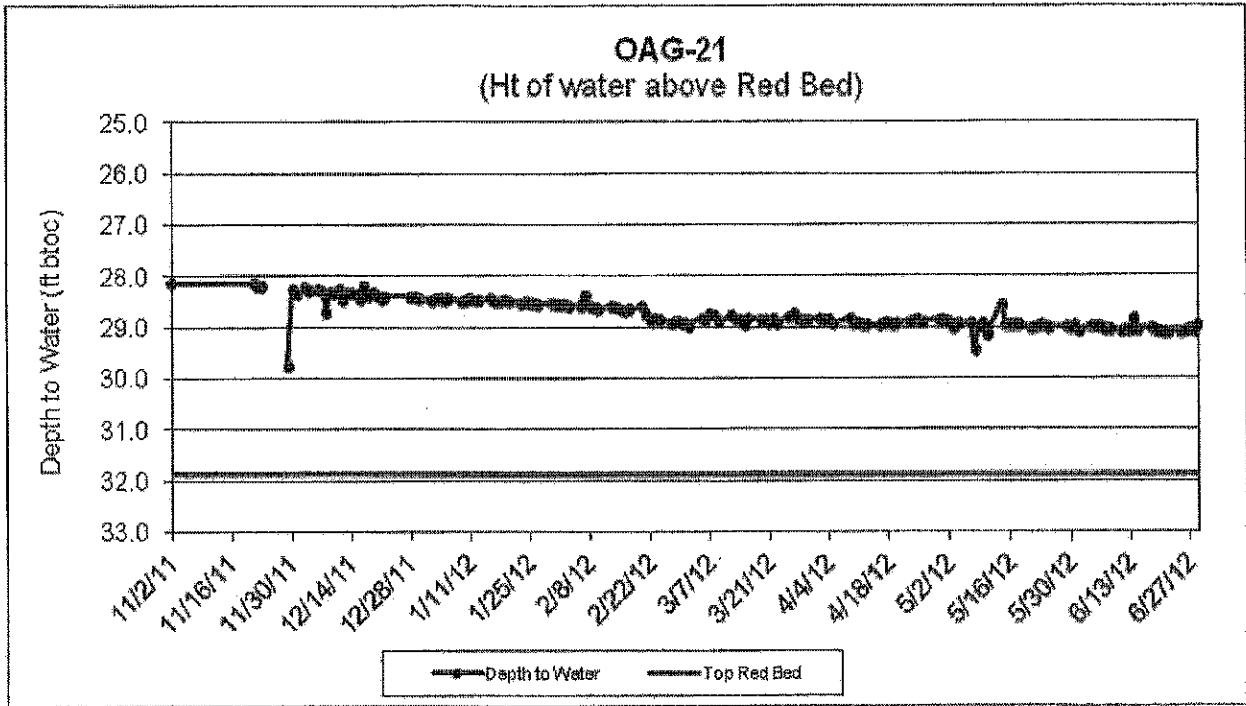
cc: Charles Maguire, TCEQ
William Dornsife, P.E., WCS
Jim Van Vliet, WCS
Linda Beach, WCS
Jane Grimm, WCS
Pam Giblin, Baker Botts
WCS Regulatory Compliance
WCS Records Management

ATTACHMENT A
Hydrographs through June 29, 2012 for
OW-1, OW-2, OAG-21, OAG-22, and TP-173

HYDROGRAPHS



HYDROGRAPHS



HYDROGRAPHS

