VS936347

WASTE CONTROL SPECIALISTS LLC ORIGINAL

June 11, 2012 **VIA HAND DELIVERY**

Ms. Lorrie Council, P.G., Manager
Radioactive Materials Division
Texas Commission on Environmental Quality
P O Box 13087, MC-233
Austin, Texas 78711-3087

References: (1) Radioactive Material License No. R05807, Amendment No.04
CN 600616890, RN 101702439

(2) Radioactive Material License No. R04100, Amendment No. 15
CN 600616890, RN 101702439

Subject: Monthly OAG Water Level Report Submitted in Support of LC 44 in RML No. R05807 and LC 72 in RML No. R04100, Waste Control Specialists LLC, Andrews County, Texas

Dear Ms. Council:

License Condition (LC) 44 of Radioactive Material License (RML) No. R05807 (Reference 1) and LC 72 of RML No. R04100 (Reference 2) require Waste Control Specialists LLC (WCS) to conduct Ogallala/Antlers/Gatuña (OAG) water level elevation measurements monthly to monitor potential movement of the dry line and report the elevations to the Executive Director.

The monthly OAG water level report for May 2012 provides an analysis of the May 2012 water level data for all required OAG monitoring wells on the WCS facility (Attachment 1). May 2012 water level measurements and pertinent well data are summarized in Table 1 and presented visually on a map of OAG wells in and near the 1,338 acres of WCS operations (Figure 1), as well as on a smaller scale map of all OAG wells on the WCS property (Figure 2). The maps include an indication of whether the wells are dry or have water and, where there is water in the well, the thickness of water above, or in the case of negative numbers, below the top of the Dockum. The May 2012 OAG water level data in Table 1 are also provided as an Excel file on the attached CD.

The location of the dry line in May 2012 is substantially the same in Figures 1 and 2 as represented in the license applications and as shown on the April 2012 map. The zone of continuous saturation of the OAG north of the Federal Facility Waste Disposal Facility (FWF) and Compact Waste Disposal Facility (CWF) landfills also remains approximately the same. Please refer to the attached report for additional details.

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.

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Sincerely,

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

cc: Gary L. Smith, Ph.D., TCEQ
Charles Maguire, TCEQ
William Dornsife, P.E., WCS
Jim Van Vliet, WCS
Linda Beach, WCS
WCS Regulatory Compliance
WCS Records Management

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ORIGINAL

Attachment 1

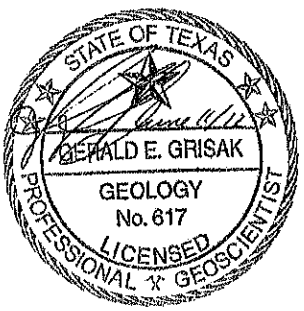
May 2012 OAG Water Level Report

Prepared for:

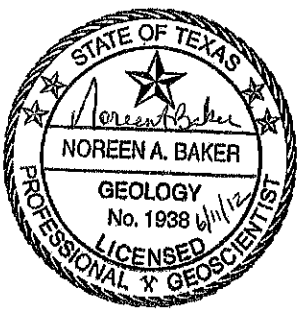
Waste Control Specialists LLC
P.O. Box 1129
Andrews, TX 79714

Prepared by:

Gerald E. Grisak, Noreen A. Baker
INTERA INC.
Austin, TX



Gerald E. Grisak, P.G.



Noreen A. Baker, P.G.

June 11, 2012

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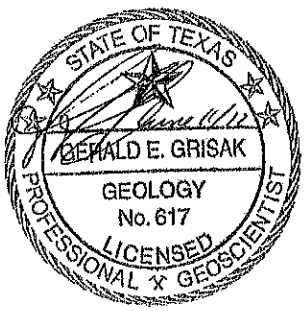

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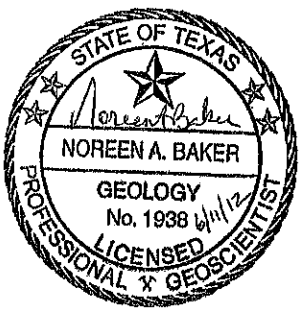

Noreen A. Baker, P.G.

June 11, 2012

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1.0 Introduction

Byproduct Radioactive Materials License (RML) No. R05807, License Condition (LC) 44, and Low Level Radioactive Materials License No. R04100, LC 72, require Waste Control Specialists LLC (WCS) to measure water level elevations monthly in wells completed in the OAG and report, in writing, the elevations to monitor potential movement in the mapped dry line. TCEQ requested that additional information be included in the monthly OAG water level reports (Smith, 2009a, 2009b, 2009c and 2010). This report meets the requirements of Byproduct RML LC 44 and Low Level RML LC 72 and the requests for additional information referenced above by submitting the OAG water level measurements in tabular and map form. A narrative of the monthly OAG water level measurements, including a discussion of absolute changes and apparent trends is provided. In addition, on a quarterly basis, hydrographs for each OAG well are submitted individually and plotted on maps at the WCS facility and site scales. OAG hydrographs through the first quarter of 2012 are included in this OAG water level report.

This report provides depth to water (DTW) measurements and water-level elevations of any standing water in the wells. In general the OAG wells are installed in borings advanced 2 to 3 feet into the underlying Dockum red beds, although some OAG wells installed prior to 2007 terminate at the OAG-Dockum contact. The wells have a sand pack around the screen that extends from the bottom of the boring to above the top of the screen slots. Therefore the bottom 2 to 3 feet of the well is essentially in a sump in the red beds.

Water levels in the OAG wells fall into one of four general categories. Each category has implications about the saturation of the OAG unit and interpretation of the observations.

Dry OAG Wells

If there is no standing water in a well, the well is simply reported as dry and the OAG is clearly unsaturated.

Saturated OAG Wells

Where there is water in a well and the water level is above the elevation of the contact between the OAG and the underlying Dockum red beds, the water level is used to calculate a saturated thickness of OAG above the red beds. For example, if the OAG/Dockum contact is at elevation 3430 ft msl, and the measured water level elevation is at 3431 ft msl, the saturated thickness is 1.0 foot.

Below Red Bed Wells (BRB)

Where a water level is above the lowermost slots in a well screen, but below the OAG/Dockum contact, the water level is reported as BRB (Below Red Bed contact). In these instances the OAG is considered dry since there is insufficient water in the OAG to fill the well sump to the level of the OAG/red bed contact (i.e., where groundwater movement occurs).

End Cap Water Wells

In some instances there is a measured water level in the end cap below the lowermost slots of the well screen and below the top of the red bed contact. In these instances the well and the OAG are dry. The end cap assembly is a non-slotted cap attached to the lower section of the screen by a screw fitting and water-tight gasket. Any water in the end cap below the lowermost screen slot is accumulated by condensation or mechanisms other than groundwater flowing into the well casing. Since these conditions do not indicate saturation of the OAG, these wells are considered dry, but will continue to be monitored with special attention.

2.0 May 2012 Water Levels

Table 1 provides the May, 2012 water-level elevations and pertinent well data for the OAG wells. Figure 1 is a map of OAG wells within and near the 1338 acres of WCS facility operations (the Facility). Figure 2 is a map of OAG wells on the approximately 23 square miles comprising the entire WCS property (the Site). Both Figures 1 and 2 graphically indicate the presence or absence of water. All data on Figures 1 and 2 represent pre-sampling water levels or data as free from sampling influences as possible. Table 2 provides a summary of the OAG wells sampled in May, 2012 including the monitoring program and license for which the samples were obtained.

Figures 1 and 2 are color-coded to show where water levels have increased (light blue), declined (magenta), or remained unchanged (gray) between water level measurements in April, 2012 and May, 2012. Also identified on these figures are those wells where the change in water level between April and May exceeds 1.0 foot.

The OAG wells have been subdivided into Type 1, Type 2 and Type 3 wells. Type 1 wells are those with continuous water-level measurements via transducers (Level TROLL) in the vicinity of the Byproduct Landfill. There are 18 Type 1 wells in the May, 2012 water level records: TP-42, TP-43, TP-78, TP-86, TP-88, TP-90, TP-92, TP-141, TP-142, TP-143, TP-146, TP-148, TP-

166, TP-167, TP-171, FWF-1A, FWF-26A, and FWF-27A. Type 2 wells include essentially all wells and piezometers located within and immediately adjacent to the Facility. All of the Type 1 wells are also Type 2 wells for a total of 212 Type 2 wells. Because of its location, TP-14 is a Type 2 well containing a transducer for continuous water level measurements. Type 3 wells are those wells that are either distant from the Facility or are in locations that provide redundant data in areas of high OAG well density within the Facility. There are currently 53 Type 3 wells distant from the Facility and 28 Type 3 wells that provide redundant coverage in high density well areas.

Type 1, Type 2 and Type 3 wells as currently designated are summarized in Table 3. As of May, 2012 there are 18 Type 1 wells (recall that Type 1 wells are also Type 2 wells), 212 Type 2 wells and 81 Type 3 wells for a total of 293 OAG wells.

Additionally, WCS plans in advance for routine environmental monitoring events, which are subject to change due to resource conflicts or weather conditions. The intended dates for collecting environmental monitoring samples for the Byproduct facility through the first quarter of 2013 are provided in Table 4. By means of this report, WCS provides notice to TCEQ of the planned monitoring events for the upcoming four quarters. The planned dates for the second, third and fourth quarter 2012 and first quarter 2013 monitoring events have not changed since the notice in the March 2012 OAG report. WCS will reschedule these events when necessary and notify the TCEQ of the re-scheduled sampling date.

Water levels in the Type 2 wells are measured within the first seven days of the month. In isolated instances, a quality assurance (QA) review of the measured water levels may identify an apparent data inconsistency and/or typographical error in the initial measurement. There were no instances requiring a Type 2 water level to be remeasured in May, 2012.

The Type 3 wells are measured as soon as practicable and no later than the end of each month. During May, 2012, the initial measurement in TP-152, located just north of the boundary between the FWF and CWF, was inconsistent with previous measurements and appeared to be a data entry error as the reported depth to water was deeper than the total well depth. TP-152 has historically been dry and will be re-measured in the June, 2012 monthly measurements.

Four weather stations monitor meteorological data in real time on the WCS Site. Locations of all WCS weather stations are provided on Figures 1 and 2. The WeatherHawk West station, which is located northwest of the Byproduct Landfill, is the closest station to the Type 1 wells. Daily rainfall data for May, 2012 for each of the four weather stations are provided in Table 5

and plotted on Figure 6. Precipitation in May, 2012 ranged from 2.64 to 2.98 inches at the four weather stations (Table 5) with rain events on May 10, 2012 and May 26, 2012 accounting for the majority of the monthly precipitation.

Exhibit 1 contains hydrographs for all Type 1 wells with continuous water level elevations combined with rainfall and barometric data from the WeatherHawk West and Tower 1 meteorological stations. Exhibit 1 is provided on the attached CD. Locations of all Type 1 wells are shown on Figure 5. In Exhibit 1, a similar hydrograph for TP-14 is also prepared monthly with precipitation and barometric data from the closest weather station (the ER Tower weather station north of the FWF).

Hydrographs using monthly water level elevations measured by WCS personnel and rainfall data from the main onsite meteorological weather station (Tower 1) for all Type 1, 2 and 3 OAG wells with water are submitted on a quarterly basis. The hydrographs include all existing wells that currently have water above the lowermost screen slots in a well and all wells that have previously had water above the lowermost screen slots that now have been measured as dry. The next quarterly submittal of hydrographs will occur in June, 2012 and will include data through the second quarter 2012.

2.1 OAG Groundwater Occurrence in the vicinity of the FWF and CWF

The location of the dry line in May, 2012 is shown in Figures 1 and 2 and is substantially in the same location as represented in the license applications and as shown on the previously submitted monthly OAG maps. The zone of continuous saturation of the OAG north of the FWF and CWF Landfills is approximately in the same location. The southern extent of the zone of saturation extending from the playa north of the FWF/CWF toward the northeastern corner of the FWF remains in the same position as in April, 2012. Water levels in the wells defining the zone of saturation declined by less than 1.0 foot.

The water level for well TP-14, located within the large playa, declined by 0.05 feet between April and May, 2012. In mid September, 2011, rainfall in excess of 2.2 inches (recorded at all four weather stations) caused surface water to pond at several minor low spots around the FWF and CWF Landfills. The ponded water appears to have infiltrated down the annulus of FWF-6A, located along the southern perimeter of the FWF, resulting in an increase of 2.66 feet in October, 2011. Between October, 2011 and May, 2012, the water level in FWF-6A declined by 0.32 feet.

In the area northeast of the CWF, TP-111 declined by 0.06 feet and the water level in TP-122 remained below the top of red beds. East of the CWF, there is an OAG zone of saturation beneath a small playa in the vicinity of TP-63 and TP-117. Currently, the saturated thickness in TP-63 is 0.43 feet. The saturated thickness in TP-117 in May is 5.51 feet. Both wells have exhibited declining water levels over the past two years.

Water levels in the OAG wells along the eastern side of the facilities area showed minor water level declines of 0.06 feet or less (TP-67, GW-5, PM-01 and TP-71). Three of the wells in this area (TP-12, TP-48, and TP-49) have had water levels below the top of red beds since installation.

TP-46, located about 1000 feet south of the common boundary of the CWF/FWF, had been dry since January, 2008. However, a pre-sampling measurement in December, 2011 indicated a saturated thickness of 2.03 feet. In May, 2012, the saturated thickness in TP-46 is 0.44 feet which is a decline of 0.31 feet from April. The water in TP-46 is likely the result of infiltration from the drainage ditch in the vicinity of the construction water storage pond located about 250 feet east of TP-46.

OAG wells around the perimeter of the CWF remain dry with the exception of OAG-21 and OAG-22, which are located in the vicinity of the former small playa on the eastern boundary of the CWF. Minor water level variations of +0.01 and -0.03 feet occurred in OAG-21 and OAG-22, respectively, between April and May. The minor increase in OAG-21 can be attributed to fluctuations related to pumping and are not indicative of an actual increase in the groundwater elevation. Water in the OAG was expected in the vicinity of the playa because it was a localized, closed surface depression. The water beneath the former small playa appears to be an isolated, localized lens of water in the OAG formation. This lens of water is being removed from the area by pumping OAG-21.

OW-1 and OW-2 have been dry since installation in January, 2012. In early March, water was noted below the lowermost screen slots in OW-2. Based on field observations and free chlorine residual measurements of the water, part or all of the water in OW-2 may be from the CWF tanks that contained clean potable water. The water in the tanks was discharged onto the ground and flowed south across the area where OW-1 and OW-2 were installed. The water level in OW-2 remains over 2 feet below the top of red beds and the well is dry.

2.2 *OAG Groundwater Occurrence in the vicinity of the Byproduct Landfill*

In May, 2012, the location of the dry line north of the Byproduct Landfill and saturated conditions in the OAG in the vicinity of the landfill are essentially the same as presented in the April, 2012 and earlier monthly OAG reports.

TP-42, on the north side of the Byproduct Landfill, was dry on installation in February 2006 and did not exhibit water until April 2007. The water in TP-42 is attributed to ponding and infiltration of runoff from the LSA pad prior to drainage improvements in the area. The water level in TP-42 increased by 0.01 feet between and April and May, 2012. Water levels in other wells (TP-148, TP-149, TP-166 and TP-167) on the north side of the Byproduct Landfill in the vicinity of TP-42 showed minor water level variations of 0.02 feet to 0.05 feet. TP-92 is dry. The water level in TP-151, which has been increasing over the past several months due to drainage along the top of the red beds from the TP-42 area, showed a minor decline of 0.02 feet between two measurements in early May (April data were disqualified preventing comparison to April data). The water level in TP-87, which is located on the north side of the LSA storage area, increased by 0.01 feet between April and May, 2012. Similar to the first occurrence of water in TP-151 in May, 2011, the water in TP-87, which first occurred in June, 2011, can be related to water that infiltrated along the north side of the Byproduct Landfill which is draining to the north/northeast along the top of the red beds.

Along State Line road, water levels varied by 0.37 feet or less in TP-78, TP-90 and TP-146. However, as noted in the April, 2012 OAG report, the water level in TP-86 increased between April 4, 2012 and April 8, 2012, likely due to discharge of water from the Byproduct tanks and subsequent infiltration along drainage ditches (discharge occurred on April 2-4, 2012 and April 10-12, 2012). An increase of 1.40 feet was noted in TP-145 between April and May. This increase is also related to the same discharge of water from the Byproduct tanks that caused the increase in TP-86. The saturated thickness in May at TP-86 is 0.46 feet and the saturated thickness at TP-145 is 0.90. TP-147 remained dry.

On the south side of the Byproduct Landfill, water levels declined in the month of May, 2012 by 0.06 feet or less in five wells: TP-43, TP-141, TP-142, TP-143 and TP-171, while the water levels in TP-88, TP-140, and TP-169 remain below the top of red beds. The water level in TP-170 remains below the lowermost screen slots and the well is dry. The water level in FWF-1A, located near the southeast corner of the Byproduct Landfill, declined 0.99 feet between April

and May, 2012 and is now below the top of red beds, and the water level in FWF-27A, located to the east of the Byproduct Landfill, remained unchanged between April and May.

The zone of continuous OAG saturation in the vicinity of TP-31 and PZ-43 west of the Byproduct Landfill continues to be separated from the Byproduct area by dry wells TP-76, TP-91, PZ-42, PZ-67, and PZ-66. GW-3, located in a small playa northwest of the red bed stockpile and the Byproduct Landfill, remains dry.

3.0 Water Level Trends

Water levels in the 293 wells installed in the OAG are currently measured on a monthly basis. Of the 293 wells, 205 are currently dry (including 15 wells with water levels above the lowermost screen slots but below the top of red beds) and 88 have measureable water levels above the top of red beds. A-16, located near the southeastern corner of the rail loop, is included in Table 1 but not shown on Figures 1 and 2 because it has been replaced by TP-80 for water level monitoring purposes. A-16 will continue to be used for groundwater sampling purposes, as appropriate, although it is currently dry. PM-07, located near the eastern boundary of the facilities area, is also included in Table 1 but not on Figures 1 and 2, because it has been replaced by TP-71 for water level measurements. PM-07 continues to be used for groundwater sampling.[1]

In May, 2012, 71 wells showed a decline in water levels between April and May while 17 showed an increase (note that two measurements in early May in TP-31, TP-80 and TP-151 were used in the determination of the number of declining and increasing wells as the April data were disqualified). Wells with decreasing water levels are denoted on Figures 1 and 2 with magenta highlight boxes; wells with increases are denoted with blue highlight boxes. One well with water levels that were unchanged between April and May is denoted with a gray highlight box.

Wells with water level changes greater than 1.0 foot are denoted on the figures by a black box around the colored shading. As noted above, TP-145 increased by 1.40 feet between April and

[1] As indicated, A-16 and PM-07 have been replaced for water level monitoring purposes by TP-80 and TP-71, but they remain subject to quarterly monitoring under the environmental monitoring program. However, the Modified Natural Radiation Monitoring Program (MNRMP) specified in Attachment A of RML No. R04100 included the requirement to conduct quarterly monitoring of additional OAG wells, including TP-71 and TP-80, for a minimum one-year period prior to receipt of wastes at the LLRW facility. The MNRMP was initiated in December 2009 and was formally concluded as of first quarter 2011.

May, 2012 which is likely due to the discharge of water in April from the Byproduct tanks and subsequent infiltration along drainage ditches.

4.0 Continuous Hydrographs - Type 1 Wells

There are 18 Type 1 wells: TP-42, TP-43, TP-78, TP-86, TP-88, TP-90, TP-92, TP-141, TP-142, TP-143, TP-146, TP-148, TP-166, TP-167, TP-171, FWF-1A, FWF-26A, and FWF-27A (Figure 5). Individual hydrographs for Type 1 wells with continuous water level measurements are provided on the CD in Exhibit 1. The hydrographs in Exhibit 1 are annotated to explain abrupt water level changes due to transducer repositioning, jarring of the installed equipment or sampling. The small step changes referred to as level TROLL repositioning on the hydrographs are related to either groundwater sampling or construction and related activities. The manual measurements recorded in Table 1 are used for monthly comparisons and for any OAG water level elevation interpretations, whereas the continuous hydrographs are used primarily for evaluation of monthly water level trends and responses to rainfall and barometric changes.

The continuous water level records for the Type 1 wells start in April, 2008 for TP-43, in January, 2009 for TP-42, TP-78, TP-86, TP-88, TP-90, TP-92, FWF-1A, FWF-26A, and FWF-27A, and in November, 2009 for TP-141, TP-142, TP-143, TP-146, TP-148, TP-166, TP-167, and TP-171. The maximum period shown on the continuous water level records is one year.

In TP-42, on the north-central boundary of the Byproduct Landfill, the water level trend flattened out in March, 2012, and the trend continued to be stable through May, 2012. To the northwest of TP-42, relatively stable water levels throughout May are evident in TP-148, TP-166, TP-167 and TP-90. The water level in TP-86, located along State Line road near the northwest corner of the Byproduct Landfill, remained below the top of red beds until early April when the water level rose to about 0.5 feet above the top of red beds. The water level increase was due to infiltration from the drainage ditch along State Line road following discharge from the Byproduct tanks. The water level then flattened out in mid-April and appeared to be on a decreasing trend by the end of April. The water-level record for TP-86 for the latter part of May has not been received. The other two wells along State Line road with continuous water level records are TP-146 and TP-78. TP-146 shows a response to the release of water from the Byproduct storage tanks in early April, similar to TP-86, and also shows a minor response to May precipitation. TP-78, however, shows little or no response to the April release of water from the Byproduct tanks, but does show a minor response to May precipitation. On the northeastern corner of the Byproduct Landfill, the water level in TP-92 remains below the lowermost screen slots and the

well is dry. FWF-26A, located near the northeastern corner of the Byproduct Landfill, also remains dry.

South of the Byproduct Landfill, TP-43, TP,141, TP-142 and TP-143, which had relatively stable or slightly declining water levels through April, all increased slightly in response to May rainfall. Water levels in TP-88 remain below the top of red beds. Water levels in TP-171, which began a decreasing trend in January, 2011, showed a minor increase in response to May, 2012 rainfall.

The water level in the more easterly well FWF-1A began to decline in January, 2012 and continued to decline through May. Water levels in FWF-27A continued with a minor decreasing trend that has been ongoing for more than a year.

Water levels in TP-14, a Type 2 well with a continuous record located in the large playa, showed a very minor increase in May.

In some cases, the Type 1 wells exhibit a direct relationship to barometric pressure. For instance, TP-78, TP-88, and TP-90 show relatively strong responses to barometric changes indicating that these wells have a higher barometric efficiency than the other Type 1 wells.

Barometric efficiency as used in this report is described by Todd (1959) as follows, "When atmospheric pressure changes are expressed in terms of a column of water, the ratio of water level change to pressure change expresses the barometric efficiency of an aquifer. Most observations yield values in the range of 20 to 75 per cent." From a practical standpoint, if a saturated thickness is unconfined then atmospheric pressure changes are felt equally by the water column in a well and by the water table, therefore there are no water level changes in response to barometric changes. If the saturated zone is completely confined, atmospheric pressure increases are transmitted only to the water column in the well, which both compresses the water column and increases the total pressure in the well thereby forcing flow from the well into the confined zone. The converse is true for atmospheric pressure decreases resulting in water level increases in the well.

The hydrographs in Exhibit 1 that include both barometric pressure and water level elevation measurements express barometric pressure in terms of a column of water, so that the barometric changes are directly comparable to the water level changes on the same graph. TP-78, TP-88, and TP-90 have barometric efficiencies of about 20, 30 and 15%, respectively, based on visual inspection of the graphs and an estimation of how faithfully the water level responds to changes in atmospheric pressure. The remainder of the Type 1 wells appears to

have barometric efficiencies less than 10%. In a well such as TP-88 where the water level has been below the top of red beds, water level changes in response to barometric pressure are accommodated by the sand pack which is present around the well screen both above and below the top of the red beds.

5.0 References

Smith, G.L., 2009a. Letter from Gary L. Smith, Ph.D. (TCEQ) to William P. Dornsife (WCS), re: "Radioactive Material License No. R05807, Log No. 2009-02-0004, License Condition 44: OAG Water Levels," dated March 6, 2009.

Smith, G.L., 2009b. Letter from Gary L. Smith, Ph.D. (TCEQ) to Tim Greene (WCS) dated October 20, 2009.

Smith, G.L., 2009c. Letter from Gary L. Smith, Ph.D. (TCEQ) to Tim Greene (WCS), re: "Radioactive Material License No. R05807, OAG Groundwater Level Elevation Report for July 2009, Log No. 2009-08-0006," dated October 26, 2009.

Smith, G.L., 2010. Letter from Gary L. Smith, Ph.D. (TCEQ) to Linda Beach (WCS), re: "Radioactive Material License No. R05807, December 2009 OAG Groundwater Level Elevation Report (log no. 2009-12-0009), January 2010 Groundwater Level Elevation Report (log no. 2010-01-0007)," dated February 22, 2010.

Todd, D.K., 1959. Ground Water Hydrology. John Wiley & Sons: New York, New York. 336 pp.

TABLES

Table 1: OAG Water Levels - May 2012

Monitoring Well/ Piezometer Name	Reference Boring Name	Northing (ft)	Easting (ft)	Ground Elevation (ft msl)	Top of Casing (ft msl)	Total Well Depth (ft btoc)*	Bottom of Screen Slots (ft msl)**	Top of Red Bed Elevation (ft msl)	Date of Gauging Event	Depth to Water (ft)	Water Elevation (ft msl)	Saturated Thickness (ft)***	Data Source	Comments
A-16****	A-16	6871722.9	565272.5705	3444.39	3447.41	40.60	3407.49	3409.39	05/02/12	dry	na	na	field form	dry
A-16****	A-16	6871722.9	565272.5705	3444.39	3447.41	40.60	3407.49	3409.39	05/08/12	dry	na	na	field form	dry
A-16****														
CWF-1A	CWF-1A	6873496.1365	564081.3457	3468.82	3473.45	28.59	3445.20	3446.83	05/01/12	28.39	3445.06	na	field form	dry
CWF-1A														
CWF-2A	CWF-2A	6873443.0779	564191.1018	3468.43	3471.58	29.60	3442.60	3444.73	05/01/12	29.56	3442.02	na	field form	dry
CWF-2A														
CWF-3A	CWF-3A	6873379.8324	564327.2823	3467.93	3471.03	34.30	3437.35	3440.63	05/01/12	dry	na	na	field form	dry
CWF-3A														
CWF-4A	CWF-4A	6873306.9768	564491.5562	3467.54	3471.65	34.52	3437.78	3438.57	05/01/12	34.48	3437.17	na	field form	dry
CWF-4A														
CWF-5A	CWF-5A	6873256.4717	564601.1572	3467.20	3470.41	21.34	3449.69	3450.40	05/01/12	dry	na	na	field form	dry
CWF-5A														
CWF-6A	CWF-6A	6873192.6241	564740.0014	3466.90	3470.16	28.44	3442.35	3443.90	05/01/12	dry	na	na	field form	dry
CWF-6A														
CWF-7A	CWF-7A	6873120.9930	564900.4852	3465.66	3468.85	28.56	3440.91	3443.16	05/01/12	28.44	3440.41	na	field form	dry
CWF-7A														
CWF-8A	CWF-8A	6873516.2614	565129.9084	3470.35	3473.44	30.46	3443.61	3445.35	05/01/12	30.38	3443.06	na	field form	dry
CWF-8A														
CWF-10A	CWF-10A	6874143.5934	564926.7195	3478.30	3477.97	40.43	3438.06	3440.36	05/01/12	40.35	3437.62	na	field form	dry
CWF-10A														
CWF-11A	CWF-11A	6874349.7166	564476.6898	3478.05	3477.82	36.12	3442.26	3443.62	05/01/12	35.71	3442.11	na	field form	dry
CWF-11A														
CWF-12A	CWF-12A	6873949.7767	564290.9825	3473.45	3478.64	38.90	3440.41	3443.09	05/01/12	38.79	3439.85	na	field form	dry
CWF-12A														
CWF-13A	CWF-13A	6873536.2892	564148.6097	3470.33	3473.41	34.74	3439.30	3440.93	05/01/12	dry	na	na	field form	dry
CWF-13A														
CWF-110A	CWF-110A	6874016.2888	564826.4020	3475.71	3478.88	36.98	3442.40	3443.19	05/01/12	36.60	3442.28	na	field form	dry
CWF-110A														
FWF-1A	FWF-1A	6874430.2229	562054.0669	3471.70	3474.75	31.22	3444.16	3446.30	05/01/12	28.85	3445.90	-0.39	field form	BRB
FWF-1A														
FWF-6A	FWF-6A	6874116.8004	562736.7991	3469.89	3473.18	28.07	3445.74	3446.99	05/01/12	23.49	3449.69	2.71	field form	
FWF-6A														
FWF-8A	FWF-8A	6873976.0023	563045.6303	NS	3473.20	23.65	3450.17	3451.01	05/01/12	dry	na	na	field form	dry
FWF-8A														
FWF-9A	FWF-9A	6873924.8700	563158.9592	3469.14	3472.35	22.18	3450.79	3452.54	05/01/12	21.59	3450.76	na	field form	dry
FWF-9A														
FWF-10A	FWF-10A	6873848.6597	563325.8445	3468.92	3470.63	20.44	3450.82	3451.50	05/01/12	19.90	3450.73	na	field form	dry
FWF-10A														
FWF-11A	FWF-11A	6873797.3808	563434.6098	3468.88	3472.27	23.60	3449.30	3451.18	05/01/12	23.13	3449.14	na	field form	dry
FWF-11A														

Table 1: OAG Water Levels - May 2012

Monitoring Well/ Piezometer Name	Reference Boring Name	Northing (ft)	Easting (ft)	Ground Elevation (ft msl)	Top of Casing (ft msl)	Total Well Depth (ft btoc)*	Bottom of Screen Slots (ft msl)**	Top of Red Bed Elevation (ft msl)	Date of Gauging Event	Depth to Water (ft)	Water Elevation (ft msl)	Saturated Thickness (ft)***	Data Source	Comments
FWF-12A	FWF-12A	6873737.7012	563566.7019	3469.02	3472.69	25.03	3448.28	3448.82	05/01/12	24.53	3448.16	na	field form	dry
FWF-12A														
FWF-13A	FWF-13A	6873671.9976	563707.4818	3468.90	3472.32	28.21	3444.74	3445.80	05/01/12	28.04	3444.28	na	field form	dry
FWF-13A														
FWF-14A	FWF-14A	6873600.8403	563863.9737	3469.41	3473.70	29.67	3444.52	3445.62	05/01/12	29.29	3444.41	na	field form	dry
FWF-14A														
FWF-15A	FWF-15A	6873622.6883	563963.5795	3469.54	3472.77	32.70	3440.70	3442.34	05/01/12	32.24	3440.53	na	field form	dry
FWF-15A														
FWF-16A	FWF-16A	6873957.2095	564118.9081	3472.97	3478.09	35.53	3443.21	3445.04	05/01/12	35.11	3442.98	na	field form	dry
FWF-16A														
FWF-17A	FWF-17A	6874363.6988	564305.5401	3477.40	3477.26	37.39	3440.37	3442.44	05/01/12	dry	na	na	field form	dry
FWF-17A														
FWF-18A	FWF-18A	6874679.3645	564515.9730	3480.48	3483.37	48.76	3435.24	3439.28	05/01/12	dry	na	na	field form	dry
FWF-18A														
FWF-20A	FWF-20A	6874934.6881	564113.6460	3482.00	3481.51	45.59	3436.53	3438.37	05/01/12	dry	na	na	field form	dry
FWF-20A														
FWF-21A	FWF-21A	6875303.2120	563832.3974	3484.42	3484.67	49.84	3435.45	3437.50	05/01/12	49.73	3434.94	na	field form	dry
FWF-21A														
FWF-22A	FWF-22A	6875534.0593	563451.9823	3486.88	3487.04	49.38	3438.27	3438.75	05/01/12	dry	na	na	field form	dry
FWF-22A														
FWF-23A	FWF-23A	6875582.4152	563166.5748	3486.46	3486.58	54.29	3432.53	3433.86	05/01/12	dry	na	na	field form	dry
FWF-23A														
FWF-24A	FWF-24A	6875796.8668	562605.6043	3483.20	3483.37	45.81	3436.07	3439.62	05/01/12	dry	na	na	field form	dry
FWF-24A														
FWF-25A	FWF-25A	6875668.532	562547.526	3483.05	3486.42	45.88	3441.17	3444.15	05/01/12	dry	na	na	field form	dry
FWF-25A														
FWF-26A	FWF-26A	6875284.8963	562373.4522	3479.40	3482.72	41.79	3441.56	3443.40	05/01/12	41.69	3441.03	na	field form	dry
FWF-26A														
FWF-27A	FWF-27A	6874891.8716	562192.9379	3475.02	3479.28	36.51	3443.28	3445.68	05/01/12	33.54	3445.74	0.06	field form	
FWF-27A														
GW-1A	GW-1A	6868391.3542	570649.6779	3471.69	3474.19	65.24	3409.57	3418.29	05/02/12	50.51	3423.68	5.39	field form	
GW-1A	GW-1A	6868391.3542	570649.6779	3471.69	3474.19	65.24	3409.57	3418.29	5/15/2012[1]	50.61	3423.58	5.29	field form	presampling
GW-1A	GW-1A	6868391.3542	570649.6779	3471.69	3474.19	65.24	3409.57	3418.29	5/15/2012[2]	53.54	3420.65	2.36	field form	post sampling
GW-1A	GW-1A	6868391.3542	570649.6779	3471.69	3474.19	65.24	3409.57	3418.29	5/23/2012[1]	50.20	3423.99	5.70	field form	presampling
GW-1A	GW-1A	6868391.3542	570649.6779	3471.69	3474.19	65.24	3409.57	3418.29	5/23/2012[2]	51.33	3422.86	4.57	field form	post sampling
GW-1A														
GW-3	GW-3	6875990.2700	559863.8194	3462.95	3466.03	20.22	3446.43	3446.55	05/02/12	19.95	3446.08	na	field form	dry
GW-3	GW-3	6875990.2700	559863.8194	3462.95	3466.03	20.22	3446.43	3446.55	05/15/12	19.95	3446.08	na	field form	dry
GW-3														
GW-5	GW-5	6875409.7216	567454.6068	3478.39	3481.30	50.27	3431.66	3433.99	05/03/12	46.27	3435.03	1.04	field form	
GW-5	GW-5	6875409.7216	567454.6068	3478.39	3481.30	50.27	3431.66	3433.99	5/8/2012[1]	46.26	3435.04	1.05	field form	presampling

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Monitoring Well/ Piezometer Name	Reference Boring Name	Northing (ft)	Easting (ft)	Ground Elevation (ft msl)	Top of Casing (ft msl)	Total Well Depth (ft btoc)*	Bottom of Screen Slots (ft msl)**	Top of Red Bed Elevation (ft msl)	Date of Gauging Event	Depth to Water (ft)	Water Elevation (ft msl)	Saturated Thickness (ft)‾	Data Source	Comments
GW-5	GW-5	6875409.7216	567454.6068	3478.39	3481.30	50.27	3431.66	3433.99	5/8/2012[2]	49.47	3431.83	-2.16	field form	BRB, post sampling
GW-5														
OAG-1	OAG-1	6873751.1913	564023.6699	3470.72	3473.86	29.21	3445.28	3447.02	05/03/12	28.86	3445.00	na	field form	dry
OAG-1														
OAG-2	OAG-2	6873853.6329	564070.5251	3471.90	3475.23	40.06	3435.79	3437.00	05/03/12	39.56	3435.67	na	field form	dry
OAG-2														
OAG-3	OAG-3	6874094.5990	564180.7350	3474.57	3478.09	32.92	3445.80	3447.47	05/03/12	32.62	3445.47	na	field form	dry
OAG-3														
OAG-4	OAG-4	6874229.4525	564244.3846	3476.18	3479.35	36.06	3443.91	3445.48	05/03/12	35.95	3443.40	na	field form	dry
OAG-4														
OAG-5	OAG-5	6874441.4518	564376.8337	3478.75	3478.53	35.35	3443.80	3445.25	05/03/12	35.12	3443.41	na	field form	dry
OAG-5														
OAG-7	OAG-7	6874810.0526	564054.0503	3480.99	3480.96	43.98	3437.49	3439.69	05/01/12	43.89	3437.07	na	field form	dry
OAG-7														
OAG-8	OAG-8	6875059.6005	564171.9003	3483.84	3486.99	53.60	3434.02	3434.64	05/03/12	dry	na	na	field form	dry
OAG-8														
OAG-9	OAG-9	6875224.7770	564121.1231	3484.02	3487.19	53.81	3434.00	3435.72	05/16/12	53.77	3433.42	na	field form	dry
OAG-9														
OAG-10	OAG-10	6875276.5400	564011.0225	3484.76	3488.05	58.30	3430.38	3433.36	05/16/12	58.26	3429.79	na	field form	dry
OAG-10														
OAG-12R	OAG-12R	6875471.2294	563583.9828	3486.08	3486.40	54.67	3432.35	3436.48	05/15/12	dry	na	na	field form	dry
OAG-12R														
OAG-13	OAG-13	6875594.0528	563314.7457	3486.81	3487.00	51.00	3436.31	3438.65	05/16/12	dry	na	na	field form	dry
OAG-13														
OAG-14	OAG-14	6875718.0906	563045.6571	3485.78	3485.99	48.05	3438.34	3440.51	05/21/12	dry	na	na	field form	dry
OAG-14														
OAG-15	OAG-15	6875780.3979	562911.4891	3485.37	3485.49	47.02	3438.81	3440.83	05/21/12	dry	na	na	field form	dry
OAG-15														
OAG-20	OAG-20	6873197.8314	564988.6981	3466.75	3470.32	26.25	3444.69	3447.15	05/03/12	26.11	3444.21	na	field form	dry
OAG-20														
OAG-21	OAG-21	6873304.0574	565034.8578	3468.45	3471.57	35.18	3437.01	3439.65	05/03/12	28.84	3442.73	3.08	field form	see Notes #3&4
OAG-21														
OAG-22	OAG-22	6873410.8697	565083.7390	3469.78	3473.01	34.27	3439.36	3442.88	05/03/12	28.99	3444.02	1.13	field form	see Notes #3&4
OAG-22														
OAG-23	OAG-23	6873624.3986	565158.7881	3472.20	3475.97	36.82	3439.78	3441.10	05/03/12	dry	na	na	field form	dry
OAG-23														
OAG-24	OAG-24	6873725.4850	565223.2624	3474.76	3474.75	40.24	3435.83	3439.94	05/03/12	dry	na	na	field form	dry
OAG-24														
OAG-25	OAG-25	6873817.4318	565265.3169	3476.20	3480.29	42.73	3438.16	3439.23	05/02/12	42.40	3437.89	na	field form	dry
OAG-25														
OAG-26	OAG-26	6874083.8525	565222.8020	3478.44	3478.25	49.42	3429.32	3431.29	05/02/12	dry	na	na	field form	dry

Table 1: OAG Water Levels - May 2012

Monitoring Well/ Piezometer Name	Reference Boring Name	Northing (ft)	Easting (ft)	Ground Elevation (ft msl)	Top of Casing (ft msl)	Total Well Depth (ft btoc)*	Bottom of Screen Slots (ft msl)**	Top of Red Bed Elevation (ft msl)	Date of Gauging Event	Depth to Water (ft)	Water Elevation (ft msl)	Saturated Thickness (ft)***	Data Source	Comments
OAG-26														
OAG-27	OAG-27	6874150.1662	565079.2991	3478.32	3478.12	48.69	3429.96	3430.60	05/02/12	dry	na	na	field form	dry
OAG-27														
OAG-28	OAG-28	6874282.0968	564792.6700	3478.71	3478.58	42.11	3437.05	3438.45	05/03/12	dry	na	na	field form	dry
OAG-28														
OAG-29	OAG-29	6874348.8648	564648.7156	3478.74	3478.77	36.68	3442.58	3444.34	05/03/12	36.51	3442.26	na	field form	dry
OAG-29														
OAG-34	OAG-34	6874174.3830	564804.7858	3478.09	3478.04	39.21	3439.45	3442.49	05/03/12	dry	na	na	field form	dry
OAG-34														
OAG-35	OAG-35	6874241.3002	564699.2253	3477.55	3478.19	37.22	3441.59	3444.25	05/03/12	dry	na	na	field form	dry
OAG-35														
OAG-36	OAG-36	6874285.8933	564594.7866	3476.53	3478.00	36.02	3442.61	3444.03	05/03/12	dry	na	na	field form	dry
OAG-36														
OAG-37	OAG-37	6874223.6914	564418.8080	3476.79	3480.21	39.96	3440.87	3442.09	05/03/12	39.84	3440.37	na	field form	dry
OAG-37														
OAG-38	OAG-38	6874085.6284	564353.8259	3475.21	3478.23	38.33	3440.52	3442.71	05/03/12	38.25	3439.98	na	field form	dry
OAG-38														
OAG-39	OAG-39	6873843.2030	564240.4738	3472.46	3475.37	40.18	3435.81	3437.16	05/03/12	dry	na	na	field form	dry
OAG-39														
OAG-40	OAG-40	6873722.4152	564185.9144	3471.17	3474.56	37.51	3437.67	3439.47	05/03/12	dry	na	na	field form	dry
OAG-40														
OAG-41	OAG-41	6874547.5752	564446.9930	3480.20	3480.07	37.36	3443.33	3444.80	05/03/12	dry	na	na	field form	dry
OAG-41														
OAG-42	OAG-42	6874745.9048	564347.1748	3480.82	3484.45	48.79	3436.28	3439.22	05/03/12	dry	na	na	field form	dry
OAG-42														
OAG-43	OAG-43	6874839.7349	564233.8569	3481.48	3484.60	48.78	3436.44	3439.48	05/03/12	48.62	3435.98	na	field form	dry
OAG-43														
OAG-45	OAG-45	6875062.2649	564046.6400	3482.39	3482.61	48.32	3434.91	3434.99	05/03/12	dry	na	na	field form	dry
OAG-45														
OAG-47	OAG-47	6875265.6491	563936.6949	3484.46	3484.29	48.34	3436.57	3438.36	05/03/12	48.29	3436.00	na	field form	dry
OAG-47														
OAG-48	OAG-48	6875407.0500	563721.0592	3485.59	3485.85	50.69	3435.79	3437.29	05/03/12	dry	na	na	field form	dry
OAG-48														
OAG-49	OAG-49	6875659.7530	563179.4665	3486.36	3486.77	54.24	3433.16	3434.86	05/03/12	54.06	3432.71	na	field form	dry
OAG-49														
OAG-50	OAG-50	6875841.0670	562778.7376	3484.80	3485.04	45.90	3439.76	3443.00	05/03/12	dry	na	na	field form	dry
OAG-50														
OAG-51	OAG-51	6875894.8611	562661.9848	3484.64	3484.84	43.98	3441.48	3442.84	05/03/12	dry	na	na	field form	dry
OAG-51														
OAG-52	OAG-52	6875815.8860	562537.8312	3483.69	3483.63	43.24	3441.02	3441.89	05/03/12	dry	na	na	field form	dry
OAG-52														

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Monitoring Well/ Piezometer Name	Reference Boring Name	Northing (ft)	Easting (ft)	Ground Elevation (ft msl)	Top of Casing (ft msl)	Total Well Depth (ft btoc)*	Bottom of Screen Slots (ft msl)**	Top of Red Bed Elevation (ft msl)	Date of Gauging Event	Depth to Water (ft)	Water Elevation (ft msl)	Saturated Thickness (ft)***	Data Source	Comments
OW-1	OW-1	6873440.7784	564916.4498	3470.77	3470.31	27.87	3443.07	3445.77	05/01/12	dry	na	na	J. Hultman email	dry
OW-1														
OW-2	OW-2	6873352.3200	564886.6447	3468.88	3468.48	28.67	3440.44	3442.88	05/01/12	28.02	3440.46	-2.42	J. Hultman email	BRB
OW-2														
PM-01	TP-05	6874799.44	567475.99	3485.52	3489.34	61.41	3428.61	3430.52	05/02/12	56.42	3432.92	2.40	field form	
PM-01	TP-05	6874799.44	567475.99	3485.52	3489.34	61.41	3428.61	3430.52	5/8/2012[1]	56.42	3432.92	2.40	field form	presampling
PM-01	TP-05	6874799.44	567475.99	3485.52	3489.34	61.41	3428.61	3430.52	5/8/2012[2]	60.96	3428.38	na	field form	dry, post sampling
PM-01														
PM-04	TP-04	6874514.33	566148.59	3486.72	3490.72	61.74	3429.66	3435.72	05/02/12	dry	na	na	field form	dry
PM-04														
PM-07****	PM-09	6872792.26	567463.03	3479.55	3483.66	54.32	3430.02	unk	05/08/12	53.58	3430.08	unk	field form	
PM-07****	PM-09	6872792.26	567463.03	3479.55	3483.66	54.32	3430.02	unk	5/9/2012[1]	53.58	3430.08	unk	field form	presampling
PM-07****	PM-09	6872792.26	567463.03	3479.55	3483.66	54.32	3430.02	unk	5/9/2012[2]	53.64	3430.02	unk	field form	dry, post sampling
PM-07****														
PM-10	PM-12	6872796.29	566417.87	3471.13	3475.51	36.51	3439.68	3437.63	05/02/12	dry	na	na	field form	dry
PM-10														
PW-01	PW-01	6871702.3000	568926.4470	3478.63	3481.05	61.21	3420.46	3418.63	05/08/12	51.46	3429.59	10.96	field form	see Note #2
PW-01														
PW-07	PW-07	6872801.8770	569584.7480	3487.02	3491.08	82.00	3409.70	3407.02	05/08/12	63.80	3427.28	20.26	field form	see Note #2
PW-07														
PZ-1	PZ-1	6886985.5983	561313.6432	3541.64	3541.98	119.89	3422.44	3440.64	05/04/12	75.88	3466.10	25.46	field form	
PZ-1														
PZ-2	PZ-2	6887136.2886	565523.0489	3517.97	3518.27	79.42	3439.20	3429.97	05/21/12	73.19	3445.08	15.11	field form	
PZ-2														
PZ-3	PZ-3	6882226.5976	571538.5730	3491.19	3491.38	79.78	3411.95	3429.19	05/07/12	57.47	3433.91	4.72	field form	
PZ-3														
PZ-4	PZ-4	6887421.0028	568053.7311	3511.73	3512.40	103.9	3408.85	3402.23	05/08/12	dry	na	na	field form	dry
PZ-4														
PZ-5	PZ-5	6880355.2348	567112.7619	3491.28	3492.16	94.83	3397.70	3411.28	05/07/12	84.39	3407.79	-3.49	field form	BRB
PZ-5														
PZ-6	PZ-6	6876170.895	577202.210	3466.28	3467.08	78.33	3389.10	3401.28	05/07/12	63.45	3403.63	2.35	field form	
PZ-6														
PZ-7	PZ-7	6876896.705	579198.725	3455.87	3456.56	69.23	3387.68	3400.87	05/07/12	69.00	3387.56	na	field form	dry
PZ-7														
PZ-8	PZ-8	6877184.4014	568335.9850	3490.85	3490.49	69.76	3421.08	3431.85	05/02/12	dry	na	na	field form	dry
PZ-8														
PZ-9	PZ-9	6871853.104	570522.179	3483.48	3484.10	79.97	3404.48	3417.48	05/08/12	58.21	3425.89	8.41	field form	
PZ-9														
PZ-10	PZ-10	6872270.399	576275.864	3484.93	3485.41	94.74	3391.02	3404.93	05/07/12	73.93	3411.48	6.55	field form	
PZ-10														
PZ-11	PZ-11	6872148.921	579371.665	3449.91	3450.41	80.25	3370.51	3384.91	05/07/12	63.78	3386.63	1.72	field form	

Table 1: OAG Water Levels - May 2012

Monitoring Well/ Piezometer Name	Reference Boring Name	Northing (ft)	Easting (ft)	Ground Elevation (ft msl)	Top of Casing (ft msl)	Total Well Depth (ft btoc)*	Bottom of Screen Slots (ft msl)**	Top of Red Bed Elevation (ft msl)	Date of Gauging Event	Depth to Water (ft)	Water Elevation (ft msl)	Saturated Thickness (ft)¯	Data Source	Comments
PZ-11														
PZ-12	PZ-12	6868186.673	581233.560	3429.64	3430.23	89.4	3341.18	3354.64	05/07/12	61.55	3368.68	14.04	field form	
PZ-12														
PZ-13	PZ-13	6868904.275	576177.596	3469.25	3469.84	89.13	3381.06	3394.25	05/07/12	56.61	3413.23	18.98	field form	
PZ-13														
PZ-14	PZ-14	6869110.105	570181.012	3486.30	3487.03	84.1	3403.28	3415.30	05/07/12	61.39	3425.64	10.34	field form	
PZ-14														
PZ-15	PZ-15	6869369.333	564925.974	3447.93	3448.48	94.93	3353.90	3367.93	05/07/12	dry	na	na	field form	dry
PZ-15														
PZ-16	PZ-16	6883294.1446	561534.4715	3519.37	3519.69	96.31	3423.73	3444.37	05/07/12	68.78	3450.91	6.54	field form	
PZ-16														
PZ-17	PZ-17u	6879998.304	578144.812	3465.46	3466.10	93.33	3373.12	3380.46	05/07/12	83.83	3382.27	1.81	field form	
PZ-17														
PZ-18	PZ-18u	6882146.961	574726.060	3482.36	3482.86	75.89	3407.32	3411.36	05/07/12	65.12	3417.74	6.38	field form	
PZ-18														
PZ-19	PZ-19u	6865466.039	564529.658	3432.45	3433.20	117.68	3315.87	3327.45	05/21/12	dry	na	na	field form	dry
PZ-19														
PZ-20	PZ-20u	6862004.900	567683.839	3440.92	3441.62	100.11	3341.88	3344.92	05/18/12	dry	na	na	field form	dry
PZ-20														
PZ-21	PZ-21	6856245.113	565026.651	3401.98	3402.46	69.85	3332.96	3336.98	05/18/12	dry	na	na	field form	dry
PZ-21														
PZ-22	PZ-22B	6856429.224	560025.368	3393.70	3394.40	108.02	3286.73	3278.70	05/21/12	dry	na	na	field form	dry
PZ-22														
PZ-23	PZ-23B	6861475.873	560266.144	3412.63	3413.48	102.66	3311.17	3310.63	05/21/12	dry	na	na	field form	dry
PZ-23														
PZ-24	PZ-24B	6865694.944	560489.799	3417.28	3417.46	79.85	3337.96	3332.28	05/21/12	dry	na	na	field form	dry
PZ-24														
PZ-25	PZ-25	6869150.105	560583.063	3411.18	3411.56	44.33	3367.58	3370.18	05/21/12	dry	na	na	field form	dry
PZ-25														
PZ-26	PZ-26	6864311.205	581047.956	3434.37	3435.07	54.91	3380.51	3388.37	05/18/12	37.94	3397.13	8.76	field form	
PZ-26														
PZ-27	PZ-27	6860549.860	580935.544	3406.31	3406.96	49.79	3357.52	3361.31	05/18/12	dry	na	na	field form	dry
PZ-27														
PZ-28	PZ-28	6855573.206	580822.995	3376.13	3376.73	69.4	3307.68	3311.13	05/18/12	dry	na	na	field form	dry
PZ-28														
PZ-29	PZ-29u	6855717.653	576583.079	3385.00	3385.66	84.02	3301.99	3305.00	05/18/12	dry	na	na	field form	dry
PZ-29														
PZ-30	PZ-30u	6856062.138	568488.233	3416.73	3417.45	38.28	3379.52	3381.73	05/18/12	dry	na	na	field form	dry
PZ-30														
PZ-31	PZ-31	6861861.457	570549.113	3461.59	3462.10	59.45	3403.00	3407.59	05/18/12	dry	na	na	field form	dry
PZ-31														

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PZ-32	PZ-32	6865079.807	570851.091	3484.49	3484.94	100.13	3385.16	3396.49	05/18/12	70.58	3414.36	17.87	field form	
PZ-32														
PZ-33	PZ-33	6866037.241	575295.905	3475.12	3475.95	82.66	3393.64	3400.12	05/18/12	63.08	3412.87	12.75	field form	
PZ-33														
PZ-34	PZ-34	6861284.867	575551.905	3432.93	3433.57	54.86	3379.06	3392.93	05/18/12	35.19	3398.38	5.45	field form	
PZ-34														
PZ-36	PZ-36	6878185.3457	563718.5732	3494.79	3498.49	78.98	3420.19	3419.79	05/02/12	dry	na	na	field form	dry
PZ-36														
PZ-37	PZ-37	6883302.3711	564337.7552	3510.20	3513.71	74.9	3439.49	3438.20	05/07/12	71.31	3442.40	4.20	field form	
PZ-37														
PZ-38	PZ-38	6883226.3955	566807.1082	3500.72	3503.97	110.83	3393.82	3394.22	05/07/12	98.38	3405.59	11.37	field form	
PZ-38														
PZ-39	PZ-39	6882354.6638	568349.9162	3499.09	3503.20	88.45	3415.43	3415.09	05/07/12	dry	na	na	field form	dry
PZ-39														
PZ-40	PZ-40	6886887.9229	571241.2120	3512.59	3514.99	95.1	3420.57	3420.59	05/08/12	81.48	3433.51	12.92	field form	
PZ-40														
PZ-41	B-135	6874180.9371	559040.2430	3429.87	3432.84	50.49	3382.97	3384.97	05/02/12	dry	na	na	field form	dry
PZ-41														
PZ-42	B-107	6876279.0969	560181.3940	3471.51	3474.55	27.60	3447.58	3448.71	05/02/12	27.29	3447.26	na	field form	dry
PZ-42														
PZ-43	B-108	6877999.4273	559733.7383	3481.16	3484.20	54.58	3430.24	3431.66	05/02/12	51.64	3432.56	0.90	field form	
PZ-43														
PZ-44	B-116	6879514.4814	561028.2106	3496.59	3499.88	82.98	3417.52	3419.49	05/08/12	76.98	3422.90	3.41	field form	
PZ-44														
PZ-45	B-121	6880429.1364	559178.0692	3492.55	3495.60	37.83	3458.40	3460.55	05/08/12	dry	na	na	field form	dry
PZ-45														
PZ-46	B-117	6879390.3302	563517.2915	3502.38	3505.87	93.83	3412.66	3414.98	05/09/12	90.17	3415.70	0.71	field form	
PZ-46														
PZ-47	B-118	6878917.0254	565277.6223	3500.60	3503.78	92.22	3412.19	3413.60	05/09/12	86.58	3417.20	3.60	field form	
PZ-47														
PZ-48R	PZ-48R	6878383.655	569024.9891	3496.93	3500.29	82.80	3418.11	3422.63	05/07/12	77.86	3422.43	-0.20	field form	BRB
PZ-48R														
PZ-49	B-113	6875684.7983	569236.2671	3490.56	3493.65	70.61	3423.67	3425.56	05/02/12	59.75	3433.90	8.35	field form	
PZ-49														
PZ-50	B-114	6874711.6061	573605.9628	3489.01	3492.20	83.07	3409.76	3412.01	05/08/12	75.20	3417.00	4.99	field form	
PZ-50														
PZ-51	B-120	6876000.2545	572098.3836	3491.00	3494.42	84.22	3410.82	3412.50	05/08/12	71.06	3423.36	10.86	field form	
PZ-51														
PZ-52	B-123	6878535.8586	571298.2317	3497.63	3500.72	91.95	3409.40	3410.53	05/08/12	74.57	3426.15	15.62	field form	
PZ-52														
PZ-53	B-124	6878438.5140	575170.8613	3479.00	3482.14	93.72	3389.04	3390.50	05/08/12	dry	na	na	field form	dry

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PZ-53														
PZ-54	B-127	6880277.1277	575372.4062	3484.09	3487.16	113.69	3374.10	3376.79	05/07/12	102.11	3385.05	8.27	field form	
PZ-54														
PZ-55	B-126	6880626.7711	570307.2812	3491.50	3494.49	79.42	3415.69	3418.00	05/17/12	73.71	3420.78	2.77	field form	
PZ-55														
PZ-56	B-125	6881626.1329	565697.8236	3497.52	3500.91	90.31	3411.23	3413.22	05/16/12	87.43	3413.48	0.26	field form	
PZ-56														
PZ-57	B-122	6880721.3582	563883.6205	3511.79	3515.00	99.56	3416.06	3418.29	05/09/12	95.08	3419.92	1.62	field form	
PZ-57														
PZ-58	B-128	6885270.7390	566779.1709	3505.88	3508.68	125.97	3383.34	3385.38	05/04/12	103.72	3404.96	19.58	field form	
PZ-58														
PZ-59	B-129	6884457.3985	569878.1582	3505.23	3508.69	79.66	3429.66	3431.93	05/04/12	77.70	3430.99	-0.93	field form	BRB
PZ-59														
PZ-60	B-150	6880066.6353	566984.9111	3494.48	3497.61	93.67	3404.56	3407.08	05/07/12	87.72	3409.89	2.81	field form	
PZ-60														
PZ-61	PZ-61	6875427.7965	559779.8253	3467.38	3470.57	26.01	3445.18	3446.78	05/02/12	25.87	3444.70	na	field form	dry
PZ-61														
PZ-62	PZ-62	6875061.8841	559320.9380	3443.15	3446.44	32.55	3414.51	3415.65	05/02/12	32.50	3413.94	na	field form	dry
PZ-62														
PZ-63	PZ-63	6874786.0963	559736.5448	3444.30	3447.57	30.22	3417.98	3421.20	05/02/12	dry	na	na	field form	dry
PZ-63														
PZ-64	PZ-64	6874137.7475	560293.6024	3450.64	3453.86	30.41	3424.08	3424.84	05/02/12	dry	na	na	field form	dry
PZ-64														
PZ-66	PZ-66	6876268.6970	560567.7976	3475.53	3478.29	29.65	3449.27	3451.43	05/02/12	29.56	3448.73	na	field form	dry
PZ-66														
PZ-67	PZ-67	6876685.4410	560582.1453	3477.60	3480.55	34.17	3447.00	3449.10	05/02/12	dry	na	na	field form	dry
PZ-67														
TMW-B	TMW-B	6872485.2838	560736.0165	3430.40	3433.52	41.86	3392.28	3393.70	05/02/12	30.23	3403.29	9.59	field form	
TMW-B														
TMW-C	TMW-C	6872486.0208	560984.7474	3429.31	3432.50	27.47	3405.66	3408.11	05/02/12	27.28	3405.22	na	field form	dry
TMW-C														
TMW-D	TMW-D	6872099.3915	560887.1319	3426.25	3429.26	33.71	3396.18	3398.95	05/03/12	23.20	3406.06	7.11	field form	
TMW-D														
TMW-E	TMW-E	6873050.4820	562797.0577	3443.67	3446.87	30.13	3417.36	3418.07	05/03/12	30.00	3416.87	na	field form	dry
TMW-E														
TMW-F	TMW-F	6872692.1526	562628.4822	3437.84	3440.91	32.24	3409.29	3410.74	05/03/12	32.08	3408.83	na	field form	dry
TMW-F														
TMW-G	TMW-G	6872911.3426	562970.4883	3441.20	3444.30	35.98	3408.94	3410.40	05/03/12	35.90	3408.40	na	field form	dry
TMW-G														
TMW-H	TMW-H	6872293.8449	560859.2013	3427.63	3430.29	41.33	3389.59	3392.43	05/03/12	25.39	3404.90	12.47	field form	
TMW-H														

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TMW-I	TMW-I	6872262.1230	560993.2040	3427.00	3429.87	31.89	3396.61	3401.20	05/02/12	22.88	3406.99	5.80	field form	
TMW-I														
TMW-J	TMW-J	6872295.1040	560921.8562	3428.13	3431.09	37.31	3394.40	3397.43	05/03/12	25.54	3405.55	8.11	field form	
TMW-J														
TMW-K	TMW-K	6871920.7081	562296.9274	3431.94	3434.70	48.99	3386.33	3388.94	05/03/12	39.58	3395.12	6.18	field form	
TMW-K														
TP-12	TP-12	6874033.75	567096.53	3489.32	3492.62	60.91	3432.39	3433.32	05/02/12	59.69	3432.93	-0.39	field form	BRB
TP-12														
TP-13	TP-13	6873376.86	566733.97	3478.64	3481.68	45.62	3436.74	3436.14	05/02/12	dry	na	na	field form	dry
TP-13														
TP-14	T-3	6876309.135	565425.2628	3476.51	3479.55	54.94	3425.29	3425.01	05/02/12	49.20	3430.35	5.34	field form	
TP-14	T-3	6876309.135	565425.2628	3476.51	3479.55	54.94	3425.29	3425.01	5/9/2012[1]	49.26	3430.29	5.28	field form	presampling
TP-14	T-3	6876309.135	565425.2628	3476.51	3479.55	54.94	3425.29	3425.01	5/9/2012[2]	49.45	3430.10	5.09	field form	post sampling
TP-14	T-3	6876309.135	565425.2628	3476.51	3479.55	54.94	3425.29	3425.01	5/23/2012[1]	49.15	3430.40	5.39	field form	presampling
TP-14	T-3	6876309.135	565425.2628	3476.51	3479.55	54.94	3425.29	3425.01	5/23/2012[2]	49.25	3430.30	5.29	field form	post sampling
TP-14														
TP-15	B-71	6875917.2285	564912.6498	3484.92	3488.44	64.89	3424.23	3426.92	05/09/12	58.01	3430.43	3.51	field form	
TP-15														
TP-16	B-70	6875612.1630	564550.4972	3488.48	3491.92	57.98	3434.62	3434.48	05/02/12	57.86	3434.06	na	field form	dry
TP-16														
TP-17	B-57	6875483.0307	563747.8678	3487.21	3490.20	53.76	3437.12	3438.21	05/02/12	dry	na	na	field form	dry
TP-17														
TP-18	B-58	6875070.5743	564620.4954	3485.45	3488.34	62.18	3426.84	3427.45	05/02/12	57.80	3430.54	3.09	field form	
TP-18	B-58	6875070.5743	564620.4954	3485.45	3488.34	62.18	3426.84	3427.45	5/9/2012[1]	57.56	3430.78	3.33	field form	presampling
TP-18	B-58	6875070.5743	564620.4954	3485.45	3488.34	62.18	3426.84	3427.45	5/9/2012[2]	60.70	3427.64	0.19	field form	post sampling
TP-18														
TP-19	B-59	6874280.5717	564964.8174	3477.40	3480.26	52.69	3428.25	3430.40	05/02/12	52.65	3427.61	na	field form	dry
TP-19	B-59	6874280.5717	564964.8174	3477.40	3480.26	52.69	3428.25	3430.40	5/23/2012[1]	49.12	3431.14	0.74	field form	presampling
TP-19	B-59	6874280.5717	564964.8174	3477.40	3480.26	52.69	3428.25	3430.40	5/23/2012[2]	51.45	3428.81	-1.59	field form	BRB, post sampling
TP-19														
TP-20	B-72	6877665.7080	566488.2664	3489.72	3492.53	67.01	3426.20	3427.72	05/02/12	66.74	3425.79	na	field form	dry
TP-20														
TP-30	B-63	6874882.3349	564326.7144	3482.68	3485.53	52.32	3433.89	3435.68	05/02/12	dry	na	na	field form	dry
TP-30														
TP-31	B-73	6877037.5804	559154.4606	3473.80	3477.15	44.29	3433.54	3433.30	05/02/12	43.50	3433.65	0.35	field form	
TP-31	B-73	6877037.5804	559154.4606	3473.80	3477.15	44.29	3433.54	3433.30	5/14/2012[1]	43.55	3433.60	0.30	field form	presampling
TP-31	B-73	6877037.5804	559154.4606	3473.80	3477.15	44.29	3433.54	3433.30	5/14/2012[2]	nr	na	na	field form	post sampling, data not recorded
TP-31	B-73	6877037.5804	559154.4606	3473.80	3477.15	44.29	3433.54	3433.30	5/23/2012[1]	43.54	3433.61	0.31	field form	presampling
TP-31	B-73	6877037.5804	559154.4606	3473.80	3477.15	44.29	3433.54	3433.30	5/23/2012[2]	44.28	3432.87	na	field form	dry, post sampling
TP-31														
TP-32	B-74	6874965.1304	564456.0467	3483.56	3487.07	55.19	3432.56	3433.56	05/02/12	dry	na	na	field form	dry

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TP-32														
TP-33	B-75	6874937.3974	564545.6547	3483.47	3486.28	55.18	3431.78	3432.47	05/02/12	dry	na	na	field form	dry
TP-33														
TP-34	B-76	6874842.1768	564496.9800	3482.41	3485.61	51.85	3434.44	3435.41	05/02/12	dry	na	na	field form	dry
TP-34														
TP-35	B-77	6874804.7963	565817.7889	3486.92	3489.41	55.45	3434.64	3434.92	05/02/12	dry	na	na	field form	dry
TP-35														
TP-36	B-78	6874795.8454	565177.4673	3483.77	3486.97	57.45	3430.20	3430.77	05/02/12	56.56	3430.41	-0.36	field form	BRB
TP-36														
TP-37	B-79	6874954.2593	566446.8644	3485.32	3488.32	56.95	3432.05	3432.82	05/02/12	dry	na	na	field form	dry
TP-37														
TP-38	B-80	6873907.7172	565352.189	3477.74	3477.93	48.77	3429.51	3430.66	05/01/12	dry	na	na	field form	dry
TP-38														
TP-39	B-81	6874094.1501	564936.9072	3477.92	3477.71	41.75	3436.55	3436.91	05/03/12	dry	na	na	field form	dry
TP-39														
TP-41	B-81	6875682.5760	562371.0063	3482.46	3485.54	44.43	3441.79	3443.46	05/03/12	dry	na	na	field form	dry
TP-41														
TP-42	B-84	6875850.3766	561457.3686	3478.70	3481.66	41.62	3440.72	3441.70	05/03/12	35.95	3445.71	4.01	field form	
TP-42														
TP-43	B-88	6874647.2966	561209.3206	3471.57	3471.30	24.57	3447.14	3449.30	05/03/12	19.29	3452.01	2.71	field form	
TP-43														
TP-44	B-89	6873546.6476	563497.5524	3455.57	3458.14	15.05	3443.77	3445.57	05/02/12	dry	na	na	field form	dry
TP-44														
TP-45	B-31A	6873096.2449	564321.5367	3453.35	3456.35	20.38	3436.65	3439.35	05/02/12	20.20	3436.15	na	field form	dry
TP-45														
TP-46	B-90	6872427.4861	563476.1809	3437.31	3440.50	34.91	3406.27	3407.31	05/02/12	32.75	3407.75	0.44	field form	
TP-46	B-90	6872427.4861	563476.1809	3437.31	3440.50	34.91	3406.27	3407.31	5/9/2012[1]	32.93	3407.57	0.26	field form	presampling
TP-46	B-90	6872427.4861	563476.1809	3437.31	3440.50	34.91	3406.27	3407.31	5/9/2012[2]	33.53	3406.97	-0.34	field form	BRB, post sampling
TP-46														
TP-47	B-85	6870974.2359	563474.0964	3433.32	3436.41	69.03	3368.06	3369.32	05/02/12	dry	na	na	field form	dry
TP-47														
TP-48	B-86	6872411.8124	567489.0349	3474.78	3477.70	50.14	3428.24	3432.78	05/02/12	45.80	3431.90	-0.88	field form	BRB
TP-48														
TP-49	B-87	6871921.0354	567678.9741	3474.25	3477.41	48.12	3429.97	3432.25	05/02/12	47.29	3430.12	-2.13	field form	BRB
TP-49														
TP-62	B-134	6871853.4330	561719.3943	3429.56	3432.72	52.18	3381.16	3383.26	05/02/12	33.94	3398.78	15.52	field form	
TP-62														
TP-63	B-102	6872899.7280	565754.2562	3460.47	3463.19	25.60	3438.21	3441.17	05/02/12	21.58	3441.61	0.43	field form	
TP-63														
TP-64	B-109	6877785.0050	562244.1728	3502.08	3504.80	70.81	3434.61	3436.78	05/02/12	70.60	3434.20	na	field form	dry
TP-64														

Table 1: OAG Water Levels - May 2012

Monitoring Well/ Piezometer Name	Reference Boring Name	Northing (ft)	Easting (ft)	Ground Elevation (ft msl)	Top of Casing (ft msl)	Total Well Depth (ft btoc)*	Bottom of Screen Slots (ft msl)**	Top of Red Bed Elevation (ft msl)	Date of Gauging Event	Depth to Water (ft)	Water Elevation (ft msl)	Saturated Thickness (ft)***	Data Source	Comments
TP-65	B-110	6876654.5425	563621.5985	3490.40	3493.75	57.68	3436.69	3437.90	05/03/12	57.49	3436.26	na	field form	dry
TP-65														
TP-66	B-111	6876728.3713	564210.1596	3485.45	3488.66	57.78	3431.51	3434.45	05/02/12	dry	na	na	field form	dry
TP-66														
TP-67	B-112	6876145.9929	567243.4713	3484.35	3487.49	61.55	3426.57	3428.55	05/03/12	58.75	3428.74	0.20	field form	
TP-67														
TP-68	B-115	6877337.1495	565309.3157	3485.95	3489.17	70.85	3418.95	3421.95	05/02/12	65.52	3423.65	1.71	field form	
TP-68														
TP-70	B-151	6872785.0883	566471.1764	3471.53	3474.67	39.16	3436.13	3438.03	05/03/12	dry	na	na	field form	dry
TP-70														
TP-71	B-152	6872816.1293	567388.7955	3479.14	3482.18	57.08	3425.73	3427.84	05/03/12	52.06	3430.12	2.28	field form	
TP-71														
TP-75	TP-75	6873973.4518	562693.5002	3470.14	3473.59	23.33	3450.61	3452.68	05/03/12	23.26	3450.33	na	field form	dry
TP-75														
TP-76	TP-76	6877359.4945	561121.9423	3487.06	3490.20	53.42	3437.40	3439.96	05/03/12	dry	na	na	field form	dry
TP-76														
TP-77	TP-77	6876582.6779	562237.5058	3484.19	3487.39	51.30	3436.72	3438.79	05/03/12	46.78	3440.61	1.82	field form	
TP-77														
TP-78	TP-78	6875313.0721	560864.0382	3472.41	3475.75	27.87	3448.50	3449.71	05/03/12	25.39	3450.36	0.65	field form	
TP-78														
TP-79	TP-79	6873578.2471	561118.6574	3454.27	3457.54	15.97	3442.20	3443.57	05/03/12	dry	na	na	field form	dry
TP-79														
TP-80	TP-80	6871694.3245	565348.5793	3445.11	3448.34	45.55	3403.42	3405.71	05/03/12	41.01	3407.33	1.62	field form	
TP-80														
TP-83	TP-83	6876337.3258	562910.9839	3487.77	3491.15	55.55	3436.22	3437.97	05/03/12	55.04	3436.11	na	field form	dry
TP-83														
TP-84	TP-84	6877523.5985	563735.4556	3491.56	3494.83	65.24	3430.21	3432.86	05/02/12	65.03	3429.80	na	field form	dry
TP-84														
TP-85	TP-85	6875981.2141	562022.1501	3482.54	3485.71	40.49	3445.84	3448.54	05/03/12	40.32	3445.39	na	field form	dry
TP-85														
TP-86	TP-86	6875981.5868	560877.5234	3476.00	3479.20	33.67	3446.16	3448.70	05/03/12	30.04	3449.16	0.46	field form	
TP-86														
TP-87	TP-87	6877040.5809	561611.0739	3484.17	3487.49	49.02	3439.10	3440.87	05/03/12	46.30	3441.19	0.32	field form	
TP-87														
TP-88	TP-88	6874634.8955	561613.5512	3471.85	3474.88	26.95	3448.56	3449.35	05/03/12	26.00	3448.88	-0.47	field form	BRB
TP-88														
TP-90	TP-90	6876245.3326	560888.1651	3478.51	3481.97	38.50	3444.09	3446.01	05/03/12	34.67	3447.30	1.28	field form	
TP-90														
TP-91	TP-91	6876803.5424	560913.5967	3478.85	3482.05	39.89	3442.79	3444.15	05/03/12	39.73	3442.32	na	field form	dry
TP-91														
TP-92	TP-92	6875474.6374	562077.3794	3479.97	3483.16	40.00	3443.78	3444.77	05/03/12	39.51	3443.65	na	field form	dry

Table 1: OAG Water Levels - May 2012

Monitoring Well/ Piezometer Name	Reference Boring Name	Northing (ft)	Easting (ft)	Ground Elevation (ft msl)	Top of Casing (ft msl)	Total Well Depth (ft btoc)*	Bottom of Screen Slots (ft msl)**	Top of Red Bed Elevation (ft msl)	Date of Gauging Event	Depth to Water (ft)	Water Elevation (ft msl)	Saturated Thickness (ft)***	Data Source	Comments
TP-92														
TP-93	TP-93	6875240.6459	564841.4649	3487.60	3490.84	67.32	3424.15	3426.00	05/02/12	60.09	3430.75	4.75	field form	
TP-93														
TP-94	TP-94	6875041.5981	564994.1865	3485.81	3489.37	62.39	3427.61	3428.01	05/02/12	58.68	3430.69	2.69	field form	
TP-94														
TP-95	TP-95	6875422.5733	564705.2654	3487.89	3491.36	61.95	3430.03	3431.29	05/02/12	61.78	3429.58	na	field form	dry
TP-95														
TP-96	TP-96	6875300.1028	564501.6797	3486.88	3490.08	59.39	3431.31	3432.68	05/02/12	dry	na	na	field form	dry
TP-96														
TP-97	TP-97	6875524.7526	564844.6921	3487.85	3491.09	63.98	3427.73	3428.55	05/02/12	60.31	3430.78	2.23	field form	
TP-97														
TP-98	TP-98	6875436.1870	565037.8115	3487.99	3491.31	66.81	3425.12	3426.19	05/02/12	60.61	3430.70	4.51	field form	
TP-98														
TP-99	TP-99	6875339.2612	565239.3934	3487.98	3491.13	63.91	3427.84	3428.38	05/02/12	60.53	3430.60	2.21	field form	
TP-99														
TP-100	TP-100	6874848.6760	564799.5090	3482.44	3485.42	59.94	3426.10	3426.84	05/02/12	54.66	3430.76	3.92	field form	
TP-100														
TP-101	TP-101	6875096.9591	564367.6683	3484.57	3487.81	55.28	3433.15	3434.37	05/02/12	55.22	3432.59	na	field form	dry
TP-101														
TP-102	TP-102	6874763.0340	564197.4990	3481.07	3480.83	41.04	3440.31	3441.51	05/02/12	dry	na	na	field form	dry
TP-102														
TP-103	TP-103	6874985.9638	565485.2901	3487.94	3491.27	60.85	3431.04	3431.34	05/02/12	dry	na	na	field form	dry
TP-103														
TP-104	TP-104	6874580.0048	565540.6643	3486.38	3489.57	58.66	3431.54	3433.08	05/02/12	dry	na	na	field form	dry
TP-104														
TP-105	TP-105	6874604.1662	564993.8980	3479.37	3482.76	53.88	3429.50	3431.57	05/02/12	52.46	3430.30	-1.27	field form	BRB
TP-105														
TP-106	TP-106	6874437.8166	565241.8120	3481.72	3485.19	56.75	3429.07	3430.42	05/02/12	dry	na	na	field form	dry
TP-106														
TP-107	TP-107	6874432.4875	564808.0227	3478.17	3481.49	52.91	3429.20	3430.67	05/02/12	dry	na	na	field form	dry
TP-107														
TP-108	TP-108	6874205.4175	565284.7062	3479.85	3483.21	52.99	3430.85	3431.25	05/02/12	dry	na	na	field form	dry
TP-108														
TP-109	TP-109	6873994.1022	565490.2498	3477.54	3480.77	53.11	3428.29	3430.44	05/02/12	dry	na	na	field form	dry
TP-109														
TP-110	TP-110	6874108.2769	565945.6732	3480.82	3484.16	54.62	3430.16	3431.52	05/02/12	dry	na	na	field form	dry
TP-110														
TP-111	TP-111	6873811.4435	565690.4664	3476.04	3479.35	56.96	3423.02	3424.74	05/02/12	50.95	3428.40	3.67	field form	
TP-111														
TP-112	TP-112	6873751.6504	566264.0042	3480.44	3483.90	54.03	3430.50	3432.84	05/02/12	dry	na	na	field form	dry
TP-112														

Table 1: OAG Water Levels - May 2012

Monitoring Well/ Piezometer Name	Reference Boring Name	Northing (ft)	Easting (ft)	Ground Elevation (ft msl)	Top of Casing (ft msl)	Total Well Depth (ft btoc)*	Bottom of Screen Slots (ft msl)**	Top of Red Bed Elevation (ft msl)	Date of Gauging Event	Depth to Water (ft)	Water Elevation (ft msl)	Saturated Thickness (ft)***	Data Source	Comments
TP-113	TP-113	6873670.2505	565373.0783	3472.57	3476.12	41.30	3435.45	3436.87	05/02/12	41.29	3434.83	na	field form	dry
TP-113														
TP-114	TP-114	6873532.5956	565500.6578	3471.71	3475.06	37.20	3438.49	3440.11	05/02/12	37.16	3437.90	na	field form	dry
TP-114														
TP-115	TP-115	6873244.6382	565344.4590	3469.12	3472.24	28.78	3444.08	3445.52	05/02/12	28.63	3443.61	na	field form	dry
TP-115														
TP-116	TP-116	6872997.3212	565222.9311	3469.26	3472.61	27.97	3445.26	3446.76	05/02/12	27.82	3444.79	na	field form	dry
TP-116														
TP-117	TP-117	6872922.5462	565567.1362	3460.46	3464.00	29.44	3435.18	3436.46	05/02/12	22.03	3441.97	5.51	field form	
TP-117	TP-117	6872922.5462	565567.1362	3460.46	3464.00	29.44	3435.18	3436.46	5/8/2012[1]	22.04	3441.96	5.50	field form	presampling
TP-117	TP-117	6872922.5462	565567.1362	3460.46	3464.00	29.44	3435.18	3436.46	5/8/2012[2]	22.14	3441.86	5.40	field form	post sampling
TP-117	TP-117	6872922.5462	565567.1362	3460.46	3464.00	29.44	3435.18	3436.46	5/23/2012[1]	22.13	3441.87	5.41	field form	presampling
TP-117	TP-117	6872922.5462	565567.1362	3460.46	3464.00	29.44	3435.18	3436.46	5/23/2012[2]	22.18	3441.82	5.36	field form	post sampling
TP-117														
TP-118	TP-118	6874631.4637	564661.3238	3480.44	3483.82	57.47	3426.97	3428.64	05/02/12	52.90	3430.92	2.28	field form	
TP-118	TP-118	6874631.4637	564661.3238	3480.44	3483.82	57.47	3426.97	3428.64	05/03/12	52.92	3430.90	2.26	field form	
TP-118														
TP-119	TP-119	6873826.2447	565479.5741	3474.88	3478.27	46.69	3432.20	3433.58	05/02/12	46.64	3431.63	na	field form	dry
TP-119														
TP-120	TP-120	6874208.0644	565553.8497	3480.87	3484.14	54.55	3430.22	3431.67	05/02/12	dry	na	na	field form	dry
TP-120														
TP-121	TP-121	6874029.7417	565656.8126	3478.91	3482.19	54.54	3428.27	3429.81	05/02/12	54.49	3427.70	na	field form	dry
TP-121														
TP-122	TP-122	6873572.5309	565929.8686	3474.38	3477.76	51.62	3426.76	3428.18	05/02/12	50.39	3427.37	-0.81	field form	BRB
TP-122														
TP-123	TP-123	6873318.4788	565995.1774	3472.59	3476.04	52.95	3423.72	3429.29	05/02/12	dry	na	na	field form	dry
TP-123														
TP-124	TP-124	6873298.1785	565716.2017	3470.15	3473.56	33.30	3440.89	3442.65	05/02/12	33.01	3440.55	na	field form	dry
TP-124														
TP-125	TP-125	6872915.8614	565997.6743	3468.17	3471.77	32.59	3439.80	3441.37	05/02/12	dry	na	na	field form	dry
TP-125														
TP-126	TP-126	6872436.3827	566100.1631	3464.33	3467.71	26.49	3441.84	3443.23	05/02/12	dry	na	na	field form	dry
TP-126														
TP-127	TP-127	6874507.2532	564472.1186	3479.00	3482.55	42.10	3441.08	3442.40	05/02/12	41.92	3440.63	na	field form	dry
TP-127														
TP-128	TP-128	6872905.9859	565939.0261	3468.03	3471.37	30.25	3441.75	3443.13	05/02/12	30.22	3441.15	na	field form	dry
TP-128														
TP-129	TP-129	6874075.2019	565064.1481	3478.01	3477.88	42.62	3435.75	3437.49	05/03/12	42.33	3435.55	na	field form	dry
TP-129														
TP-130	TP-130	6874014.3074	565182.3612	3478.32	3478.08	40.72	3437.93	3438.40	05/03/12	40.67	3437.41	na	field form	dry
TP-130														

Table 1: OAG Water Levels - May 2012

Monitoring Well/ Piezometer Name	Reference Boring Name	Northing (ft)	Easting (ft)	Ground Elevation (ft msl)	Top of Casing (ft msl)	Total Well Depth (ft btoc)*	Bottom of Screen Slots (ft msl)**	Top of Red Bed Elevation (ft msl)	Date of Gauging Event	Depth to Water (ft)	Water Elevation (ft msl)	Saturated Thickness (ft)***	Data Source	Comments
TP-131	TP-131	6873878.8760	565292.0578	3477.00	3476.93	37.72	3439.89	3439.62	05/03/12	dry	na	na	field form	dry
TP-131														
TP-132	TP-132	6875177.6660	564227.5450	3484.14	3487.20	53.77	3434.05	3436.24	05/09/12	dry	na	na	field form	dry
TP-132														
TP-133	TP-133	6875474.5940	564236.1080	3488.54	3491.70	61.79	3430.54	3432.64	05/09/12	61.72	3429.98	na	field form	dry
TP-133														
TP-134	TP-134	6875817.4080	563858.2614	3491.96	3495.02	60.17	3435.47	3436.96	05/09/12	59.75	3435.27	na	field form	dry
TP-134														
TP-135	TP-135	6875930.4590	563269.2845	3486.72	3489.83	53.87	3436.59	3439.42	05/09/12	dry	na	na	field form	dry
TP-135														
TP-136	TP-136	6876252.3230	563381.4964	3490.17	3493.22	55.21	3438.63	3439.67	05/09/12	55.15	3438.07	na	field form	dry
TP-136														
TP-137	TP-137	6876274.7600	564031.6267	3488.00	3491.14	56.41	3435.36	3436.50	05/02/12	56.40	3434.74	na	field form	dry
TP-137														
TP-138	TP-138	6875968.4900	564527.0449	3487.63	3490.74	60.08	3431.28	3432.03	05/02/12	59.93	3430.81	na	field form	dry
TP-138														
TP-139	TP-139	6876323.0860	564549.8089	3484.54	3487.81	61.58	3426.85	3428.74	05/02/12	59.89	3427.92	-0.82	field form	BRB
TP-139														
TP-140	TP-140	6874508.1271	561594.9997	3470.85	3470.67	22.04	3449.18	3450.99	05/03/12	20.69	3449.98	-1.01	field form	BRB
TP-140														
TP-141	TP-141	6874595.7083	561376.0978	3470.56	3470.39	24.03	3446.82	3449.31	05/03/12	19.16	3451.23	1.92	field form	
TP-141														
TP-142	TP-142	6874495.6583	561296.7037	3470.58	3470.38	21.82	3449.13	3450.67	05/03/12	18.67	3451.71	1.04	field form	
TP-142														
TP-143	TP-143	6874475.9823	561127.7054	3470.75	3470.57	21.75	3449.29	3450.82	05/03/12	18.39	3452.18	1.36	field form	
TP-143														
TP-144	TP-144	6874036.4400	561010.0545	3468.06	3471.25	21.87	3450.01	3451.86	05/02/12	21.58	3449.67	na	field form	dry
TP-144														
TP-145	TP-145	6875135.0690	560858.3894	3472.81	3475.83	25.67	3450.78	3452.01	05/03/12	22.92	3452.91	0.90	field form	
TP-145														
TP-146	TP-146	6875552.6550	560875.4921	3473.82	3476.74	31.92	3445.45	3447.22	05/03/12	27.70	3449.04	1.83	field form	
TP-146														
TP-147	TP-147	6875771.4250	560877.6361	3475.18	3478.08	28.78	3449.92	3452.38	05/03/12	28.68	3449.40	na	field form	dry
TP-147														
TP-148	TP-148	6875943.1650	561170.0813	3478.36	3481.12	37.70	3444.04	3445.86	05/03/12	34.63	3446.49	0.62	field form	
TP-148														
TP-149	TP-149	6875728.5890	561566.3169	3478.82	3481.51	39.72	3442.41	3444.92	05/03/12	35.89	3445.62	0.70	field form	
TP-149														
TP-150	TP-150	6875659.5200	561910.4535	3480.04	3483.29	41.60	3442.31	3443.94	05/03/12	41.52	3441.77	na	field form	dry
TP-150														
TP-151	TP-151	6876025.4610	561712.2878	3481.41	3484.47	43.25	3441.84	3442.61	05/03/12	39.98	3444.49	1.87	field form	

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Monitoring Well/ Piezometer Name	Reference Boring Name	Northing (ft)	Easting (ft)	Ground Elevation (ft msl)	Top of Casing (ft msl)	Total Well Depth (ft btoc)*	Bottom of Screen Slots (ft msl)**	Top of Red Bed Elevation (ft msl)	Date of Gauging Event	Depth to Water (ft)	Water Elevation (ft msl)	Saturated Thickness (ft)***	Data Source	Comments
TP-151														
TP-152	TP-152	6874599.0310	564529.0128	3480.31	3483.10	45.37	3438.35	3441.01	05/09/12	45.43	3437.67	na	field form	data disqualified - below TWD
TP-152														
TP-153	TP-153	6874504.5820	564620.3949	3479.30	3482.28	46.07	3436.84	3439.00	05/09/12	46.03	3436.25	na	field form	dry
TP-153														
TP-154	TP-154	6874399.1520	564726.7615	3478.16	3481.20	52.80	3429.02	3430.86	05/09/12	52.72	3428.48	na	field form	dry
TP-154														
TP-155	TP-155	6873944.4389	565237.0533	3477.95	3477.75	42.41	3435.88	3437.76	05/03/12	42.13	3435.62	na	field form	dry
TP-155	TP-155	6873944.4389	565237.0533	3477.95	3477.75	42.41	3435.88	3437.76	05/09/12	42.20	3435.55	na	field form	dry
TP-155														
TP-156	TP-156	6873736.8060	565401.1110	3473.79	3476.82	44.17	3433.27	3435.19	05/09/12	dry	na	na	field form	dry
TP-156														
TP-157	TP-157	6875227.1110	564350.6753	3484.20	3487.39	54.74	3433.27	3434.90	05/09/12	54.73	3432.66	na	field form	dry
TP-157														
TP-158	TP-158	6875296.6740	564229.6776	3484.25	3487.45	55.15	3432.93	3434.65	05/09/12	55.04	3432.41	na	field form	dry
TP-158														
TP-159	TP-159	6875388.8430	564163.3505	3486.08	3489.29	60.25	3429.67	3431.88	05/09/12	dry	na	na	field form	dry
TP-159														
TP-160	TP-160	6875419.3870	563966.1384	3486.10	3489.41	55.01	3435.02	3436.60	05/09/12	dry	na	na	field form	dry
TP-160														
TP-161	TP-161	6873193.3000	563890.4924	3449.30	3452.30	21.87	3431.06	3432.00	05/09/12	21.79	3430.51	na	field form	dry
TP-161														
TP-162	TP-162	6872702.7630	564877.5576	3454.20	3456.76	25.23	3432.16	3433.90	05/09/12	dry	na	na	field form	dry
TP-162														
TP-163	TP-163	6872830.4460	564312.8977	3449.61	3452.70	29.43	3423.90	3426.31	05/09/12	29.39	3423.31	na	field form	dry
TP-163														
TP-164	TP-164	6875189.7213	563975.2992	3483.14	3483.73	48.14	3436.22	3437.65	05/09/12	47.96	3435.77	na	field form	dry
TP-164														
TP-166	TP-166	6876102.4490	561071.6746	3478.97	3481.91	39.42	3443.12	3444.97	05/03/12	34.81	3447.10	2.14	field form	
TP-166														
TP-167	TP-167	6876090.1570	561393.5915	3479.98	3482.92	41.73	3441.81	3444.18	05/03/12	36.93	3445.99	1.81	field form	
TP-167														
TP-168	TP-168	6875827.2620	561770.4963	3481.06	3483.96	36.74	3447.85	3449.66	05/03/12	36.68	3447.28	na	field form	dry
TP-168														
TP-169	TP-169	6874563.0301	560961.5403	3470.12	3469.87	18.02	3452.31	3453.40	05/02/12	16.99	3452.88	-0.52	field form	BRB
TP-169														
TP-170	TP-170	6874203.3480	561163.0191	3469.29	3472.45	22.87	3450.21	3452.19	05/03/12	22.46	3449.99	na	field form	dry
TP-170														
TP-171	TP-171	6874383.2796	561867.3260	3471.61	3471.53	27.03	3445.14	3447.36	05/03/12	23.29	3448.24	0.89	field form	
TP-171														
TP-172	TP-172	6874120.1865	562411.2561	3471.44	3471.42	22.57	3449.25	3451.59	05/09/12	22.67	3448.75	na	field form	dry

Table 1: OAG Water Levels - May 2012

Monitoring Well/ Piezometer Name	Reference Boring Name	Northing (ft)	Easting (ft)	Ground Elevation (ft msl)	Top of Casing (ft msl)	Total Well Depth (ft btoc)*	Bottom of Screen Slots (ft msl)**	Top of Red Bed Elevation (ft msl)	Date of Gauging Event	Depth to Water (ft)	Water Elevation (ft msl)	Saturated Thickness (ft)***	Data Source	Comments
TP-172														
TP-173	TP-173	6873352.8336	565123.4904	3471.06	3470.96	30.34	3441.24	3443.36	05/03/12	30.12	3440.84	na	field form	dry
TP-173														

na: not applicable

nr: not recorded

unk: unknown

BRB: water in well is below the top of the red beds and does not indicate OAG saturation

NS: current ground elevation not surveyed until well modifications complete, total well depth and TOC elevation are interim values

*total well depth measured in the field.

**bottom of screen slots in PZ-1 through PZ-34 is based on generic monitor well completion diagram from Texas Tech (LLRW Rev 12c, Appendix 2.6.1 (Geology Report), Attachment 2-1)

***Negative numbers indicate that the water elevation is below the top of the red beds. As calculated, the negative number does not represent a saturated thickness, instead it is the distance from the top of red beds to the top of water in the well.

****Well used for environmental monitoring only. Included in table for information but not on saturated thickness map.

[1] Superscripts in the **Date of Gauging Event** column are used for entries on the same date to denote time sequence, i.e. superscript 1 is the first measurement, superscript 2 denotes the second measurement, etc.

Note 1: coordinates are in Texas State Plane, Texas North Central Zone, NAD 83, US survey feet

Note 2: top of red bed elevation and saturated thickness are estimates based on estimated depth to top of red beds from West Texas Water Well Services well report.

Note 3: OAG sampling on 4/24/2012.

Note 4: Water levels may be affected by pumping in OAG-21.

Table 2: Summary of OAG Sampling - May 2012

Monitoring Well/ Piezometer Name	Date of Sampling Event	Monitoring Program	License	Comments
GW-1A	05/15/12	Rad & Chemicals	LLRW	
GW-5	05/08/12	Rad & Chemicals	LLRW	
PM-01	05/08/12	Rad & Chemicals	LLRW	
PM-07	05/08/12	Rad & Chemicals	LLRW	
TP-14	5/9,23/2012	Rad & Chemicals	LLRW	
		Rad	BP	
TP-18	05/09/12	Rad	LLRW	
		Rad	BP	
TP-19	05/23/12	Rad	LLRW	
		Rad	BP	
TP-31	5/14,23/2012	Rad & Chemicals	LLRW	
		Rad	BP	
TP-46	05/09/12	Rad	LLRW	
		Rad	BP	
TP-117	5/8,23/2012	Rad & Chemicals	LLRW	

BP: Byproduct license R05807
LLRW: Low Level license R04100

Table 3: Summary of Phase Type Wells as of May 2012

Phase Type 1 Wells
TP-42
TP-43
TP-78
TP-86
TP-88
TP-90
TP-92
TP-141
TP-142
TP-143
TP-146
TP-148
TP-166
TP-167
TP-171
FWF-1A
FWF-26A
FWF-27A
18 wells

Phase Type 2 Wells				
TP-12	TP-87	TP-140	OAG-22	PW-07
TP-13	TP-88	TP-141	OAG-23	FWF-9A
TP-14	TP-90	TP-146	OAG-24	FWF-11A
TP-15	TP-91	TP-148	OAG-25	FWF-12A
TP-16	TP-92	TP-149	OAG-26	FWF-13A
TP-17	TP-93	TP-150	OAG-27	FWF-15A
TP-18	TP-94	TP-166	OAG-28	FWF-18A
TP-19	TP-95	TP-171	OAG-29	OAG-1
TP-20	TP-96	PZ-8	OAG-34	OAG-2
TP-30	TP-97	PZ-36	OAG-35	OAG-3
TP-31	TP-98	PZ-41	OAG-36	OAG-4
TP-32	TP-99	PZ-42	OAG-37	OAG-5
TP-33	TP-100	PZ-43	OAG-38	OAG-41
TP-34	TP-101	PZ-49	OAG-39	OAG-42
TP-35	TP-102	PZ-61	OAG-40	OAG-43
TP-36	TP-103	PZ-62	TMW-B	OAG-45
TP-37	TP-104	PZ-63	TMW-C	OAG-47
TP-38	TP-105	PZ-64	TMW-D	OAG-48
TP-39	TP-106	PZ-66	TMW-E	OAG-49
TP-41	TP-107	PZ-67	TMW-F	OAG-50
TP-42	TP-108	FWF-1A	TMW-G	OAG-51
TP-43	TP-109	FWF-6A	TMW-H	OAG-52
TP-44	TP-110	FWF-8A	TMW-I	OW-1
TP-45	TP-111	FWF-10A	TMW-J	OW-2
TP-46	TP-112	FWF-14A	PM-01	
TP-47	TP-113	FWF-16A	PM-04	
TP-48	TP-114	FWF-17A	PM-07	
TP-49	TP-115	FWF-21A	PM-10	
TP-62	TP-116	FWF-23A	A-16	
TP-63	TP-117	FWF-24A	FWF-25A	
TP-64	TP-118	FWF-26A	CWF-110A	
TP-65	TP-119	FWF-27A	TP-142	
TP-66	TP-120	CWF-1A	TP-143	
TP-67	TP-121	CWF-2A	TP-144	
TP-68	TP-122	CWF-3A	TP-145	
TP-70	TP-123	CWF-4A	TP-147	
TP-71	TP-124	CWF-5A	TP-151	
TP-75	TP-125	CWF-6A	TP-167	
TP-76	TP-126	CWF-7A	TP-168	
TP-77	TP-127	CWF-8A	TP-169	
TP-78	TP-128	CWF-10A	TP-170	
TP-79	TP-129	CWF-11A	TP-173	
TP-80	TP-130	CWF-12A	GW-3	
TP-83	TP-131	CWF-13A	GW-5	
TP-84	TP-137	OAG-8	TMW-K	
TP-85	TP-138	OAG-20	GW-1A	
TP-86	TP-139	OAG-21	PW-01	
212 wells				

Phase Type 3 Wells	
PZ-1	PZ-48R
PZ-2	PZ-50
PZ-3	PZ-51
PZ-4	PZ-52
PZ-5	PZ-53
PZ-6	PZ-54
PZ-7	PZ-55
PZ-9	PZ-56
PZ-10	PZ-57
PZ-11	PZ-58
PZ-12	PZ-59
PZ-13	PZ-60
PZ-14	TP-132
PZ-15	TP-133
PZ-16	TP-134
PZ-17	TP-135
PZ-18	TP-136
PZ-19	TP-152
PZ-20	TP-153
PZ-21	TP-154
PZ-22	TP-155
PZ-23	TP-156
PZ-24	TP-157
PZ-25	TP-158
PZ-26	TP-159
PZ-27	TP-160
PZ-28	TP-161
PZ-29	TP-162
PZ-30	TP-163
PZ-31	TP-164
PZ-32	TP-172
PZ-33	OAG-7
PZ-34	OAG-9
PZ-37	OAG-10
PZ-38	OAG-13
PZ-39	OAG-14
PZ-40	OAG-15
PZ-44	FWF-20A
PZ-45	FWF-22A
PZ-46	OAG-12R
PZ-47	
81 wells	

total OAG wells: 293

phase type 1 wells
phase type 2 wells
phase type 3 wells

Table 4: Byproduct Material Disposal Facility Environmental Monitoring Dates
Second Quarter 2012 through First Quarter 2013

	Planned Beginning Sampling Date			
Media	**Second Quarter 2012**	**Third Quarter 2012**	**Fourth Quarter 2012**	**First Quarter 2013**
Ambient Radiation	4/2/2012	7/9/2012	10/8/2012	1/7/2013
Air Particulate	Every Tuesday	Every Tuesday	Every Tuesday	Every Tuesday
Radon	4/16/2012	7/18/2012	10/15/2012	1/15/2013
Soil	4/10/2012	7/9/2012	10/9/2012	1/14/2013
Water	5/7/2012	8/13/2012	11/12/2012	2/11/2013
Vegetation	4/16/2012	N/A	10/22/2012	N/A
Fauna*	N/A	N/A	N/A	N/A

*Fauna is collected whenever possible (traps are set out all year long).

Table 5: Daily Rainfall Data for WCS Weather Stations, May 2012

Day	Tower 1 (inches)	ER Tower (inches)	WH East (inches)	WH West (inches)
5/1/2012	0.00	0.00	0.00	0.00
5/2/2012	0.00	0.00	0.00	0.00
5/3/2012	0.00	0.00	0.00	0.00
5/4/2012	0.00	0.00	0.00	0.00
5/5/2012	0.00	0.00	0.00	0.00
5/6/2012	0.00	0.00	0.00	0.00
5/7/2012	0.03	0.03	0.00	0.02
5/8/2012	0.32	0.28	0.00	0.26
5/9/2012	0.00	0.00	0.00	0.00
5/10/2012	1.52	1.84	2.08	1.69
5/11/2012	0.00	0.01	0.01	0.01
5/12/2012	0.00	0.00	0.00	0.00
5/13/2012	0.08	0.10	0.11	0.10
5/14/2012	0.08	0.07	0.07	0.06
5/15/2012	0.00	0.00	0.01	0.00
5/16/2012	0.00	0.00	0.00	0.00
5/17/2012	0.00	0.00	0.00	0.00
5/18/2012	0.00	0.00	0.00	0.00
5/19/2012	0.00	0.00	0.00	0.00
5/20/2012	0.00	0.00	0.00	0.00
5/21/2012	0.00	0.00	0.00	0.00
5/22/2012	0.11	0.00	0.00	0.00
5/23/2012	0.00	0.12	0.00	0.00
5/24/2012	0.00	0.00	0.00	0.00
5/25/2012	0.00	0.00	0.00	0.00
5/26/2012	0.49	0.53	0.44	0.67
5/27/2012	0.01	0.00	0.01	0.00
5/28/2012	0.00	0.00	0.00	0.00
5/29/2012	0.00	0.00	0.00	0.00
5/30/2012	0.00	0.00	0.00	0.00
5/31/2012	0.00	0.00	0.00	0.00
TOTAL	**2.64**	**2.98**	**2.73**	**2.81**

NA: Rainfall data not available

FIGURES

PZ-28
DRY

STATE OF TEXAS
NOREEN A. BAKER
GEOLOGY
No. 1938
6/11/12
LICENSED PROFESSIONAL GEOSCIENTIST

WASTE CONTROL SPECIALISTS LLC

COOK-JOYCE INC.
ENGINEERING AND CONSULTING
812 WEST ELEVENTH 512-474-9097
AUSTIN, TEXAS 78701
TEXAS REGISTERED ENGINEERING FIRM F-883

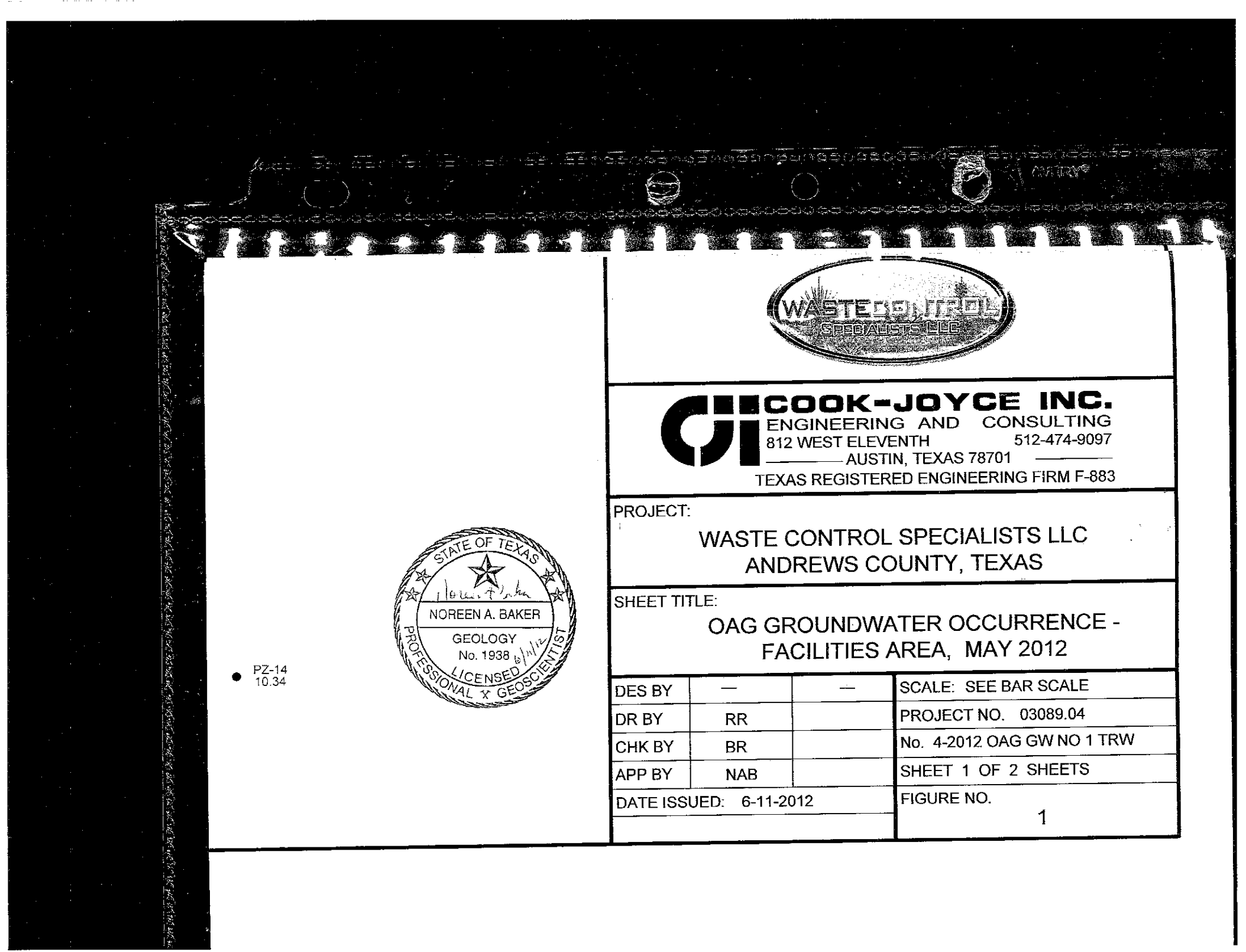
PROJECT:

WASTE CONTROL SPECIALISTS LLC
ANDREWS COUNTY, TEXAS

SHEET TITLE:

OAG GROUNDWATER OCCURRENCE - WCS SITE, MAY 2012

DES BY	—	—	SCALE: 1" = 1000'
DR BY	RR		PROJECT NO. 03089.04
CHK BY	BR		No. 4-2012 OAG GW NO 1 TRW
APP BY	NAB		SHEET 2 OF 2 SHEETS
DATE ISSUED: 6-11-2012			FIGURE NO. 2


WASTE CONTROL SPECIALISTS LLC
COOK-JOYCE INC.
ENGINEERING AND CONSULTING
812 WEST ELEVENTH
512-474-9097
AUSTIN, TEXAS 78701
TEXAS REGISTERED ENGINEERING FIRM F-883
PROJECT:
WASTE CONTROL SPECIALISTS LLC
ANDREWS COUNTY, TEXAS
SHEET TITLE:
OAG GROUNDWATER OCCURRENCE - FACILITIES AREA, MAY 2012
STATE OF TEXAS
NOREEN A. BAKER
GEOLOGY
No. 1938
LICENSED
PROFESSIONAL GEOSCIENTIST
PZ-14
10.34
DES BY —
DR BY RR
CHK BY BR
APP BY NAB
DATE ISSUED: 6-11-2012
SCALE: SEE BAR SCALE
PROJECT NO. 03089.04
No. 4-2012 OAG GW NO 1 TRW
SHEET 1 OF 2 SHEETS
FIGURE NO.
1

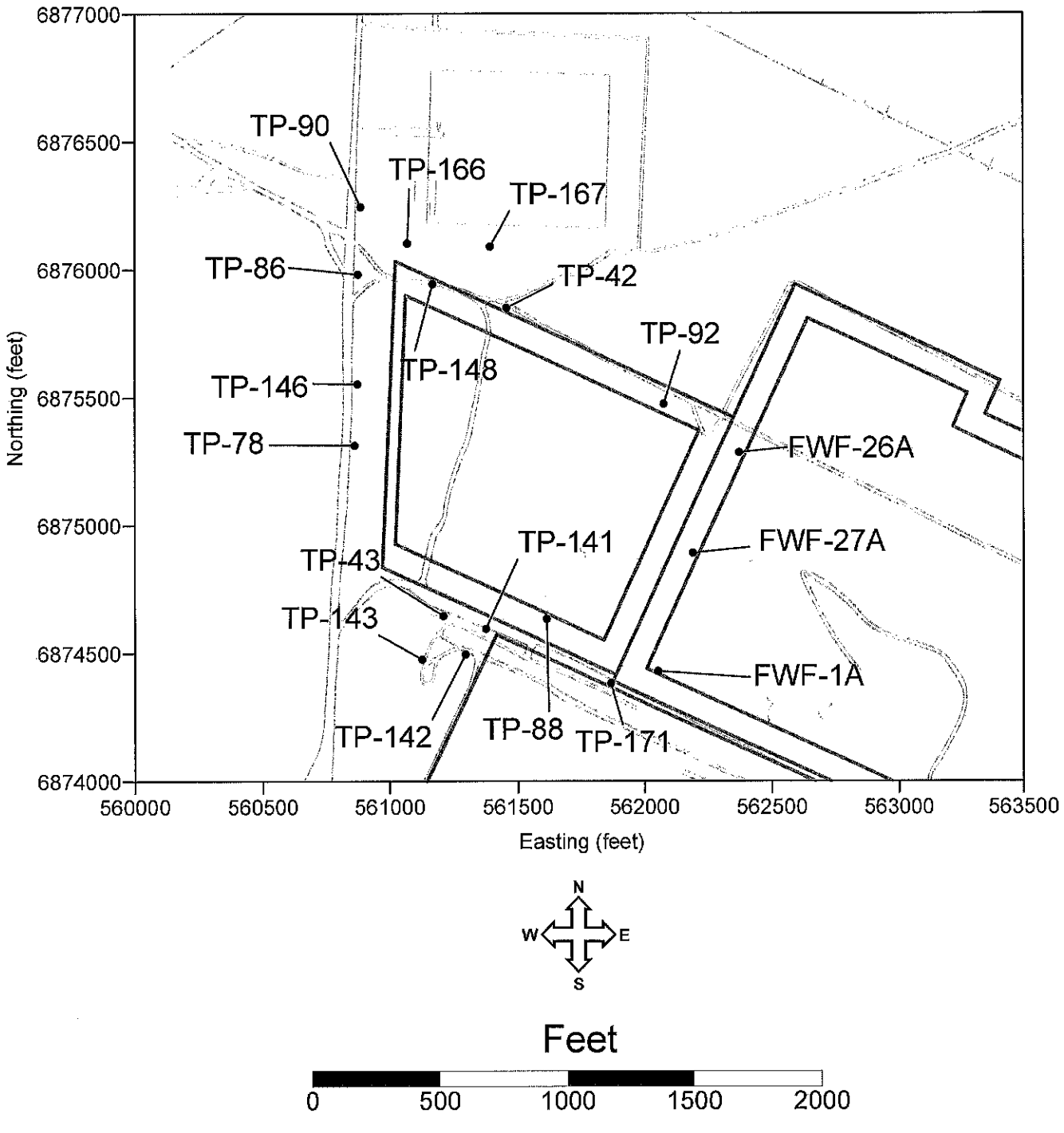


Figure 5: Locations of Type 1 Wells

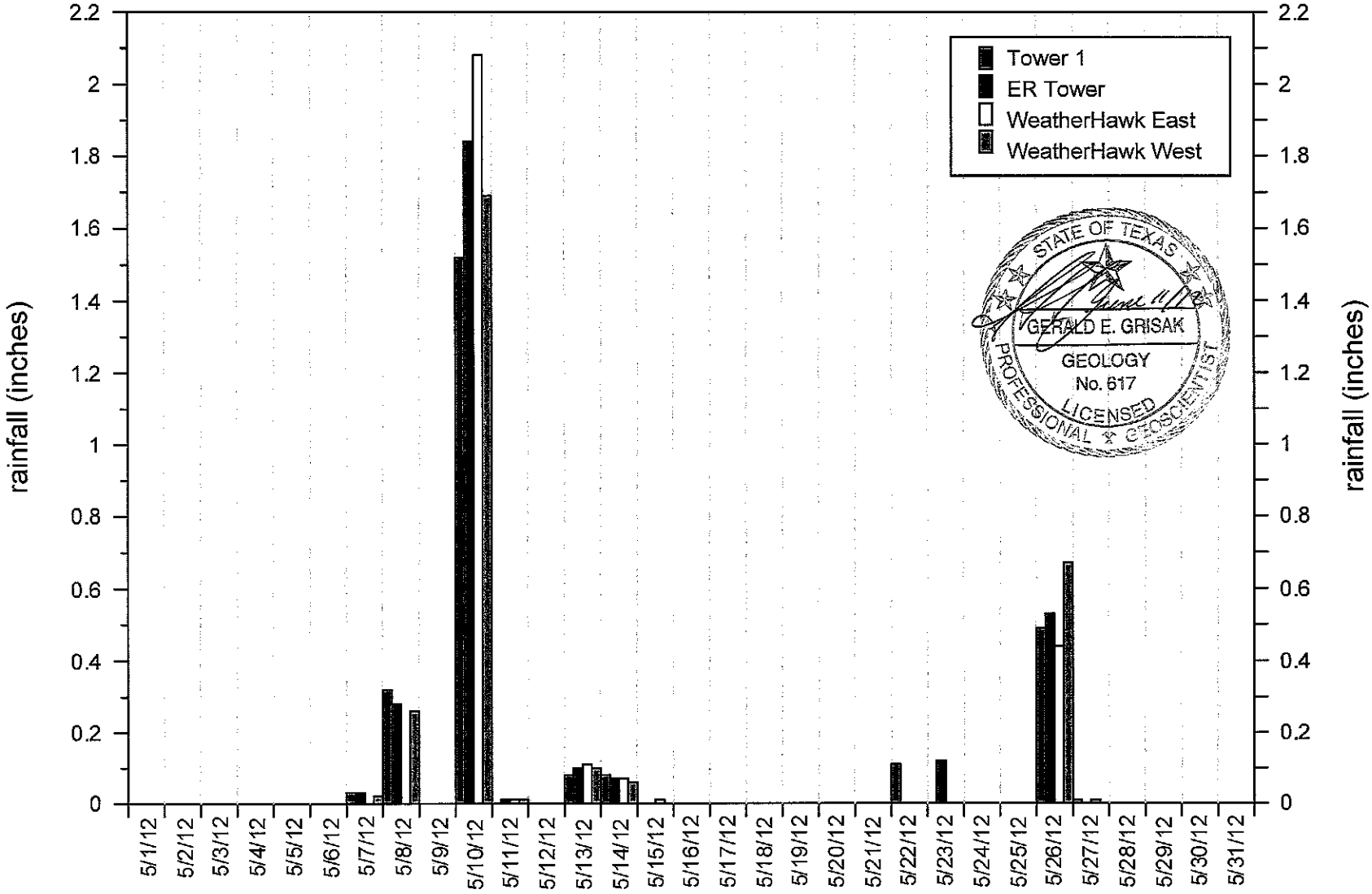
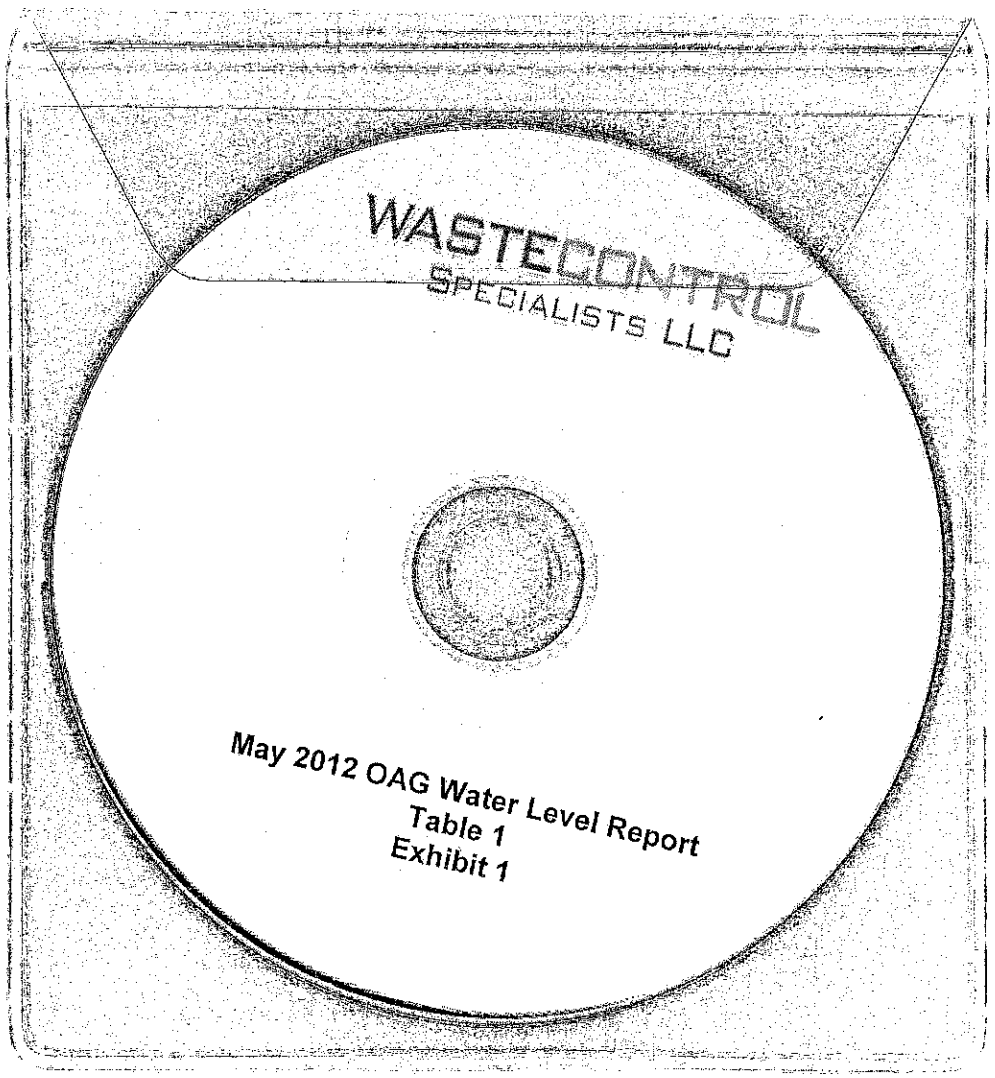


Figure 6: Daily Rainfall Data for WCS Weather Stations, May 2012

EXHIBIT 1

Hydrographs of Type 1 Wells and TP-14 with Continuous Water Level Measurements

Reserved for Quarterly Submittals: Hydrographs with Single Monthly Water Level Measurements


WASTECONTROL
SPECIALISTS LLC
May 2012 OAG Water Level Report
Table 1
Exhibit 1