OCTOBER 4, 2013

ADDITIONAL GROUNDWATER ASSESSMENT

AND

MONITOR WELL CONSTRUCTION REPORT

(MW-38, MW-39, AND MW-40)

RAYTHEON COMPANY

1901 WEST MALVERN AVENUE

FULLERTON, CALIFORNIA

PREPARED FOR:
RAYTHEON COMPANY

HARGIS + ASSOCIATES, INC.
HYDROGEOLOGY • ENGINEERING

HARGIS + ASSOCIATES, INC.
HYDROGEOLOGY • ENGINEERING

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October 4, 2013

VIA FEDERAL EXPRESS – STANDARD

Mr. William F. Jeffers, PE
Hazardous Substances Engineer
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
9211 Oakdale Avenue
Chatsworth, CA 91311-6505

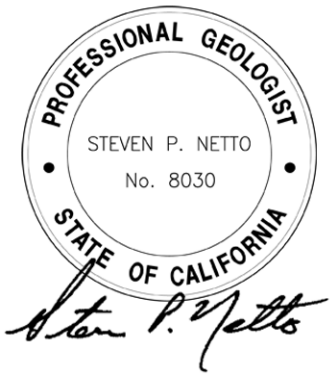
Re: Transmittal of Additional Groundwater Assessment and Monitor Well Construction Report, (MW-38, MW-39, and MW-40),
Raytheon Company, 1901 West Malvern Avenue, Fullerton, California

Dear Mr. Jeffers:

Enclosed is one hard copy with a compact disc that contains a copy of the above-referenced report. If you have any questions or require further information, please contact us at 858-455-6500.

Sincerely,

HARGIS + ASSOCIATES, INC.



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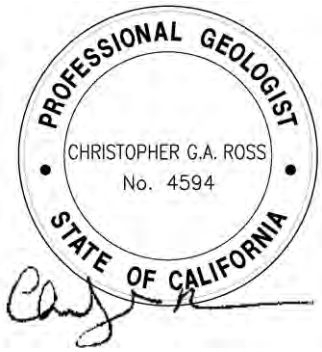

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ADDITIONAL GROUNDWATER ASSESSMENT
AND
MONITOR WELL CONSTRUCTION REPORT

(MW-38, MW-39 AND MW-40)

RAYTHEON COMPANY
1901 WEST MALVERN AVENUE
FULLERTON, CALIFORNIA

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ACRONYMS AND ABBREVIATIONS

AGAWP	Additional Groundwater Assessment Work Plan
ASTM	American Society for Testing and Materials
bls	Below land surface
CACA	Corrective Action Consent Agreement
CMS	Corrective Measures Study
1,1-DCE	1,1-Dichloroethylene
DTSC	California Environmental Protection Agency, Department of Toxic Substances Control
DWR	California Department of Water Resources
H+A	Hargis + Associates, Inc.
LAS	Lower Aquifer System
MAS	Middle Aquifer System
msl	Mean sea level
OCGB	Orange County Groundwater Basin
PVC	Polyvinyl Chloride
Raytheon	Raytheon Company
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
the Site	1901 West Malvern Avenue, Fullerton, California
UAS	Upper Aquifer System
SOPs	Standard operating procedures
VOCs	Volatile Organic Compounds

ADDITIONAL GROUNDWATER ASSESSMENT AND MONITOR WELL CONSTRUCTION REPORT

(MW-38, MW-39 AND MW-40)

RAYTHEON COMPANY
1901 WEST MALVERN AVENUE
FULLERTON, CALIFORNIA

1.0 INTRODUCTION

This Additional Groundwater Assessment and Monitor Well Construction Report has been prepared by Hargis + Associates, Inc. (H+A) on behalf of Raytheon Company (Raytheon), formerly Hughes Aircraft Company, for the site located at 1901 West Malvern Avenue, Fullerton, California (the Site) (Figures 1 and 2).

Activities described in this report were conducted in accordance with the Additional Groundwater Assessment Work Plan (AGAWP) Addendum No. 5 pursuant to general requirements of a Resource Conservation and Recovery Act (RCRA) Corrective Action Consent Agreement (CACA) between California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) and Raytheon (H+A, 2013b; DTSC, 2003). The AGAWP Addendum No. 5 was approved by DTSC on March 28, 2013 (DTSC, 2013).

1.1 PURPOSE AND SCOPE

This report describes the drilling and installation of monitor wells MW-38, MW-39 and MW-40. A data submittal detailing initial and confirmation groundwater sampling of the newly constructed monitor wells will be submitted separately (H+A, 2013e). Monitor well MW-38 was installed to correlate hydrostratigraphic units and evaluate the geologic structure in the area of monitor well MW-37 (Figure 2). Monitor well MW-39 was installed to delineate the distribution of volatile organic compounds (VOCs) and 1,4-dioxane in the Target Zone (Unit B) west of monitor well MW-36. Monitor well MW-40 was installed to assess the groundwater quality and hydraulic

properties on the upgradient portion of the Site and also to evaluate potential injection of treated groundwater as part of the Corrective Measures Study (CMS).

This report is organized as follows:

- Section 1 includes the purpose and organization of the report, and summarizes the objectives and findings from the well construction conducted as part of the tasks outlined in the AGAWP Addendum No. 5 (H+A, 2013b).

- Section 2 presents a general description of the regional geologic and hydrogeologic framework of the Site vicinity.

- Section 3 presents a description of the methods used during drilling and construction of the additional monitor wells.

- Section 4 summarizes aquifer testing performed at MW-40.

- Section 5 summarizes conclusions and provides recommendations.

- Section 6 lists the references cited in this report.

1.2 GROUNDWATER ASSESSMENT TASKS AND OBJECTIVES

The following describes the tasks presented in the AGAWP Addendum No. 5 and the respective objectives.

1.2.1 Groundwater Assessment Task 1: Install and Sample One Water Table Monitor Well in the Vicinity of Monitor Well MW-37

In July 2013, off-Site monitor well MW-38 was installed approximately 20 feet east of monitor well MW-37 (Figure 2). This well was constructed with a single screen across the water table, which was encountered approximately 150 below land surface (Figure 3).

1.2.1.1 Objectives

The objective of this task was to correlate hydrostratigraphic units and evaluate the geologic structure in the area of MW-37. Specifically, water level measurements in MW-37 are significantly higher than nearby Target Zone monitor wells. Two possible explanations for the elevated water levels are:

- a hydraulic barrier in the vicinity is causing higher water levels, or
- MW-37 was screened below the Target Zone, where higher water levels have been observed in other Site monitor wells.

Installation and sampling of monitor well MW-38 has established the following:

- Water levels in MW-38 are several feet lower than water levels in MW-37 (Table 2).
- Water levels in the vicinity of MW-37 do not appear to be elevated when compared to nearby Site monitor wells.
- The results and a review of data suggest MW-37 is screened below the Target Zone.

The objective of this task was met by the drilling, installation, and sampling of monitor well MW-38.

1.2.2 Groundwater Assessment Task 2: Install One Monitor Well West of Existing Monitor Well MW-36

In July 2013, off-Site Target Zone monitor well MW-39 was installed approximately 1,525 feet west of the monitor well MW-36, south of Malvern Avenue (Figure 2). This well was constructed with a single screen in the Target Zone (Figure 4).

1.2.2.1 Objectives

The objective of this task was to delineate the distribution of VOCs and 1,4-dioxane in the Target Zone west of monitor well MW-36.

Installation and sampling of monitor well MW-39 has established the following:

- VOCs and 1,4-dioxane have not been detected in groundwater samples collected from monitor well MW-39 (H+A, 2013e).
- The western extent of VOCs and 1,4-dioxane in groundwater from the Target Zone has been delineated.

The objective of this task was met by the drilling, installation, and sampling of monitor well MW-39.

1.2.3 Groundwater Assessment Task 3: Install One Monitor Well on the Upgradient Portion of the Site

Between June and July 2013, monitor well MW-40 was installed approximately 1,740 feet east of the monitor well MW-31, north of Malvern Avenue (Figure 2). This well was constructed with a single screen in the Target Zone (Figure 5).

1.2.3.1 Objectives

The objective of this task was to assess the hydraulic properties of the Target Zone upgradient of the Site and to evaluate potential injection of treated groundwater as part of the CMS.

Installation and sampling of monitor well MW-40 has established the following:

- VOCs and 1,4-dioxane in groundwater are not detected the Target Zone at monitor well MW-40 (H+A, 2013e).
- The transmissivity of the Target Zone in the vicinity of MW-40 is approximately 1,700 to 2,500 ft^2/day. The hydraulic conductivity is approximately 43 and 63 ft/day.

The objectives of this task were met by the drilling, installation, and sampling of monitor well MW-40.

2.0 REGIONAL GEOLOGIC AND HYDROGEOLOGIC OVERVIEW

This section presents a summary of recent investigations conducted at the Site since 2008 that are pertinent to additional groundwater assessment activities that are summarized herein. A summary of investigations conducted prior to 2003, Site conditions, regulatory background, and areas of the Site that are the subjects of the CACA are presented in the Corrective Measures Study Workplan and the AGAWP (H+A, 2003a and 2003b). A description of the geologic and hydrogeologic conditions at and in the vicinity of the Site is provided in the Deep Boring and Well Construction and Groundwater Sampling Report, and the Additional Groundwater Assessment Primary Transport Zone (Target Zone) Well Construction and Groundwater Sampling Report (H+A, 2005 and 2009). Results of aquifer hydraulic testing conducted at monitor well MW-31 and extraction well EW-02 are summarized in the Aquifer Hydraulic Testing and Preliminary Groundwater Capture Zone Analysis Technical Memorandum (H+A, 2010a). The most recent well construction reports summarize installation of monitor wells MW-31 through MW-37, which provided information that was used to delineate the lower portion of the structural fold observed beneath and in the vicinity of the Site (H+A, 2010b, 2011a and 2013d).

2.1 REGIONAL HYDROGEOLOGY FRAMEWORK

The Site is located within the Orange County Groundwater Basin (OCGB). Aquifers in the OCGB have been divided into three separate systems called the upper, middle, and lower regional groundwater systems (California Department of Water Resources [DWR], 1967).

The Upper Aquifer System (UAS) is located within the OCGB to the south of Malvern Avenue. The UAS in this area includes stream terrace and older alluvial deposits as well as the La Habra/Lakewood formation. It is believed that coarse-grained facies in the La Habra/Lakewood formation, corresponding to the upper aquifer, pinch out south of the Coyote Hills or are folded and unconformably truncated near the southern boundary of the Site (H+A, 2005).

The Middle Aquifer System (MAS) underlies the UAS to the south of Malvern Avenue and extends to approximately -1,500 feet mean sea level (msl) in this area. The MAS is believed to include the Coyote Hills formation and the San Pedro formation and may include portions of the La Habra formation incised as channels into the underlying Coyote Hills formation.

The Lower Aquifer System (LAS) underlies the MAS and extends to the base of the freshwater zone. The LAS is believed to include portions of the Fernando group of Pliocene age. The base of the freshwater zone in the vicinity of the Site is estimated to be approximately -300 feet msl just north of the Site and -3,000 feet msl south of the Site in the OCGB (DWR, 1967). The base of the freshwater zone immediately beneath the Site has not been established.

Groundwater production in the OCGB is primarily from the lower portion of the UAS and the upper portion of the MAS between approximately -250 feet msl and -1,000 feet msl (DWR, 1967).

2.2 SITE HYDROGEOLOGY

Site hydrostratigraphic units consist of strata having similar hydraulic properties and lithologic characteristics, which have been correlated across the Site. The soils encountered at the Site are generally interbedded sand, silty to clayey sand, sandy silt, and sandy clay, with local gravel layers (H+A, 1998). Correlation of strata with thicknesses on the order of several feet or less is typically not possible between boreholes. However, some larger-scale stratigraphic zones are regionally extensive and can be correlated across the Site and vicinity as described below.

The conceptual groundwater model for the Site was refined after completion of additional groundwater assessment activities in 2004, and confirmed and further refined during the 2008 through 2012 well construction activities. Specific results of prior additional assessment activities were documented after discrete phases of work in several well construction and groundwater sampling reports, (H+A, 2005, 2009, 2010b, 2011a, and 2013d). The following provides a general overview based on the RCRA Facility Investigation (RFI) and well construction reports for the Site.

Two localized perched zones were identified under portions of the Site during the course of the RFI (H+A, 1998). Perched zones were identified based on the occurrence and behavior of groundwater, and are not clearly expressed lithologically. The perched zones do not represent a usable source of groundwater due to the limited area over which they occur and the small quantities of water flowing through these zones.

The water table in the regional groundwater system beneath the Site occurs in sand, silt, and clay (H+A, 1998). The upper portion of the regional groundwater system is heterogeneous as indicated by the differences in the lithology encountered during the construction of the groundwater monitor wells. The hydraulic conductivity of these sediments was estimated to range from approximately 0.1 foot per day to approximately 100 feet per day. Wells completed in lithologic intervals with varying degrees of hydraulic communication with each other and with aquifer units in the OCGB respond differently to changes in regional water levels. Those in good communication respond rapidly to regional changes, while those in finer-grained or isolated lithologic units exhibit a dampened and delayed response to regional water level changes. This differential response may also appear as a reversal of the vertical hydraulic gradients in the vicinity of paired monitor well groupings. Such reversals tend to be repeated, representing a seasonally-linked pattern of gradient reversals, from downwards during periods of expected high basin-wide groundwater extraction to upwards during the shorter winter season (H+A, 2005).

The hydrogeology in the southern portion of the Site is heterogeneous and is interpreted to include a structural fold based on regional subsurface studies and on an evaluation of Site lithology, geophysical, water level, and water quality trends (H+A, 2005, 2009, 2010b, 2011a, and 2013d). A conceptual groundwater model was developed as part of the RFI and was subsequently refined to incorporate this structural feature following subsequent phases of additional subsurface exploration, such as exploratory borings and installation of deep monitor wells. The conceptual groundwater model is intended to be descriptive of conditions observed in the subsurface, as well as predictive of geologic and hydrogeologic conditions likely to be encountered in the course of any additional subsurface work. The groundwater conceptual model is intended to describe conditions at both the regional scale and at the smaller, Site-specific scale. It is expected that the conceptual model will continue to be refined with time

as it is continuously tested against additional new groundwater monitoring data and other new data that may become available.

The data collected during this most recent phase of groundwater assessment are generally consistent with the conceptual model developed previously. The primary geologic/hydrogeologic structural feature at and in the vicinity of the Site is the monoclinal fold exhibited by a local southward dip of approximately 42 degrees in the hydrogeologic units underlying the terrace deposits between exploratory boring EB-1 and monitor well MW-31 (H+A, 2010b). These dipping units become nearly horizontal in the OCGB south of the Site. Data collected during the recent assessment were used to refine the trend of this fold to the west and make minor adjustments to the basal elevation contours of the Target Zone (Unit B).

3.0 TARGET ZONE GROUNDWATER ASSESSMENT WELL INSTALLATIONS

Three monitor wells were drilled and constructed off-site and or adjacent to the Site during the period June 2013 through August 2013 as outlined in the AGAWP Addendum No. 5. Well locations were selected in concurrence with DTSC (H+A, 2013b). The locations of three monitor wells, identified as MW-38, MW-39 and MW-40, are shown on the Site well and piezometer location map (Figure 2).

Prior to drilling, well locations were cleared for underground utilities by Underground Services Alert and GeoVision Geophysical Services, Corona, California, using various subsurface utility detection technologies. Monitor well MW-38 was drilled and installed during the period July 22, 2013 through July 30, 2013. MW-38 was drilled using hollow stem auger by BC^2 Environmental, Orange, California. Monitor well MW-39 was drilled and installed during the period July 9, 2013 through July 29, 2013. Monitor well MW-40 was drilled and installed during the period June 17, 2013 through July 27, 2013. Both monitor wells, MW-39 and MW-40, were drilled by mud-rotary by National Exploration, Montclair, California.

Drilling and well construction was conducted in accordance with the AGAWP Addendum No. 5 (H+A, 2013b), standard operating procedures (SOPs) specified in Appendix A of the AGAWP (H+A, 2003b), and subsequently amended for the deep groundwater program (H+A, 2004a, 2004b, and 2004c).

Liquid and solid waste generated during well construction operations was handled, contained, and disposed of in accordance with SOPs specified in Appendix A of the AGAWP (H+A, 2003b). Waste manifests are provided (Appendix A).

The following sections describe drilling equipment and methods, lithologic logging, geophysical logging, and well construction.

3.1 DRILLING OF BOREHOLES

3.1.1 Drilling of Hollow Stem Auger Boreholes

A nominal 10-inch diameter borehole was drilled at monitor well MW-38 to obtain lithologic samples prior to well construction. Monitor well MW-38 was drilled using a hollow stem auger drill rig (CME 95).

The borehole was advanced to approximately 203 feet bls and soil samples were collected from cuttings and a standard penetration testing (SPT) sampler. Cutting (grab) samples were collected approximately every 5 feet and STP samples were collected near the top and bottom of the anticipated well screen interval. Lithologic logging and soil sampling were conducted as described in Section 3.2. Following the completion of borehole drilling, the well screen, casing, and construction materials were installed as described in Section 3.4. Once the monitor well was built, a traffic-rated well vault, was installed at the surface as described in Section 3.4.

3.1.2 Drilling of Mud-Rotary Boreholes

A, nominal 12.25-inch diameter borehole was drilled at monitor wells MW-39 and MW-40 to obtain lithologic samples and conduct geophysical logging prior to well construction. Monitor wells MW-39 and MW-40 were drilled using a mud-rotary drill rig (Speedstar 50K). Temporary steel conductor casing was advanced to approximately 40 feet and 20 feet below land surface (bls) at monitor wells MW-39 and MW-40, respectively.

Well boreholes were advanced to approximately 1,080 feet bls and 1,040 feet bls at monitor wells MW-39 and MW-40, respectively. Drill cutting samples were collected approximately every 5 feet to the total depth of the borehole for lithologic description. Lithologic logging and soil sampling were conducted during borehole drilling as described in Section 3.2. Downhole geophysical logging was conducted as described in Section 3.3. Following the completion of borehole drilling and geophysical logging the portion of the borehole below the Target Zone was backfilled with cement. After the cement hardened, the boring was cleaned by conducting a

"wiper pass". The well screen, casing, and construction materials were installed as described in Section 3.4. Once the monitor well was built, the temporary surface casing was removed and traffic-rated well vaults were installed at the surface as described in Section 3.4.

3.2 LITHOLOGIC LOGGING

Lithologic logging was performed to define the lithology and thickness of geologic materials and to characterize subsurface geologic and hydrogeologic conditions. Lithologic logs were compiled based on description of drill cutting samples recovered at land surface during mud rotary drilling, and drill cuttings and SPT samples recovered during hollow stem auger drilling. Samples for lithologic description were collected during mud rotary drilling using a sieve-type catcher set at the point where mud circulating out of the borehole and enters the mud pit.

Soil type was characterized using the Unified Soil Classification System (American Society for Testing and Materials [ASTM], 1984). Soil color was described using Munsell Soil Color Charts (Munsell Soil Color Charts, 1992). Grain size was estimated using ASTM standards (ASTM, 1984). Lithologic logs for newly constructed monitor wells have been prepared (Appendix B).

3.3 GEOPHYSICAL LOGGING

The following describes geophysical logging conducted during drilling of monitor wells MW-39 and MW-40.

Once the total drill depths were reached the borehole was geophysically logged using downhole wireline logging tools. The following logs were run in each borehole:

- Caliper;
- Gamma ray;
- Spontaneous potential;

- Short- and long-normal resistivity; and
- Laterolog 3 (focused resistivity log).

Geophysical logging was performed on July 18, 2013 at monitor well MW-39 and on June 27, 2013 at monitor well MW-40 by Pacific Surveys, Claremont, California. Geophysical logs of the boreholes have been provided (Appendix C).

Geophysical logs were used to evaluate subsurface geology and refine depth determinations of contacts observed based on samples collected during drilling operations.

3.4 WELL CONSTRUCTION

The following section summarizes details of monitor well construction.

3.4.1 Well Construction, Monitor Well MW-38

Monitor well MW-38 was constructed across the water table of the regional groundwater system. Based on geophysical logging, previously conducted at MW-37, the anticipated depth to the water table at this location was approximately 150 feet bls.

Nominal 4-inch diameter Schedule 80 polyvinyl chloride (PVC) well screen (0.020-inch factory slotted) and nominal 4-inch diameter Schedule 80 PVC blank well casing were used to construct monitor well MW-38. A 50-foot screen section was installed from 150 feet to 200 feet bls and completed with blank cased to near land surface (Table 1; Figure 3).

A filter pack consisting of Monterey No. 2/12 sand was emplaced in the annulus around the screen as the augers were removed. During emplacement the level of filter pack was verified by tagging. The process of filter pack emplacement and auger lifting was alternated to keep between 1 and 5 feet of filter pack inside the augers at all times.

An approximate 20-foot thick seal, from 120 feet to 140 feet bls, was emplaced in the annulus above the filter pack using non-beneficiated medium bentonite chips. The augers were pulled up slowly as the bentonite was emplaced to ensure proper placement. After allowing the bentonite to hydrate, the annulus, from near the surface to 120 feet bls, was filled with neat cement containing approximately 5 percent bentonite. Monitor well MW-38 was completed with a locking cover and a traffic-rated well vault set in concrete at land surface, slightly above grade of the surrounding asphalt road. Monitor well construction details have been provided (Table 1; Figure 3; Appendix B).

Development of monitor well MW-38 was performed utilizing development methods of swabbing, bailing, and pumping. Approximately 330 gallons of fluids were removed from monitor well MW-38 during development, representing more than 10 casing volumes.

Monitor well MW-38 was equipped with a dedicated 115 Volt ½-Horsepower 3-inch Grundfos electric submersible pump (5SQ05-140 ½-HP 115V) for groundwater purging and sampling. The dedicated pump was set at approximately 190 feet bls. Monitor well MW-38 was also equipped with 185 feet of 1-inch PVC sounding tube. The bottom 10 feet of the sounding tube consists of 0.010-inch slotted PVC screen.

3.4.2 Well Construction, Monitor Well MW-39

Monitor well MW-39 was constructed in the Target Zone of the regional groundwater system. Prior to drilling, available information was reviewed, and the base of the Target Zone was anticipated to be approximately 1,040 feet bls (H+A, 2013b).. The borehole was advanced to a total depth of approximately 1,080 feet bls to confirm the Target Zone interval. The final well design was determined based on lithologic and geophysical data and consultation with DTSC.

Upon the completion of borehole drilling, the portion of the borehole below the Target Zone (from 1,017 to 1,080 feet bls) was backfilled with neat cement grout containing approximately 5 percent bentonite. Cement grout was emplaced via a tremie pipe placed to within a few feet of the borehole bottom. The cement grout was then pumped into the borehole from the bottom up. The

tremie pipe was then gradually withdrawn as the cement level rose during emplacement. The bottom of the borehole was filled to a depth approximately equal to the bottom of the monitor well target screen interval. The cement grout was allowed to harden prior to installing the well screen and casing. Additionally, prior to installing the well casing, a wiper pass of the borehole was conducted to clean the borehole walls and thin the drilling mud.

Nominal 4-inch diameter stainless steel wire-wrap well screen (0.020-inch factory slotted) and nominal 4-inch diameter Schedule 80 PVC blank well casing were used to construct monitor well MW-39. A 30-foot screen section was installed from 982 feet to 1,012 feet bls and completed with blank casing to near land surface (Table 1; Figure 4). Centralizers were installed approximately at the top and bottom of the screen interval and at approximate 40-foot intervals along the blank well casing.

A filter pack consisting of Monterey No. 2/12 sand was pumped in using a tremie pipe set in the annulus between the well screen and the borehole wall. An approximate 57-foot thick transition seal grout filter consisting of non-beneficiated medium bentonite chips was pumped into the annulus above the filter pack using a tremie pipe. After allowing the bentonite chips to hydrate, a 50 percent bentonite chips/ 50 percent Monterey No. 2/12 sand by volume was emplaced by tremie pipe in the annulus between the well casing and the borehole wall from the top of the grout filter to approximately 156 feet bls. From 156 feet bls to approximately 5 feet bls neat cement containing approximately 5 percent bentonite was emplaced in the annulus using the same method as above. From 5 feet bls to the land surface, the annulus was filled with concrete. Monitor well MW-39 was completed with a locking, traffic-rated well vault set in concrete and slightly above grade of the surrounding asphalt. Monitor well construction details have been provided (Table 1; Figure 4; Appendix B).

Initial development of monitor well MW-39 was performed immediately following installation and consisted of surging and bailing to remove heavy drilling mud. Development methods incorporated swabbing, bailing, airlifting, and pumping. Approximately 5,500 gallons of fluids were removed from monitor well MW-39 during development, representing more than 10 casing volumes.

Monitor well MW-39 was equipped with a dedicated 230 Volt ¾-Horsepower 3-inch Grundfos electric submersible pump (22SQ15-220 1-HP 230V) for groundwater purging and sampling. The dedicated pump was set at approximately 560 feet bls,. Monitor well MW-39 was equipped with 200 feet of 1-inch PVC sounding tube. The bottom 10 feet of the sounding tube consists of 0.020-inch slotted PVC screen.

3.4.3 Well Construction, Monitor Well MW-40

Monitor well MW-40 was constructed in the Target Zone of the regional groundwater system. Prior to drilling, available information was reviewed, and the base of the Target Zone was anticipated to be approximately 850 to 1,000 feet bls (H+A, 2013b). The borehole was advanced to a total depth of approximately 1,040 feet bls to confirm the Target Zone interval. The final well design was determined based on lithologic and geophysical data and consultation with DTSC.

Upon the completion of borehole drilling, the portion of the borehole below the Target Zone (from 975 to 1,040 feet bls) was backfilled with neat cement grout containing approximately 5 percent bentonite. Cement grout was emplaced via a tremie pipe placed to within a few feet of the borehole bottom. The cement grout was then pumped into the borehole from the bottom up. The tremie pipe was then gradually withdrawn as the cement level rose during emplacement. The bottom of the borehole was filled to a depth approximately equal to the bottom of the monitor well target screen interval. The cement grout was allowed to harden prior to installing the well screen and casing. Additionally, prior to installing the well casing, a wiper pass of the borehole was conducted to clean the borehole walls and thin the drilling mud.

Nominal 6-inch diameter stainless steel wire-wrap well screen (0.030-inch factory slotted) and nominal 6-inch diameter Schedule 80 PVC blank well casing were used to construct monitor well MW-40. A 40-foot screen section was installed from 930 feet to 970 feet bls and completed with blank casing to near land surface (Table 1; Figure 5). Centralizers were installed approximately at the top and bottom of the screen interval and at approximate 40-foot intervals along the blank well casing.

A filter pack consisting of Monterey No. 3 sand was pumped in using a tremie pipe set in the annulus between the well screen and the borehole wall. An approximate 36-foot thick transition seal grout filter was pumped in the annulus above the filter pack using non-beneficiated medium bentonite chips. After allowing the bentonite chips to hydrate, a 50 percent bentonite chips/ 50 percent Monterey No 2/12 sand by volume was emplaced by tremie pipe in the annulus between the well casing and the borehole wall from the top of the grout filter to approximately 175 feet bls. From 175 feet bls to approximately 5 feet bls neat cement containing approximately 5 percent bentonite was emplaced in the annulus using the same method as above. From 5 feet bls to the land surface, the annulus was filled with concrete. Monitor well MW-40 was completed with a locking, traffic-rated well vault set in concrete and slightly above grade of the surrounding land surface. Monitor well construction details have been provided (Table 1; Figure 5; Appendix B).

Initial development of monitor well MW-40 was performed immediately following installation and consisted of surging and bailing to remove heavy drilling mud. Development methods incorporated swabbing, bailing, airlifting, and pumping. Approximately 9,600 gallons of fluids were removed from monitor well MW-40 during development, representing approximately 8 casing volumes.

Monitor well MW-40 was equipped with a dedicated 230 Volt 3-Horsepower 4-inch Grundfos electric submersible pump (16S30-24 3-HP 230V) for groundwater purging and sampling. The dedicated pump was set at approximately 920 feet bls. Monitor well MW-40 was equipped with 200 feet of 1-inch PVC sounding tube. The bottom 10 feet of the sounding tube consists of 0.020-inch slotted PVC screen.

3.4.4 Surveying

The reference point elevations for newly constructed monitor wells MW-38, MW-39 and MW-40 were surveyed on August 15, 2013. Wells were surveyed by Psomas, Santa Ana, California, a licensed surveyor. Reference point elevations were surveyed to the National Geodetic Vertical

Datum of 1929 (NGVD29) and converted to the common datum used across the site (the City of Fullerton datum). The City of Fullerton datum was used to survey groundwater monitor wells during the RFI. Elevation data for each of the wells are provided in Tables 1 and 2 and on the lithologic logs (Appendix B).

4.0 AQUIFER TESTING

4.1 AQUIFER TESTING SETUP

Hydraulic testing was conducted at newly constructed monitor well MW 40 on July 18, 2013, and consisted of a short-term, constant-discharge-rate test to evaluate the hydraulic properties of the Target Zone. MW 40 was pumped using a 6-inch Grundfos model 300S300 30-horsepower electric submersible pump at a constant discharge rate of approximately 90 gpm for a duration of 3.5 hours.

Water levels were measured manually using flat tape electric water level sounders and automatically using Solinst "Levelogger" pressure transducers with integrated dataloggers for both drawdown and recovery periods in MW-40 and Target Zone observation wells MW-27, MW-31 and EW-01. The discharge rate was measured via an in-line totalizing flow meter.

4.2 AQUIFER TESTING RESULTS

The maximum drawdown measured at MW-40 during the pumping phase of the test was approximately 19.9 feet. Very little drawdown was noted at observation well EW-01 which is located approximately 1,180_ feet from the pumped well. Additionally, drawdown at observation well EW-01 was masked by regional water level fluctuations Levelogger water level data collected from observation wells MW-27 and MW-31 were lost during computer transferring activities. Therefore, only data from MW-40 was use for analysis. Drawdown measurements were corrected to remove regional water level changes. Regional water level changes were determined by plotting water elevations in monitor wells EW-01, EW-02, MW-27 and MW-29 from July 1st to July 17th 2013. Water levels in these four monitor wells decreased at a steady rate of 0.19 to 0.20 feet per day during this time period.

4.3 AQUIFER TESTING ANALYSIS

Values of transmissivity were calculated using the Cooper-Jacob time-drawdown graphical method (Cooper and Jacob, 1946) and the Theis recovery method (Theis, 1935). A line was fit to the appropriate portion of each data set, and transmissivity was calculated using the equation:

$$T = 2.3Q/(4\pi\Delta s)$$

where:

T = transmissivity
Q = constant well discharge rate
Δs = change in water level drawdown (or residual drawdown) during one log cycle of time

Both drawdown and recovery curves from MW-40 were used in the analysis (Figure 9).. Calculated transmissivity for the drawdown and recovery phases of the test are approximately 1,700 and 2,500 ft^2/day, respectively. Since drawdown in a pumped well may be influenced by well bore storage, turbulent well losses and increasing well efficiency from the additional well development occurring throughout the entire test, recovery phase data are generally considered more reliable.

Hydraulic conductivity (K) was estimated from calculated transmissivity and the aquifer thickness (b) using the relationship K = T/b. Based on an assumed aquifer thickness of 40 feet, the estimated hydraulic conductivity for the drawdown and recovery phases of the test are approximately 43 and 63 ft/day, respectively.

5.0 DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

The scope of work presented in the AGAWP Addendum No. 5 has been completed as documented in this report.

Monitor well MW-38, installed in July 2013, provided additional lithologic and hydrologic information to evaluate the higher than expected water levels in monitor well MW-37. The lack of elevated water levels in monitor well MW-38 and the similarity of water levels in monitor well MW-37 to monitor well MW-32C suggest monitor well MW-37 is screened below the Target Zone. The water level elevations measured in monitor well MW-38 were higher than those observed in nearby Unit B monitor wells, which suggest that this well is screened above the Unit B. As discussed in the September 25, 2013 meeting with DTSC, an additional monitor well will be constructed in between these two monitor wells within Unit B. This monitor well will be constructed using mud rotary methods similar to those outlined in this report and in accordance with DTSC previously approved work plans. The screened interval for the new monitor well is tentatively estimated to be completed between 400 and 450 feet bls. The final selection of screened interval will be determined in a yet to be scheduled meeting with DTSC and OCWD using existing geophysical, lithologic and water level data. It is recommended that this meeting occur in the fourth quarter of 2013 and a brief technical memorandum also be prepared for final DTSC approval prior to constructing the new monitor well.

Monitor well MW-39, installed in July 2013, provided additional lithologic and hydrologic information that was used to delineate the western extent of VOCs and 1,4-dioxane in Target Zone groundwater between monitor wells MW-36 and MW-39. It is recommended that monitor well MW-39 be added to the Site groundwater monitoring program for water level monitoring and groundwater sampling.

Monitor well MW-40, installed in July 2013, provided additional lithologic and hydrologic information that indicates VOCs and 1,4-dioxane are not present in the target zone at the upgradient Site boundary. Aquifer testing indicates that the transmissivity of the Target Zone in the vicinity of monitor well MW-40 is approximately 1,700 to 2,500 ft^2/day and the hydraulic

conductivity is approximately 43 to 63 ft/day. It is recommended that monitor well MW-40 be added to the Site groundwater monitoring program for water level monitoring only. As further evaluation of a potential injection program is performed, additional aquifer testing and sampling at monitor well MW-40 may be recommended.

Water levels measured in Unit B monitor wells on August 12, 2013, indicate a westerly flow within the Target Zone in the area of the Site, and vertical hydraulic gradients into the Target Zone from above and below (Table 2; Figure 8) (H+A, 2013e).

Monitor wells MW-38 and MW-39 provided additional lithologic information that suggested the structural feature identified at and to the immediate west of the Site continues westward and southeastward to the areas of these newly installed monitor wells. This structural feature, a monoclinal fold dipping to the south, is generally consistent with the groundwater conceptual model. The elevation of the bottom of the Target Zone decreases to the south, and is most steeply dipping with an approximate east-west strike in the vicinity of the southern portion of the Site (Figure 7).

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HARGIS + ASSOCIATES, INC.

TABLE 1

WELL CONSTRUCTION SUMMARY

Well Identifier	Date Installed	Current Land Surface Elevation (feet msl)	Current Reference Point Elevation (feet msl)	Total Depth of Borehole (feet bls)	Perforated Interval (feet bls)	Screen Slot Size (inches)	Borehole Diameter (inches)	Casing Diameter (inches) (a)	Filter Pack Interval (feet bls)	Filter Pack Sand Size	Grout Filter/ Intermediate Seal Interval (feet bls) (b)	Annular Seal Interval (feet bls) (c)
Regional Groundwater System Monitor Wells, Extraction Wells and Piezometers												
MW-06	1/16/1997	185.0	184.70	190.9	149.6 - 189.6	0.010	8.5	2	145.4 - 190.9	#2/16	139.4 - 145.4 (d)	0 - 139.4
MW-08	1/22/1997	156.6	155.91	167.2	126.1 - 166.1	0.010	8.5	2	120.7 - 167.2	#2/16	115.7 - 120.7	0 - 115.7
MW-09	3/21/1997	180.5	180.10	194.2	152.2 - 192.2	0.010	8.5	2	146.2 - 194.2	#2/16	141.2 - 146.2	0 - 141.2
MW-13	4/16/1997	142.5	141.84	159.6	120.6 - 159.6	0.010	8.5	2	114.6 - 159.6	#2/16	109.6 - 114.6	0 - 109.6
MW-15	5/18/1998	145.6	144.95	174.8	120.8 - 170.8	0.010	8.5	2	115.8 - 174.8	#2/16	112.8 - 115.8	0 - 112.8
MW-16	11/20/1999	143.0	142.40	179.5	148.5 - 178.5	0.010	11.0	4	144.5 - 179.5	#2/16	134.5 - 144.5 (e)	0 - 134.5
MW-17	5/31/2000	142.8	142.70	203.7	173.1 - 193.1 (i)	0.020	10.0	4	159.7 - 193.1	#2/16	156.2 - 159.7 193.1 - 203.7 (j)	0 - 156.2
MW-18	5/24/2000	142.4	142.32	195.6	164.1 - 194.1	0.020	10.0	4	158.9 - 194.5	#2/16	154.2 - 158.9	0 - 154.2
MW-19	5/26/2000	142.7	142.06	205.5	184.9 - 204.9	0.020	10.0	4	177.0 - 205.3	#2/16	171.5 - 177.0	0 - 171.5
MW-20	6/26/2003	184.4	184.19	200.0	158.6 - 198.2	0.020	11.0	4 (f)	158.0 - 200.0	#2/12	151.0 - 158.0 (g)	0 - 151.1 (h)
MW-21	7/17/2003	143.3	141.18	238.3	212.1 - 232.1	0.010	8.0	4 (k)	205.0 - 234.5	#2/16	202.0 - 205.0 234.5 - 238 (j)	0 - 202.0 (h)
MW-22	8/13/2003	139.4	138.65	245.0	217.4 - 237.4	0.020	8.0	4 (l)	215.0 - 238.0	#2/12	208.0 - 215.0 (m)	0 - 208.0 (h)
MW-23	8/18/2003	137.8	137.33	235.6	215.2 - 235.2	0.020	8.0	4 (n)	209.4 - 235.6	#2/12	203.5 - 209.4 (m)	0 - 203.5 (h)
MW-24	9/15/2004	143.1	142.83	338.0	310.3 - 330.3	0.030	10.6	4 (o)	306 - 330	#3	301 - 306 (p)	0 - 301 (h)
MW-25	9/10/2004	143.0	142.64	805	449.4 - 479.8	0.010	8.5 (q)	2 (r)	429 - 485	#2/16	418 - 429	0 - 418 (h)
MW-26A (s)	10/1/2004	137.6	137.04	805	279 - 309	0.020	12.25 (q)	2 (t)	274 - 315	#2/12	266 - 274	0 - 266 (h)
MW-26B (s)	10/1/2004	137.6	137.05	805	339 - 379	0.020	12.25 (q)	2 (u)	334 - 387	#2/12	266 - 274	0 - 266 (h)
MW-26C (s)	10/1/2004	137.6	137.22	805	459 - 499	0.020	12.25 (q)	2 (v)	435 - 499	#2/12	387 - 435 (w)	0 - 266 (h)
MW-27	4/22/2008	137.6	137.16	550	475 - 505.2 (cc)	0.030	11.25 (q)	4 (z)	468 - 520	#3	457.5 - 468	0 - 457.5 (h)
MW-28	5/5/2008	141.4	140.77	425	335 - 375	0.040	12.25 (q)	4 (z)	325.4- 377	#8	318 - 325.4	0 - 318 (h)
MW-29	8/15/2008	142.7	142.34	265.7	200 - 240	0.020	10.0 (aa)	4 (z)	185 - 246	#2/12	176 - 185	0 - 176 (h)
MW-30A(s)	11/26/2008	130.2	129.44	635 (j)	524-564	0.020	14.25	3 (y)	515.9-570.5	#2/12	495.5-515.9	0-495.5 (bb)
MW-30B(s)	11/26/2008	130.2	129.39	635 (j)	596-616	0.020	14.25	3 (y)	586.8-625	#2/12	586.8-570.5	0-495.5 (bb)
MW-31	10/2/2009	120.3	119.60	1,100 (jj)	946-996	0.020	13	6(kk)	922-1,006	#2/12	904-922	0-904
MW-32A(s)	12/10/2009	93.4	92.88	1,153 (gg)	890-905	0.020	18.5	4(dd)	880-910	#2/12	832-880	0-832
MW-32B(s)	12/10/2009	93.4	92.89	1,153 (gg)	969-999	0.020	18.5	4(dd)	960-1,004.5	#2/12	910-960	0-832
MW-32C(s)	12/10/2009	93.4	92.88	1,153 (gg)	1,070-1,090	0.020	18.5	4(dd)	1,054-1,100	#2/12	1,004.5-1,054	0-832
MW-33	7/2/2010	83.8	83.19	1,080 (hh)	980-1,020	0.020	11	4(dd)	970-1,025	#2/12	924-970	0-924 (ii)
MW-34A	2/3/2011	154.0	153.25	290	220 - 280	0.020	12.25	4(dd)	211 - 290	#2/12	175 - 211	0 - 175
MW-34B	2/1/2011	153.9	153.11	540	486 - 536	0.020	12.25	4(dd)	475 - 540	#2/12	449 - 475	0 - 449
MW-34C	1/19/2011	154.1	153.29	709 (ll)	556 - 576	0.020	12.25	4(dd)	551 - 582	#2/12	530 - 551	0 - 530
MW-35A	12/20/2010	94.3	93.57	1,101	420 - 470	0.020	18	4(dd)	401 - 482	#2/12	376 - 401	0 - 376
MW-35B	12/20/2010	94.3	93.56	1,101	745 - 805	0.020	18	4(dd)	725 - 816	#2/12	482 - 725	0 - 376
MW-35C	12/20/2010	94.3	93.55	1101 (ll)	990 - 1,040	0.020	12.25	4(dd)	980 - 1,048	#2/12	816 - 980	0 - 376
MW-36	1/3/2012	87.19	86.65	1030 (mm)	934 - 954 974 - 994	0.020	12.25	4(dd)	914 - 1,003	#2/12	95 -853 (oo), 853 - 914 (pp)	0 - 95 (qq)
MW-37	10/17/2012	156.02	155.60	916	770-820	0.020	12.25	4(dd)	755-834	#2/12	229-724 (rr) 724-755 (pp)	0-229 (ss)
MW-38	7/29/2013	155.7	154.90	203	150-200	0.020	10	4(z)	140-203	#2/12	120-140 (pp)	0-120 (qq)
MW-39	7/25/2013	84.71	84.25	1,080 (ll)	982-1,012	0.020	12.25	4(dd)	974-1,017	#2/12	156 -917 (rr) 917-974 (pp)	0-156 (qq)
MW-40	7/2/2013	124.09	123.40	1040 (ll)	930-970	0.030	12.25	6(dd)	916-975	#3	175 -880 (rr) 880-916 (pp)	0-175 (qq)
EW-01	5/16/2005	143.3	141.07	195	138.1-188.1	0.020	7.6	4 (x)	134.1-195	#2/12	129-134.1 (m)	0-129 (h)
EW-02	10/20/2009	136.0	132.97	473 (ee)	410-460	0.030	17.0	8 (ff)	400-465	#3	384-400	0-384
Perched Zone Piezometers												
P-07	6/6/1997	142.7	142.31	116.8	107.7 - 117.7	0.010	8.5	2	104.7 - 117.7	#2/16	101.7 - 104.7	0 - 101.7
P-09	6/30/2003	184.3	183.86	130.0	109.6 - 129.6	0.010	11.0	4	114.0 - 130.0	#2/16	101.0 - 108.0 (g)	0 - 101.0 (h)

TABLE 1

WELL CONSTRUCTION SUMMARY

NOTE: Refer to page 2 of this table for footnotes.

FOOTNOTES

msl = Mean sea level, City of Fullerton datum
bls = Below current land surface (October 2004)
(a) = Schedule 40 polyvinyl chloride (PVC) screen and casing, unless otherwise indicated
(b) = Medium bentonite chip seal, unless otherwise indicated
(c) = Bentonite grout annular seal unless otherwise indicated, completed at surface with vault set in concrete
(d) = No. 60 silica sand
(e) = Includes 2.0 feet of No. 60 silica sand placed above filter pack
(f) = Schedule 80 polyvinyl chloride screen and casing
(g) = Includes 2.5 to 3.0 feet of No. 60 silica sand placed above bentonite chip seal
(h) = Cement/bentonite grout, Type I/II Portland, less than 5% bentonite
(i) = Well plug, approximately 0.5-foot length, set at bottom of perforated interval
(j) = Bottom of borehole backfilled with bentonite chips
(k) = Stainless steel wire wrap screen; Schedule 10 stainless steel casing 122.0 - 212.1 feet bls; Schedule 40 mild steel casing 0 - 122.0 feet bls
(l) = Stainless steel wire wrap screen; Schedule 10 stainless steel casing 112.4 - 217.4 feet bls; Schedule 40 mild steel casing 0 - 112.4 feet bls
(m) = 1/4-inch coated bentonite pellets
(n) = Stainless steel wire wrap screen; Schedule 10 stainless steel casing 110.1 - 215.2 feet bls; Schedule 40 mild steel casing 0 - 110.1 feet bls
(o) = Mild steel wire wrap screen and Schedule 40 mild steel well casing
(p) = Includes 1 to 2 feet of #2/16 sand placed above bentonite chip seal
(q) = Below filter pack, diameter of the original pilot borehole is 5 to 6.25 inches to total depth of boring. Lower borehole backfilled with cement/bentonite grout, Type I/II Portland, less than 5% bentonite
(r) = Stainless steel wire wrap screen, Schedule 10 stainless steel casing 429.4 - 449.4 feet bls, Schedule 80 polyvinylchloride casing 429.0 - 429.4 feet bls, Schedule 40 mild steel casing 0 - 429.0 feet bls
(s) = Nested wells MW-26A, MW-26B, MW-26C, and MW-32A, MW-32B, MW-32C are constructed with three separate well casings in a single borehole; nested well MW-30A and MW-30B is constructed with two separate casings in a single borehole.
(t) = Stainless steel wire wrap screen; Schedule 10 stainless steel casing 259 - 279 feet bls and 0 - 19 feet bls; Schedule 40 mild steel casing 19 - 259 feet bls
(u) = Stainless steel wire wrap screen; Schedule 10 stainless steel casing 319 - 339 feet bls; Schedule 40 mild steel casing 0 - 319 feet bls
(v) = Stainless steel wire wrap screen; Schedule 10 stainless steel casing 439 - 459 feet bls; Schedule 40 mild steel casing 0 - 439 feet bls
(w) = #8 granular bentonite with exception of heavy mud/formational caving filling annular interval from 417 to 428 feet bls
(x) = Stainless steel wire wrap screen; Schedule 10 stainless steel casing 118.1-138.1 feet bls; Schedule 40 mild steel casing 0-118.1 feet bls
(y) = Schedule 40 Stainless steel endcaps; Schedule 10 stainless steel casing; Stainless steel wire wrap screen
(z) = Schedule 80 PVC blank and screen casing
(aa) = Below filter pack, diameter of the original pilot borehole is 8 inches to total depth of boring. Lower borehole backfilled with cement/bentonite grout, Type I/II Portland, less than 5% bentonite
(bb) = Neat cement
(cc) = Depth of screen interval adjusted to account for loss at bottom of casing due to breakage in casing wall. Original casing (515 ft bls) was sealed at 505.2 ft bls
(dd) = Schedule 40 Stainless steel endcaps; Schedule 80 polyvinyl chloride casing; Stainless steel wire wrap screen
(ee) = Pilot borehole drilled to a total depth of 493 feet bls and backfilled with 5% bentonite-cement grout seal to 465 feet bls
(ff) = Schedule 40 Stainless steel endcaps; Schedule 40 stainless steel casing; Stainless steel wire wrap screen; 2.5-foot stainless steel sump
(gg) = Pilot borehole drilled to a total depth of 1,153 feet bls and backfilled with 5% bentonite-cement grout seal to 1,100 feet bls
(hh) = Pilot borehole drilled to a total depth of 1,080 feet bls and backfilled with 5% bentonite-cement grout seal to 1,025 feet bls
(ii) = Annular seal interval is composed of cement grout with approximately 5% bentonite from 720 to 924 feet bls and bentonite grout from near land surface to 720 feet bls
(jj) = Pilot borehole drilled to a total depth of 1,100 feet bls and backfilled with 5% bentonite-cement grout seal to 1,006 feet bls
(kk) = Schedule 40 Stainless steel endcaps; Schedule 40 stainless steel casing; Stainless steel wire wrap screen; 5-foot stainless steel sump
(ll) = Bottom of borehole backfilled with approximately 5% bentonite-cement grout
(mm) = Bottom of borehole backfilled with bentonite pellets
(oo) = High solids bentonite grout
(pp) = Bentonite chips
(qq) = Portland cement with approximately 5% bentonite
(rr) = Medium bentonite chips and #2/12 Sand; 1:1 dry volume mix
(ss) = Portland cement with approximately 2.5% bentonite

TABLE 2

GROUNDWATER LEVELS
THIRD QUARTER 2013

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
Regional Groundwater System Monitor and Extraction Wells					
MW-06	08/12/13	184.70	167.29	17.41	
MW-08	08/12/13	155.91	137.80	18.11	
MW-09	08/12/13	180.10	165.03	15.07	
MW-13	08/12/13	141.84	131.58	10.26	
MW-15	08/12/13	144.95	134.30	10.65	
MW-16	08/12/13	142.40	147.17	-4.77	
MW-17	08/12/13	142.70	139.22	3.48	
MW-18	08/12/13	142.32	139.59	2.73	
MW-19	08/12/13	142.06	139.28	2.78	
MW-20	08/12/13	184.19	160.23	23.96	
MW-21	08/12/13	141.18	129.76	11.42	
MW-22	08/12/13	138.65	135.75	2.90	
MW-23	08/12/13	137.33	135.83	1.50	
MW-24	08/12/13	142.83	128.32	14.51	
MW-25	08/12/13	142.64	130.68	11.96	
MW-26A	08/12/13	137.04	125.12	11.92	
MW-26B	08/12/13	137.05	126.75	10.30	
MW-26C	08/12/13	137.22	145.20	-7.98	
MW-27	08/12/13	137.16	144.52	-7.36	
MW-28	08/12/13	140.77	148.39	-7.62	
MW-29	08/12/13	142.34	151.61	-9.27	
MW-30A	08/12/13	129.44	139.38	-9.94	
MW-30B	08/12/13	129.39	134.12	-4.73	
MW-31	08/12/13	119.60	129.49	-9.89	
MW-32A	08/12/13	92.88	108.43	-15.55	
MW-32B	08/12/13	92.89	106.20	-13.31	
MW-32C	08/12/13	92.88	84.56	8.32	

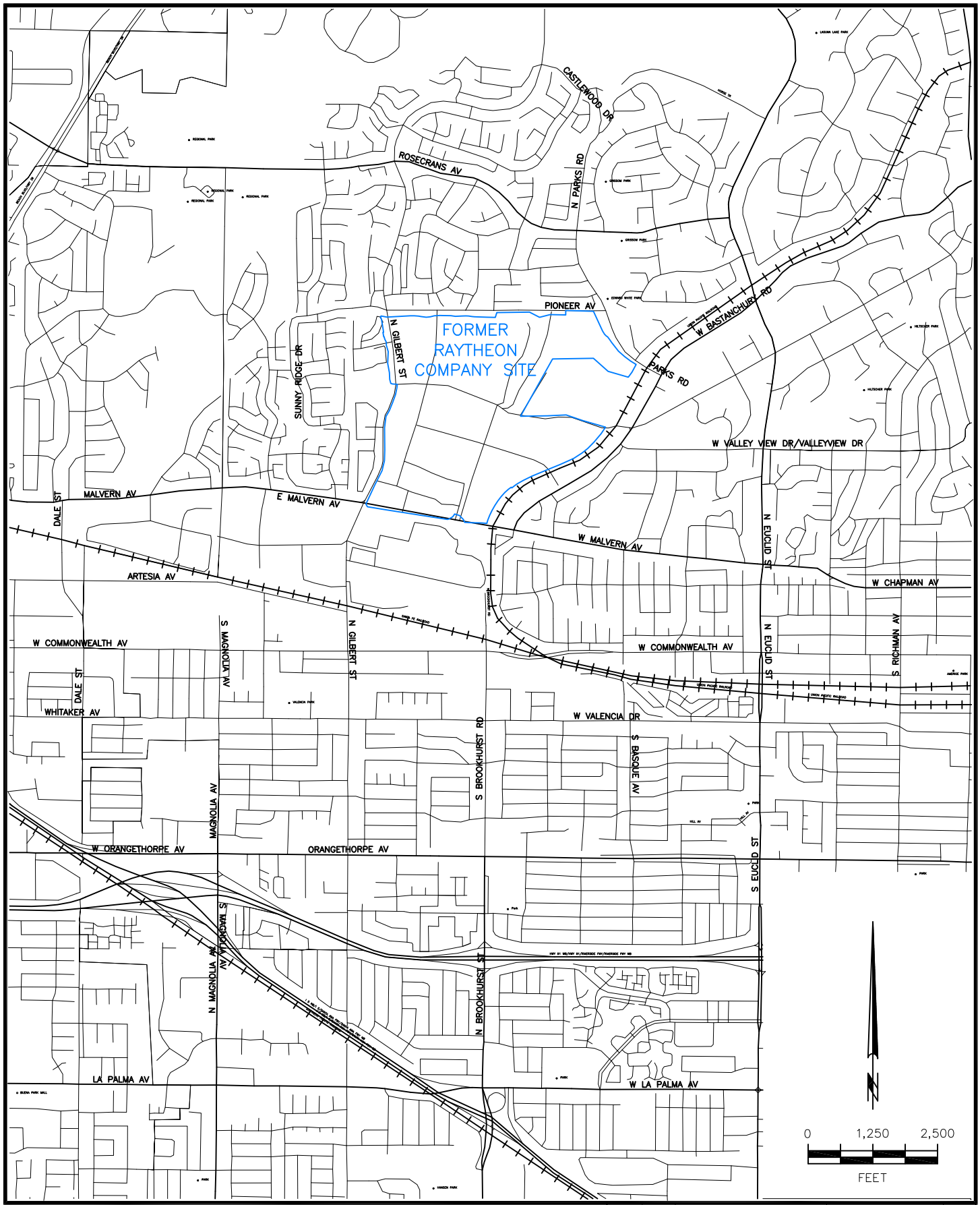
TABLE 2

GROUNDWATER LEVELS
THIRD QUARTER 2013

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
Reginal Groundwater System Monitor and Extraction Wells (continued)					
MW-33	08/12/13	83.19	103.70	-20.51	
MW-34A	08/12/13	153.25	156.14	-2.89	
MW-34B	08/12/13	153.11	164.81	-11.70	
MW-34C	08/12/13	153.29	162.95	-9.66	
MW-35A	08/12/13	93.57	86.05	7.52	
MW-35B	08/12/13	93.56	97.17	-3.61	
MW-35C	08/12/13	93.55	107.84	-14.29	
MW-36	08/12/13	86.65	108.65	-22.00	
MW-37	08/12/13	155.6	149.41	6.19	
MW-38	08/07/13	154.90	156.80	-1.90	
	08/12/13	154.90	157.50	-2.60	
MW-39	08/08/13	84.25	106.13	-21.88	
	08/12/13	84.25	106.72	-22.47	
MW-40	07/19/13	123.40	124.37	-0.97	
	08/12/13	123.40	129.88	-6.48	
EW-01	08/12/13	141.07	145.78	-4.71	
EW-02	06/16/13	132.97	136.67	-3.70	Pilot GETS
	07/02/13	132.97	139.40	-6.43	Pilot GETS
	08/12/13	132.97	147.57	-14.60	Pilot GETS
Perched Zone Water Levels					
P-07	08/12/13	142.31	113.15	29.16	
P-09	08/12/13	183.86	120.63	63.23	

FOOTNOTES

(a) Reference point elevations are relative to City of Fullerton datum.
bls = Below land surface
msl = Mean sea level
Pilot GETS = Pilot Groundwater Extraction and Treatment System On



May 11, 2011 - 10:09am ADE - T:\2011\500-599\532 Raytheon\Hydrogeology\H+A BaseMaps\410-8281.dwg

HARGIS + ASSOCIATES, INC.
Hydrogeology/Engineering

5/11	RPT NO. 532.31	410-8281	A

FIGURE 1. SITE LOCATION

EXPLANATION

- MW-09 — GROUNDWATER MONITOR WELL
- MW-25 — GROUNDWATER PIEZOMETER
- P-09 — PERCHED ZONE PIEZOMETER
- EW-01 — GROUNDWATER EXTRACTION WELL
- MW-10 — FORMER GROUNDWATER MONITOR WELL (ABANDONED)
- P-04 — FORMER PERCHED ZONE PIEZOMETER (ABANDONED)
- DPE-05 — FORMER PERCHED ZONE DUAL-PHASE EXTRACTION WELL (ABANDONED)
- EB-01 — FORMER GROUNDWATER ASSESSMENT SOIL BORING (ABANDONED)
- PGETS — PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM FACILITY COMPOUND
- 609 — FORMER RAYTHEON BUILDING, DEMOLISHED MID-2000
- CURRENT RESIDENTIAL AND COMMERCIAL BUILDINGS
- DRIVEWAYS, PARKING LOTS AND OTHER HARDSCAPE OF SITE RE-DEVELOPMENT
- SITE BOUNDARY

MW-37 MW-38 MW-34 MW-39 MW-36 MW-32 MW-33 MW-35 MW-40 MW-31 MW-29 MW-30 MW-08 MW-15 MW-23 MW-28 MW-27 MW-22 MW-17 MW-19 MW-18 MW-13A MW-26/EB-04 MW-24 MW-21 MW-25/EB-03 EW-01 MW-16 MW-09 MW-20 MW-07 MW-06 MW-05 MW-11 MW-10 MW-12 MW-14 P-01 P-02 P-03 P-04 P-05 P-06 P-07 DPE-01 DPE-02 DPE-03 DPE-04 DPE-05 DPE-06 EB-01 EB-02

SEE DETAIL BELOW

ROCKLEDGE WAY, MEADOWBROOK WAY, VESTAVIA AVE, EMERYWOOD DRIVE, KENWOOD AVENUE, MONTICELLO AVENUE, LINKS ROAD, MALVERN AVENUE, BREA CREEK, LAKEKNOLL DRIVE, OAK STREET, NORTHAMPTON WAY, SHERIDAN RD, NEWCASTLE LN, WILLIAMSBURG RD, BAYBERRY WAY, BAYCREST PL, ROXBURY DR, BRIGHTON PL, ASHTON PL, FOXBOROUGH PL, BURNING TREE RD, N SEVILLE PL, FRANKLIN HILLS DR, CHATSWORTH PL, MONTEREY PL, CYPRESS POINT DR, RAMADA PLAZA, N CANDLEWOOD DR, N FAIR RD, SUNNY RIDGE DR, CARMEL CIR, CREEKSIDE DR, WINDSOR WAY, SANDBAR DR, W MILLSTREAM DR, BRIDGE WAY, MILLSTREAM DR, NORTH GILBERT STREET, STANBURY STREET, STERN-GOODMAN STREET, HUGHES DRIVE, COOLING TOWER, 601, 609, ROSES, OLD WAY, LINENS 'N THINGS, COMPUTER LITERACY, DEER HORNS, RETAIL, TARGET, ALBERTSONS, BARNES & NOBLE BOOKS, RESTAURANT AND RETAIL, BANK, A. T. & S. F. ARTESIA, RAILROAD BLVD, CITY OF FULLERTON WELL NO. 9, FULLERTON MUNICIPAL AIRPORT, OCWD AIRPORT TEST WELL 3S/11W-36A6, MOORE AVENUE, BURNING TREE ROAD, AIRPARK DRIVE, RAYMER AVENUE, GILBERT STREET, PRITCHARD AVENUE

0 250 500 FEET

DETAIL AREA

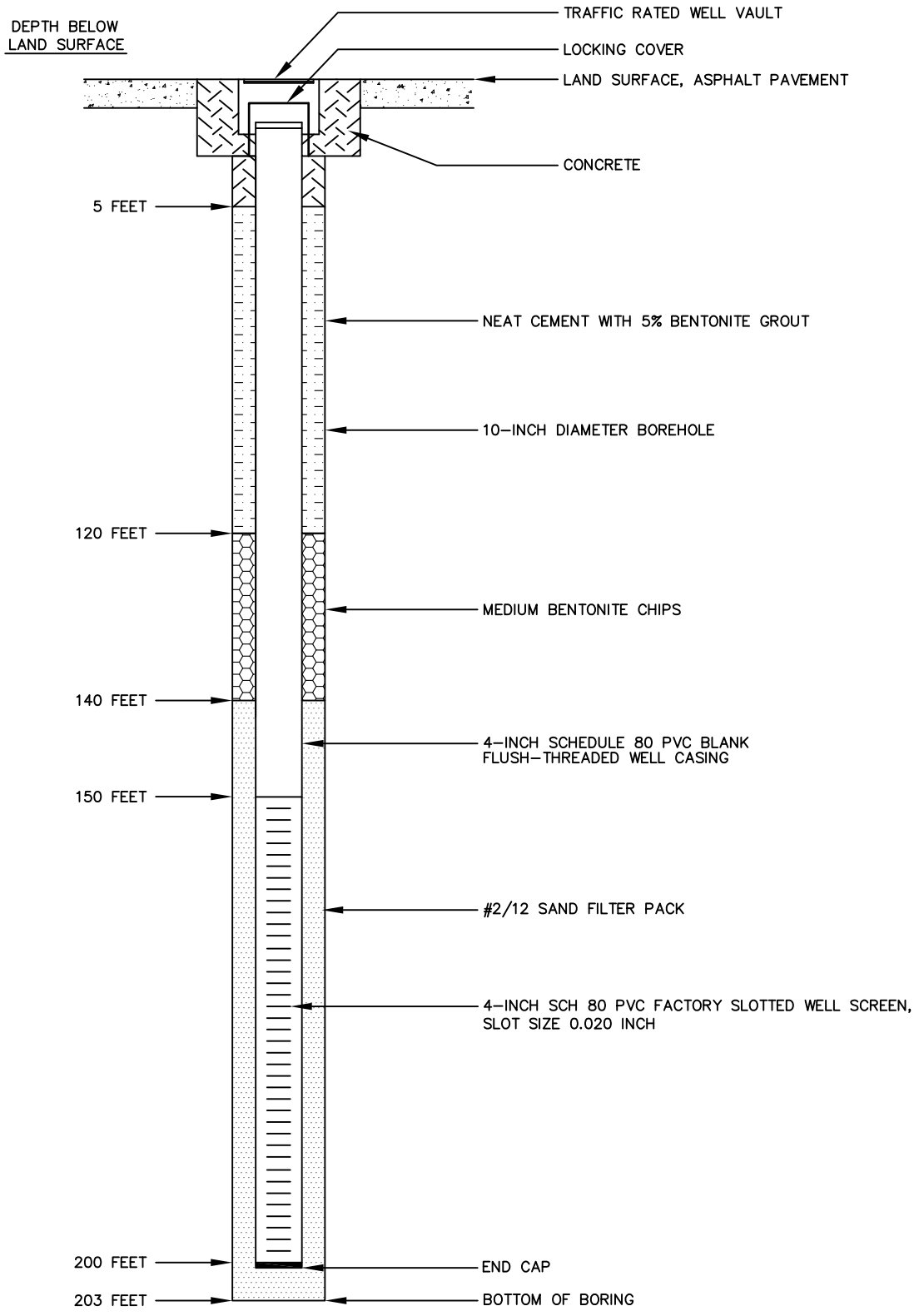
0 50 100 FEET

Sep 09, 2013 - 9:57am ADE - T:\2013\500-599\532 Raytheon\Hydrogeology\H+A BaseMaps\410-9054.dwg

HARGIS + ASSOCIATES, INC.
Hydrogeology/Engineering

08/13 | RPT NO. 532.31 | 410-9054 | A

FIGURE 2.
WELL AND PIEZOMETER LOCATIONS

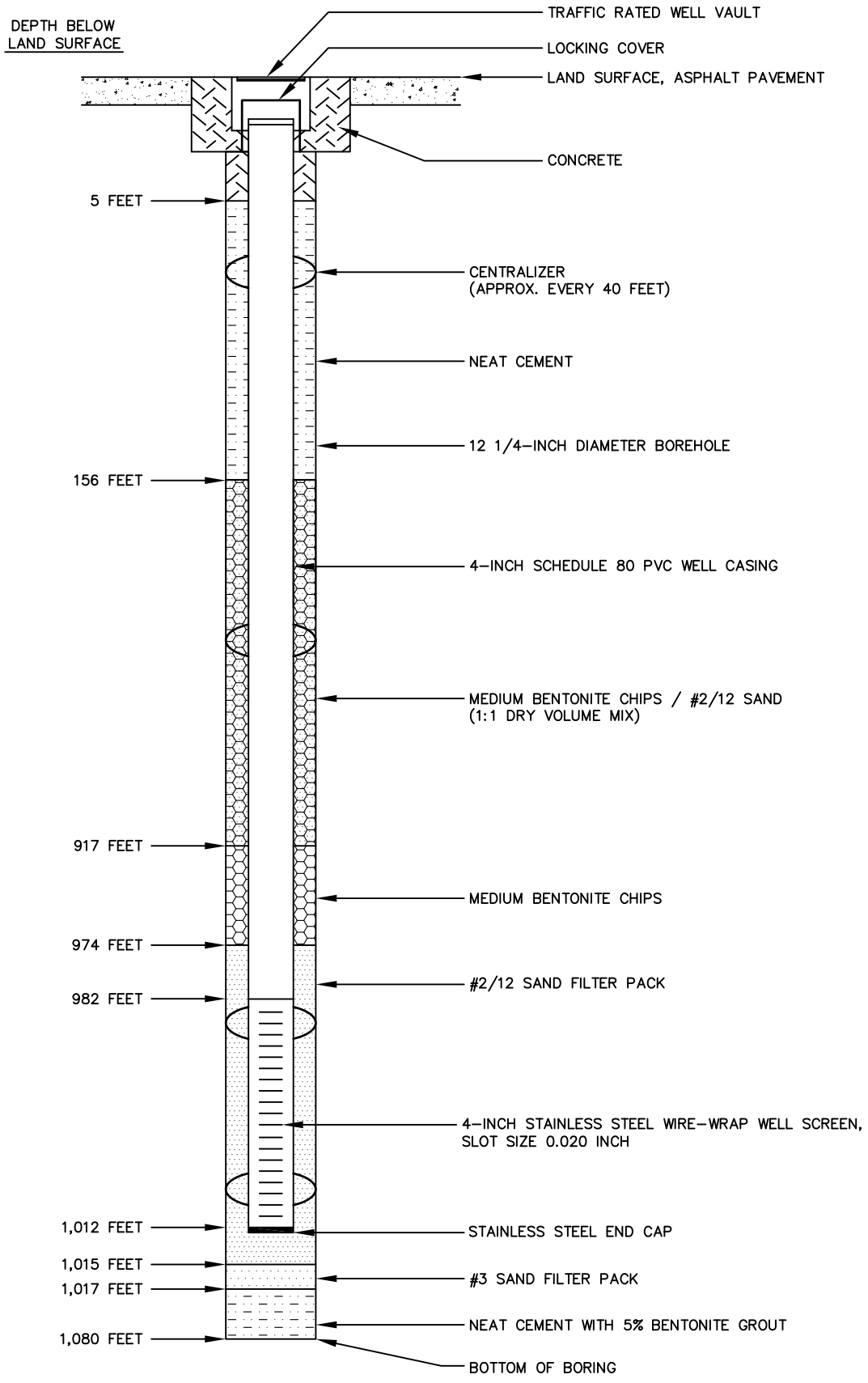


NOT TO SCALE

HARGIS + ASSOCIATES, INC.
Hydrogeology/Engineering

9/13	RPT NO. 532.03	710-0795	A

FIGURE 3.
SCHEMATIC CONSTRUCTION DIAGRAM
MONITOR WELL MW-38



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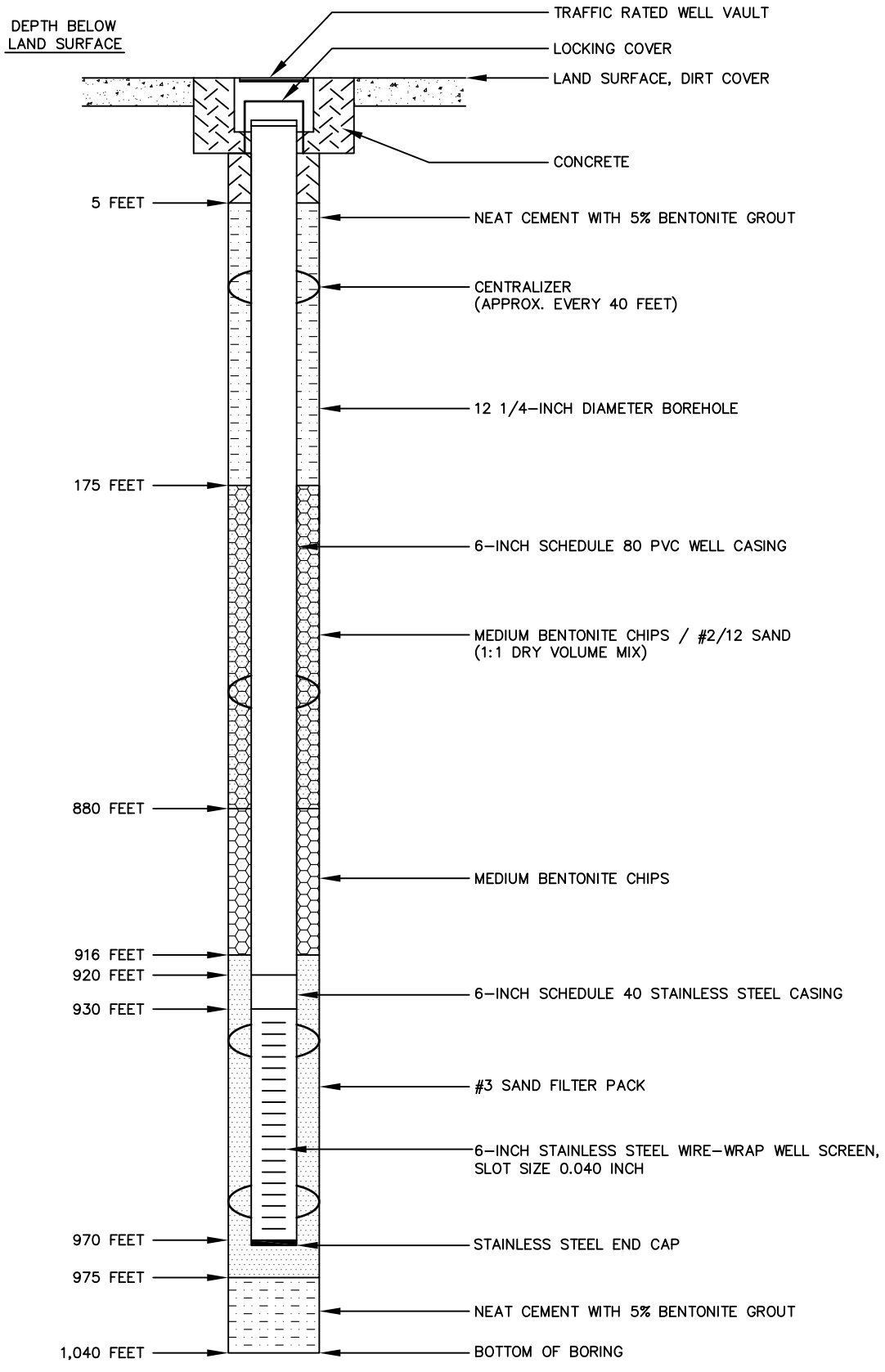
HARGIS + ASSOCIATES, INC.
Hydrogeology/Engineering

9/13	RPT NO. 532.03	710-0796	A

FIGURE 4.
SCHEMATIC CONSTRUCTION DIAGRAM
MONITOR WELL MW-39



NOT TO SCALE

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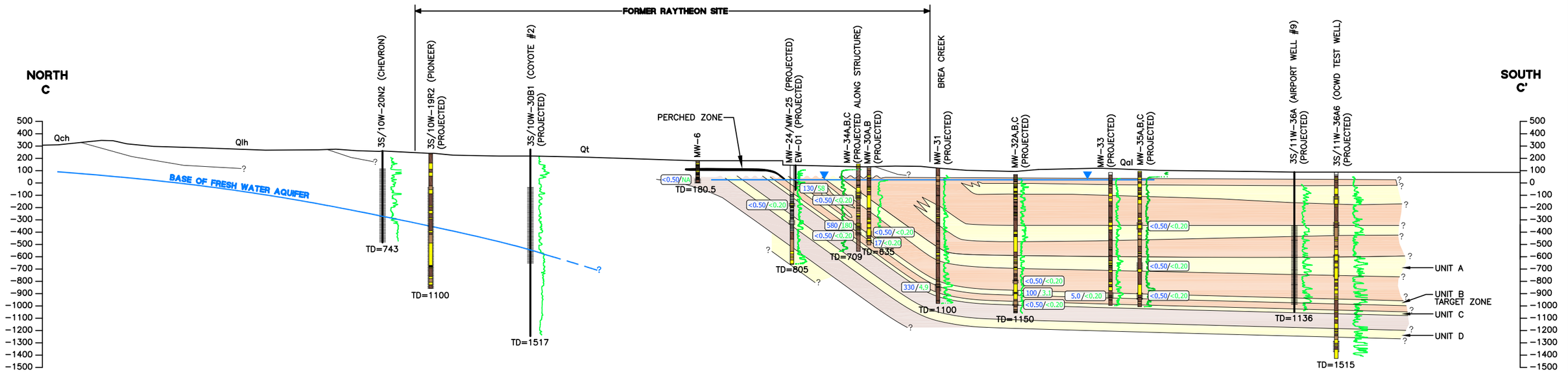
HARGIS + ASSOCIATES, INC.
Hydrogeology/Engineering

9/13	RPT NO. 532.03	710-0797	A

FIGURE 5.
SCHEMATIC CONSTRUCTION DIAGRAM
MONITOR WELL MW-40



EXPLANATION

- RELATIVELY COARSE ZONE, PREDOMINANTLY SANDS WITH LITTLE TO NO SILT OR CLAY
- MIXED ZONE, MIXTURES OF SANDS, CLAYS, AND SILTS
- RELATIVELY FINE ZONE, PREDOMINANTLY SILTS OR CLAYS WITH LITTLE TO NO SAND
- PREDOMINANTLY COARSE ZONE
- MIXED ZONE
- RELATIVELY FINE ZONE
- SCREENED INTERVAL OF MONITOR WELL

LGRD
0 (OHM-M) 100 500

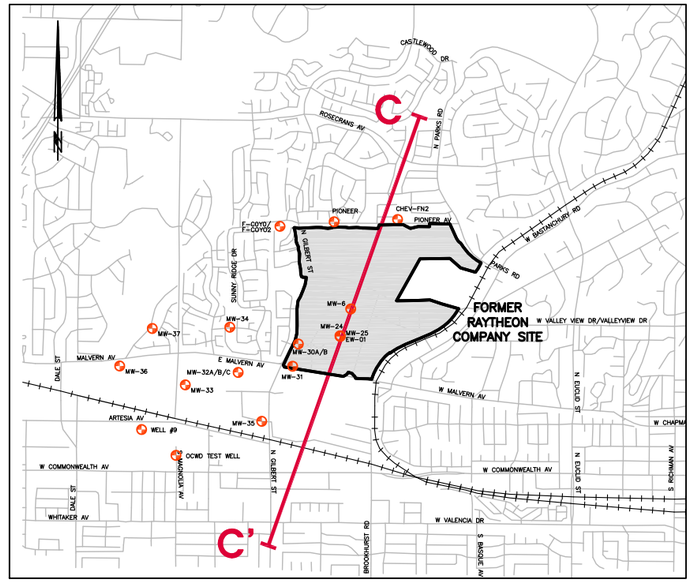
RESISTIVITY LOG (ohm-m) (LATERAL OR SHORT-NORMAL) OF WELL BOREHOLE. RIGHT EDGE OF THE LITHOLOGIC LOG COLUMN IS THE ZERO ohm-m LINE.

1,600
800
0
FEET
VERTICAL SCALE

800 400 0
FEET
HORIZONTAL SCALE

Qal	ALLUVIUM, HOLOCENE: UNCONSOLIDATED AND POORLY CONSOLIDATED GRAVEL, SAND AND SILT.
Qt/ Qoa	TERRACE DEPOSITS/OLDER ALLUVIUM, UPPER PLEISTOCENE TO HOLOCENE: POORLY CONSOLIDATED GRAVEL, SAND AND SILT, COMMONLY REDDISH-BROWN; LOCALLY RED-BROWN SILT.
Qlh	LA HABRA FORMATION, UPPER PLEISTOCENE: OLIVE-GRAY TO RED-BROWN SILTSTONE; PALE YELLOW-BROWN TO RED-BROWN THICK-BEDDED FRIABLE SANDSTONE; PALE-YELLOW-GRAY POORLY BEDDED PEBBLY SANDSTONE; AND PALE-YELLOW-BROWN UNSORTED PEBBLE-COBBLE CONGLOMERATE; BASAL PART FILLS IRREGULAR CHANNELS CUT INTO UNDERLYING STRATA.
Qch	COYOTE HILLS FORMATION, UPPER PLEISTOCENE: MODERATE YELLOW-BROWN TO MODERATE BROWN THICK-BEDDED TO MASSIVE FRIABLE PEBBLY SANDSTONE; OLIVE-GRAY TO GRAY-BROWN MASSIVE SILTSTONE; AND YELLOW-BROWN MASSIVE SANDSTONE AND PEBBLE CONGLOMERATE.
330	1,1-DICHLOROETHYLENE CONCENTRATION, MICROGRAMS PER LITER, FEBRUARY 2013 UNLESS OTHERWISE INDICATED
NS	NOT SAMPLED
4.9	1,4-DIOXANE CONCENTRATION, MICROGRAMS PER LITER, FEBRUARY 2013 UNLESS OTHERWISE INDICATED
	NOTE: SURFACE DISTRIBUTION OF STRATIGRAPHIC UNITS AND DESCRIPTIONS OF STRATIGRAPHIC UNITS EXCERPTED FROM YERKES, 1972.
▼	APPROXIMATE UNIT B GROUNDWATER LEVEL, FEBRUARY 2013
?	QUERIED WHERE INFERRED
NOTE:	NOT ALL ON-SITE WELLS ARE DEPICTED ON CROSS SECTION

CROSS SECTION LOCATION

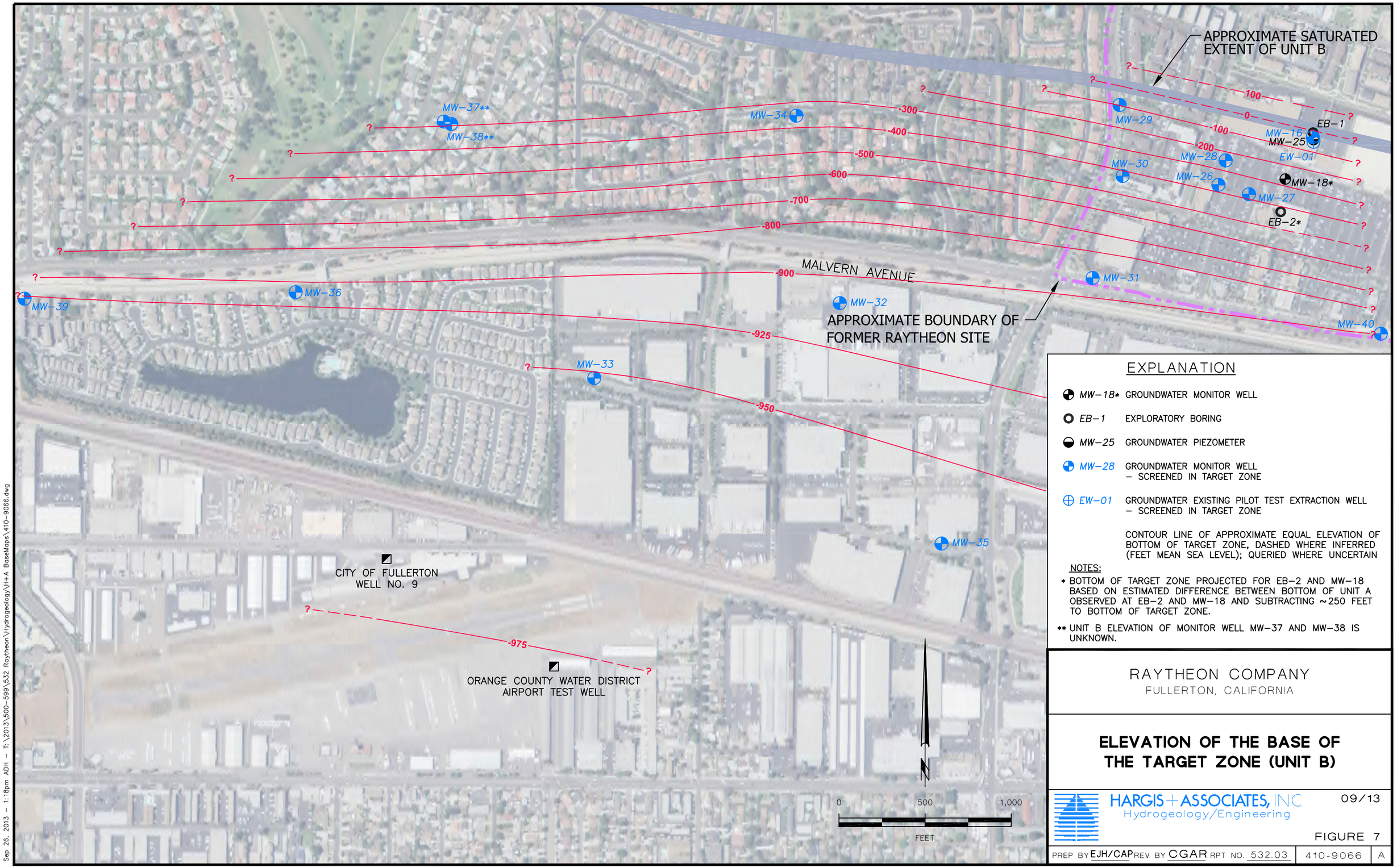


Sep 20, 2013 - 1:19pm ADH - T:\2013\500-599\532 Raytheon\Hydrogeology\X-Sections\310-1203.dwg

HARGIS + ASSOCIATES, INC
Hydrogeology/Engineering

06/13	RPT NO. 532.31	310-1203	A

FIGURE 6.
REGIONAL CONCEPTUAL GROUNDWATER MODEL HYDROGEOLOGIC CROSS-SECTION C-C'



EXPLANATION

- MW-18* GROUNDWATER MONITOR WELL
- EB-1 EXPLORATORY BORING
- MW-25 GROUNDWATER PIEZOMETER
- MW-28 GROUNDWATER MONITOR WELL – SCREENED IN TARGET ZONE
- EW-01 GROUNDWATER EXISTING PILOT TEST EXTRACTION WELL – SCREENED IN TARGET ZONE

CONTOUR LINE OF APPROXIMATE EQUAL ELEVATION OF BOTTOM OF TARGET ZONE, DASHED WHERE INFERRED (FEET MEAN SEA LEVEL); QUERIED WHERE UNCERTAIN

NOTES:

* BOTTOM OF TARGET ZONE PROJECTED FOR EB-2 AND MW-18 BASED ON ESTIMATED DIFFERENCE BETWEEN BOTTOM OF UNIT A OBSERVED AT EB-2 AND MW-18 AND SUBTRACTING ~250 FEET TO BOTTOM OF TARGET ZONE.

** UNIT B ELEVATION OF MONITOR WELL MW-37 AND MW-38 IS UNKNOWN.

RAYTHEON COMPANY
FULLERTON, CALIFORNIA

ELEVATION OF THE BASE OF THE TARGET ZONE (UNIT B)

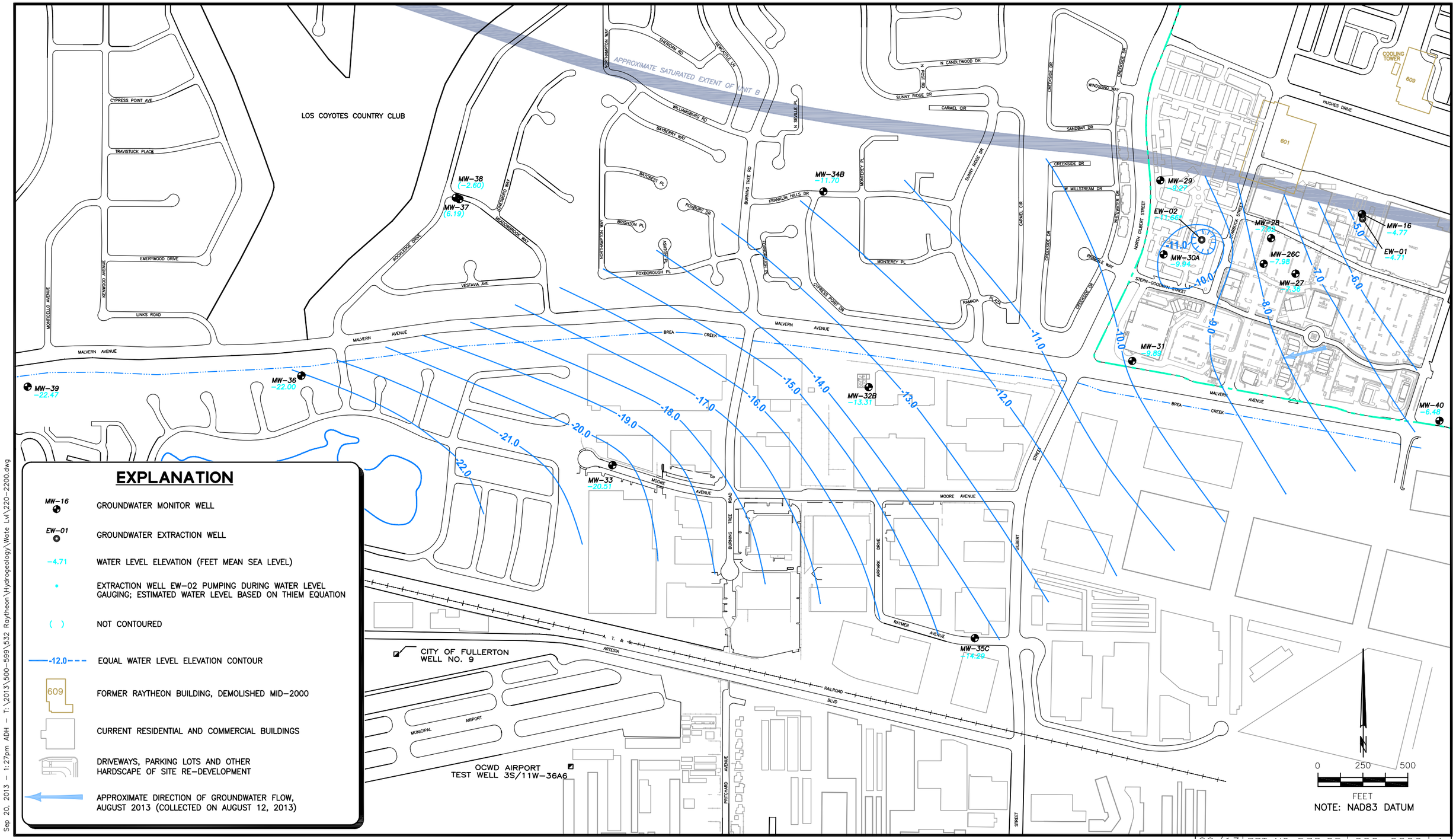
HARGIS + ASSOCIATES, INC.
Hydrogeology/Engineering

09/13

FIGURE 7

PREP BY EJH/CAP REV BY CGAR RPT NO. 532.03 | 410-9066 | A

Sep 26, 2013 – 1:18pm ADH – T:\2013\500-599\532 Raytheon\Hydrogeology\H+A BaseMaps\410-9066.dwg



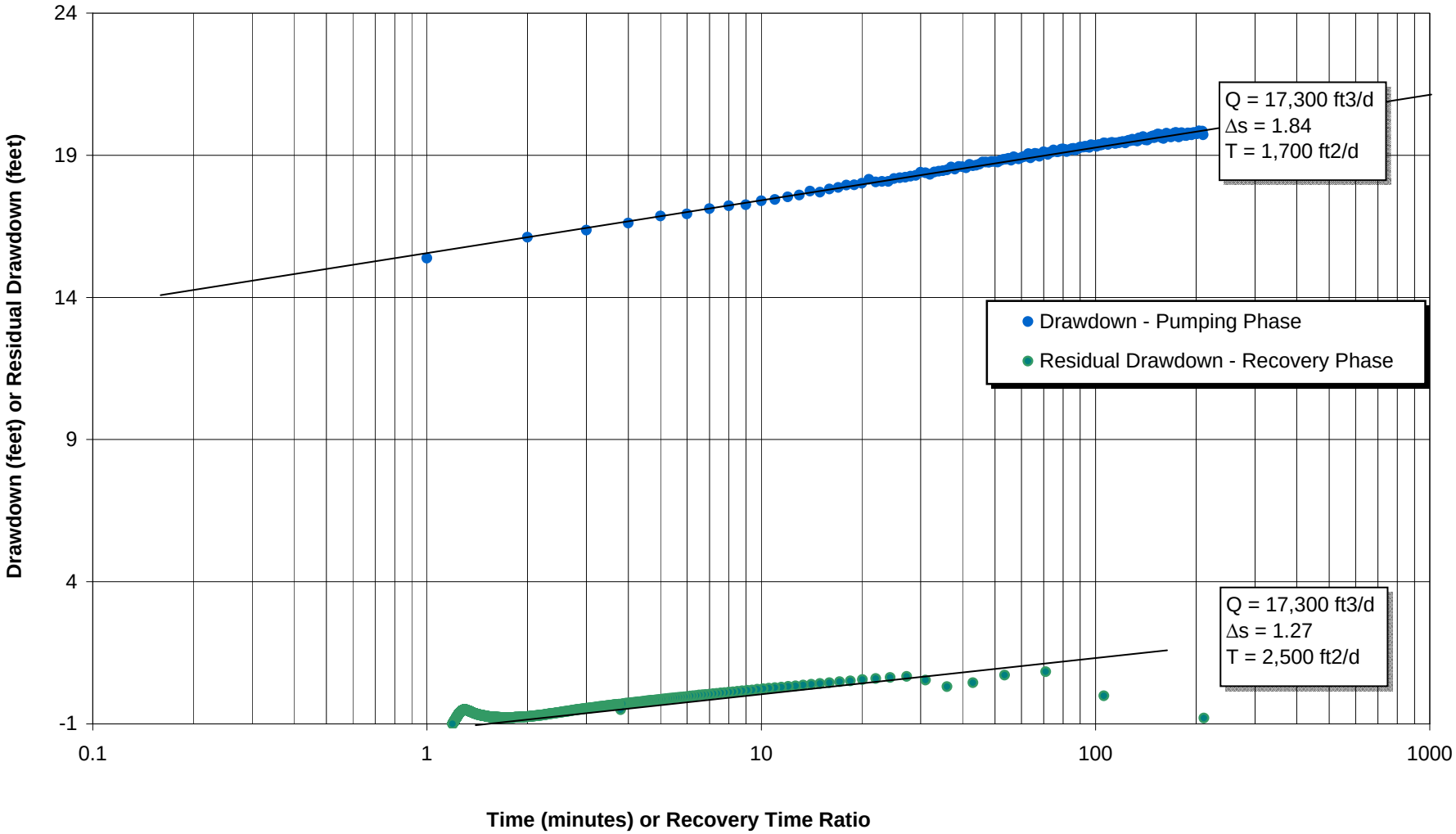
EXPLANATION

- MW-16 — GROUNDWATER MONITOR WELL
- EW-01 — GROUNDWATER EXTRACTION WELL
- -4.71 — WATER LEVEL ELEVATION (FEET MEAN SEA LEVEL)
- * — EXTRACTION WELL EW-02 PUMPING DURING WATER LEVEL GAUGING; ESTIMATED WATER LEVEL BASED ON THIEM EQUATION
- ( ) — NOT CONTOURED
- -12.0 — EQUAL WATER LEVEL ELEVATION CONTOUR
- 609 — FORMER RAYTHEON BUILDING, DEMOLISHED MID-2000
- CURRENT RESIDENTIAL AND COMMERCIAL BUILDINGS
- DRIVEWAYS, PARKING LOTS AND OTHER HARDSCAPE OF SITE RE-DEVELOPMENT
- APPROXIMATE DIRECTION OF GROUNDWATER FLOW, AUGUST 2013 (COLLECTED ON AUGUST 12, 2013)

HARGIS + ASSOCIATES, INC.
Hydrogeology/Engineering

09/13 | RPT NO. 532.05 | 220-2200 | A

FIGURE 8.
WATER LEVEL AND ELEVATION TARGET ZONE (UNIT B)
AUGUST 2013



Q = constant well discharge rate
T = transmissivity
ft3/d = cubic feet per day
ft2/d = square feet per day

532 H01_2013-9_Fig9&AppD_MW40.xls

FIGURE 9: AQUIFER TEST ANALYSIS - MONITOR WELL MW-40

APPENDIX A

WASTE MANIFESTS

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
NOT REQUIRED	1	888-423-6060	0404321

GENERATOR

5. Generator's Name and Mailing Address
Raytheon Company
1900 Hughes Drive Bld. 676 MSF216
Generator's Phone: Fullerton, CA 92834

Generator's Site Address (if different than mailing address)
1861 W. Malvern Ave.
Fullerton, CA.

6. Transporter 1 Company Name: American Integrated Services, Inc.
U.S. EPA ID Number: CAR000148338

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Waste Management - Nuway
13620 Live Oak Way
Facility's Phone: Irwindale, CA. 91706
U.S. EPA ID Number: Not Required

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-Hazardous Drilling Solids (Drill Cuttings)	1	CM	16	Y	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
Wear protective equipment while handling. Weights or volumes are approximate. 24 hour emergency number (888) 423-6060 (AIS Dispatcher).
Project #: 33001-7-3
PT2757

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Paul Brewer
Signature:
Month: 06 Day: 19 Year: 13

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Steve Walrath
Signature:
Month: 06 Day: 25 Year: 13

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Osmolalda Gomez
Signature:
Month: 06 Day: 25 Year: 13

169-BLC-O 5 11977 (Rev. 9/09)

TRANSPORTER #1

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
NOT REQUIRED	1	888-423-6060	0404322

GENERATOR

5. Generator's Name and Mailing Address
Raytheon Company
1500 Hughes Drive Bld. 676 M3F216
Fullerton, CA 92634
Generator's Phone:

Generator's Site Address (if different than mailing address)
1651 W. Malvern Ave.
Fullerton, CA.

6. Transporter 1 Company Name
American Integrated Services, Inc.

U.S. EPA ID Number
CAR000146336

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address
Waste Management - Nuway
13620 Live Oak Way
Irwindale, CA. 91706
Facility's Phone:

U.S. EPA ID Number
Not Required

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-Hazardous Drilling Solids (Drill Cuttings)	1	CM	16	Y	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
Wear protective equipment while handling. Weights or volumes are approximate. 24 hour emergency number (888) 423-6060 (AIS Dispatcher).

Project #: 33001-7-3 B-16011

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Rac Brewer
Signature:
Month: 06 Day: 19 Year: 13

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Steve Walrath
Signature:
Month: 06 Day: 25 Year: 13

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Esmeralda Gonzalez
Signature:
Month: 6 Day: 25 Year: 13

169-BLC-O 5 11977 (Rev. 9/09)

TRANSPORTER #1

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
NOT REQUIRED	1	888-423-6060	0404323

GENERATOR

5. Generator's Name and Mailing Address
Raytheon Company
1900 Hughes Drive Bld. 676 MSF216
Fullerton, CA 92634
Generator's Phone:

Generator's Site Address (if different than mailing address)
1881 W. Malvern Ave.
Fullerton, CA.

6. Transporter 1 Company Name
American Integrated Services, Inc.

U.S. EPA ID Number
CAR000148338

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address
Waste Management - Nuway
13620 Live Oak Way
Irwindale, CA. 91706
Facility's Phone:

U.S. EPA ID Number
Not Required

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-Hazardous Drilling Solids (Drill Cuttings)	1	CM	16	Y	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
Wear protective equipment while handling. Weights or volumes are approximate. 24 hour emergency number (888) 423-6060 (AIS Dispatcher).

B-16028
Project #: 33001-7-3

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Paul Bizeau
Signature:
Month: 06 Day: 19 Year: 13

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Steve Walrath
Signature: S Walrath
Month: 06 Day: 20 Year: 13

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)

U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month: 6 Day: 20 Year: 13

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Esmeralda Gomez
Signature:
Month: 6 Day: 20 Year: 13

169-BLC-O 5 11977 (Rev. 9/09)

TRANSPORTER #1

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
NOT REQUIRED	1	888-423-6060	0404320

GENERATOR

5. Generator's Name and Mailing Address
Raytheon Company
1300 Hughes Drive Bld. 676 M3F216
Fullerton, CA 92834
Generator's Phone:

Generator's Site Address (if different than mailing address)
1851 W. Malvern Ave.
Fullerton, CA.

6. Transporter 1 Company Name
American Integrated Services, Inc.

U.S. EPA ID Number
CAR000148338

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address
Waste Management - Nuway
13620 Live Oak Way
Irwindale, CA. 91706
Facility's Phone:

U.S. EPA ID Number
Not Required

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-Hazardous Drilling Solids (Drill Cuttings)	1	CM	16	Y	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
Wear protective equipment while handling. Weights or volumes are approximate. 24 hour emergency number (888) 423-6060 (AIS Dispatcher).

PT ~~4043~~ 3034
Project #: 33001-7-3

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Paul Brewer
Signature:
Month: 06 Day: 17 Year: 13

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Steve Walrath
Signature:
Month: 06 Day: 20 Year: 13

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)

U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Esmeralda Gonzo
Signature:
Month: 6 Day: 20 Year: 13

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
NOT REQUIRED	1	888-423-6060	0404332

5. Generator's Name and Mailing Address
Raytheon Company
1900 Hughes Drive Bld. 678 MSF218
Fullerton, CA 92634
Generator's Phone:

Generator's Site Address (if different than mailing address)
1851 W. Malvern Ave.
Fullerton, CA.

6. Transporter 1 Company Name
American Integrated Services, Inc.

U.S. EPA ID Number
CAR000148338

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address
Lakeland Processing Company
12345 Lakeland Road
Santa Fe Springs, CA 9070 (562) 944-6111
Facility's Phone:

U.S. EPA ID Number

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-Hazardous Drilling Mud (Drilling Liquid)	1	TT	2300	G	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
Wear protective equipment while handling. Weights or volumes are approximate. 24 hour emergency number (888) 423-6060 (AIS Dispatcher).

C30165
Profile# 11-3789
Project# 33001-7-3
54.77

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Paul Brouca
Signature:
Month: 06 Day: 19 Year: 13

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Ted Valencia
Signature:
Month: 06 Day: 24 Year: 13

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)

U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)

Month: Day: Year:

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: JOHN BAQUIR
Signature:
Month: 6 Day: 24 Year: 13

C-30166

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
NOT REQUIRED	1	888-423-6060	0404324

GENERATOR

5. Generator's Name and Mailing Address
Raytheon Company
1900 Hughes Drive Bld. 675 MSF216
Fullerton, CA 92634
Generator's Phone:

Generator's Site Address (if different than mailing address)
1881 W. Malvern Ave.
Fullerton, CA.

1338S

6. Transporter 1 Company Name
American Integrated Services, Inc.

U.S. EPA ID Number
CAR000148338

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address
Lakeland Processing Company
12345 Lakeland Road
Santa Fe Springs, CA 9070 (562) 944-6111
Facility's Phone:

U.S. EPA ID Number

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-Hazardous Drilling Mud (Drilling Liquid)	1	TT	2108	G	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information

50.19 BBL

Wear protective equipment while handling. Weights or volumes are approximate. 24 hour emergency number (888) 423-6060 (AIS Dispatcher).

Profile# 11-3789
Project# 33001-7-3

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: PAUL BROWN
Signature:
Month: 06 Day: 12 Year: 13

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: IRVIN DUNCAN
Signature:
Month: 06 Day: 27 Year: 13

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)

U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: JEM BAUER
Signature:
Month: 6 Day: 27 Year: 13

169-BLC-O 5 11977 (Rev. 9/09)

TRANSPORTER #1

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address

Generator's Site Address (if different than mailing address)

Generator's Phone:

6. Transporter 1 Company Name

U.S. EPA ID Number

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

U.S. EPA ID Number

Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1.					
	2.					
	3.					
	4.					

13. Special Handling Instructions and Additional Information

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name	Signature	Month	Day	Year

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name	Signature	Month	Day	Year

Transporter 2 Printed/Typed Name	Signature	Month	Day	Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)

U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)		Month	Day	Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name	Signature	Month	Day	Year

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address

Generator's Phone:

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name — U.S. EPA ID Number

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number

Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1.					
	2.					
	3.					
	4.					

13. Special Handling Instructions and Additional Information

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name — Signature — Month — Day — Year

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name — Signature — Month — Day — Year

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month — Day — Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17

Printed/Typed Name — Signature — Month — Day — Year

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address

Generator's Site Address (if different than mailing address)

Generator's Phone:

6. Transporter 1 Company Name — U.S. EPA ID Number

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number

Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1.					
	2.					
	3.					
	4.					

13. Special Handling Instructions and Additional Information

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name | Signature | Month | Day | Year

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) | Month | Day | Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name | Signature | Month | Day | Year

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address

Generator's Phone:

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name

U.S. EPA ID Number

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

U.S. EPA ID Number

Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1.					
	2.					
	3.					
	4.					

13. Special Handling Instructions and Additional Information

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name | Signature | Month | Day | Year

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) | U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) | Month | Day | Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name | Signature | Month | Day | Year

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address

Generator's Phone:

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name — U.S. EPA ID Number

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number

Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1.					
	2.					
	3.					
	4.					

13. Special Handling Instructions and Additional Information

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name — Signature — Month — Day — Year

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name — Signature — Month — Day — Year

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month — Day — Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month — Day — Year

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address

Generator's Phone:

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name

U.S. EPA ID Number

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

U.S. EPA ID Number

Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1.					
	2.					
	3.					
	4.					

13. Special Handling Instructions and Additional Information

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name | Signature | Month | Day | Year

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) | U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) | Month | Day | Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name | Signature | Month | Day | Year

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address

Generator's Site Address (if different than mailing address)

Generator's Phone:

6. Transporter 1 Company Name — U.S. EPA ID Number

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number

Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1.					
	2.					
	3.					
	4.					

13. Special Handling Instructions and Additional Information

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name — Signature — Month — Day — Year

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name — Signature — Month — Day — Year

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month — Day — Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in item 17a

Printed/Typed Name — Signature — Month — Day — Year

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
[illegible]		[illegible]	[illegible]

GENERATOR

5. Generator's Name and Mailing Address

[illegible]

Generator's Phone: [illegible]

Generator's Site Address (if different than mailing address)

[illegible]

6. Transporter 1 Company Name

[illegible]

U.S. EPA ID Number

[illegible]

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

[illegible]

U.S. EPA ID Number

Facility's Phone: [illegible]

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1. [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	2.					
	3.					
	4.					

13. Special Handling Instructions and Additional Information

[illegible]

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name	Signature	Month	Day	Year
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name	Signature	Month	Day	Year
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Transporter 2 Printed/Typed Name	Signature	Month	Day	Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)		Month	Day	Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name	Signature	Month	Day	Year

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address

Generator's Phone:

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name — U.S. EPA ID Number

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number

Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1.					
	2.					
	3.					
	4.					

13. Special Handling Instructions and Additional Information

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name — Signature — Month — Day — Year

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name — Signature — Month — Day — Year

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month — Day — Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month — Day — Year

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address

Generator's Phone:

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name

U.S. EPA ID Number

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

U.S. EPA ID Number

Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1.					
	2.					
	3.					
	4.					

13. Special Handling Instructions and Additional Information

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name	Signature	Month	Day	Year
Transporter 2 Printed/Typed Name	Signature	Month	Day	Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name	Signature	Month	Day	Year

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name	Signature	Month	Day	Year

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address

Generator's Phone:

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name

U.S. EPA ID Number

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

U.S. EPA ID Number

Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1.					
	2.					
	3.					
	4.					

13. Special Handling Instructions and Additional Information

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name	Signature	Month	Day	Year

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name	Signature	Month	Day	Year

Transporter 2 Printed/Typed Name	Signature	Month	Day	Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)

U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)	Month	Day	Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name	Signature	Month	Day	Year

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address

Generator's Phone:

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name

U.S. EPA ID Number

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

U.S. EPA ID Number

Not Required

Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1.					
	2.					
	3.					
	4.					

13. Special Handling Instructions and Additional Information

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name	Signature	Month	Day	Year

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name	Signature	Month	Day	Year

Transporter 2 Printed/Typed Name	Signature	Month	Day	Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)

U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)		Month	Day	Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name	Signature	Month	Day	Year

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address

Generator's Phone:

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name

U.S. EPA ID Number

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

U.S. EPA ID Number

Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1.					
	2.					
	3.					
	4.					

13. Special Handling Instructions and Additional Information

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Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Steve Wolpert | Signature | Month: 02 | Day: 19 | Year: 13

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) | U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) | Month | Day | Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name | Signature | Month | Day | Year

American Integrated Services, Inc.

1502 E Opp St., Wilmington, CA. 90744-3927 P.O. 92316, Long Beach, CA. 90809-2316

Date: 7-23-13	Project Number: 532.03 PO Number: 33001	X Daily Work Report Change Order Emergency Response Project Service

Client: HARRIS & ASSOC

Description: provide Confined Space crew for enter & pressure wash (2) frac tanks
Drop off (12) Recreation Drums

Phone:

Project Location: FULLERTON (MALVERN behind target)

Labor

				Straight Time		Over Time		Premium		
Position	Name	Start	End	Hours	Rate	Hours	Rate	Hours	Rate	Amount
S	Damian Ocampo	0600	1000							
T	LOUIS CRUZ	0600	1000							
T	EDDIE CALDERON	0600	1000							174
DR	STEVEN									X 4
										696

Labor Sub-Total

Equipment

Description	QTY	UOM	Rate	Amount
Confined Space	1			150
Equip -				
TR# 472	1			
bear TR# 418	1			
P. WASHER #435	1			

Equipment Sub-Total

Materials

Description	QTY	UOM	Rate	Amount
PPE white tyvek	2	EA		
55gal OT steel drums (recon)	12	EA		

Materials sub-Total

Outside Services

Description	QTY	UOM	Rate	Amount
MW-40 BAKER TANK CLEANING				

Outside services sub-Total

Markup

Outside services total

Labor	
Equipment	
Materials	
Outside Services	
Total	1446.00

Acknowledgement

Representative Signature:	Client Representative Signature:
Printed Name and Title: Damian Ocampo Site Super	Printed Name and Title: D. MONCA ENV. TECH

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address

Generator's Phone:

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name

U.S. EPA ID Number

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

U.S. EPA ID Number

Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1.					
	2.					
	3.					
	4.					

13. Special Handling Instructions and Additional Information

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Generator's/Offeror's Printed/Typed Name	Signature	Month	Day	Year

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name	Signature	Month	Day	Year

Transporter 2 Printed/Typed Name	Signature	Month	Day	Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)

U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)	Month	Day	Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name	Signature	Month	Day	Year

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address

Generator's Site Address (if different than mailing address)

Generator's Phone:

6. Transporter 1 Company Name — U.S. EPA ID Number

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number

Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
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	2.					
	3.					
	4.					

13. Special Handling Instructions and Additional Information

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Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name | Signature | Month | Day | Year

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) | Month | Day | Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name | Signature | Month | Day | Year

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address

Generator's Phone:

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name

U.S. EPA ID Number

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

U.S. EPA ID Number

Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
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	3.					
	4.					

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Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name | Signature | Month | Day | Year

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) | U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) | Month | Day | Year

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Printed/Typed Name | Signature | Month | Day | Year

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address

Generator's Phone:

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name

U.S. EPA ID Number

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

U.S. EPA ID Number

Facility's Phone:

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	2.					
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INTL

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name | Signature | Month | Day | Year

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) | Month | Day | Year

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Printed/Typed Name | Signature | Month | Day | Year

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address

Generator's Phone:

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name

U.S. EPA ID Number

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

U.S. EPA ID Number

Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
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	2.					
	3.					
	4.					

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Generator's/Offeror's Printed/Typed Name	Signature	Month	Day	Year

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name	Signature	Month	Day	Year

Transporter 2 Printed/Typed Name	Signature	Month	Day	Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)

U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)		Month	Day	Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name	Signature	Month	Day	Year

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address

Generator's Phone:

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name

U.S. EPA ID Number

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

U.S. EPA ID Number

Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1.					
	2.					
	3.					
	4.					

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Generator's/Offeror's Printed/Typed Name	Signature	Month	Day	Year

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name	Signature	Month	Day	Year
Steve Whitlatch		07	24	13

Transporter 2 Printed/Typed Name	Signature	Month	Day	Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)		Month	Day	Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name	Signature	Month	Day	Year

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address

Generator's Phone:

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name

U.S. EPA ID Number

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

U.S. EPA ID Number

Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
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	2.					
	3.					
	4.					

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Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name | Signature | Month | Day | Year

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) | Month | Day | Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name | Signature | Month | Day | Year

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address

Generator's Phone:

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name

U.S. EPA ID Number

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

U.S. EPA ID Number

Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1.					
	2.					
	3.					
	4.					

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Generator's/Offeror's Printed/Typed Name	Signature	Month	Day	Year

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name	Signature	Month	Day	Year

Transporter 2 Printed/Typed Name	Signature	Month	Day	Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)

U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)		Month	Day	Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name	Signature	Month	Day	Year

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	[illegible]		[illegible]	[illegible]

GENERATOR

5. Generator's Name and Mailing Address

[illegible]

Generator's Phone:

Generator's Site Address (if different than mailing address)

[illegible]

6. Transporter 1 Company Name

[illegible]

U.S. EPA ID Number

[illegible]

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

[illegible]

Facility's Phone:

U.S. EPA ID Number

Not Required

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1. [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	2.					
	3.					
	4.					

13. Special Handling Instructions and Additional Information

[illegible]

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

[illegible]

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name | Signature | Month | Day | Year

[illegible]

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) | U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) | Month | Day | Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name | Signature | Month | Day | Year

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address

Generator's Site Address (if different than mailing address)

Generator's Phone:

6. Transporter 1 Company Name | U.S. EPA ID Number

7. Transporter 2 Company Name | U.S. EPA ID Number

8. Designated Facility Name and Site Address | U.S. EPA ID Number

Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1.					
	2.					
	3.					
	4.					

13. Special Handling Instructions and Additional Information

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name | Signature | Month | Day | Year

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) | U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) | Month | Day | Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name | Signature | Month | Day | Year

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address

Generator's Site Address (if different than mailing address)

Generator's Phone:

6. Transporter 1 Company Name — U.S. EPA ID Number

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number

Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1.					
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13. Special Handling Instructions and Additional Information

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Generator's/Offeror's Printed/Typed Name — Signature — Month — Day — Year

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name — Signature — Month — Day — Year

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month — Day — Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month — Day — Year

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address

Generator's Site Address (if different than mailing address)

Generator's Phone:

6. Transporter 1 Company Name — U.S. EPA ID Number

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number

Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1.					
	2.					
	3.					
	4.					

13. Special Handling Instructions and Additional Information

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name — Signature — Month — Day — Year

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name — Signature — Month — Day — Year

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month — Day — Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month — Day — Year

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	NOT REQUIRED	1	888-423-6360	0404522

GENERATOR

5. Generator's Name and Mailing Address
Raytheon Company
1600 Hughes Drive Bld. 676 MSF218
Generator's Phone: Fullerton, CA 92634

Generator's Site Address (if different than mailing address)
1501 W. Malvern Ave.
Fullerton, CA.

6. Transporter 1 Company Name: American Integrated Services, Inc.
U.S. EPA ID Number: CAR000148338

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Waste Management - Nuway
13620 Live Oak Way
Facility's Phone: Irwindale, CA. 91706

U.S. EPA ID Number: Not Required

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-Hazardous Drilling Solids (Drill Cuttings)	2	CM	25	Y	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
Wear protective equipment while handling. Weights or volumes are approximate. 24 hour emergency number (888) 423-6360 (AIS Dispatcher).
Project #: 33601-7-3
PO: B16003, Bin PT3628

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: [illegible] | Signature: [signature] | Month: 07 | Day: 01 | Year: 13

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Darius Oliveras | Signature: [signature] | Month: 07 | Day: 01 | Year: 13

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) | U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) | Month | Day | Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: [illegible] | Signature: [signature] | Month: 07 | Day: 01 | Year: 13

C-4116

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	NOT REQUIRED	1	866-423-6060	0404678

GENERATOR

5. Generator's Name and Mailing Address

Raytheon Company
1950 Hughes Drive Bld. 676 MS:F210
Fullerton, CA 92834

Generator's Phone:

Generator's Site Address (if different than mailing address)

Dale & Malvern
Fullerton, CA

6. Transporter 1 Company Name — U.S. EPA ID Number

American Integrated Services, Inc. — CAR000148338

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number

Lakeland Processing Company
12345 Lakeland Road
Santa Fe Springs, CA 9070 (562) 944-6111

Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-Hazardous Drilling Mud (Drilling Liquid)	1	TT	2,900	G	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information

Wear protective equipment while handling. Weights or volumes are approximate. 24 hour emergency number (866) 423-6060 (AIS Dispatcher)

Project 11-3788
Project# 33001-7-4
TANK 229T

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: TAM Erdelik — Signature: [signature] — Month: 07 — Day: 24 — Year: 13

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: STEVE WALRATH — Signature: [signature] — Month: 08 — Day: 01 — Year: 13

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month — Day — Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Arnold Rowan — Signature: [signature] — Month: 8 — Day: 1 — Year: 13

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	NOT REQUIRED	1	888-423-6060	0404677

GENERATOR

5. Generator's Name and Mailing Address
Raytheon Company
1900 Hughes Drive Bld. 676 MSF218
Fullerton, CA 92834
Generator's Phone:

Generator's Site Address (if different than mailing address)
Dale & Malvern
Fullerton, CA.

6. Transporter 1 Company Name
American Integrated Services, Inc.

U.S. EPA ID Number
CAR000146336

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address
Lakeland Processing Company
12345 Lakeland Road
Santa Fe Springs, CA 9070 (562) 944-6111
Facility's Phone:

U.S. EPA ID Number

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-Hazardous Drilling Mud (Drilling Liquid)	1	TT	4200	G	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
Wear protective equipment while handling. Weights or volumes are approximate. 24 hour emergency number (888) 423-6060 (AIS Dispatcher)

C-4.16101
Profile# 11-3789
Project# 33001-7-4

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Paul Brewin
Signature:
Month: 07 Day: 24 Year: 13

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Roman Hernandez
Signature:
Month: 07 Day: 02 Year: 13

Transporter 2 Printed/Typed Name
Signature
Month: Day: Year:

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)

U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Anthony Chavez
Signature: Anthony Chavez
Month: 8 Day: 2 Year: 13

169-BLC-O 5 11977 (Rev. 9/09)

TRANSPORTER #1

BAL 16028 # 16094 #

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	NOT REQUIRED	1	888-423-6060	0404319

GENERATOR

5. Generator's Name and Mailing Address
Raytheon Company
1900 Hughes Drive Bld. 676 MSF216
Generator's Phone: Fullerton, CA 92834

Generator's Site Address (if different than mailing address)
1881 W. Malvern Ave.
Fullerton, CA.

6. Transporter 1 Company Name: American Integrated Services, Inc.
U.S. EPA ID Number: CAR000148338

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Waste Management - Nuway
13620 Live Oak Way
Facility's Phone: Irwindale, CA. 91706
U.S. EPA ID Number: Not Required

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-Hazardous Drilling Solids (Drill Cuttings)	2	CM	8	Y	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
Wear protective equipment while handling. Weights or volumes are approximate. 24 hour emergency number (888) 423-6060 (AIS Dispatcher)
Project #: 33001-7-3

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Paul Eaton
Signature:
Month: 06 Day: 27 Year: 13

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Robert Mauro
Signature:
Month: 08 Day: 05 Year: 13

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name
Signature
Month Day Year

169-BLC-O 5 11977 (Rev. 9/09)

TRANSPORTER #2

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
NOT REQUIRED	1	800-483-0900	0404681

GENERATOR

5. Generator's Name and Mailing Address
Raytheon Company
2000 Hughes Drive Bld. 777 M/S 216
Generator's Phone: Fullerton, CA 92634

Generator's Site Address (if different than mailing address)
Dale & Malvern
Fullerton, CA.

6. Transporter 1 Company Name: American Integrated Services, Inc.
U.S. EPA ID Number: CAR000148338

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Lakeland Processing Company
12345 Lakeland Road
Facility's Phone: Santa Fe Springs, CA 90670 (562) 944-8111
U.S. EPA ID Number

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-Hazardous Drilling Mud (Drilling Liquid)	1	TT	600	G	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
Wear protective equipment while handling. Weights or volumes are approximate. 24 hour emergency number (800) 423-6363 (ARS Dispatcher).
Profile# 11-3760
Project# 330X1-7-4

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Karl Berner
Signature:
Month: 08 Day: 08 Year: 13

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Kyle Mata
Signature:
Month: 08 Day: 08 Year: 13

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: BEN CORRAL
Signature:
Month: 8 Day: 8 Year: 13

APPENDIX B

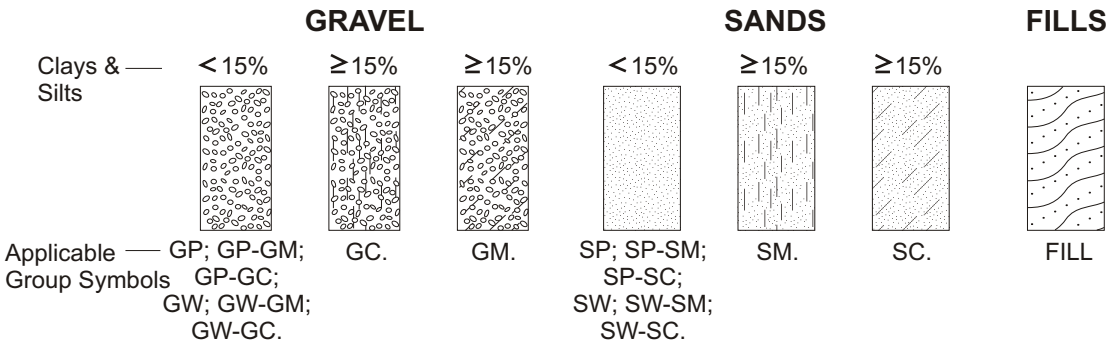
CONSTRUCTION AND LITHOLOGIC LOGS

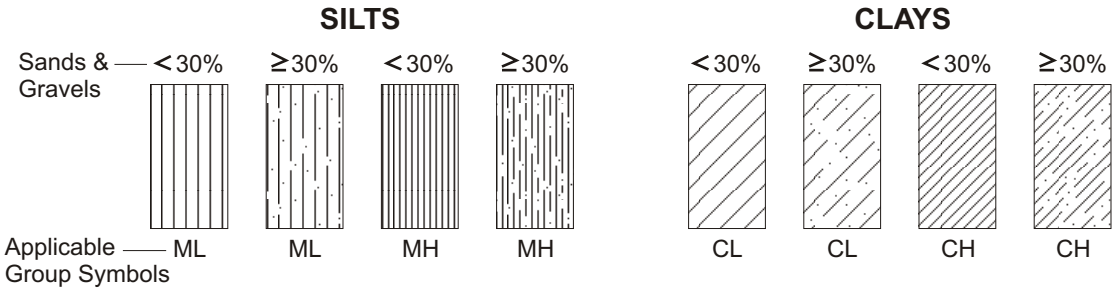
APPENDIX B

LITHOLOGIC LOGS

TABLE OF CONTENTS

GRAPHIC LOG MATERIAL SYMBOLS





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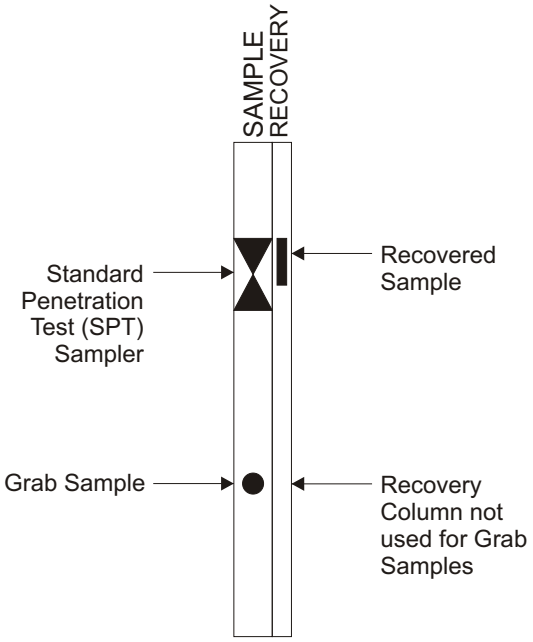
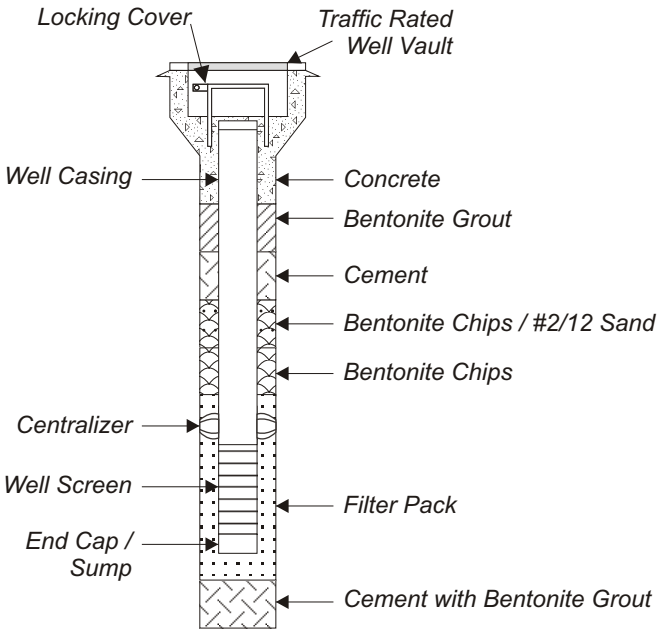


WELL CONSTRUCTION MATERIAL SYMBOLS



9/13	RPT NO.532.03	Figure B-1 Lith Log Symbols 2013_09.CDR

FIGURE B-1: CONSTRUCTION AND LITHOLOGIC LOG SYMBOLS

MONITOR WELL MW-38

DATE DRILLED: *7/22/13-7/30/13*
SURFACE ELEVATION: *155.7 feet msl**
BOREHOLE DIA.: *10 inches*
TOTAL DEPTH OF BORING *203 feet bls*
DRILLING COMPANY: *BC*[2]
METHOD: *Hollow Stem Auger*
DRILLER'S NAME: *R. Zepeda*
DRILL RIG: *CME 95*
LOGGED BY: *C. Perkovac (P.G. #6576)*
CHECKED BY: *C. Ross (P.G. #4594)*

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.3*
LOCATION: *8820 Meadowbrook Way, Fullerton.*
COMMENTS *Sampler: Split Spoon Sampler.*
*Top of Sounding Tube Elevation: 154.90 ft msl**
** - City of Fullerton Datum*

DEPTH (feet)	SAMPLE	RECOVERY	BLOWS (per 6 inches)	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
						A/C Pavement
10	●			SM		SILTY SAND (tr,80,20) Yellowish brown (2.5Y 6/4), fine-grained, well sorted.
20	●			ML		SANDY SILT (0,30,70) Yellowish brown (10YR 5/4), medium plasticity.
30	●			ML		SANDY SILT (0,35,65) Olive (5Y 4/3), moist, low plasticity.

WELL CONSTRUCTION DIAGRAM

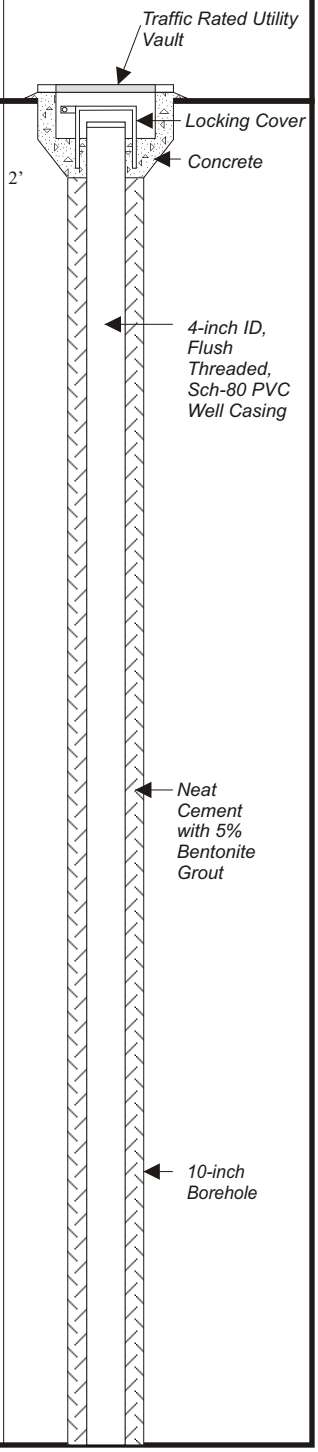


FIGURE B-2: LITHOLOGIC LOG FOR MONITOR WELL MW-38

MONITOR WELL MW-38

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.3*
DATE DRILLED: *7/22/13-7/30/13*

DEPTH (feet)	SAMPLE	RECOVERY BLOWS (per 6 inches)	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL	WELL CONSTRUCTION DIAGRAM
			ML		SANDY SILT continued.	
	●		ML		SANDY SILT (0,40,60) Olive (5Y 5/3), low to medium plasticity.	
40	●		SM		SILTY SAND (0,80,20) Olive brown (2.5Y 4/3), fine- to medium-grained, moderately sorted, subangular.	
	●		ML		SANDY SILT (0,40,60) Light olive brown (2.5Y 5/3), low to medium plasticity.	
45						*4-inch ID, Flush Threaded, Sch-80 PVC Well Casing*
	●		SC		CLAYEY SAND (0,65,35) Olive brown (2.5Y 4/3), fine-grained, well sorted.	
50	●		SM		SILTY SAND (0,60,40) Dark grayish brown (2.5Y 4/2), fine- to medium-grain, predominantly fine, well sorted.	
55						*Neat Cement with 5% Bentonite Grout*
60	●		SM		Same as above.	
65						*10-inch Borehole*
70	●		ML		SANDY SILT (,040,60) Dark grayish brown (2.5Y 4/2), medium plasticity.	
	●		SM		SILTY SAND (0,80,20) Very dark grayish brown (10YR 3/2), moist, fine- to medium-grain, predominantly fine, well sorted, subangular.	

FIGURE B-2: LITHOLOGIC LOG FOR MONITOR WELL MW-38

MONITOR WELL MW-38

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.3*
DATE DRILLED *7/22/13-7/30/13*

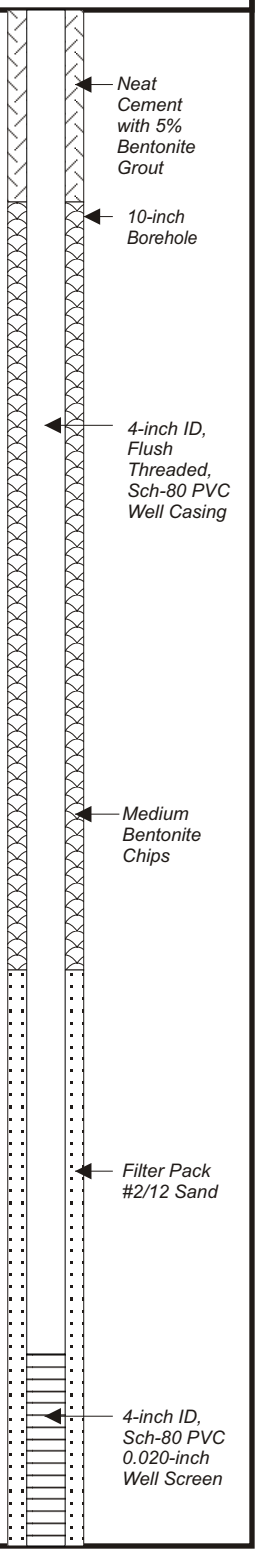
DEPTH (feet)	SAMPLE	RECOVERY BLOWS (per 6 inches)	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL	WELL CONSTRUCTION DIAGRAM
			SM		SILTY SAND continued.	
					CLAYEY SAND (0,70,30) Brown (10YR 5/3), moist, fine- to medium-grained, predominantly fine, well sorted.	
			SC		CLAYEY SAND (10,75,15) Dark grayish brown (10YR 4/2), fine- to coarse-grained, predominantly fine to medium, moderately sorted, subrounded.	
80			SC			
			SM		SILTY SAND (0,80,20) Dark grayish brown (2.5Y 4/2), fine-grained, well sorted.	
85						*4-inch ID, Flush Threaded, Sch-80 PVC Well Casing*
90			SM		SILTY SAND Trace medium-grained sand, otherwise same as above.	
95			SM		Same as above.	
						Neat Cement with 5% Bentonite Grout
100			SM		Same as above.	
105			SC		CLAYEY SAND (0,70,30) Olive brown (2.5Y 4/3), fine-grained, well sorted.	*10-inch Borehole*
110			SC		Same as above.	
			SC		CLAYEY SAND (10,70,20) Grayish brown (2.5Y 5/2), fine-grained, well sorted, subrounded.	

FIGURE B-2: LITHOLOGIC LOG FOR MONITOR WELL MW-38

MONITOR WELL MW-38

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.3*
DATE DRILLED *7/22/13-7/30/13*

DEPTH (feet)	SAMPLE	RECOVERY BLOWS (per 6 inches)	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
			SC		CLAYEY SAND continued.
120			SC		CLAYEY SAND (0,80,20) Grayish brown (2.5Y 5/2), fine-grained, well sorted.
125			SC		CLAYEY SAND (10,70,20) Olive gray (5Y 4/2), fine- to coarse-grained, predominantly fine to medium, moderately sorted.
130			SC		CLAYEY SAND (5,75,20), otherwise same as above.
135			SC		Same as above.
140			GW-GM		GRAVEL WITH SILT AND SAND (60,30,10) Olive gray (5Y 4/2), subrounded.
			SP-SM		SAND WITH SILT (5,85,10) Olive brown (2.5Y 4/3) fine- to medium-grained, moderately sorted.
145			SM		SILTY SAND (5,75,20) Dark grayish brown (2.5Y 4/2), fine- to coarse-grained, moderatrely sorted, subrounded.
150			SM		Same as above.
			SP		SAND (10,85,5) Light olive brown (2.5Y 5/4), fine- to medium-grained, moderately sorted, subrounded to subangular.



WELL CONSTRUCTION DIAGRAM

FIGURE B-2: LITHOLOGIC LOG FOR MONITOR WELL MW-38

MONITOR WELL MW-38

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.3*
DATE DRILLED *7/22/13-7/30/13*

DEPTH (feet)	SAMPLE	RECOVERY	BLOWS (per 6 inches)	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL	WELL CONSTRUCTION DIAGRAM
				SP		SAND continued.	
				SM		SILTY SAND WITH GRAVEL (15,70,15) Light olive brown (2.5Y 5/3), fine- to coarse-grained, poorly sorted, subrounded.	
160			13 18 22	SW		SAND (5,90,5) Pale yellow (2.5Y 7/3), fine- to coarse-grained, poorly sorted, subrounded to subangular.	*10-inch Borehole*
				CL		CLAY (0,15,85) Very pale brown (10YR 8/2), medium plasticity.	
165				GW-GM		GRAVEL WITH SILT AND SAND (50,40,10) Dark grayish brown (2.5Y 4/2), subrounded; sand: fine to coarse.	
170				SW-SC		SAND WITH CLAY (5,85,10) Olive gray (5Y 4/2) fine- to coarse-grained, poorly sorted, angular to subrounded.	*Filter Pack #2/12 Sand*
175				SC		CLAYEY SAND (0,80,20) Olive brown (2.5Y 4/3), fine- to medium-grained, moderately sorted.	
180							
				SC		Same as above.	*4-inch ID, Sch-80 PVC 0.020-inch Well Screen*
185			5 5 8	SC		CLAYEY SAND (5,80,15) Brown (10YR 4/3), fine- to medium-grained, predominantly fine, sell sorted.	
190							

FIGURE B-2: LITHOLOGIC LOG FOR MONITOR WELL MW-38

MONITOR WELL MW-38

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.3*
DATE DRILLED *7/22/13-7/30/13*

DEPTH (feet)	SAMPLE	RECOVERY	BLOWS (per 6 inches)	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL	WELL CONSTRUCTION DIAGRAM
200							200' Filter Pack #2/12 Sand; 4-inch ID, Sch-80 PVC 0.020-inch Well Screen; 200.5' End Cap; 10-inch Borehole
205						TOTAL DEPTH OF BORING = 203 FEET BELOW LAND SURFACE	203'
210							
215							
220							
225							
230							

FIGURE B-2: LITHOLOGIC LOG FOR MONITOR WELL MW-38

MONITOR WELL MW-39

DATE DRILLED: *7/09/13 to 7/29/13*
SURFACE ELEVATION: *84.71 feet msl**
BOREHOLE DIA.: *12.25 inches*
TOTAL DEPTH OF BORING: *1,080 feet bls*
DRILLING COMPANY: *National EWP*
METHOD: *Mud Rotary*
DRILLER'S NAME: *R. Reynolds*
DRILL RIG: *Speedstar 50K*
S. Netto
LOGGED BY: *G. Waggle (P.G. #8750)*
CHECKED BY: *(P.G. #8030, CHG #872)*

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*

LOCATION: *1881 West Malvern, Fullerton, CA*

COMMENTS: *Lithologic description based on grab samples.*
*Top of Sounding Tube Elevation: 84.25 ft msl**
** - City of Fullerton Datum*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
					0 to 50 feet not logged.

WELL CONSTRUCTION DIAGRAM

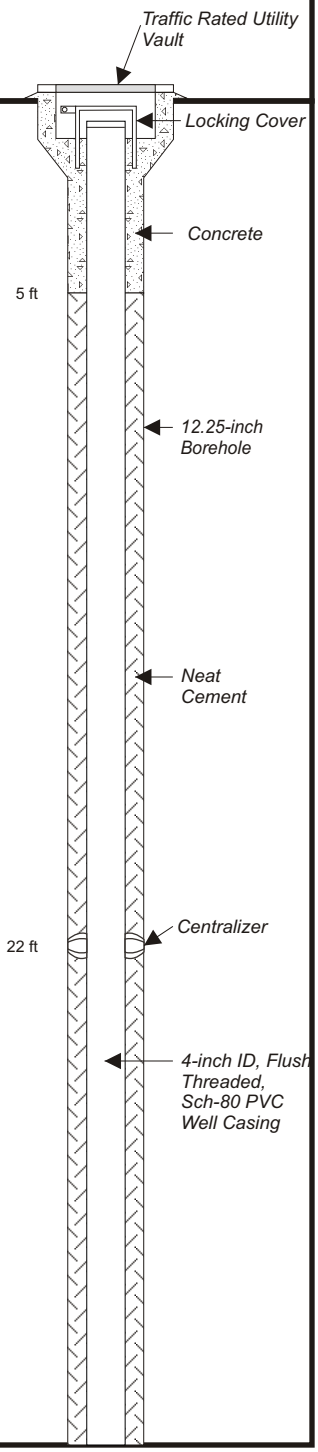


FIGURE B-3: LITHOLOGIC LOG FOR MONITOR WELL MW-39

MONITOR WELL MW-39

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *7/09/13 to 7/29/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
40					
50	●		SM		SILTY SAND (0,60,40) Fine-grained, trace medium, well sorted.
60	●		SM		Same as above.
	●		SM		Same as above.
70	●		ML		CLAYEY SILT (0,15,75) soft to firm, nonplastic; sand: fine.
	●		SM		SILTY SAND same as at 65 feet.

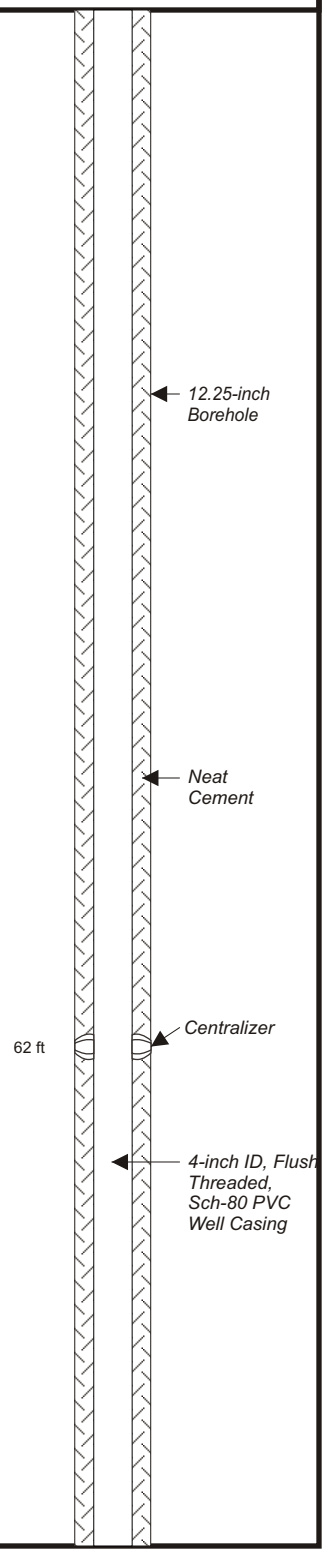


FIGURE B-3: LITHOLOGIC LOG FOR MONITOR WELL MW-39

MONITOR WELL MW-39

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *7/09/13 to 7/29/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
			SM		SILTY SAND continued.
80			SM		SILTY SAND (0,60,40) Brown (7.5YR 4/3), fine-grained, well sorted; silt: low plasticity.
			SP-SM		SAND WITH SILT (0,90,10) Brown (7.5YR 4/3), fine- to medium-grained, trace coarse, well sorted; silt: low plasticity.
90			SP-SM		Same as above.
			SP-SM		Same as above.
100			SP		SAND (0,95,5) Brown (7.5YR 4/4), fine- to medium-grained, trace coarse, moderately sorted, subrounded; sand grains multicolored.
			SM		SILTY SAND (0,60,40) Fine-grained, trace medium, well sorted; silt: soft, nonplastic.
110			ML		CLAYEY SILT (0,10,90) Brown (7.5YR 4/4), soft, nonplastic; sand: predominantly fine, trace coarse.
			ML		Same as above.

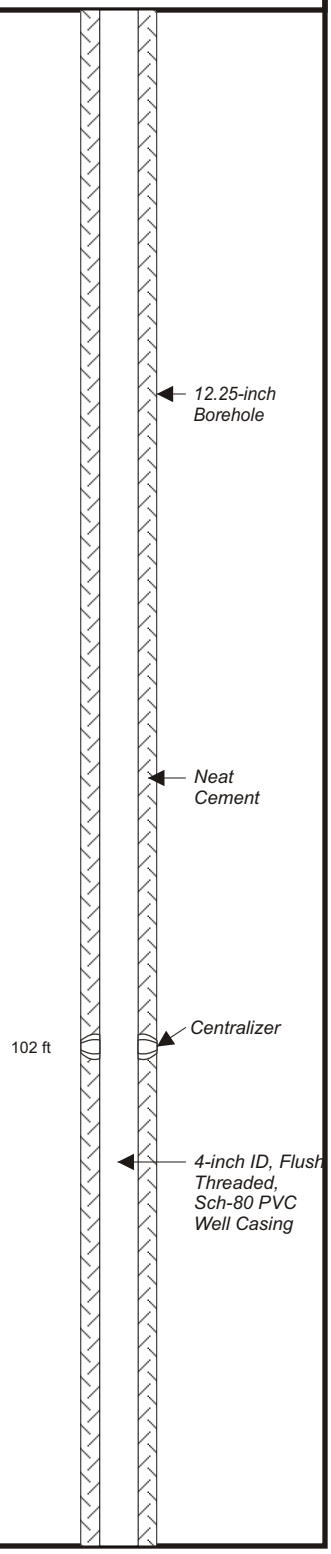


FIGURE B-3: LITHOLOGIC LOG FOR MONITOR WELL MW-39

MONITOR WELL MW-39

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *7/09/13 to 7/29/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		ML		CLAYEY SILT continued.
120	●		ML		Same as above.
	●		ML		Same as above.
130	●		SC		CLAYEY SAND (0,70,30) Dark yellowish brown (10YR 4/4), fine- to coarse-grained, predominantly fine; clay: soft, nonplastic.
	●		SC		Same ad above.
140	●		SC		CLAYEY SAND (tr,85,15); Gravel: fine, otherwise same as above.
	●		SP		SAND (0,95,5) Dark yellowish brown (10YR 4/4), fine- to medium-grained, trace coarse, moderately sorted, subrounded.
150	●		SW		SAND (tr,95,5) Dark yellowish brown (10YR 4/4), fine- to coarse-grained, poorly sorted; sand grains multicolored gravel: fine.
	●		SM		SILTY SAND (tr,70,30) Dark yellowish brown (10YR 4/4), fine- to medium-grained, trace coarse; gravel: fine.

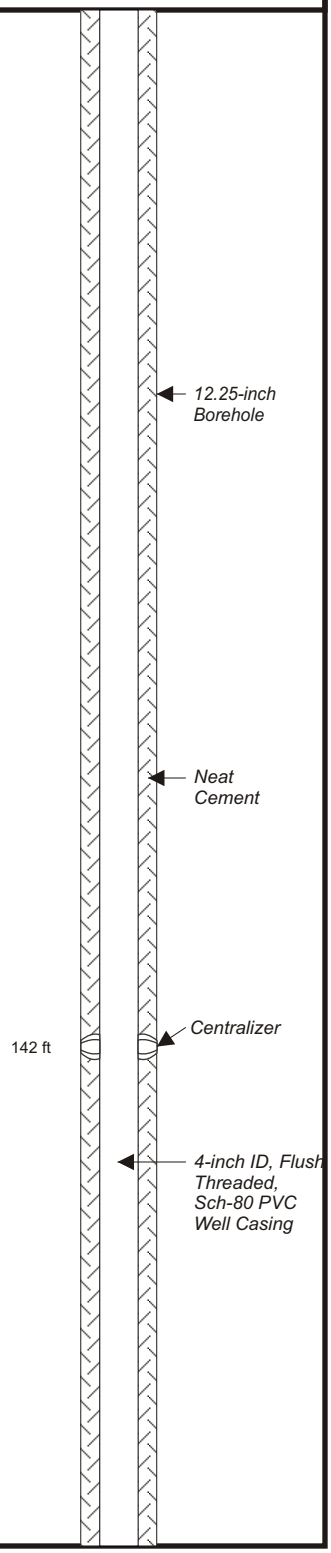


FIGURE B-3: LITHOLOGIC LOG FOR MONITOR WELL MW-39

MONITOR WELL MW-39

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *7/09/13 to 7/29/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		SM		SILTY SAND continued.
160	●		SM		Same as above.
	●		SP		SAND (tr,95,5) Dark yellowish brown (10YR 4/4), fine- to medium-grained, trace coarse, moderately sorted, subrounded; gravel: fine.
170	●		SW		SAND Fine- to coarse-grained, otherwise same as above.
	●		SW		Same as above.
180	●		SC		CLAYEY SAND (tr,75,25) Dark yellowish brown (10YR 4/4), fine- to coarse-grained, predominantly fine, well sorted; gravel: fine; clay: olive brown (2.5Y 4/2), COLOR?, soft, low plasticity.
	●		SC		Same as above.
190	●		CL		CLAY WITH SAND (tr,20,80) Dark olive brown (2.5Y 4/2), COLOR? soft, nonplastic; sand: fine to coarse, predominantly fine.
	●		CL		Same as above.

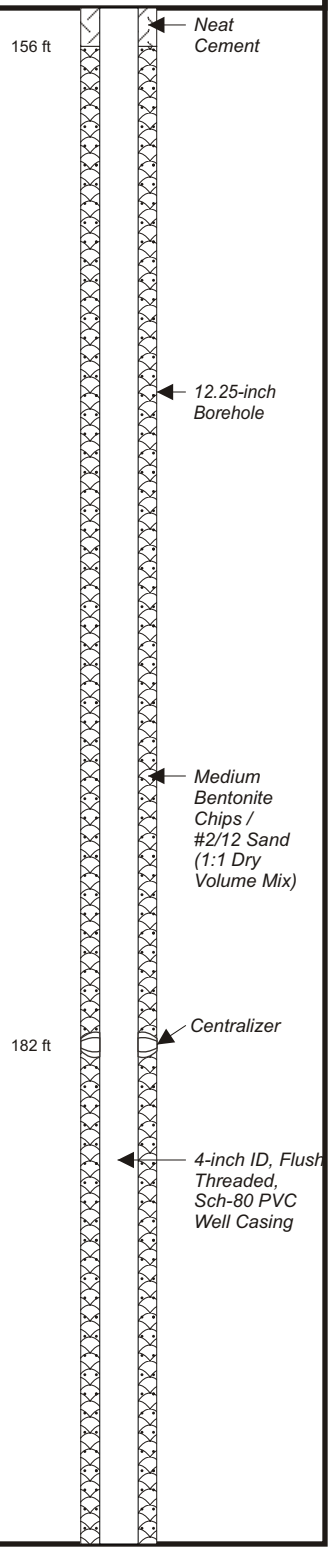
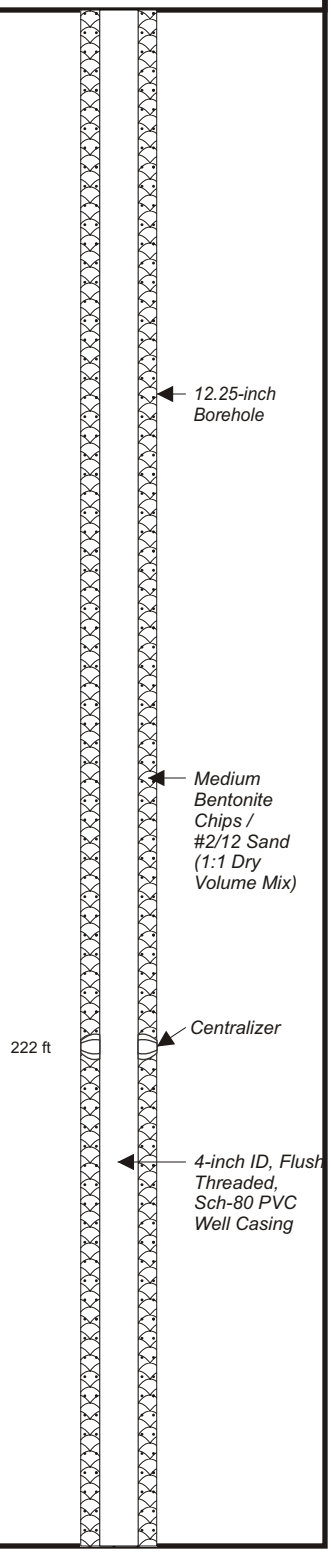


FIGURE B-3: LITHOLOGIC LOG FOR MONITOR WELL MW-39

MONITOR WELL MW-39

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *7/09/13 to 7/29/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		CL		CLAY WITH SAND continued.
200	●		CL		CLAY WITH SAND, Becomes firm, otherwise same as above.
	●		CL		Same as above.
210			CL		Same as above.
	●		ML/CL		CLAYEY SILT TO SILTY CLAY (0,5,95) Dark olive brown (2.5Y 4/2), COLOR?, soft, nonplastic; sand: fine.
220	●		ML/CL		Same as above.
	●		ML/CL		Same as above.
230	●		ML/CL		230 ft ML/CL
	●		ML/CL		Same as above.



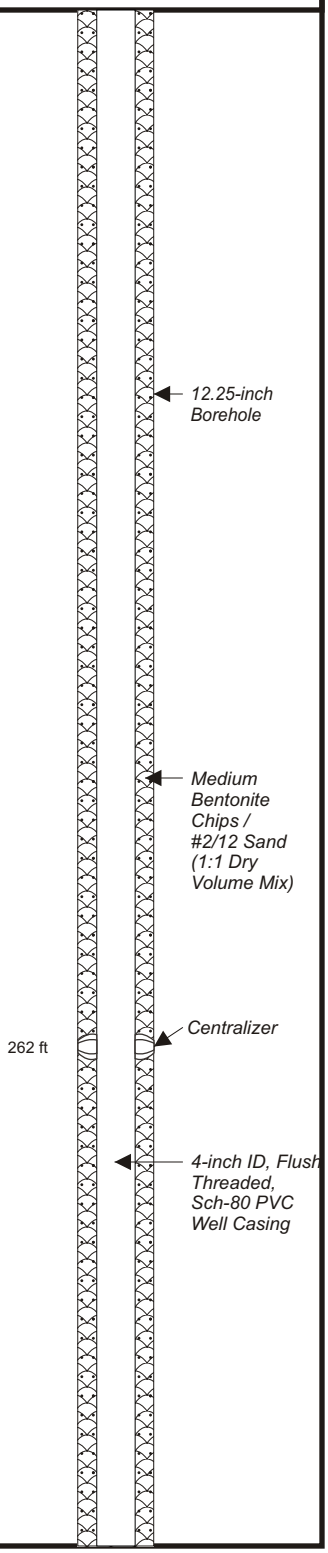
WELL CONSTRUCTION DIAGRAM

FIGURE B-3: LITHOLOGIC LOG FOR MONITOR WELL MW-39

MONITOR WELL MW-39

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *7/09/13 to 7/29/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		ML/ CL		CLAYEY SILT TO SILTY CLAY continued.
240	●		ML/ CL		Same as above.
	●		ML/ CL		CLAYEY SILT TO SILTY CLAY (tr,5,95) Trace fine-grained gravel, otherwise same as above.
250	●		CL		SILTY CLAY (tr,5,95) Olive brown (2.5Y 4/3), firm, nonplastic; sand: fine; gravel: fine.
	●		CL		Same as above.
260	●		CL		Same as above.
	●		CL		CLAY (tr,tr,100) Olive brown (2.5Y 4/3), firm, medium plasticity; gravel: fine.
270	●		CL		Same as above.
	●		CL		Same as above.



WELL CONSTRUCTION DIAGRAM

FIGURE B-3: LITHOLOGIC LOG FOR MONITOR WELL MW-39

MONITOR WELL MW-39

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *7/09/13 to 7/29/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL	WELL CONSTRUCTION DIAGRAM
			CL		CLAY continued.	
280			CL		Same as above.	
			ML		SILT (tr,tr,100) Soft, medium plasticity; some clay; sand: fine; gravel: fine.	
290			ML		Same as above.	
			ML		Same as above.	
300			ML		Same as above.	
			CL		CLAY Same as at 265 feet.	
310			CL		Same as above.	
			CL		Same as above.	

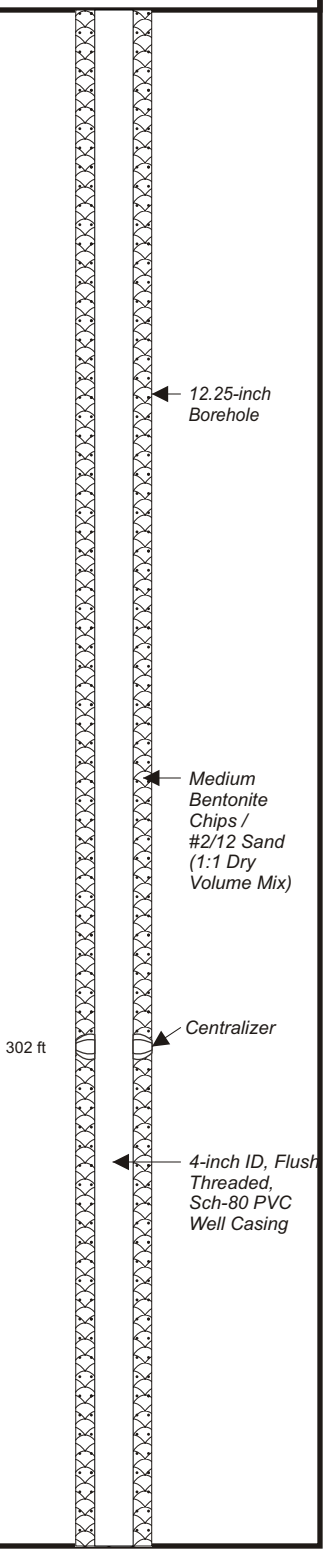


FIGURE B-3: LITHOLOGIC LOG FOR MONITOR WELL MW-39

MONITOR WELL MW-39

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *7/09/13 to 7/29/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
			CL		CLAY continued.
320			CL		Same as above.
			CL		Same as above.
330			CL		CLAY (0,tr,100), Otherwise same as above.
			CL		Same as above.
340			CL		Same as above.
			CL		Same as above.
350			CL		Same as above.
			CL		Same as above.

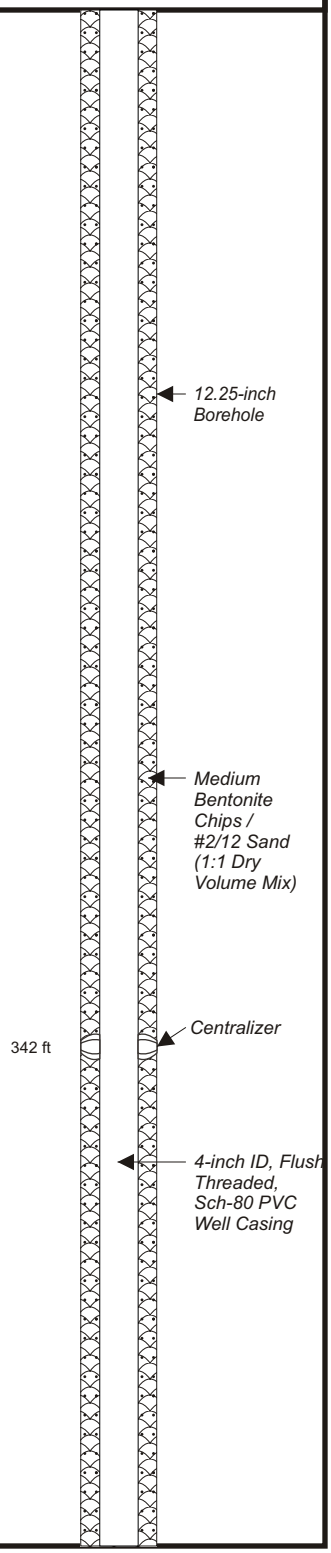
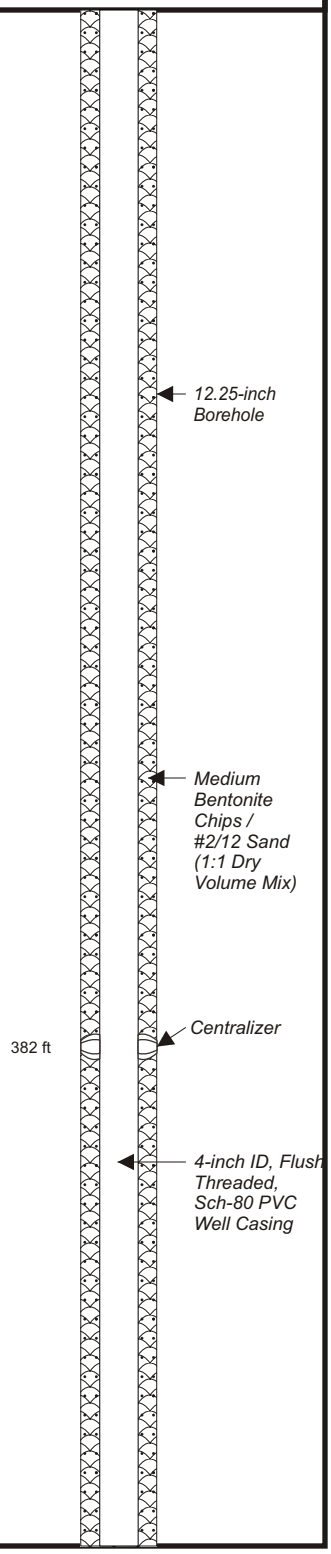


FIGURE B-3: LITHOLOGIC LOG FOR MONITOR WELL MW-39

MONITOR WELL MW-39

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *7/09/13 to 7/29/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
			CL		CLAY continued.
360			CL		Same as above.
			CL		Same as above.
370			CL		SANDY CLAY (tr,40,60) Dark grayish brown (2.5Y 4/2), soft, nonplastic; sand: fine to medium; gravel: fine.
			CL		Same as above.
380			CL		CLAY WITH SAND (tr,20,80) Dark grayish brown (2.5Y 4/2), soft to firm, nonplastic; sand: fine with trace coarse; gravel: fine.
			SC		CLAYEY SAND (tr,80,20) Olive brown (2.5Y 4/4), fine- to medium-grained, predominantly fine, trace coarse, moderately sorted; gravel: fine.
390			SC		Same as above.
			SC		CLAYEY SAND, Increased coarse-grained, poorly sorted, otherwise same as above.



WELL CONSTRUCTION DIAGRAM

FIGURE B-3: LITHOLOGIC LOG FOR MONITOR WELL MW-39

MONITOR WELL MW-39

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *7/09/13 to 7/29/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
			SC		CLAYEY SAND continued.
400			SC		Same as above.
			SC		CLAYEY SAND (0,80,20) Olive brown (2.5Y 4/3), fine- to coarse-grained, predominantly fine, well sorted, subrounded; with pieces of dark gray clay.
410			SC		CLAYEY SAND (0,80,20) Light olive brown (2.5Y 5/3), fine-grained, trace coarse, well sorted.
			SC		Same as above.
420			SC		CLAYEY SAND (0,80,20) Light olive brown (2.5Y 5/3), fine- to coarse-grained, predominantly fine, well sorted, subangular; with pieces of dark gray clay.
			SC		Same as above.
430			SC		CLAYEY SAND (0,85,15) Fine- to medium-grained, moderately sorted, otherwise same as above.
			SC		CLAYEY SAND (0,85,15) Fine- to coarse-grained, predominantly fine, otherwise same as above.

WELL CONSTRUCTION DIAGRAM

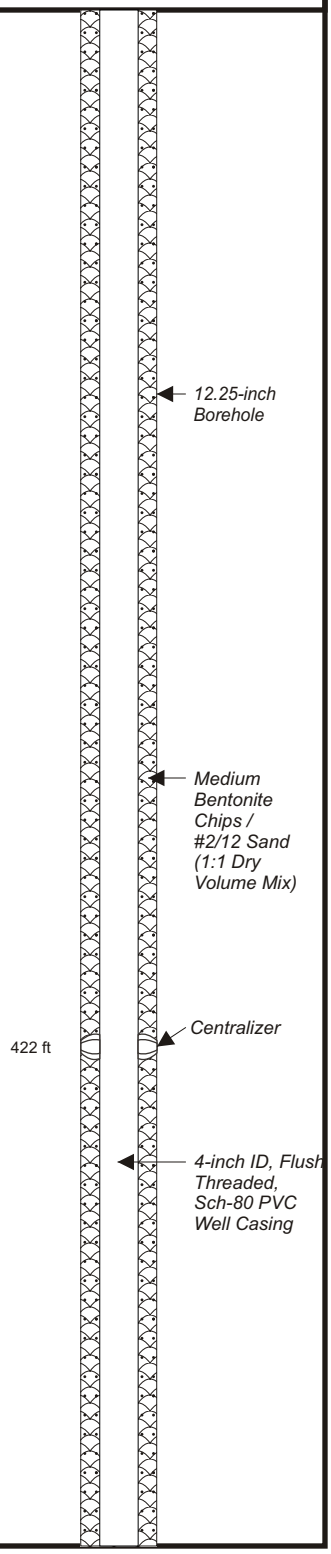


FIGURE B-3: LITHOLOGIC LOG FOR MONITOR WELL MW-39

MONITOR WELL MW-39

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *7/09/13 to 7/29/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
			SC		CLAYEY SAND continued.
440			SC		CLAYEY SAND (tr,85,15), Otherwise same as above.
			SC		CLAYEY SAND (0,70,30) Light olive brown (2.5Y 5/3), fine- to medium-grained, moderately sorted, subrounded to subangular; with pieces of gray clay.
450			SC		CLAYEY SAND (tr,85,15) Fine- to medium-grained, well sorted, subrounded.
			SC		CLAYEY SAND (0,65,35) Dark greenish gray (10Y 4/1), fine- to medium-grained, moderately sorted; with pieces of clay.
460			SC		CLAYEY SAND (0,60,40) otherwise same as above.
			CL		SANDY CLAY (0,45,55) Greenish gray (10Y 5/1), medium plasticity; sand: fine to medium.
470			SC		CLAYEY SAND (10,60,30) Gray (5Y 5/1), fine- to coarse-grained, poorly sorted, subangular to subrounded.
			SC		CLAYEY SAND (0,60,40) Gray (5Y 5/1), very fine- to fine-grained, trace medium, well sorted, rounded.

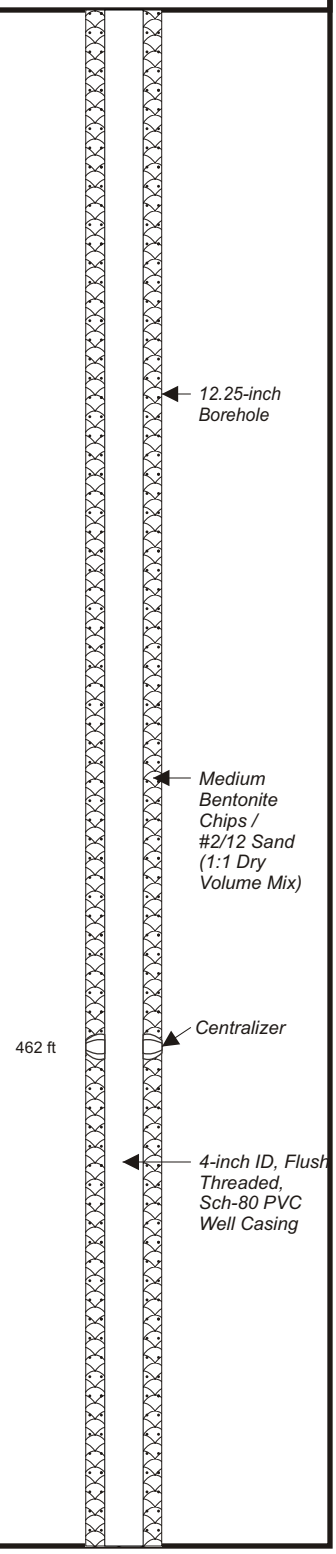


FIGURE B-3: LITHOLOGIC LOG FOR MONITOR WELL MW-39

MONITOR WELL MW-39

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *7/09/13 to 7/29/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		SC		CLAYEY SAND continued.
480	●		SC		Same as above.
	●		SC		Same as above.
490	●		CL		SANDY CLAY (0,40,60) Gray (5Y 5/1), medium plasticity.
	●		CL		CLAY WITH SAND (0,20,80) Gray (5Y 5/1), medium plasticity.
500	●		CL		CLAY WITH SAND (0,20,80) Olive gray (5Y 5/2), medium plasticity.
	●		CL		CLAY WITH SAND (0,25,75), otherwise same as above.
510	●		SC		CLAYEY SAND (0,80,20) Fine- to medium-grained, moderately sorted, subangular to subrounded.
	●		SC		CLAYEY SAND (tr,60,40) Olive gray (5Y 4/2), fine- to medium-grained, well sorted, subangular.

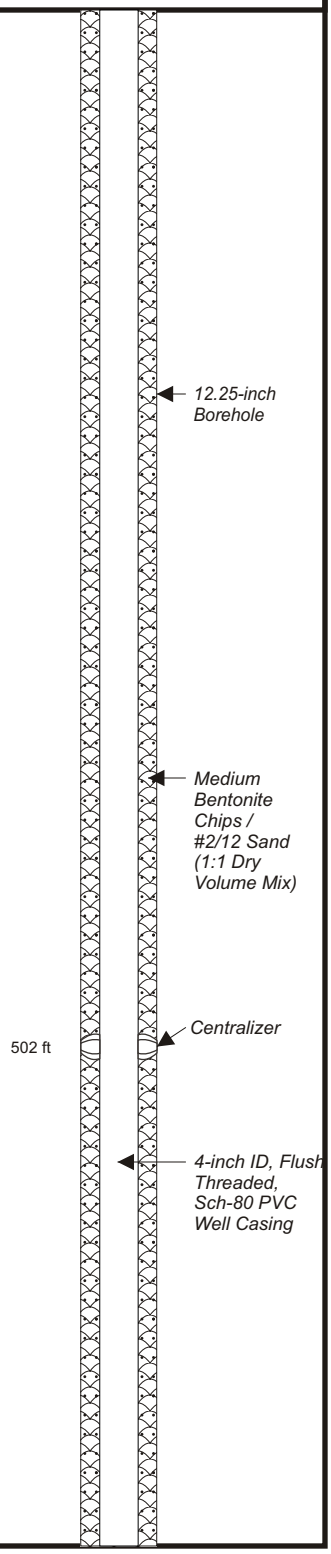
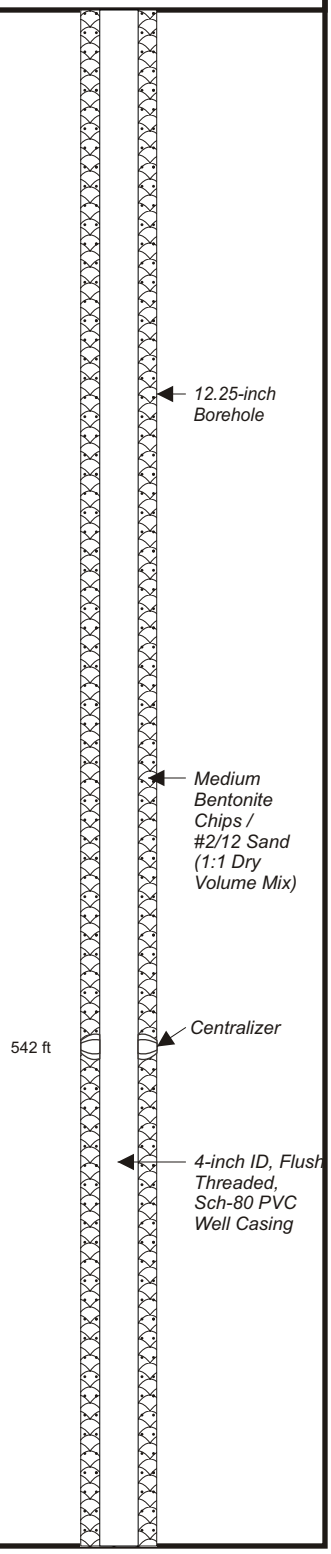


FIGURE B-3: LITHOLOGIC LOG FOR MONITOR WELL MW-39

MONITOR WELL MW-39

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *7/09/13 to 7/29/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
			SC		CLAYEY SAND continued.
520			SM		SILTY SAND (0,85,15) Olive gray (5Y 5/2), fine- to coarse-grained, predominantly medium, well sorted, subangular to rounded; sand grains consist of plagioclase, quarts (clear and rose), and black mafics.
			SM		SILTY SAND (0,75,35) Light olive brown (2.5Y 5/3), fine- to medium-grained, well sorted, subrounded.
530			ML		SANDY SILT (0,40,60) Light olive brown (2.5Y 5/3), medium plasticity; sand: fine to medium.
			ML		SANDY SILT (0,35,65) Light olive brown (2.5Y 5/3), medium plasticity; sand: fine to medium.
540			ML		SANDY SILT (0,30,70) Olive gray (5Y 4/2), medium plasticity; sand: fine to medium, less medium sand than at 535 feet.
			ML		SILT (0,10,90) Olive gray (5Y 5/2), low to medium plasticity; sand: fine.
550			ML		Same as above.
			ML		Same as above.



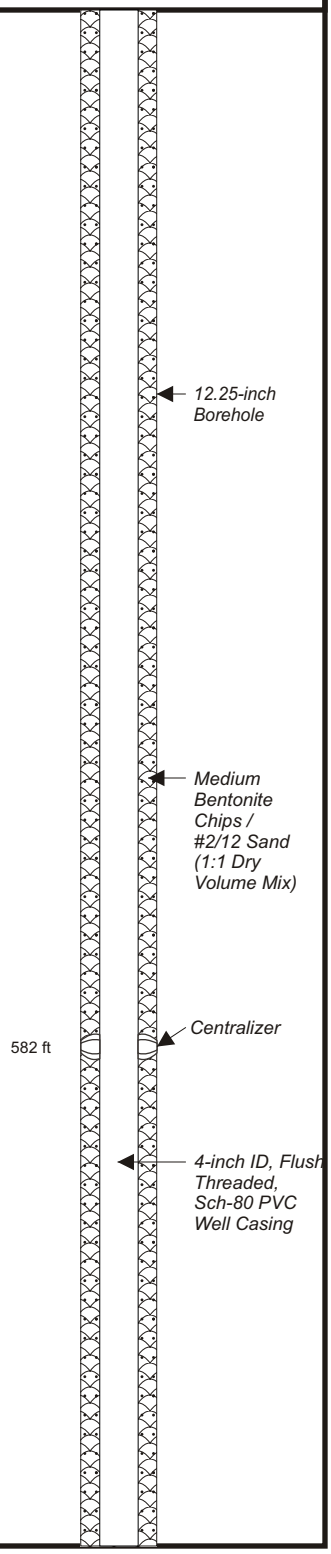
WELL CONSTRUCTION DIAGRAM

FIGURE B-3: LITHOLOGIC LOG FOR MONITOR WELL MW-39

MONITOR WELL MW-39

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *7/09/13 to 7/29/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		ML		SILT continued.
560	●		ML		SILT WITH SAND (0,20,80) Grayish brown (2.5Y 5/2), very fine- to fine-grained, trace medium grain.
	●		ML		Same as above.
570	●		ML		SANDY SILT (0,45,55) Grayish brown (2.5Y 5/2); sand: fine.
	●		ML		SILT WITH SAND (0,15,85) Grayish brown (2.5Y 5/2); sand: fine to medium, predominantly fine.
580					
	●		ML		Same as above.
590	●		ML		Same as above.
	●		ML/ CL		SANDY SILT TO SANDY CLAY (0,25,75) firm, nonplastic; sand: fine.



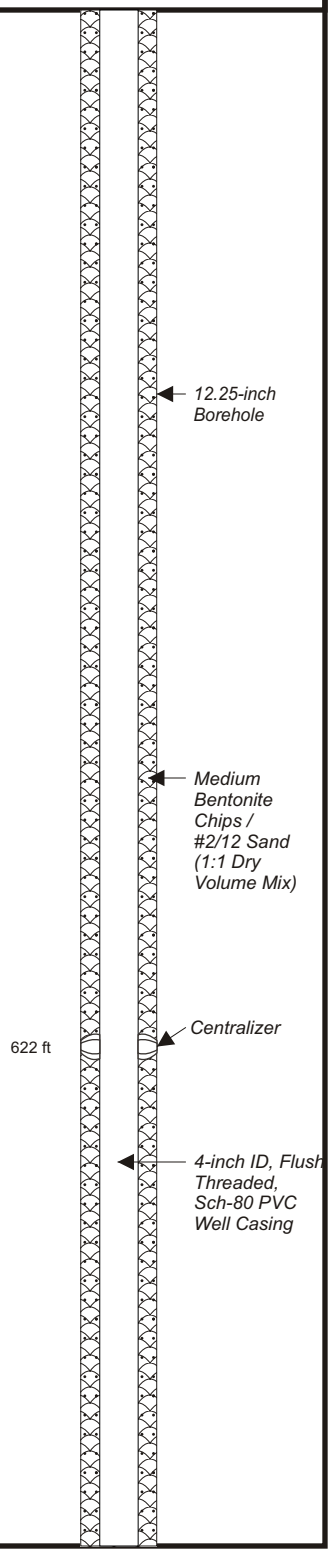
WELL CONSTRUCTION DIAGRAM

FIGURE B-3: LITHOLOGIC LOG FOR MONITOR WELL MW-39

MONITOR WELL MW-39

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *7/09/13 to 7/29/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		ML/ CL		SANDY SILT TO SANDY CLAY continued.
600					
	●		CL		CLAY (0,tr,100) Dark grayish brown (2.5Y 4/2), firm, low plasticity; sand: fine.
610	●		ML/ CL		SANDY SILT TO SANDY CLAY (0,25,75) Dark grayish brown (2.5Y 4/2), soft, nonplastic; sand: fine to medium, trace of coarse.
	●		ML/ CL		SANDY SILT TO SANDY CLAY (tr,25,75); gravel: fine; otherwise same as above.
620	●		SM/ SC		SILTY SAND TO CLAYEY SAND Dark grayish brown (2.5Y 4/2), fine- to coarse-grained, predominantly fine; fines: low plasticity.
	●		SC		CLAYEY SAND Dark grayish brown (2.5Y 4/2), fine- to coarse-grained, predominantly fine; fines: low plasticity.
630	●		CL		CLAY (0,tr,100) Dark grayish brown (2.5Y 4/2), soft, low plasticity; 5% silt; sand: coarse.
	●		SM/ SC		SILTY SAND TO CLAYEY SAND, same as at 620 feet.



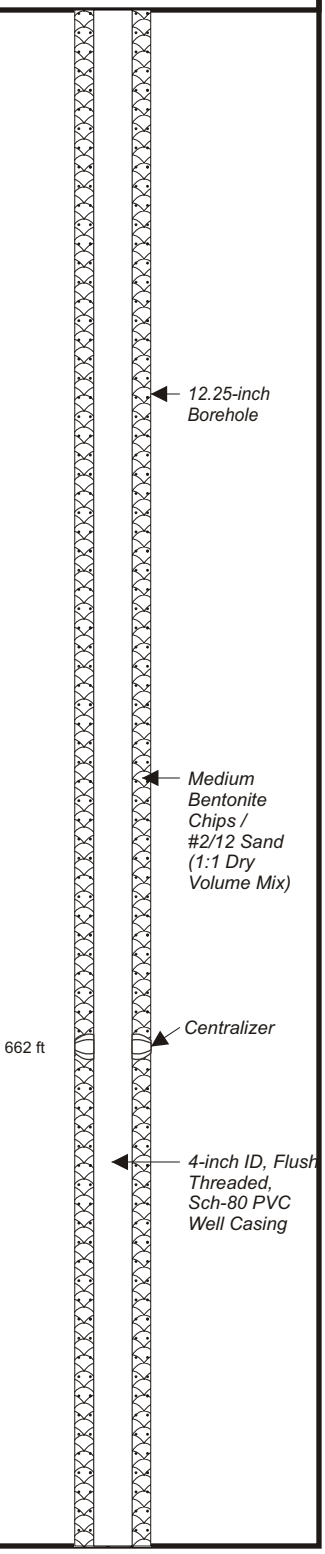
WELL CONSTRUCTION DIAGRAM

FIGURE B-3: LITHOLOGIC LOG FOR MONITOR WELL MW-39

MONITOR WELL MW-39

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *7/09/13 to 7/29/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		SM/ SC		SILTY SAND TO CLAYEY SAND continued.
640	●		SM/ SC		Same as above.
	●		SM/ SC		Same as above.
650	●		ML/ CL		SANDY SILT TO SANDY CLAY (0,25,75) nonplastic to low plasticity; sand: fine to coarse, predominantly fine.
	●		ML/ CL		Same as above.
660	●		SC		CLAYEY SAND (0,70,30) Olive brown (2.5Y 4/3), fine- to coarse-grained, predominantly fine, well sorted, subrounded; sand grains multicolored; 5% silt.
670					
	●		SP		SAND (0,100,tr) Fine- to medium-grained, predominantly fine, trace coarse, well sorted, subrounded.



WELL CONSTRUCTION DIAGRAM

FIGURE B-3: LITHOLOGIC LOG FOR MONITOR WELL MW-39

MONITOR WELL MW-39

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *7/09/13 to 7/29/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		SP		SAND continued.
680	●		SP		Same as above.
	●		CL		CLAY (0,tr,100) Olive brown (2.5Y 4/3), soft, low plasticity; sand: fine.
690	●		CL		Same as above.
	●		CL		Same as above.
700	●		CL		Same as above.
	●		SC		CLAYEY SAND (0,75,25) Olive brown (2.5Y 4/3), fine- to coarse-grained, predominantly medium, well sorted; clay: soft, low plasticity.
710	●		SP-SM		SAND WITH SILT (0,90,10) fine- to coarse-grained, predominantly fine to medium, moderately to well sorted.
	●		SP-SM		SAND WITH SILT (tr,90,10) fine- to coarse-grained, predominantly medium, otherwise same as above.

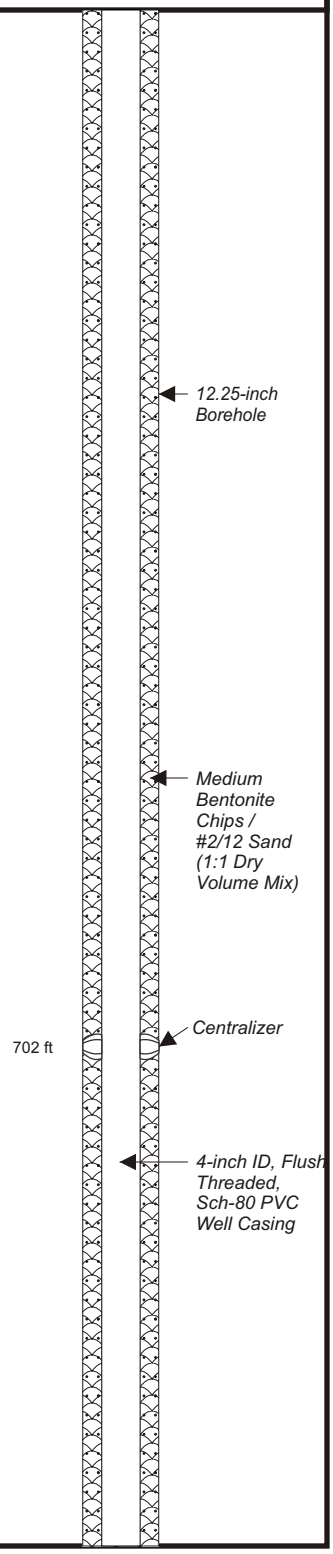


FIGURE B-3: LITHOLOGIC LOG FOR MONITOR WELL MW-39

MONITOR WELL MW-39

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *7/09/13 to 7/29/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
			SP-SM		SAND WITH SILT continued.
720			SC		CLAYEY SAND (0,70,30) fine- to coarse-grained, predominantly medium, moderately sorted; clay: soft, low plasticity.
			ML/ CL		SILT TO CLAY (0,tr,100) Light olive brown (2.5Y 5/4), soft, nonplastic to low plasticity; sand: fine to medium.
730			ML		SILT (0,tr,100) Olive brown (2.5Y 4/3), soft, nonplastic; sand: fine.
			ML		Same as above.
740			SC		CLAYEY SAND Same as at 720 feet.
			SP-SM		SAND WITH SILT (0,90,10) fine- to medium-grained, trace coarse, predominantly fine, well sorted; sand grains multicolored.
750			ML		SANDY SILT (0,25,75) Soft, nonplastic; sand: fine to medium.
			SM		SILTY SAND (0,75,25) fine- to medium-grained, predominantly fine, moderately sorted.

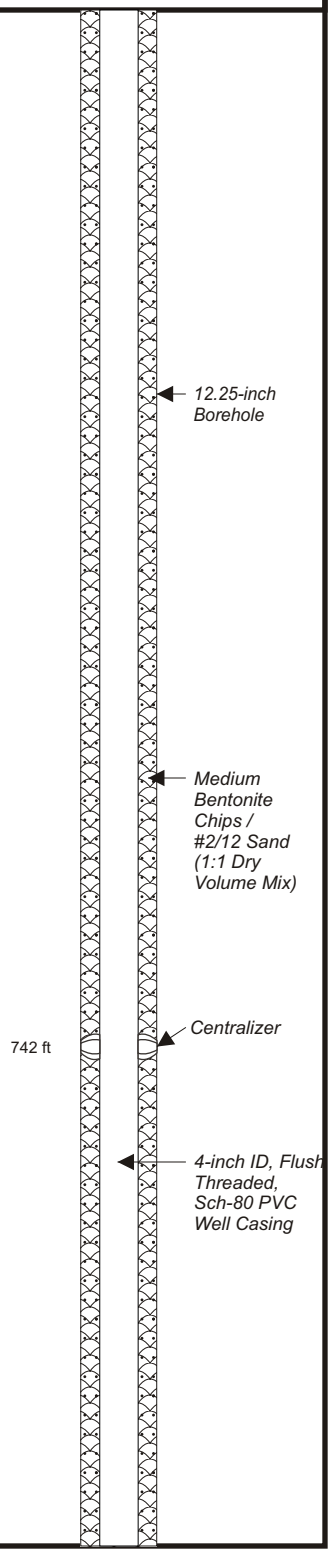


FIGURE B-3: LITHOLOGIC LOG FOR MONITOR WELL MW-39

MONITOR WELL MW-39

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *7/09/13 to 7/29/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		SM		SILTY SAND continued.
760	●		ML		SANDY SILT same as at 750 feet.
	●		ML		Same as above.
770	●		ML		Same as above, with some clay.
	●		SM		SILTY SAND (0,75,25) Olive brown (2.5Y 4/3), fine- to coarse-grained, predominantly fine; silt: nonplastic, firm.
780	●		SP-SM		SAND WITH SILT (0,90,10) Olive brown (2.5Y 4/3), fine- to medium-grained, trace coarse, well sorted.
	●		CL		SANDY CLAY (0,70,30) Greenish gray (5GY 3/1) COLOR?; interbeds of silt; sand: fine.
790	●		ML		SANDY SILT (0,30,70) Greenish gray (10Y 5/1), low plasticity; sand: fine with trace medium.
	●		ML		Same as above.

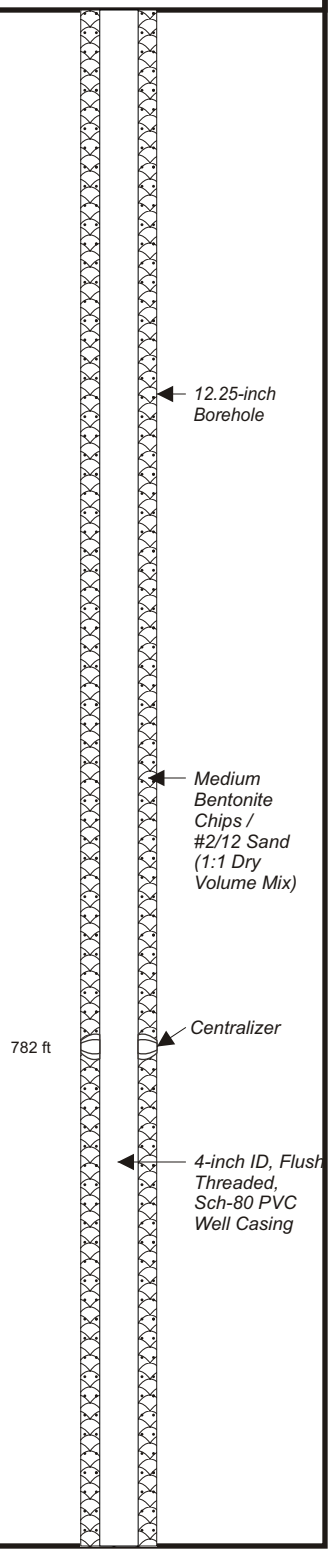
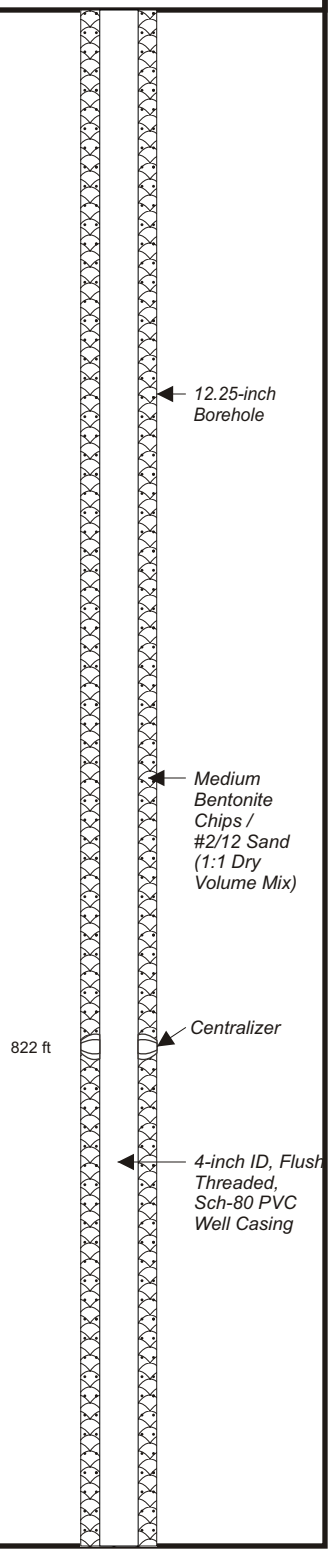


FIGURE B-3: LITHOLOGIC LOG FOR MONITOR WELL MW-39

MONITOR WELL MW-39

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *7/09/13 to 7/29/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		ML		SANDY SILT continued.
800	●		ML		SILT WITH SAND (0,15,85) Dark greenish gray (5GY 4/1), soft, low plasticity; with interbeds of clay; sand: fine.
	●		ML		Same as above.
810			ML		Same as above.
	●		ML		SANDY SILT (0,25,75) Dark greenish gray (10Y 4/1), soft, low plasticity; with clay interbeds; sand: fine.
820	●		ML		SANDY SILT (0,25,75) Dark greenish gray (10Y 4/1), low plasticity; sand: fine to coarse, predominantly fine, subangular, poorly sorted.
	●		ML		SILT (0,10,90) Dark greenish gray (10Y 4/1), soft, low plasticity; sand: fine.
830	●		ML		SILT with clay interbeds, otherwise same as above.
	●		ML		Same as above.



WELL CONSTRUCTION DIAGRAM

FIGURE B-3: LITHOLOGIC LOG FOR MONITOR WELL MW-39

MONITOR WELL MW-39

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *7/09/13 to 7/29/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		ML		SILT continued.
840	●		ML		Same as above.
	●		ML		Same as above.
850	●		ML		Same as above.
	●		ML		Same as above.
860	●		ML		SILT WITH SAND (0,20,80) Dark greenish gray (10Y 4/1), soft, low plasticity; sand: fine.
	●		ML		Same as above.
870	●		CL		CLAY WITH SAND (0,20,80) Very dark greenish gray (10Y 3/1), firm, low plasticity; sand: fine.
	●		CL		Same as above.

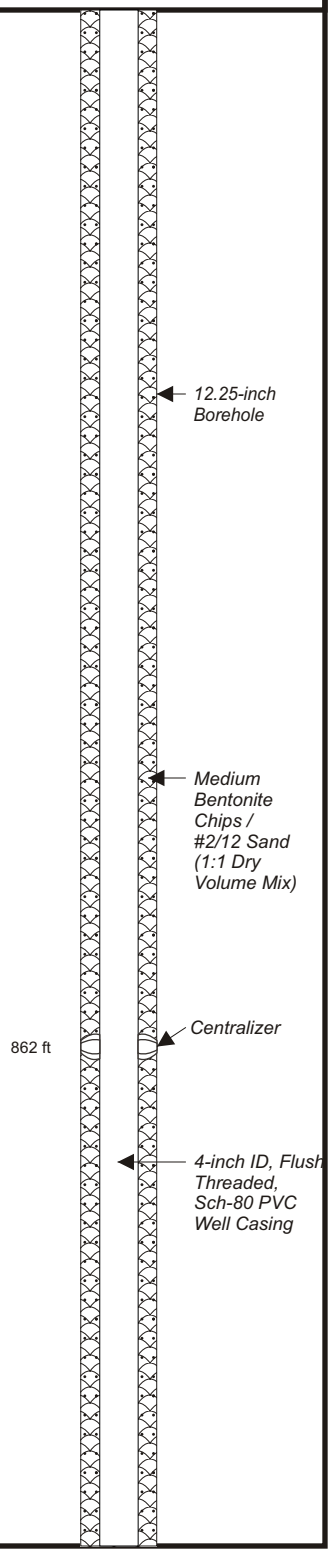


FIGURE B-3: LITHOLOGIC LOG FOR MONITOR WELL MW-39

MONITOR WELL MW-39

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *7/09/13 to 7/29/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		CL		CLAY WITH SAND continued.
880	●		CL		Same as above.
	●		CL		Same as above.
890	●		CL		Same as above.
	●		ML		SILT WITH SAND same as at 860 feet.
900	●		CL		CLAY WITH SAND same as at 870 feet.
	●		ML		SANDY SILT (0,25,75) Dark greenish gray (10Y 4/1), soft, low plasticity; sand: fine to medium, trace coarse.
910	●		ML		SANDY SILT (0,40,60) Light olive brown (2.5Y 5/3), soft, low plasticity; sand: fine to medium, trace coarse.
	●		SM		SILTY SAND (see below).

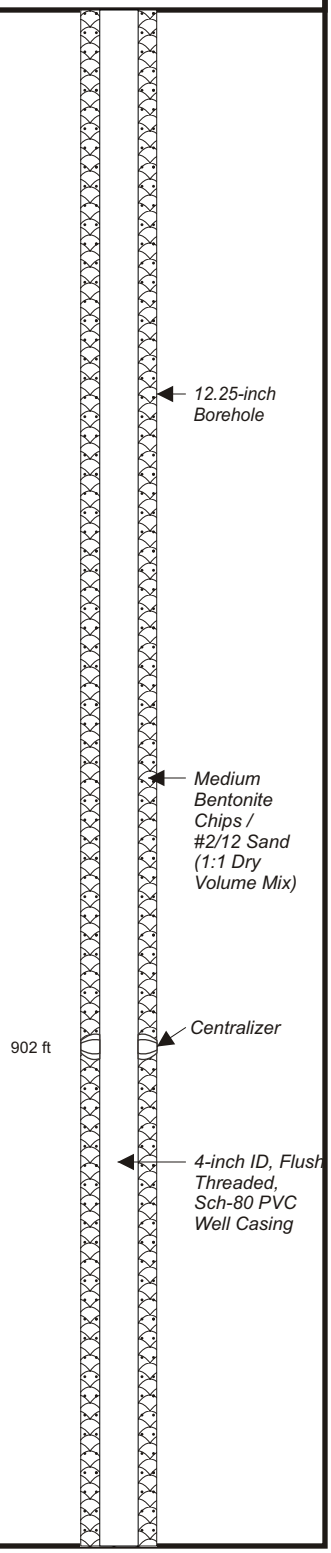


FIGURE B-3: LITHOLOGIC LOG FOR MONITOR WELL MW-39

MONITOR WELL MW-39

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *7/09/13 to 7/29/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		SM		SILTY SAND (tr,85,15) Light olive brown (2.5Y 5/3), fine- to coarse-grained, poorly sorted, subangular; sand grains multicolored.
920	●		SP-SM		SAND WITH SILT (0,90,10) Grayish brown (2.5Y 5/2), fine- to coarse grained, well sorted, subrounded; sand grains multicolored.
	●		SP-SM		Same as above.
930	●		SM		SILTY SAND (0,80,20) Grayish brown (2.5Y 5/2), fine- to coarse grained, well sorted, subrounded; sand grains multicolored.
	●		SM		Same as above.
940	●		SM		SILTY SAND (0,85,15) Grayish brown (2.5Y 5/2), fine- to coarse-grains, predominantly medium, well sorted, subrounded; sand grains multicolored.
	●		SM		SILTY SAND (0,65,35) Grayish brown (2.5Y 5/2), fine to medium-grained, mostly fine, well sorted, rounded; sand grains multicolored.
950	●		SM		SILTY SAND (0,55,45) Grayish brown (2.5Y 5/2), fine to medium-grained, trace coarse, predominantly fine, subrounded; sand grains multicolored.
	●		SM		SILTY SAND (0,60,40) Otherwise same as above.

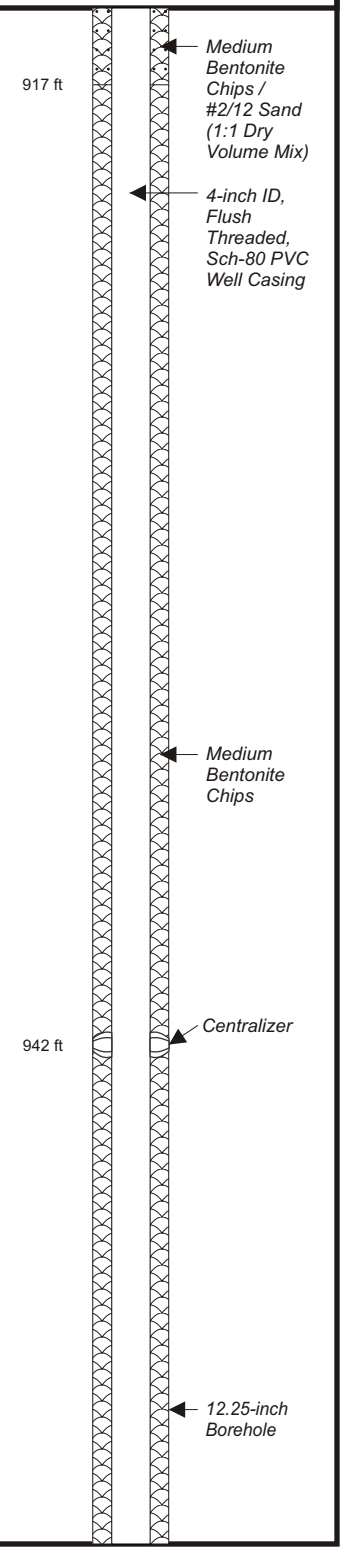
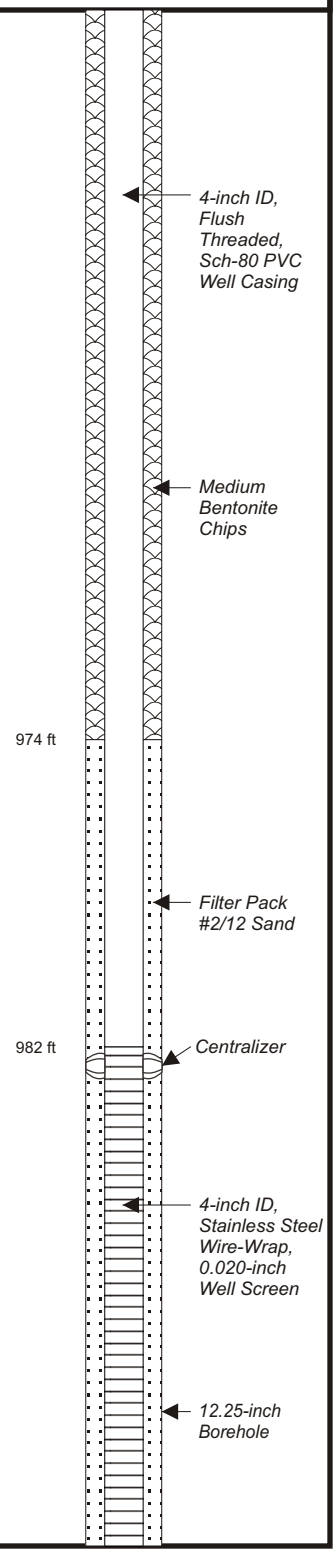


FIGURE B-3: LITHOLOGIC LOG FOR MONITOR WELL MW-39

MONITOR WELL MW-39

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *7/09/13 to 7/29/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		SM		SILTY SAND continued.
960	●		SM		Same as above.
	●		ML		SANDY SILT (0,40,60) Grayish brown (2.5Y 5/2), low plasticity; with clay interbeds; sand: fine to medium, subrounded, well sorted, sand grains multicolored.
970	●		ML		Same as above.
	●		ML		Same as above.
980	●		ML		Same as above.
	●		CL		SANDY CLAY (0,25,75) Dark greenish gray (10Y 4/1), medium plasticity; with silt; sand: fine.
990	●		SC		CLAYEY SAND (tr,75,25) Dark greenish gray (10Y 4/1), fine- to medium-grained, trace coarse, well sorted, subrounded; clay: low to medium plasticity.
	●		SC		CLAYEY SAND see below.



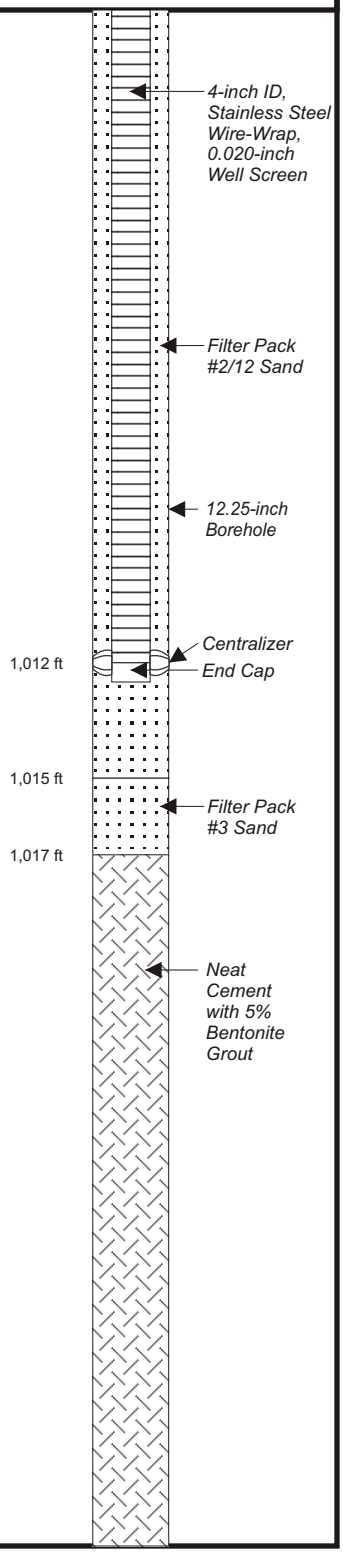
WELL CONSTRUCTION DIAGRAM

FIGURE B-3: LITHOLOGIC LOG FOR MONITOR WELL MW-39

MONITOR WELL MW-39

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *7/09/13 to 7/29/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		SC		CLAYEY SAND (0,55,45) Dark greenish gray (10Y 4/1), fine- to medium-grained, predominantly fine, well sorted, subrounded; clay: medium plasticity.
1000	●		CL		SANDY CLAY (0,40,60) Dark greenish gray (10Y 4/1), low to medium-plasticity; sand: fine, well sorted, rounded.
	●		SC		CLAYEY SAND (0,65,35) Dark grayish brown (10YR 4/2), fine- to medium-grained, trace coarse, moderately sorted, subangular; clay: medium plasticity.
1010	●		SC		CLAYEY SAND (0,75,25) Dark grayish brown (10YR 4/2), fine- to medium-grained, well sorted, rounded; clay: low to medium plasticity.
	●		SC		Same as above.
1020	●		SC		CLAYEY SAND (0,55,45) COLOR (10Y 5/2), fine-grained, well sorted, rounded; clay: low to medium plasticity.
	●		CL		CLAY WITH SAND (0,15,85) Greenish gray (5GY 5/1), medium plasticity; some silt; sand: very fine to fine.
1030	●		CL		CLAY (0,10,90) medium plasticity; some silt; sand: fine.
	●		CL		Same as above.



WELL CONSTRUCTION DIAGRAM

FIGURE B-3: LITHOLOGIC LOG FOR MONITOR WELL MW-39

MONITOR WELL MW-39

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *7/09/13 to 7/29/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL	WELL CONSTRUCTION DIAGRAM
			CL		CLAY continued.	
1040			CL		Same as above.	
			CL		CLAY WITH SAND (0,15,85) Dark greenish gray (10Y 4/1), medium plasticity; some silt; sand: fine, well sorted, rounded.	
1050			CL		CLAY WITH SAND Same as above with trace medium sand.	*12.25-inch Borehole*
			ML		SILT WITH SAND (0,15,85) Dark greenish gray (10Y 4/1), low plasticity; sand: very fine to fine, well sorted, rounded.	
1060			ML		Same as above.	*Neat Cement with 5% Bentonite Grout*
			CL		CLAY (0,5,95) Dark greenish gray (10Y 4/1), soft, low plasticity; sand: fine to medium.	
1070			CL		Same as above.	
			CL		Same as above.	

FIGURE B-3: LITHOLOGIC LOG FOR MONITOR WELL MW-39

MONITOR WELL MW-39

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *7/09/13 to 7/29/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL	WELL CONSTRUCTION DIAGRAM
	●		CL		CLAY continued.	
1080	●		CL		Same as above.	1,080 ft
					TOTAL DEPTH OF BORING = 1080 FEET BELOW LAND SURFACE	
1090						
1100						
1110						

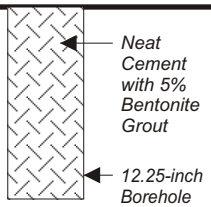


FIGURE B-3: LITHOLOGIC LOG FOR MONITOR WELL MW-39

MONITOR WELL MW-40

DATE DRILLED: *6/17/13 to 6/27/13*
SURFACE ELEVATION: *124.09 feet msl**
BOREHOLE DIA.: *12.25 inches*
TOTAL DEPTH OF BORING: *1,040 feet bls*
DRILLING COMPANY: *National EWP*
METHOD: *Mud Rotary*
DRILLER'S NAME: *R. Reynolds*
DRILL RIG: *Speedstar 50K*
LOGGED BY: *C. Perkovac (P.G. #6576)*
CHECKED BY: *S. Netto (P.G. #8030, CHG #872)*

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*

LOCATION: *1881 West Malvern, Fullerton, CA*

COMMENTS: *Lithologic description based on grab samples.*
*Top of Sounding Tube Elevation: 123.40 ft msl**
** - City of Fullerton Datum*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		SP		SAND (0,95,5) Brown (7.5YR 5/2), medium-grained, well sorted, subangular to subrounded.
30	●		SP-SM		SAND WITH SILT (0,90,10) Light olive brown (2.5Y 5/4), medium-grained, well sorted, subangular to subrounded.
	●		ML		SANDY SILT See below.

WELL CONSTRUCTION DIAGRAM

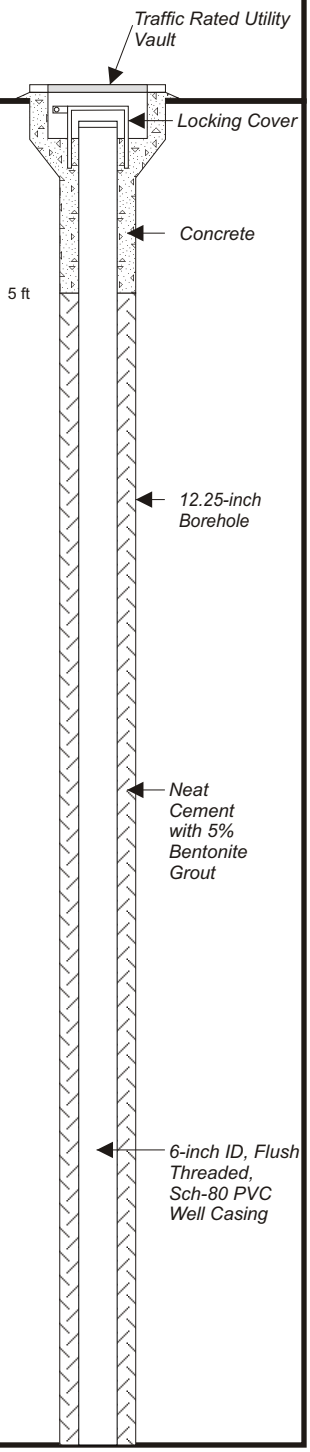


FIGURE B-4: LITHOLOGIC LOG FOR MONITOR WELL MW-40

MONITOR WELL MW-40

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *6/17/13 to 6/27/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		ML		SANDY SILT (0,30,70) Light olive brown (2.5Y 5/4), medium plasticity; sand: fine to medium.
40	●		ML		SANDY SILT (0,30,70) Brown (10YR 5/3), medium plasticity; sand: very fine to fine.
	●		ML		SILT WITH SAND (0,20,80) Brown (10YR 5/3), low to medium plasticity; sand: fine.
50	●		ML		SILT (0,10,90) Brown (10YR 5/3), medium plasticity; sand: fine.
	●		ML		SANDY SILT (0,25,75) Brown (10YR 5/3), low plasticity; sand: very fine to medium, predominantly fine.
60	●		SM		SILTY SAND (0,65,35) Brown (10YR 5/3), fine- to medium-grained, predominantly fine, well sorted, subrounded.
	●		SM		SILTY SAND (0,65,35) Brown (10YR 5/3), fine- to medium-grained, predominantly fine, well sorted, subrounded.
70	●		CL		SANDY CLAY (0,45,55) Brown (10YR 5/3), medium plasticity; sand: fine to medium, predominantly fine.
	●		SM		SILTY SAND See below.

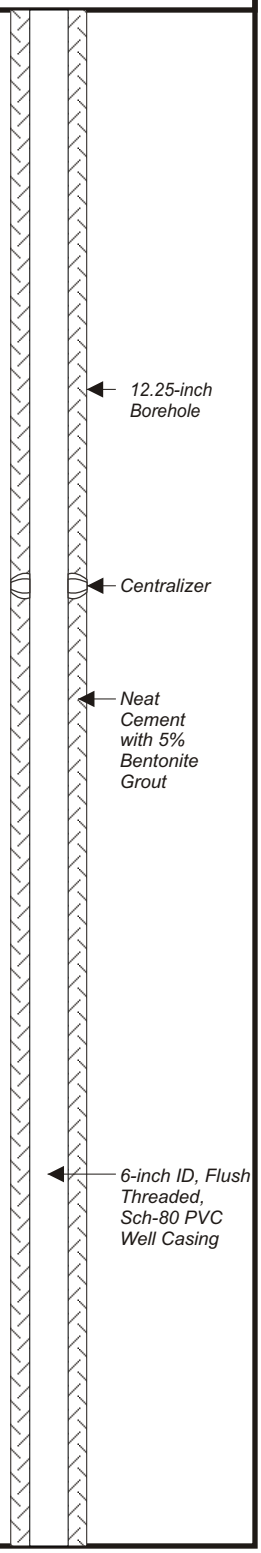


FIGURE B-4: LITHOLOGIC LOG FOR MONITOR WELL MW-40

MONITOR WELL MW-40

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *6/17/13 to 6/27/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		SM		SILTY SAND (0,75,25) Yellowish brown (10YR 5/4), fine- to medium-grained, predominantly medium, well sorted, subrounded.
80	●		SM		SILTY SAND (0,55,45) Yellowish brown (10YR 5/4), fine- to medium-grained, predominantly fine, well sorted, rounded.
	●		SM		SILTY SAND (0,55,45) Yellowish brown (10YR 5/4), fine-grained, well sorted, rounded.
90	●		SM		SILTY SAND (0,55,45) Light olive brown (2.5Y 5/3), fine- to medium-grained, predominantly fine, well sorted.
	●		ML		SANDY SILT (0,30,70) Olive brown (2.5Y 4/4), low plasticity; sand: fine.
100	●		ML		Same as above.
	●		ML		SILT WITH SAND (0,20,80) Olive brown (2.5Y 4/4), medium plasticity; sand: very fine to fine.
110	●		ML		SILT WITH SAND (0,15,85) Olive brown (2.5Y 4/4), low plasticity; sand: fine.
	●		ML		SILT WITH SAND See below.

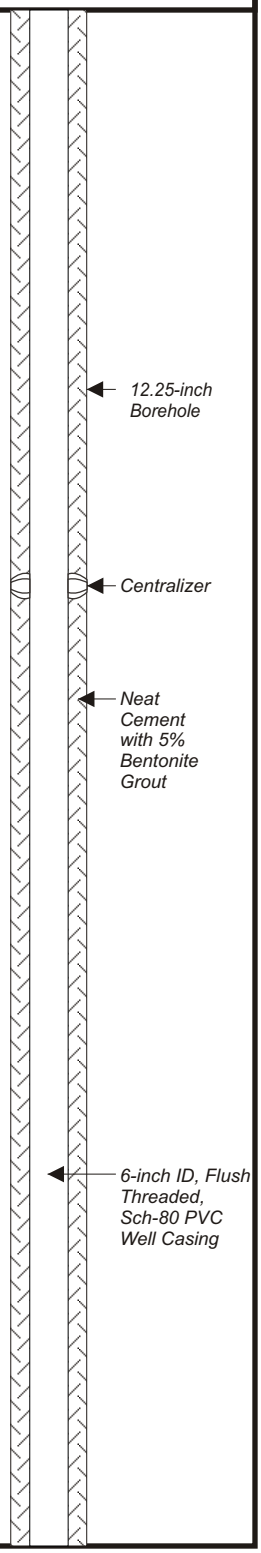


FIGURE B-4: LITHOLOGIC LOG FOR MONITOR WELL MW-40

MONITOR WELL MW-40

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *6/17/13 to 6/27/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		ML		SILT WITH SAND (0,20,80) Olive brown (2.5Y 4/3), low plasticity; sand: fine.
120	●		ML		SILT WITH SAND (0,15,85) Olive (5Y 4/3), low plasticity; sand: fine.
	●		ML		SANDY SILT (0,45,55) Light olive brown (2.5Y 5/3), medium plasticity; sand: fine.
130	●		ML		SANDY SILT (0,45,55) Light olive brown (2.5Y 5/3), medium plasticity; sand: fine to medium, predominantly fine.
	●		SM		SILTY SAND (0,60,40) Light olive brown (2.5Y 5/3), fine-grained, well sorted, rounded.
140	●		SM		Same as above.
	●		SM		Same as above.
150	●		ML		SANDY SILT (0,40,60) Olive (5Y 4/3), low plasticity; sand: fine.
	●		ML		Same as above.

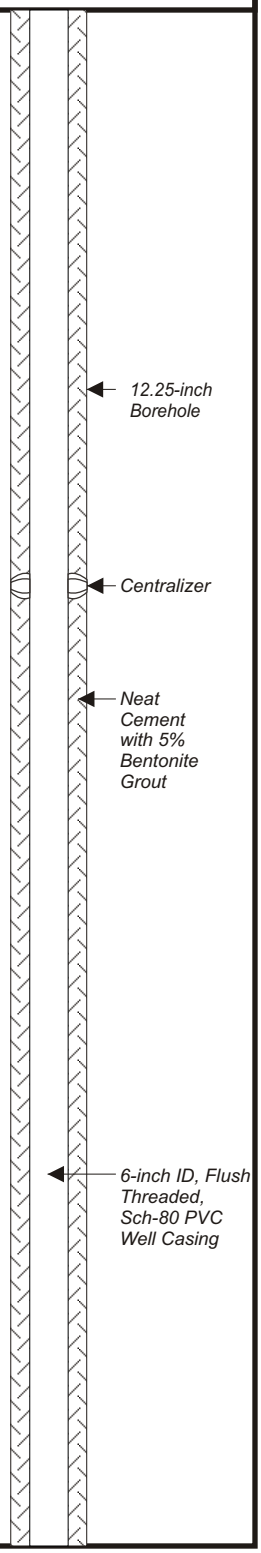


FIGURE B-4: LITHOLOGIC LOG FOR MONITOR WELL MW-40

MONITOR WELL MW-40

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *6/17/13 to 6/27/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
			ML		SANDY SILT continued.
160			ML		SANDY SILT (0,40,60) Light olive brown (2.5Y 5/4), low plasticity; sand: fine.
			ML		SANDY SILT (0,40,60) Light olive brown (2.5Y 5/4), medium plasticity; sand: fine.
170			SM		SILTY SAND (0,75,25) Light olive brown (2.5Y 5/4), fine- to coarse-grained, predominantly fine, well sorted, subangular to angular.
			SM		SILTY SAND (0,70,30) Light olive brown (2.5Y 5/4), fine- to coarse-grained, predominantly fine, well sorted, angular.
180			SW		SAND (0,95,5) Light olive brown (2.5Y 5/6), fine- to coarse-grained, poorly sorted, angular to subrounded.
			ML		SANDY SILT (0,35,65) Light olive brown (2.5Y 5/4), medium plasticity; sand: fine.
190			SM		SILTY SAND (tr,80,20) Light olive brown (2.5Y 5/4), fine- to coarse-grained, predominantly fine, well sorted, angular.
			ML		SANDY SILT See below..

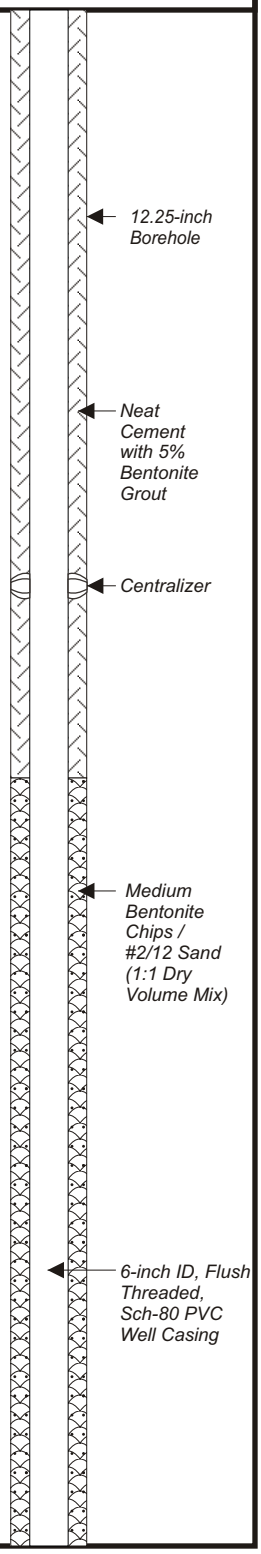
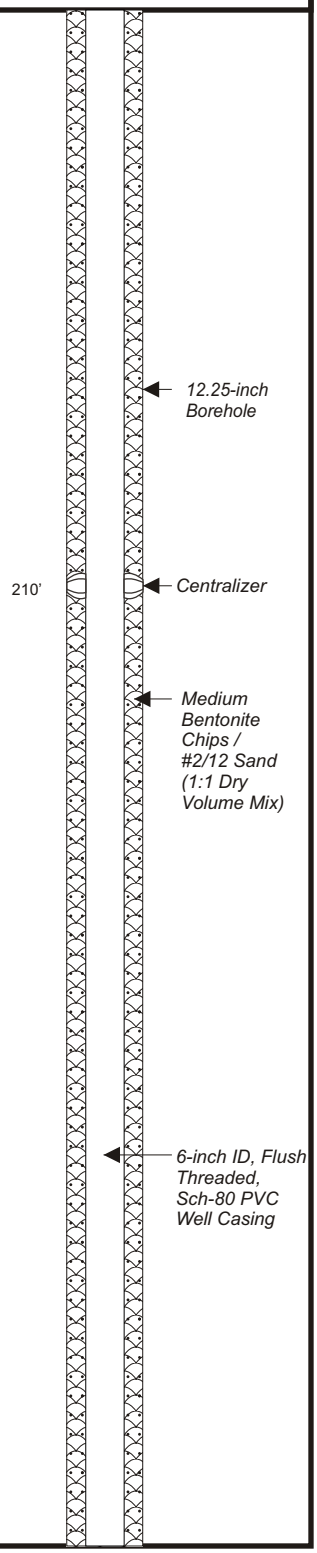


FIGURE B-4: LITHOLOGIC LOG FOR MONITOR WELL MW-40

MONITOR WELL MW-40

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *6/17/13 to 6/27/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		ML		SANDY SILT (0,35,65) Light olive brown (2.5Y 5/4), medium plasticity; sand: fine.
200	●		ML		SILT WITH SAND (0,15,85) Light olive brown (2.5Y 5/4), low plasticity; sand: fine.
	●		SM		SILTY SAND (0,60,40) Light olive brown (2.5Y 5/4), fine-grained, well sorted.
210					
	●		ML		SANDY SILT (0,25,75) Light olive brown (2.5Y 5/4), low plasticity; sand: fine.
220	●		ML		SILT WITH SAND (0,15,85) Light olive brown (2.5Y 5/4), low plasticity; sand: fine.
	●		ML		SANDY SILT (0,45,55) Olive brown (2.5Y 4/3), medium plasticity; sand: fine.
230	●		ML		SILT WITH SAND (0,20,80) Olive brown (2.5Y 4/3), low to medium plasticity.
	●		ML		SANDY SILT See below.



WELL CONSTRUCTION DIAGRAM

FIGURE B-4: LITHOLOGIC LOG FOR MONITOR WELL MW-40

MONITOR WELL MW-40

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *6/17/13 to 6/27/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		ML		SANDY SILT (0,30,70) Olive brown (2.5Y 4/4), medium plasticity.
240	●		SM		SILTY SAND (tr,55,45) Olive brown (2.5Y 4/4), fine- to coarse-grained, predominantly fine, well sorted, subrounded to subangular.
	●		SM		SILTY SAND (0,70,30) Dark olive gray (5Y 3/2), fine- to coarse-grained, predominantly fine, well sorted, subangular to subrounded.
250	●		ML		SILT WITH SAND (0,20,80) Very dark gray (5Y 3/1), medium plasticity.
	●		CL		CLAY (0,10,90) Very dark gray (5Y 3/1), medium to high plasticity.
260	●		ML		SANDY SILT (0,45,55) Grayish brown (2.5Y 5/2), low plasticity.
	●		ML		SANDY SILT (0,45,55) Grayish brown (2.5Y 5/2), medium plasticity.
270	●		SM		SILTY SAND (0,70,30) Olive brown (2.5Y 4/3), fine- to coarse-grained, predominantly fine to medium, moderately sorted, subangular to subrounded.
	●		CL		SANDY CLAY See below.

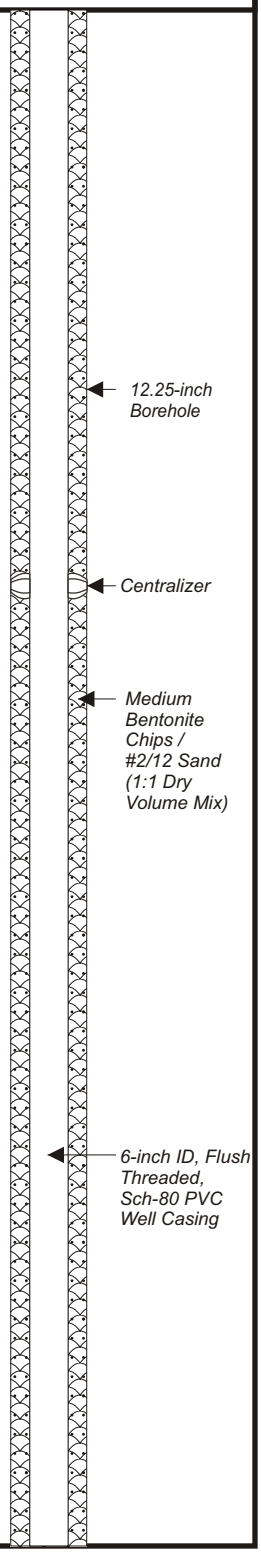
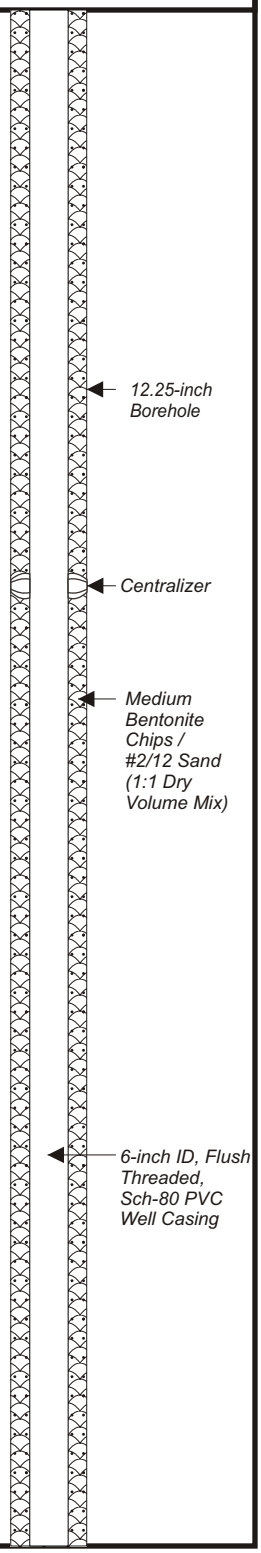


FIGURE B-4: LITHOLOGIC LOG FOR MONITOR WELL MW-40

MONITOR WELL MW-40

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *6/17/13 to 6/27/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		CL		SANDY CLAY (tr,30,70) Dark yellowish brown (10YR 4/4), medium plasticity; sand: fine.
280	●		CL		SANDY CLAY (0,30,70) Dark yellowish brown (10YR 4/4), medium plasticity.
	●		CL		CLAY (0,5,95) Brown (7.5YR 4/2), medium to high plasticity.
290	●		ML		SILT WITH SAND (0,20,80) Brown (7.5YR 5/2), low to medium plasticity; sand: fine.
	●		ML		SANDY SILT (0,25,75) Brown (10YR 4/3), low plasticity; sand: fine.
300	●		ML		SILT WITH SAND (0,15,85) Yellowish brown (10YR 5/4), low to medium plasticity.
	●		ML		SILT WITH SAND (0,20,80) Brown (10YR 4/3), low to medium plasticity.
310	●		CL		CLAY (0,10,90) Brown (10YR 4/3), medium to high plasticity.
	●		CL		CLAY WITH SAND See below.



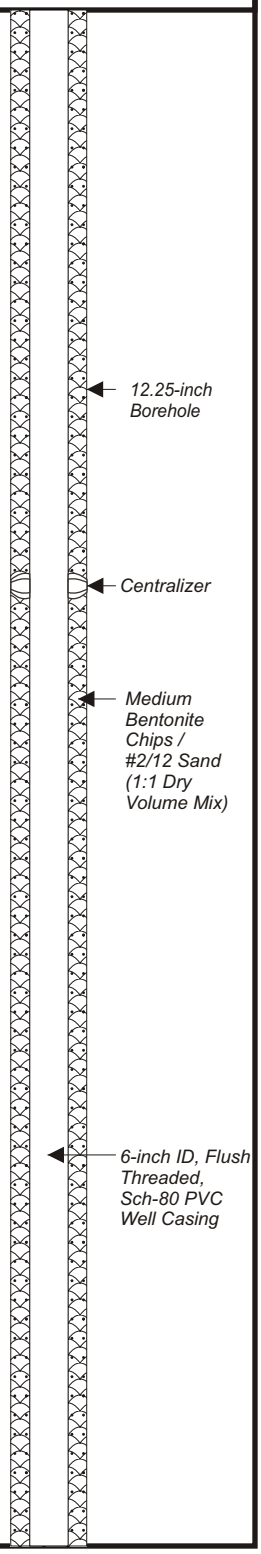
WELL CONSTRUCTION DIAGRAM

FIGURE B-4: LITHOLOGIC LOG FOR MONITOR WELL MW-40

MONITOR WELL MW-40

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *6/17/13 to 6/27/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		CL		CLAY WITH SAND (0,20,80) Yellowish brown (10YR 5/4), medium to high plasticity; sand: fine.
320	●		ML		SANDY SILT (0,30,70) Brown (10YR 4/3), low plasticity; sand: fine to medium, predominantly fine.
	●		CL		CLAY (0,5,95) Light olive brown (2.5Y 5/3), low to medium plasticity; sand: fine.
330	●		CL		CLAY (0,10,90) Light olive brown (2.5Y 5/3), medium plasticity; sand: fine to medium.
	●		SM		SILTY SAND (0,65,35) Light olive brown (2.5Y 5/3), fine- to medium-grained, moderately sorted, rounded to subangular.
340	●		SC		CLAYEY SAND (0,70,30) Light olive brown (2.5Y 5/3), fine- to coarse-grained, predominantly fine to medium, moderately sorted, angular to subrounded.
	●		SC		CLAYEY SAND (0,65,35) Light olive brown (2.5Y 5/3), fine- to coarse-grained, predominantly fine to medium, moderately sorted.
350	●		CL		SANDY CLAY (0,40,60) Light olive brown (2.5Y 5/3), medium plasticity; sand: fine to medium.
	●		SC		CLAYEY SAND See below.



WELL CONSTRUCTION DIAGRAM

FIGURE B-4: LITHOLOGIC LOG FOR MONITOR WELL MW-40

MONITOR WELL MW-40

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *6/17/13 to 6/27/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		SC		CLAYEY SAND (5,50,45) Light olive brown (2.5Y 5/3), fine- to coarse-grained, predominantly fine to medium, moderately sorted, rounded to subangular.
360	●		SC		CLAYEY SAND (0,65,35) Light olive brown (2.5Y 5/3), fine- to coarse-grained, predominantly fine to medium, moderately sorted.
	●		SM		SILTY SAND (0,75,25) Light olive brown (2.5Y 5/3), fine- to coarse-grained, predominantly medium, well sorted.
370	●		SM		SILTY SAND (0,80,20) Light olive brown (2.5Y 5/3), fine- to coarse-grained, predominantly medium, well sorted.
	●		SM		SILTY SAND (0,55,45) Olive brown (2.5Y 4/3), fine- to coarse-grained, predominantly fine to medium, well sorted, subrounded.
380	●		ML		SANDY SILT (0,45,55) Grayish brown (2.5Y 5/2), medium plasticity; sand: fine to medium.
	●		CL		SANDY CLAY (0,25,75) Olive brown (2.5Y 4/3), low to medium plasticity; sand: fine to medium.
390	●		CL		SANDY CLAY (0,25,75) Dark gray (5Y 4/1), low to medium plasticity; sand: fine to medium.
	●		CL		SANDY CLAY See below.

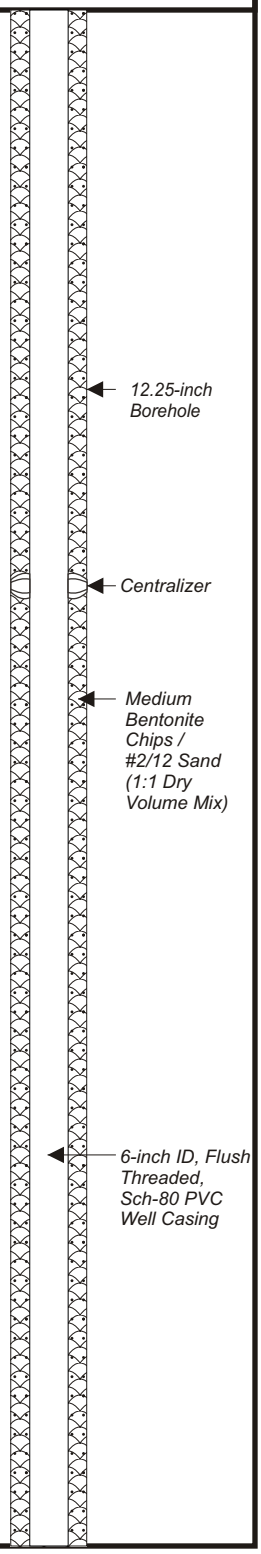
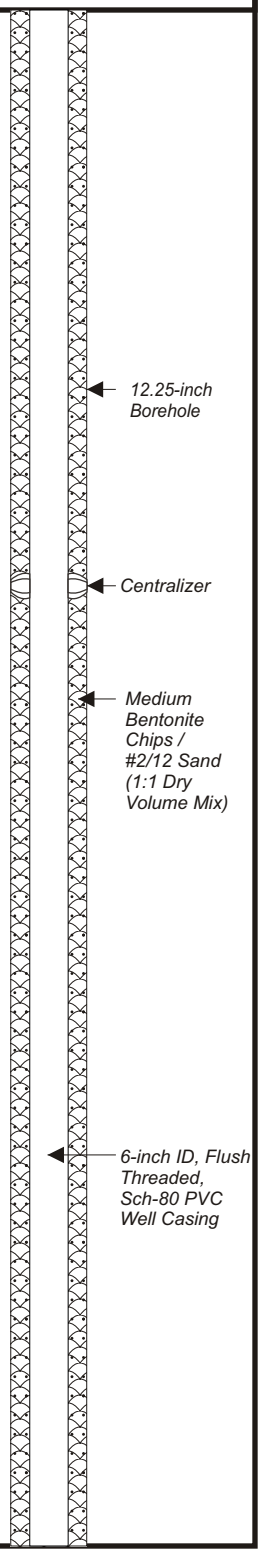


FIGURE B-4: LITHOLOGIC LOG FOR MONITOR WELL MW-40

MONITOR WELL MW-40

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *6/17/13 to 6/27/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		CL		SANDY CLAY (0,25,75) Dark gray (5Y 4/1), medium plasticity; sand: fine.
400	●		CL		SANDY CLAY (0,35,65) Dark grayish brown (2.5Y 4/2), medium plasticity; sand: fine.
	●		CL		SANDY CLAY (0,30,70) Grayish brown (2.5Y 5/2), medium plasticity; sand: fine.
410	●		SC		CLAYEY SAND (0,65,35) Olive brown (2.5Y 4/3), fine- to medium-grained, predominantly fine, well sorted, subangular.
	●		SC		CLAYEY SAND (0,55,45) Dark grayish brown (10YR 4/2), fine- to medium-grained, predominantly fine, well sorted, subrounded.
420	●		CL		SANDY CLAY (0,40,60) Dark grayish brown (10YR 4/2), medium plasticity; sand: fine.
	●		CL		SANDY CLAY (0,45,55) Dark grayish brown (10YR 4/2), low to medium plasticity; sand: fine to coarse, predominantly fine.
430	●		SC		CLAYEY SAND (0,60,40) Dark grayish brown (2.5Y 4/2), very fine- to fine-grained, well sorted.
	●		SM		SILTY SAND See below.



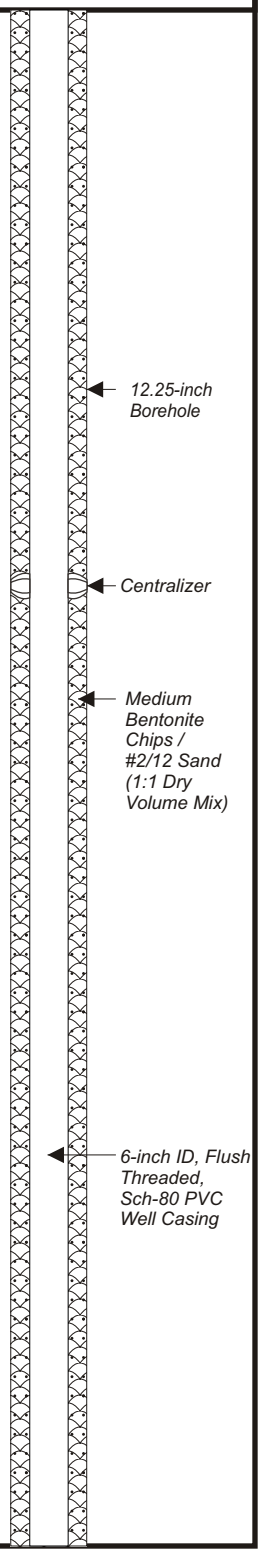
WELL CONSTRUCTION DIAGRAM

FIGURE B-4: LITHOLOGIC LOG FOR MONITOR WELL MW-40

MONITOR WELL MW-40

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *6/17/13 to 6/27/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		SM		SILTY SAND (0,60,40) Dark yellowish brown (10YR 4/4), very fine-grained, well sorted.
440	●		ML		SANDY SILT (0,40,60) Brown (10YR 4/3), low to medium plasticity.
	●		ML		SANDY SILT (0,40,60) Dark grayish brown (10YR 4/2), low plasticity; sand: very fine.
450	●		ML		SANDY SILT (0,35,65) Dark grayish brown (10YR 4/2), low to medium plasticity; sand: fine to medium.
	●		ML		SANDY SILT (0,30,70) Brown (10YR 4/3), low plasticity; sand: fine.
460	●		CL		SANDY CLAY (0,25,75) Brown (10YR 4/3), medium plasticity; sand: fine.
	●		CL		SANDY CLAY (0,30,70) Dark yellowish brown (10YR 4/4), medium plasticity; sand: fine.
470	●		CL		SANDY CLAY (0,40,60) Brown (10YR 4/3), low to medium plasticity; sand: fine.
	●		SC		CLAYEY SAND See below.



WELL CONSTRUCTION DIAGRAM

FIGURE B-4: LITHOLOGIC LOG FOR MONITOR WELL MW-40

MONITOR WELL MW-40

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *6/17/13 to 6/27/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		SC		CLAYEY SAND (0,70,30) Brown (10YR 4/3), fine- to medium-grained, predominantly fine, well sorted.
480	●		CL		SANDY CLAY (0,30,70) Yellowish brown (10YR 5/4), medium plasticity; sand: fine.
	●		ML		SANDY SILT (0,30,70) Yellowish brown (10YR 5/4), low to medium plasticity; sand: fine to medium, predominantly fine.
490	●		ML		SANDY SILT (0,25,75) Light olive brown (2.5Y 5/3), medium plasticity; sand: fine.
	●		CL		CLAY WITH SAND (0,15,85) Brown (10YR 5/3), medium to high plasticity; sand: fine.
500	●		CL		SANDY CLAY (0,35,65) Brown (10YR 5/3), medium to high plasticity; sand: fine.
	●		CL		SANDY CLAY (0,30,70) Brown (10YR 4/3), medium plasticity; sand: fine.
510	●		SC		CLAYEY SAND (0,55,45) Brown (10YR 4/3), fine- to coarse-grained, predominantly fine to medium, moderately sorted, subangular.
	●		CL		SANDY CLAY See below.

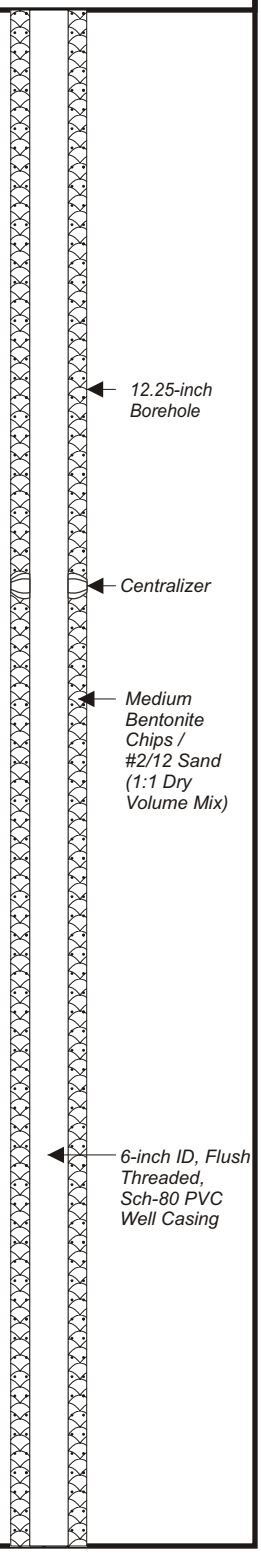
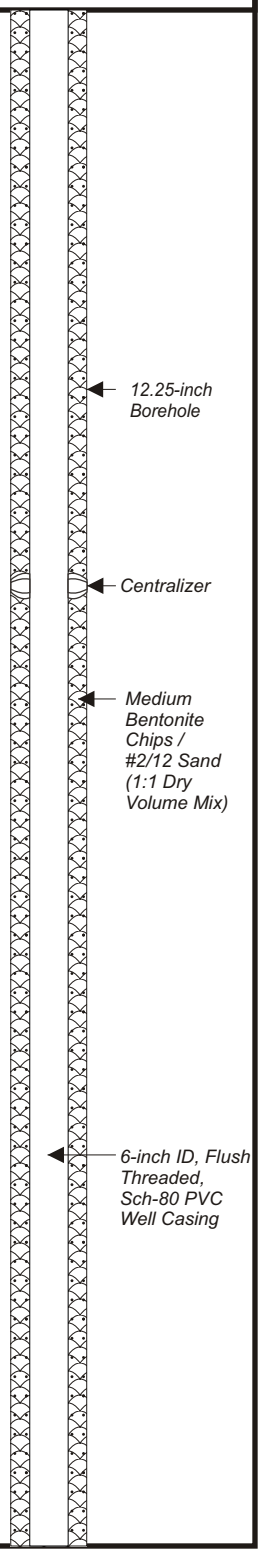


FIGURE B-4: LITHOLOGIC LOG FOR MONITOR WELL MW-40

MONITOR WELL MW-40

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *6/17/13 to 6/27/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		CL		SANDY CLAY (0,35,65) Brown (10YR 4/3), medium plasticity; sand: fine.
520	●		CL		SANDY CLAY (0,25,75) Dark yellowish brown (10YR 4/4), medium plasticity; sand: fine.
	●		SC		CLAYEY SAND (0,55,45) Dark yellowish brown (10YR 4/4), fine-grained, well sorted.
530	●		SC		Same as above.
	●		CL		CLAY WITH SAND (0,20,80) Dark yellowish brown (10YR 4/4), medium to high plasticity.
540	●		SC		CLAYEY SAND (0,55,45) Yellowish brown (10YR 5/4), fine-grained, well sorted.
	●		CL		SANDY CLAY (0,45,55) Yellowish brown (10YR 5/4), medium plasticity; sand: fine to medium, predominantly fine.
550	●		SC		CLAYEY SAND (0,60,40) Yellowish brown (10YR 5/4), fine-grained, well sorted.
	●		ML		SANDY SILT See below.



WELL CONSTRUCTION DIAGRAM

FIGURE B-4: LITHOLOGIC LOG FOR MONITOR WELL MW-40

MONITOR WELL MW-40

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *6/17/13 to 6/27/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		ML		SANDY SILT (0,40,60) Olive brown (2.5Y 4/4), medium plasticity; sand: fine.
560	●		ML		SANDY SILT (0,45,55) Olive brown (2.5Y 4/4), medium plasticity; sand: fine.
	●		SC		CLAYEY SAND (0,55,45) Dark yellowish brown (10YR 4/4), fine-grained, well sorted.
570	●		CL		SANDY CLAY (0,30,70) Olive brown (2.5Y 4/4), medium plasticity; sand: fine.
	●		CL		SANDY CLAY (0,45,55) Olive brown (2.5Y 4/4), medium plasticity; sand: fine.
580	●		CL		CLAY WITH SAND (0,20,80) Olive brown (2.5Y 4/4), medium to high plasticity; sand: fine.
	●		CL		CLAY WITH SAND (0,15,85) Olive brown (2.5Y 4/4), medium to high plasticity; sand: fine.
590	●		SC		CLAYEY SAND (0,55,45) Olive brown (2.5Y 4/4), fine-grained, well sorted.
	●		CL		SANDY CLAY See below.

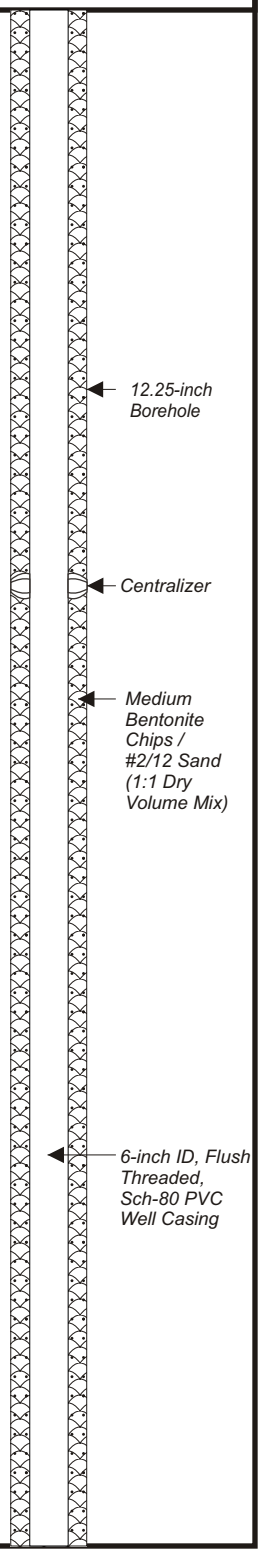


FIGURE B-4: LITHOLOGIC LOG FOR MONITOR WELL MW-40

MONITOR WELL MW-40

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *6/17/13 to 6/27/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		CL		SANDY CLAY (0,45,55) Dark yellowish brown (10YR 4/4), medium plasticity; sand: fine to coarse, predominantly fine to medium.
600	●		CL		SANDY CLAY (0,40,60) Dark yellowish brown (10YR 3/4), medium plasticity; sand: fine.
	●		CL		SANDY CLAY (0,25,75) Dark yellowish brown (10YR 3/4), medium plasticity; sand: fine to medium.
610	●		CL		SANDY CLAY (0,25,75) Dark yellowish brown (10YR 3/4), medium plasticity; sand: fine.
	●		CL		SANDY CLAY (0,40,60) Dark yellowish brown (10YR 3/4), medium to high plasticity; sand: fine.
620	●		CL		SANDY CLAY (0,40,60) Dark yellowish brown (10YR 4/4), medium plasticity; sand: fine.
	●		SC		CLAYEY SAND (0,55,45) Yellowish brown (10YR 5/4), fine-grained, well sorted.
630	●		CL		CLAY WITH SAND (0,15,85) Yellowish brown (10YR 5/4), medium to high plasticity; sand: fine.
	●		CL		SANDY CLAY See below.

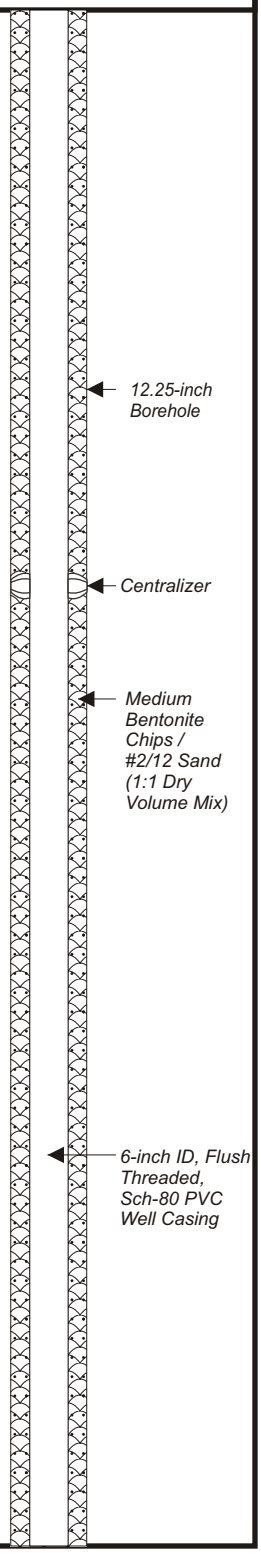


FIGURE B-4: LITHOLOGIC LOG FOR MONITOR WELL MW-40

MONITOR WELL MW-40

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *6/17/13 to 6/27/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		CL		SANDY CLAY (0,30,70) Light olive brown (2.5Y 5/3), medium to high plasticity; sand: fine to medium, predominantly fine.
640	●		SC		CLAYEY SAND (0,70,30) Olive gray (5Y 4/2), fine- to coarse-grained, poorly sorted.
	●		SC		CLAYEY SAND (0,80,20) Olive gray (5Y 4/2), medium- to coarse-grained, moderately sorted, subangular to rounded.
650	●		CL		SANDY CLAY (0,30,70) Olive gray (5Y 5/2), medium plasticity.
	●		CL		SANDY CLAY (0,35,65) Olive gray (5Y 5/2), medium plasticity; sand: fine to medium, predominantly fine.
660	●		CL		SANDY CLAY (0,30,70) Light olive brown (2.5Y 5/3), medium plasticity; sand: fine to medium, predominantly fine.
	●		CL		Same as above..
670	●		ML		SANDY SILT (0,30,70) Olive brown (2.5Y 4/4), low to medium plasticity; sand: fine to medium, predominantly fine.
	●		CL		CLAY WITH SAND See below.

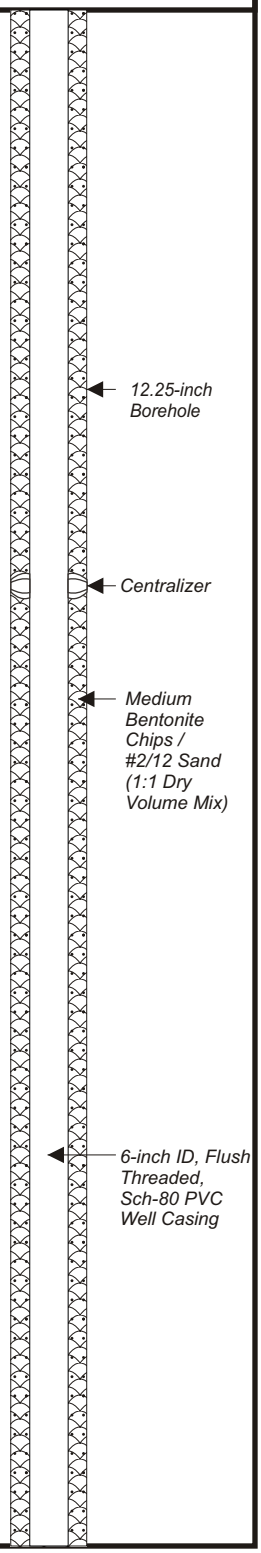


FIGURE B-4: LITHOLOGIC LOG FOR MONITOR WELL MW-40

MONITOR WELL MW-40

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *6/17/13 to 6/27/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		CL		CLAY WITH SAND (0,20,80) Light olive brown (2.5Y 5/3), medium plasticity; sand: fine to coarse, predominantly fine.
680	●		CL		CLAY WITH SAND (0,20,80) Brown (10YR 5/3), medium plasticity; sand: fine to medium, predominantly fine.
	●		CL		CLAY WITH SAND (0,15,85) Dark greenish gray (10BG 4/), medium plasticity; sand: fine to medium.
690	●		CL		SANDY CLAY (0,35,65) Light olive brown (2.5Y 5/3), medium plasticity; sand: fine to medium, predominantly fine.
	●		CL		SANDY CLAY (0,45,55) otherwise same as above.
700	●		CL		SANDY CLAY (0,35,65) Light olive brown (2.5Y 5/3), medium plasticity; sand fine.
	●		CL		CLAY WITH SAND (0,20,80) Grayish brown (10YR 5/2), medium plasticity; sand: fine.
710	●		SC		CLAYEY SAND (0,55,45) Grayish brown (10YR 5/2), fine- to coarse-grained, poorly sorted.
	●		SC		CLAYEY SAND See below.

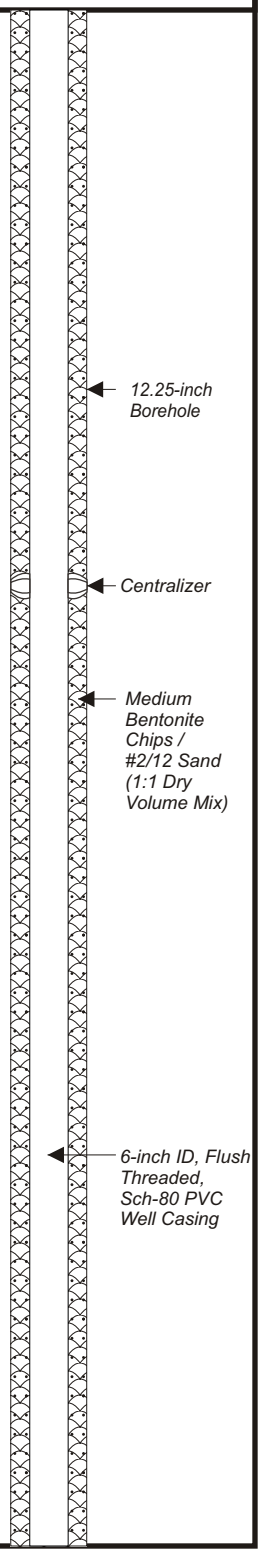


FIGURE B-4: LITHOLOGIC LOG FOR MONITOR WELL MW-40

MONITOR WELL MW-40

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *6/17/13 to 6/27/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		SC		CLAYEY SAND (tr,80,20) Grayish brown (10YR 5/2), fine- to coarse-grained, predominantly medium, well sorted, subangular to subrounded.
720	●		SC		CLAYEY SAND (tr,85,15) Grayish brown (10YR 5/2), fine- to coarse-grained, poorly sorted.
	●		CL		SANDY CLAY (0,35,65) Grayish brown (10YR 5/2), medium plasticity; sand: fine to coarse, predominantly fine to medium.
730	●		ML		SILT (0,10,90) Light olive brown (2.5Y 5/4), low to medium plasticity; sand: fine to medium, predominantly fine.
	●		CL		SANDY CLAY (0,30,70) Light olive brown (2.5Y 5/3), medium plasticity; sand: fine to coarse, predominantly fine to medium.
740	●		SC		CLAYEY SAND (0,70,30) Light olive brown (2.5Y 5/3), fine- to medium-grained, predominantly fine, well sorted, subangular.
	●		CL		SANDY CLAY (0,45,55) Light olive brown (2.5Y 5/3), medium plasticity; sand: fine to medium, predominantly fine.
750	●		CL		SANDY CLAY (0,40,60) Light olive brown (2.5Y 5/3), medium plasticity; sand: fine to medium, predominantly fine.
	●		CL		CLAY See below.

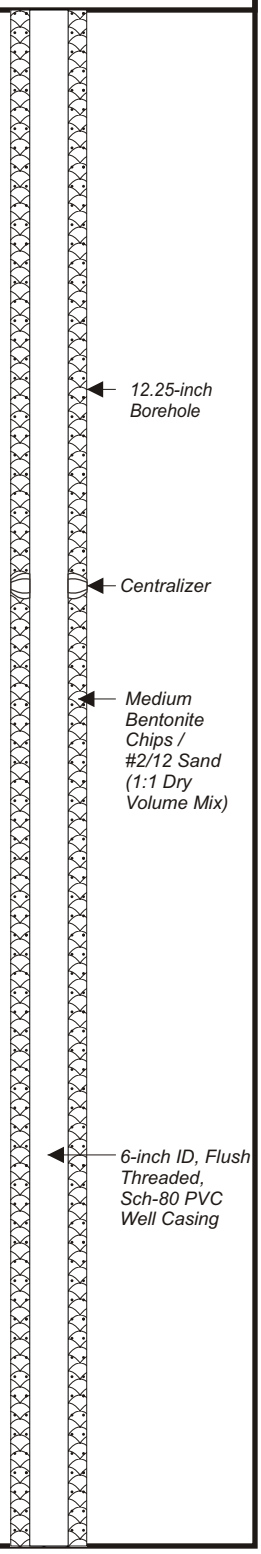


FIGURE B-4: LITHOLOGIC LOG FOR MONITOR WELL MW-40

MONITOR WELL MW-40

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *6/17/13 to 6/27/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		CL		CLAY (0,5,95) Dark greenish gray (5GY 4/), medium plasticity; sand: very fine to fine.
760	●		CL		Same as above.
	●		CL		SANDY CLAY (0,30,70) Dark greenish gray (5GY 4/), medium plasticity; sand: fine to coarse, predominantly fine to medium.
770	●		CL		SANDY CLAY (0,45,55) Gray (10Y 3/), medium plasticity; sand: fine to coarse.
	●		SC		CLAYEY SAND (tr,55,45) Dark grayish brown (10YR 4/2), fine- to coarse-grained, poorly sorted.
780					
	●		CL		SANDY CLAY (0,30,70) Grayish brown (2.5Y 5/2), medium plasticity; sand: fine to medium, predominantly fine.
790	●		CL		SANDY CLAY (0,40,60) Dark grayish brown (2.5Y 4/2), medium to high plasticity; sand: fine to medium, predominantly fine.
	●		CL		SANDY CLAY See below.

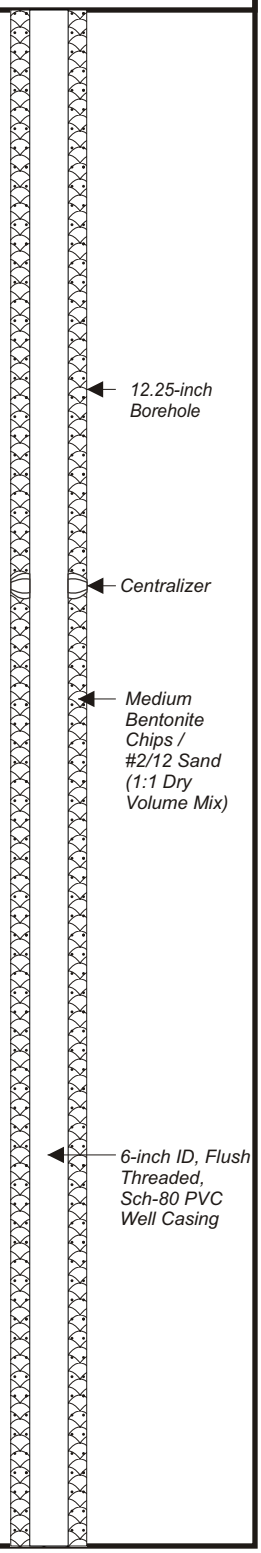


FIGURE B-4: LITHOLOGIC LOG FOR MONITOR WELL MW-40

MONITOR WELL MW-40

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *6/17/13 to 6/27/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		CL		SANDY CLAY (0,40,60) Dark grayish brown (2.5Y 4/2), medium to high plasticity; sand: fine to medium, predominantly fine.
800	●		CL		CLAY WITH SAND (0,20,80) Dark grayish brown (2.5Y 4/2), medium plasticity; sand: fine to medium, predominantly fine.
	●		CL		CLAY WITH SAND (0,15,85) Grayish brown (2.5Y 5/2), high plasticity; sand: fine to medium, predominantly fine.
810					
	●		CL		SANDY CLAY (tr,45,55) Olive brown (2.5Y 4/3), medium plasticity; sand: fine.
820	●		ML		SANDY SILT (0,45,55) Grayish brown (2.5Y 5/2), medium plasticity; sand: fine to coarse, predominantly fine to medium.
	●		ML		SANDY SILT (0,30,70) Grayish brown (2.5Y 5/2), medium plasticity; sand: fine to coarse, predominantly fine.
830	●		CL		SANDY CLAY (0,30,70) Olive brown (2.5Y 4/3), medium plasticity sand: fine to medium.
	●		CL		SANDY CLAY See below.

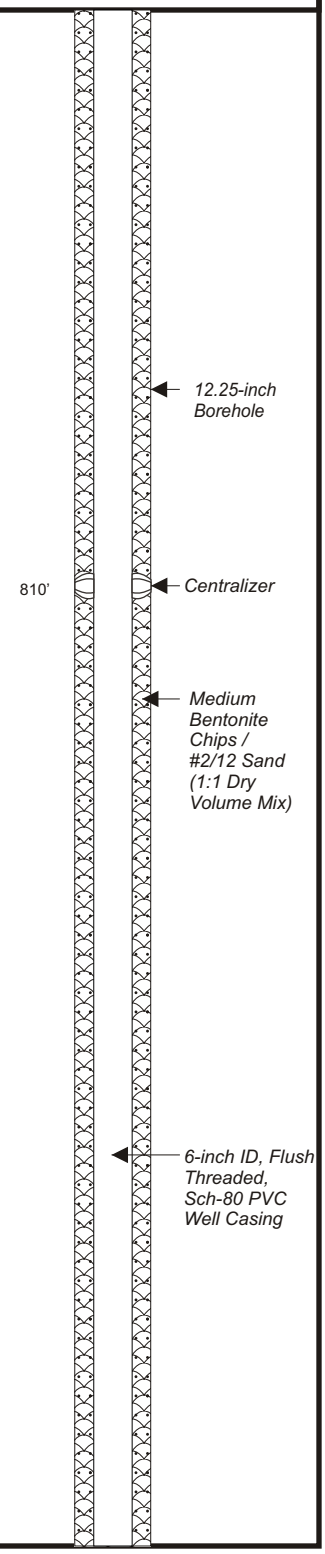


FIGURE B-4: LITHOLOGIC LOG FOR MONITOR WELL MW-40

MONITOR WELL MW-40

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *6/17/13 to 6/27/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		CL		SANDY CLAY (0,35,65) Olive brown (2.5Y 4/4), medium plasticity; sand: fine to medium, predominantly fine.
840	●		SC		CLAYEY SAND (0,55,45) Light olive brown (2.5Y 5/3), fine- to medium-grained, predominantly fine, well sorted.
	●		SC		CLAYEY SAND (0,55,45) Light olive brown (2.5Y 5/3), fine-grained, well sorted.
850	●		SC		CLAYEY SAND (0,55,45) Light olive brown (2.5Y 5/3), fine- to medium-grained, predominantly fine, well sorted.
	●		CL		SANDY CLAY (0,35,65) Light olive brown (2.5Y 5/3), low to medium plasticity; sand: fine to medium, predominantly fine.
860	●		SM		SILTY SAND (0,60,40) Light olive brown (2.5Y 5/3), fine- to medium-grained, well sorted.
	●		SM		SILTY SAND fine- to coarse-grained, moderately sorted, otherwise same as above.
870	●		SC		CLAYEY SAND (0,70,30) Light olive brown (2.5Y 5/3), fine- to medium-grained, well sorted.
	●		SC		CLAYEY SAND See below.

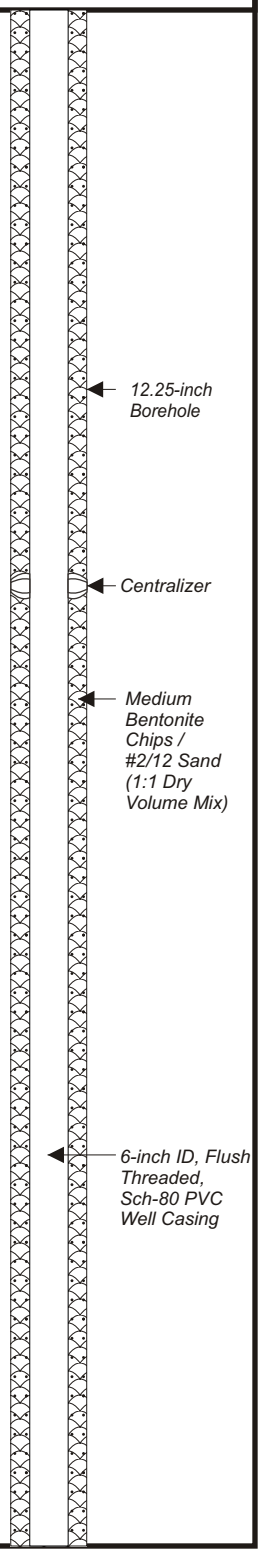
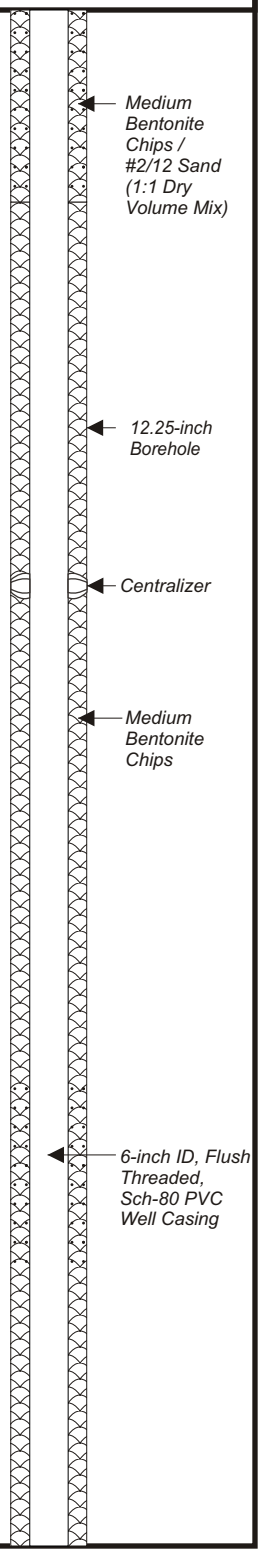


FIGURE B-4: LITHOLOGIC LOG FOR MONITOR WELL MW-40

MONITOR WELL MW-40

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *6/17/13 to 6/27/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		SC		CLAYEY SAND (0,55,45) Light olive brown (2.5Y 5/4), fine- to medium-grained, predominantly fine, well sorted.
880	●		SC		CLAYEY SAND (0,60,40) Light olive brown (2.5Y 5/3), fine- to medium-grained, predominantly fine, well sorted.
	●		SC		Same as above.
890	●		ML		SANDY SILT (0,25,75) Light olive brown (2.5Y 5/4), low to medium plasticity; sand: fine.
	●		SM		SILTY SAND (0,55,45) Light olive brown (2.5Y 5/4), fine- to medium-grained, predominantly fine, well sorted.
900	●		CL		SANDY CLAY (0,40,60) Olive brown (2.5Y 4/3), medium plasticity; sand: fine to medium.
	●		CL		SANDY CLAY (0,35,65) Olive brown (2.5Y 4/3), medium plasticity; sand: fine to coarse.
910	●		SC		CLAYEY SAND (0,65,35) Light olive brown (2.5Y 5/3), fine- to coarse-grained, poorly sorted, subrounded.
	●		SC		CLAYEY SAND See below.



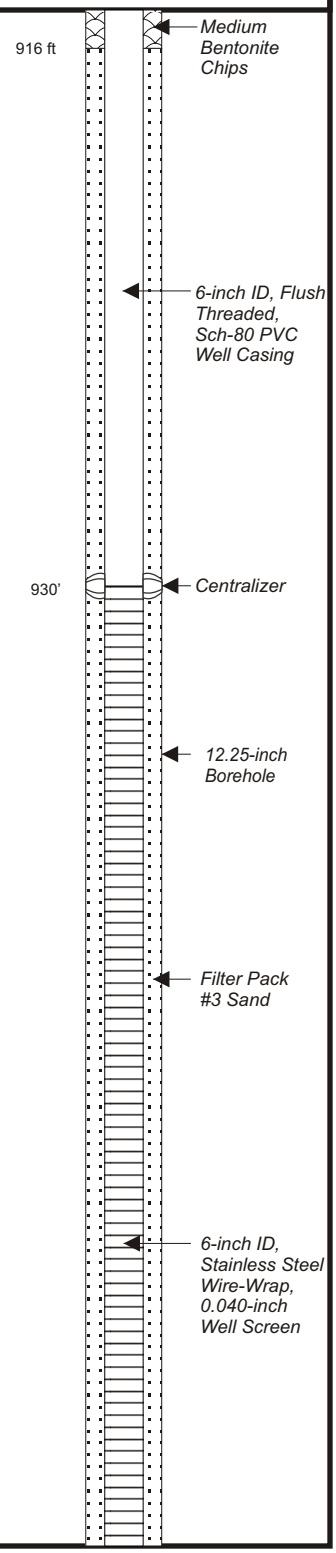
WELL CONSTRUCTION DIAGRAM

FIGURE B-4: LITHOLOGIC LOG FOR MONITOR WELL MW-40

MONITOR WELL MW-40

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *6/17/13 to 6/27/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		SC		CLAYEY SAND (0,60,40) Light olive brown (2.5Y 5/3), fine- to medium-grained, well sorted, subangular to subrounded.
920	●		SC		CLAYEY SAND (0,60,40) Light olive brown (2.5Y 5/3), fine- to coarse-grained, predominantly fine to medium, well sorted, subrounded.
	●		CL		SANDY CLAY (0,40,60) Light olive gray (5Y 6/2), medium plasticity; sand: fine to medium; sand fine to medium, predominantly fine.
930	●		SC		CLAYEY SAND (0,60,40) Light olive brown (2.5Y 5/3), fine- to coarse-grained, predominantly fine, well sorted.
	●		SC		Same as above.
940	●		SC		CLAYEY SAND (0,70,30) Light olive brown (2.5Y 5/3), fine- to medium-grained, predominantly fine, well sorted.
	●		SC		CLAYEY SAND (0,65,35) Light olive brown (2.5Y 5/3), fine- to medium-grained, predominantly fine, well sorted.
950	●		SM		SILTY SAND (0,65,35) Light olive brown (2.5Y 5/3), fine- to medium-grained, predominantly fine, well sorted.
	●		SM		SILTY SAND See below.



WELL CONSTRUCTION DIAGRAM

FIGURE B-4: LITHOLOGIC LOG FOR MONITOR WELL MW-40

MONITOR WELL MW-40

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *6/17/13 to 6/27/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL
	●		SM		SILTY SAND (0,60,40) Light olive brown (2.5Y 5/3), fine- to medium-grained, well sorted.
960	●		SM		SILTY SAND (0,70,30) Light olive brown (2.5Y 5/3), fine- to coarse-grained, poorly sorted, subangular to subrounded.
	●		SM		SILTY SAND (0,75,25) Olive gray (5Y 5/2), fine- to coarse-grained, poorly sorted.
970	●		SC		CLAYEY SAND (0,80,20) Light olive brown (2.5Y 5/3), fine- to coarse-grained, poorly sorted, subrounded.
	●		SW-SC		SAND WITH CLAY (0,90,10) Light olive brown (2.5Y 5/3), fine- to coarse-grained, poorly sorted, subangular to rounded.
980	●		ML		SILT WITH SAND (0,20,80) Greenish gray (10Y 5/), medium plasticity; sand: fine to medium.
	●		ML		SANDY SILT (0,40,60) Greenish gray (10Y 5/), low to medium plasticity; sand: fine to medium, predominantly fine.
990	●		CL		CLAY (0,10,90) Greenish gray (10Y 5/), medium to high plasticity; sand: fine to medium.
	●		CL		SANDY CLAY See below.

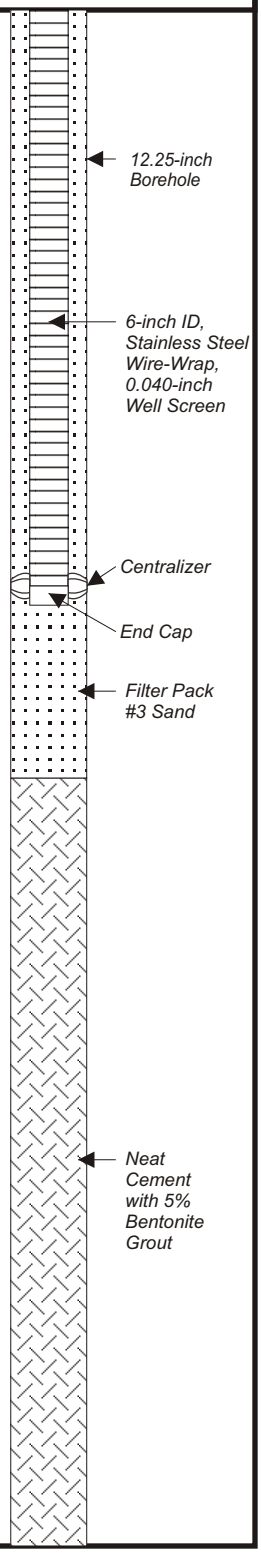


FIGURE B-4: LITHOLOGIC LOG FOR MONITOR WELL MW-40

MONITOR WELL MW-40

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *6/17/13 to 6/27/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL	WELL CONSTRUCTION DIAGRAM
	●		CL		SANDY CLAY (0,25,75) Greenish gray (10Y 5/), medium plasticity; sand: fine to medium.	
1000	●		ML		SANDY SILT (0,25,75) Olive gray (5Y 4/2), medium plasticity; sand: fine to medium.	
	●		CL		CLAY (0,5,95) Greenish gray (10Y 5/), medium plasticity; sand: fine to medium, predominantly fine.	
1010	●		CL		SANDY CLAY (0,25,75) Dark greenish gray (10Y 4/), medium plasticity; sand: fine.	
	●		CL		SANDY CLAY (0,25,75) Greenish gray (5GY 5/), medium plasticity; sand: fine to medium, predominantly fine.	
1020	●		CL		CLAY (0,10,90) Olive (5Y 5/3), medium plasticity; sand: very fine to fine.	
1030	●		CL		CLAY WITH SAND (0,20,80) Olive gray (5Y 5/2), medium plasticity.	
	●		CL		CLAY See below.	

FIGURE B-4: LITHOLOGIC LOG FOR MONITOR WELL MW-40

MONITOR WELL MW-40

PROJECT NAME: *Raytheon - Fullerton*
PROJECT NUMBER: *532.03*
DATE DRILLED: *6/17/13 to 6/27/13*

DEPTH (feet)	SAMPLE	RECOVERY	USCS	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL	WELL CONSTRUCTION DIAGRAM
	●		CL		CLAY (0,10,90) Olive brown (2.5Y 4/3), medium plasticity.	
1040					TOTAL DEPTH OF BORING = 1040 FEET BELOW LAND SURFACE	1040'
1050						
1060						
1070						

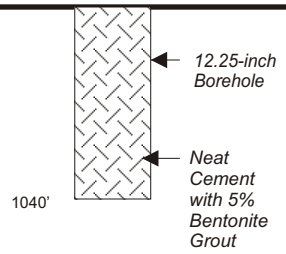


FIGURE B-4: LITHOLOGIC LOG FOR MONITOR WELL MW-40

APPENDIX C

GEOPHYSICAL LOGS

PACIFIC SURVEYS

CALIPER
BOREHOLE VOLUMES

Job No.
17501

File No.

Company HARGIS & ASSOCIATES, INC.
Well MW-39
Field BUENA PARK
County ORANGE State CA

Location:

MALVERN AVE & DALE ST
GPS: 33o 52.639' W117o 59.202'

Sec. Twp. Rge.

Other Services:

ELOG
GR/LL3

Permanent Datum	G.L.	Elevation above perm. datum	Elevation K.B.
Log Measured From	G.L.	0'	D.F.
Drilling Measured From	G.L.		G.L.

Date	7-18-2013		
Run Number	TWO		
Depth Driller	1080'		
Depth Logger	1081'		
Bottom Logged Interval	1081'		
Top Log Interval	0'		
Casing Driller	13 3/8" @40'		
Casing Logger	40'		
Bit Size	12.25"		
Type Fluid in Hole	BENTONITE		
Density / Viscosity	N/A		
pH / Fluid Loss	N/A		
Source of Sample	PIT		
Rm @ Meas. Temp	8.0 @ 77F		
Rmf @ Meas. Temp	7.84 @ 77F		
Rmc @ Meas. Temp	N/A		
Source of Rmf / Rmc	MEASURE		
Rm @ BHT	N/A		
Time Circulation Stopped	11:00		
Time Logger on Bottom	12:45		
Max. Recorded Temperature	N/A		
Equipment Number	PS-5		
Location	LA		
Recorded By	WATKINS		
Witnessed By	G. WAGGLE		

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Comments

Calibration Report

Database File 17501.db
Dataset Pathname cal.1
Dataset Creation Thu Jul 18 16:47:56 2013

Temperature Calibration Report

Serial Number:	PS-5_Short
Tool Model:	GRPH_CAL
Performed:	Fri Mar 22 16:43:47 2013

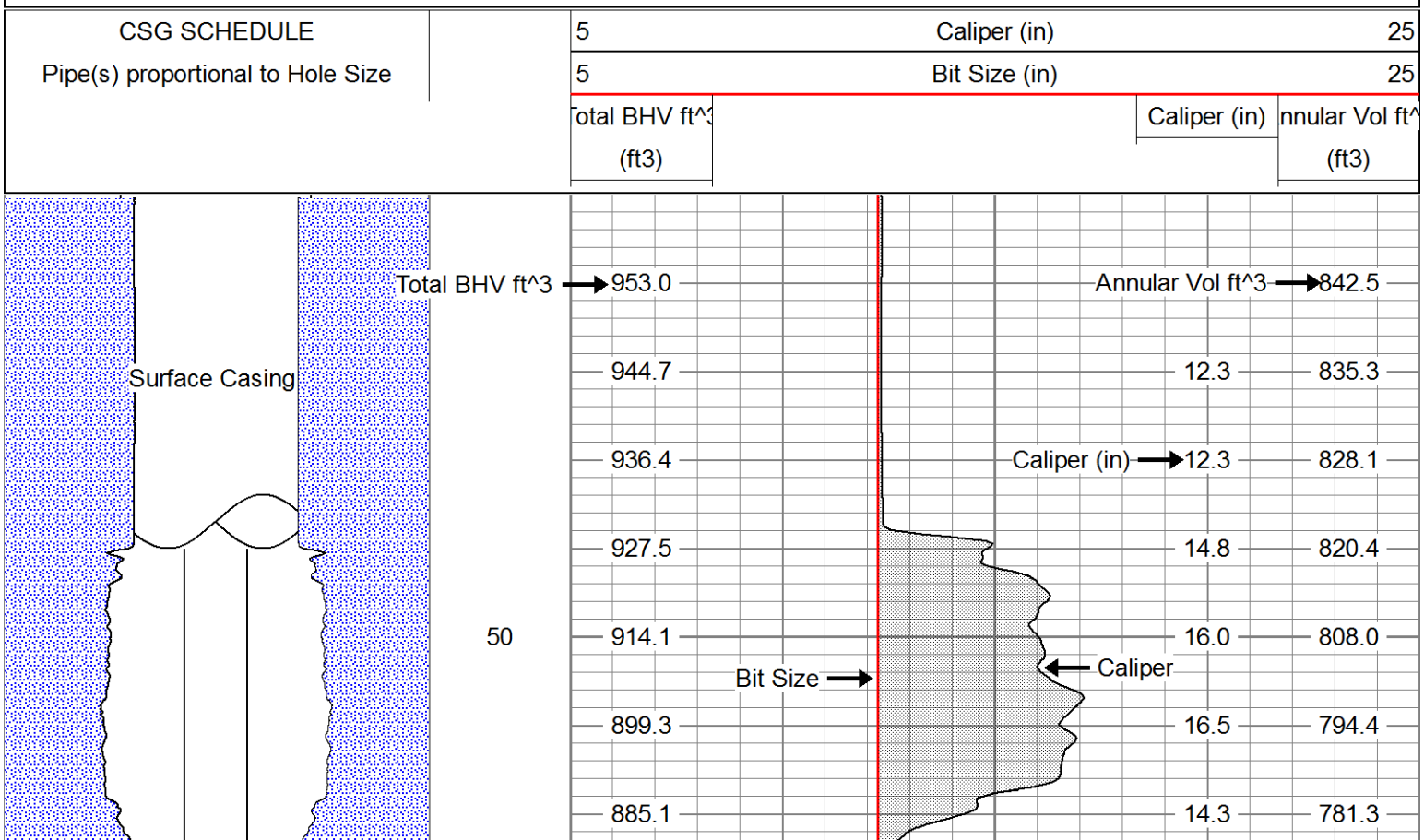
Point #	Reading		Reference	
1	2417.53	cps	4.00	degF
2	9014.71	cps	12.00	degF
3		cps		degF
4		cps		degF
5		cps		degF
6		cps		degF
7		cps		degF
8		cps		degF
9		cps		degF
10		cps		degF

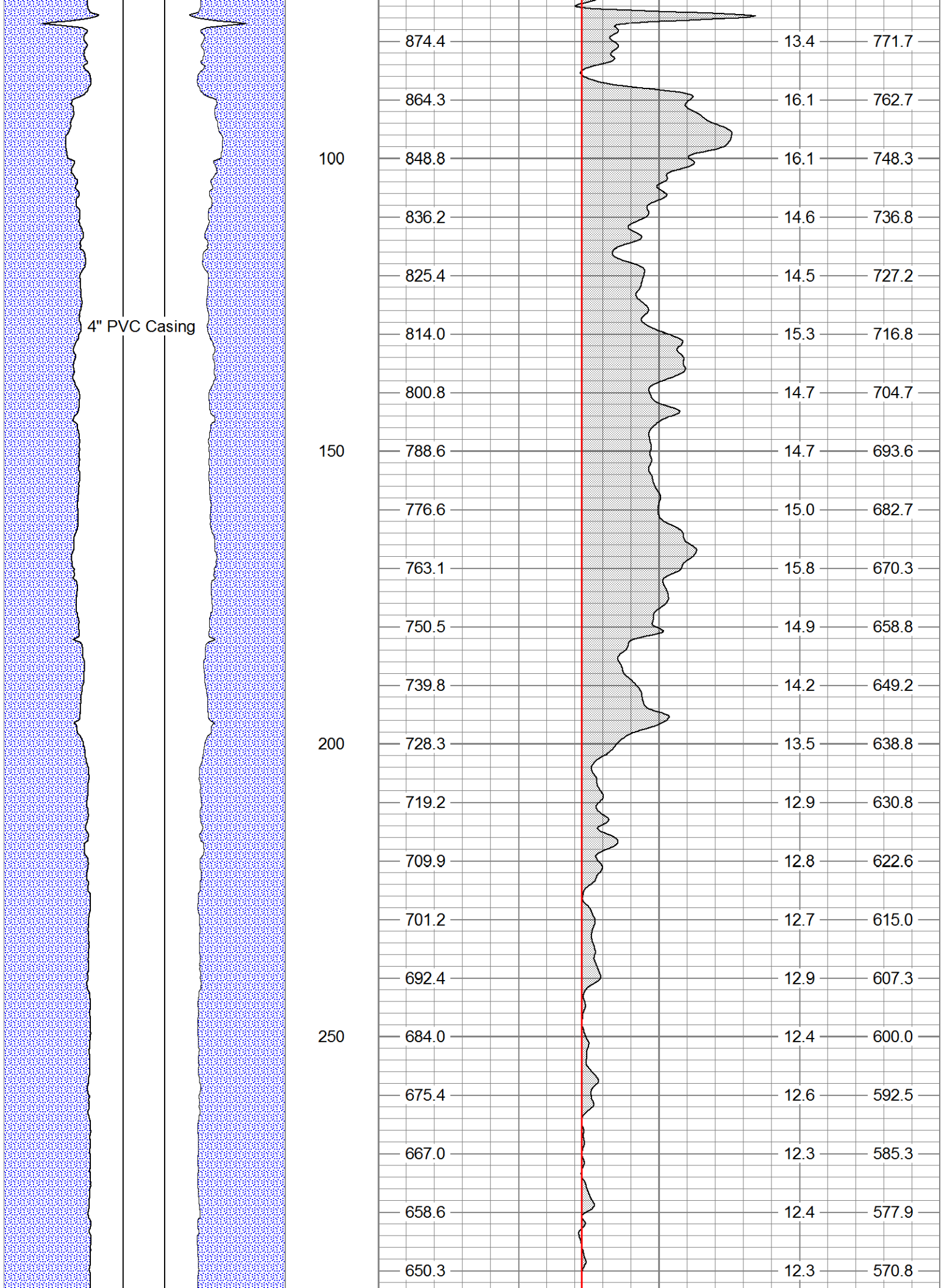
XY Caliper Calibration Report

Serial Number/Model:	PS-5_Short-Allen
Performed:	Fri Mar 22 15:52:21 2013

Ring			X Caliper		Y Caliper	
1:	4	in	1000.32	cps	1000.32	cps
2:	6	in	1609.48	cps	1609.48	cps
3:	8	in	2417.53	cps	2417.53	cps
4:	10	in	3266.45	cps	3266.45	cps
5:	16	in	5700	cps	5700	cps
6:	24	in	9014.71	cps	9014.71	cps

Database File	17501.db
Dataset Pathname	cal.1
Presentation Format	xyc_gph
Dataset Creation	Thu Jul 18 16:47:56 2013
Charted by	Depth in Feet scaled 1:240




4" PVC Casing
100
150
200
250
874.4
13.4
771.7
864.3
16.1
762.7
848.8
16.1
748.3
836.2
14.6
736.8
825.4
14.5
727.2
814.0
15.3
716.8
800.8
14.7
704.7
788.6
14.7
693.6
776.6
15.0
682.7
763.1
15.8
670.3
750.5
14.9
658.8
739.8
14.2
649.2
728.3
13.5
638.8
719.2
12.9
630.8
709.9
12.8
622.6
701.2
12.7
615.0
692.4
12.9
607.3
684.0
12.4
600.0
675.4
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667.0
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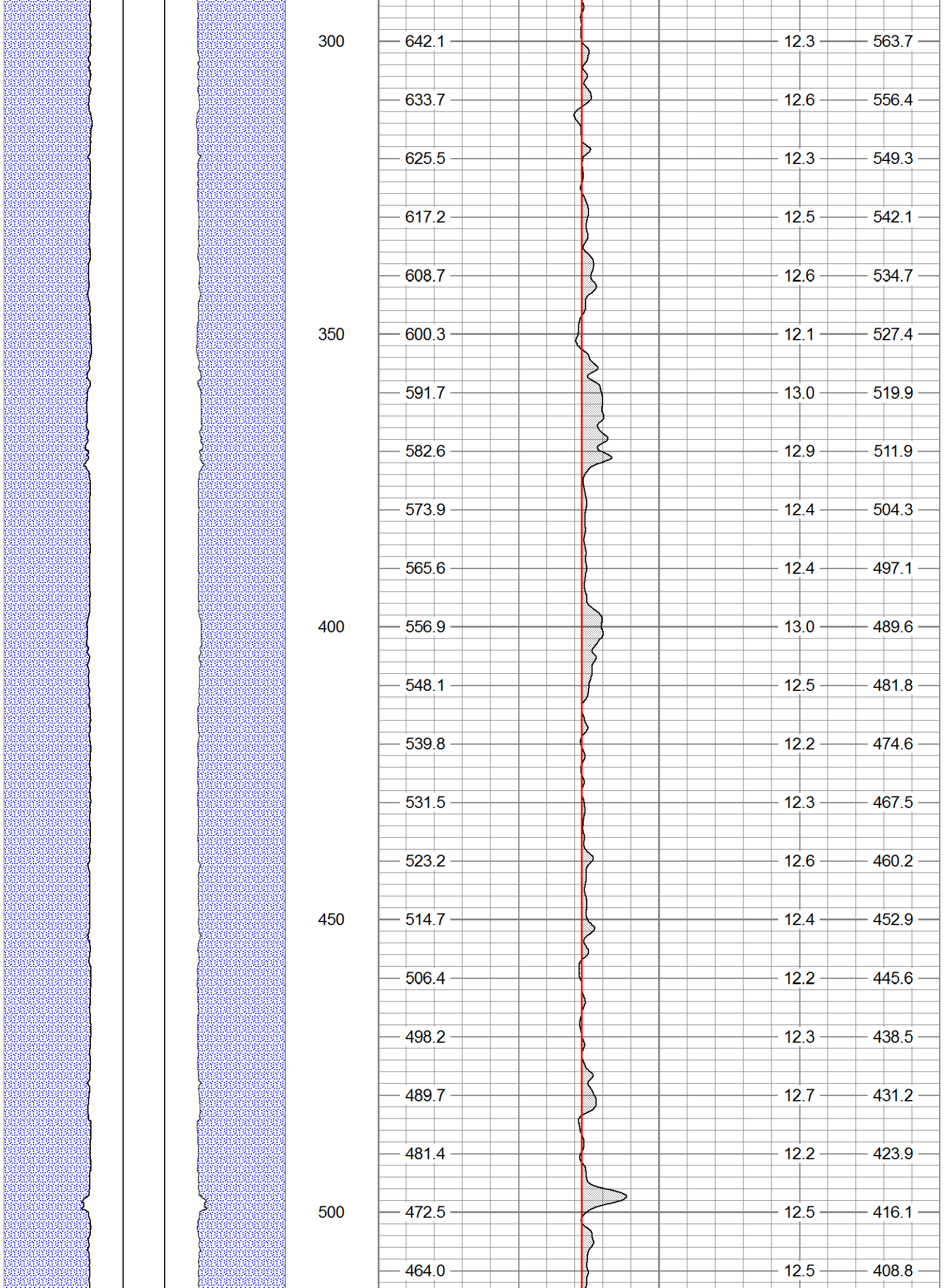
585.3
658.6
12.4
577.9
650.3
12.3
570.8


300
642.1
12.3
563.7
633.7
12.6
556.4
625.5
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549.3
617.2
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542.1
608.7
12.6
534.7
350
600.3
12.1
527.4
591.7
13.0
519.9
582.6
12.9
511.9
573.9
12.4
504.3
565.6
12.4
497.1
400
556.9
13.0
489.6
548.1
12.5
481.8
539.8
12.2
474.6
531.5
12.3
467.5
523.2
12.6
460.2
450
514.7
12.4
452.9
506.4
12.2
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12.3
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423.9
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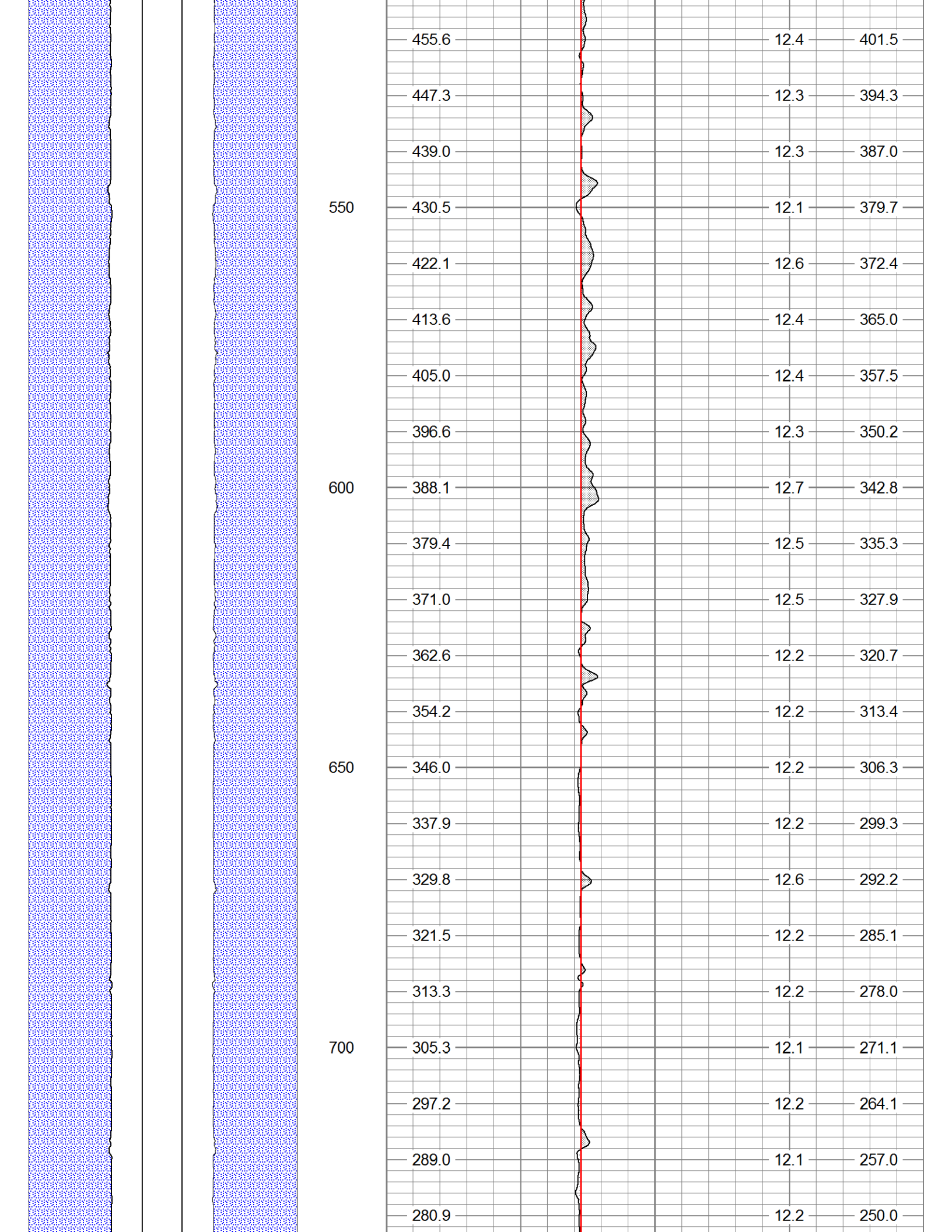
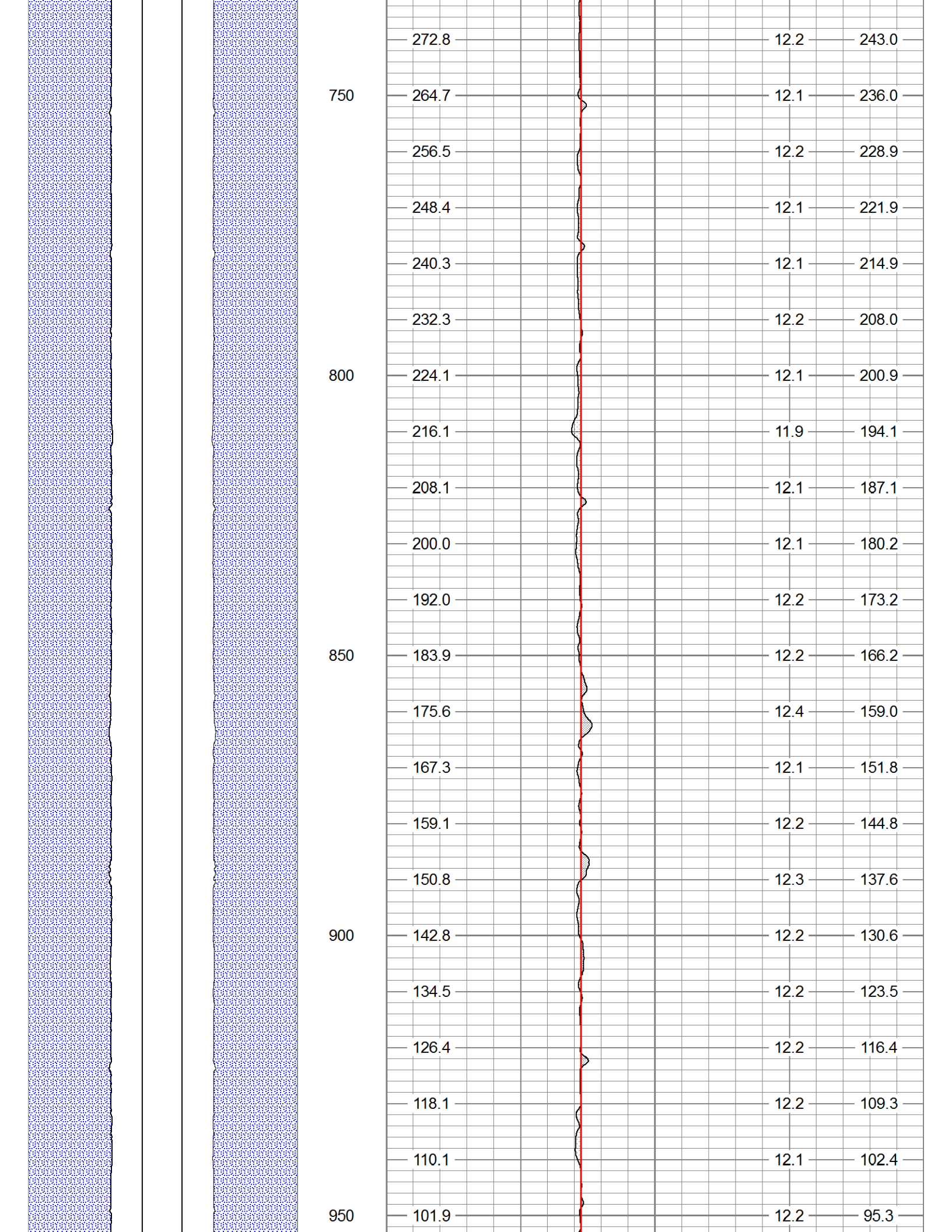
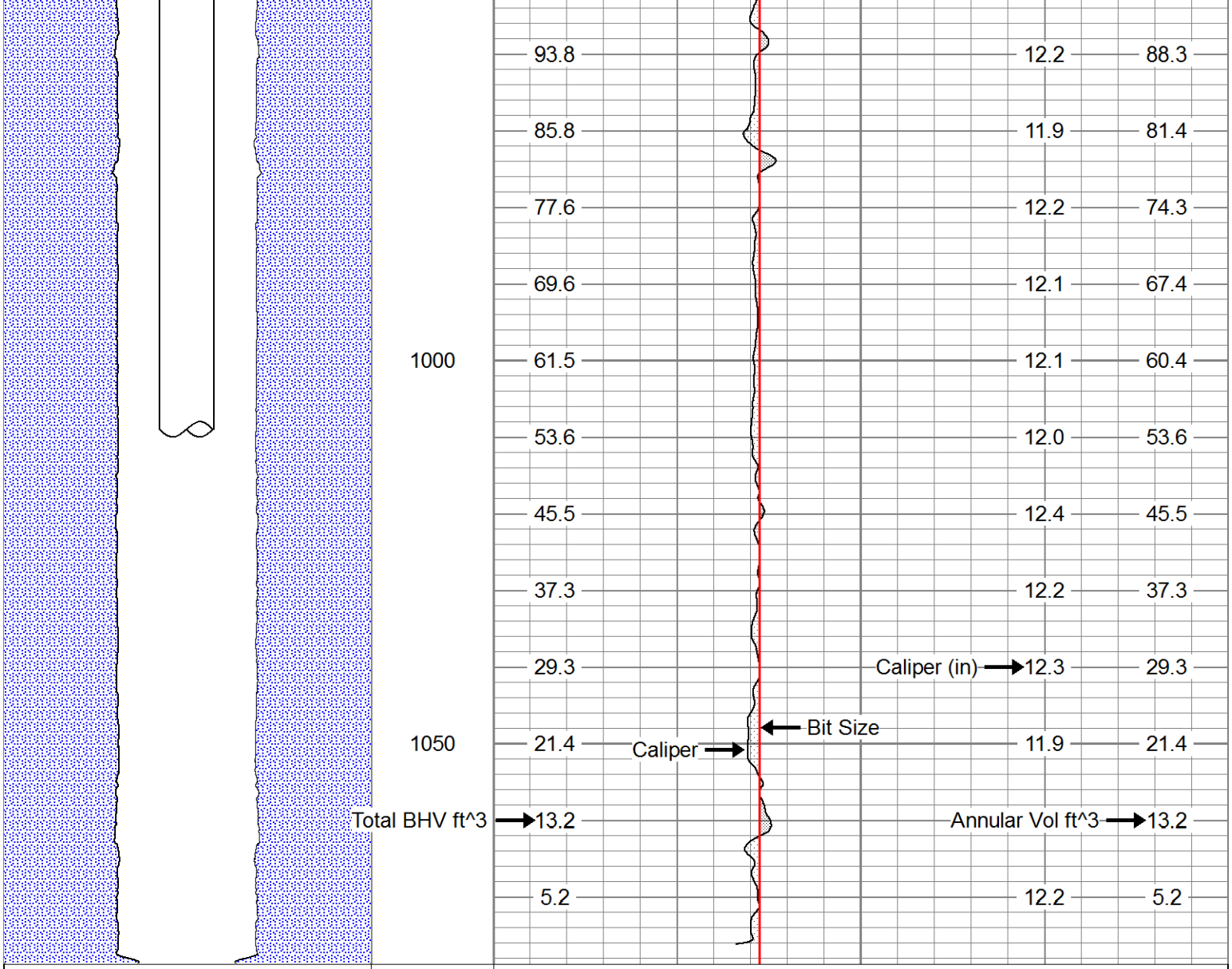
472.5
12.5
416.1
464.0
12.5
408.8


455.6 12.4 401.5
447.3 12.3 394.3
439.0 12.3 387.0
550
430.5 12.1 379.7
422.1 12.6 372.4
413.6 12.4 365.0
405.0 12.4 357.5
396.6 12.3 350.2
600
388.1 12.7 342.8
379.4 12.5 335.3
371.0 12.5 327.9
362.6 12.2 320.7
354.2 12.2 313.4
650
346.0 12.2 306.3
337.9 12.2 299.3
329.8 12.6 292.2
321.5 12.2 285.1
313.3 12.2 278.0
700
305.3 12.1 271.1
297.2 12.2 264.1
289.0 12.1 257.0
280.9 12.2 250.0


272.8 12.2 243.0
750 264.7 12.1 236.0
256.5 12.2 228.9
248.4 12.1 221.9
240.3 12.1 214.9
232.3 12.2 208.0
800 224.1 12.1 200.9
216.1 11.9 194.1
208.1 12.1 187.1
200.0 12.1 180.2
192.0 12.2 173.2
850 183.9 12.2 166.2
175.6 12.4 159.0
167.3 12.1 151.8
159.1 12.2 144.8
150.8 12.3 137.6
900 142.8 12.2 130.6
134.5 12.2 123.5
126.4 12.2 116.4
118.1 12.2 109.3
110.1 12.1 102.4
950 101.9 12.2 95.3



CSG SCHEDULE

Pipe(s) proportional to Hole Size

5	Caliper (in)	25
5	Bit Size (in)	25

Total BHV ft^3 (ft3)

Caliper (in)

Annular Vol ft^3 (ft3)

PACIFIC SURVEYS

ELECTRIC LOG
LATEROLOG 3
GAMMA-RAY

Job No. 17501

File No.

Company HARGIS & ASSOCIATES, INC.

Well MW-39

Field BUENA PARK

County ORANGE State CA

Location:

MALVERN AVE & DALE ST
GPS: 33o 52.639' W117o 59.202'

Sec. Twp. Rge.

Other Services:

GR/LL3
CALIPER

Permanent Datum	G.L.	Elevation above perm. datum	Elevation K.B.
Log Measured From	G.L.	0'	D.F.
Drilling Measured From	G.L.		G.L.

Date	7-18-2013		
Run Number	TWO		
Depth Driller	1080'		
Depth Logger	1081'		
Bottom Logged Interval	1081'		
Top Log Interval	0'		
Casing Driller	13 3/8" @40'		
Casing Logger	40'		
Bit Size	12.25"		
Type Fluid in Hole	BENTONITE		
Density / Viscosity	N/A		
pH / Fluid Loss	N/A		
Source of Sample	PIT		
Rm @ Meas. Temp	8.0 @ 77F		
Rmf @ Meas. Temp	7.84 @ 77F		
Rmc @ Meas. Temp	N/A		
Source of Rmf / Rmc	MEASURE		
Rm @ BHT	N/A		
Time Circulation Stopped	11:00		
Time Logger on Bottom	12:45		
Max. Recorded Temperature	N/A		
Equipment Number	PS-5		
Location	LA		
Recorded By	WATKINS		
Witnessed By	G. WAGGLE		

<<< Fold Here >>>

Comments

Calibration Report

Database File 17501.db
Dataset Pathname elog2
Dataset Creation Thu Jul 18 13:56:49 2013

ELOG Calibration Report

Serial:	D1
Model:	DTQ
Shop Calibration Performed:	Wed Jan 02 13:42:42 2013
Before Survey Verification Performed:	Fri Aug 31 10:09:27 2012
After Survey Verification Performed:	Fri Aug 31 10:11:46 2012

Shop Calibration

	Readings			References			Results	
	Zero	Cal		Zero	Cal		Gain	Offset
Short	9.343	101.133		10.200	102.200	Ohm-m	1.002	0.836
Long	7.393	96.345		10.200	102.200	Ohm-m	1.034	-17.600
IEE	209.320	7096.560	counts	0.229	7.766	A		
VSN	96.180	8069.260	counts	1.835	153.911	V		
VLN	86.040	2050.920	counts	1.641	39.119	V		

Before Survey Verification

	Readings			References			Results	
	Zero	Cal		Zero	Cal		Gain	Offset
Short	28.684	101.321		34.937	101.312	Ohm-m	0.914	8.726
Long	153.931	102.826		102.828	102.828	Ohm-m	0.659	35.059
IEE	245.260	7584.340	counts	0.268	8.300	A		
VSN	79.040	8633.620	counts	1.508	164.676	V		
VLN	106.040	2190.460	counts	2.023	41.780	V		

After Survey Verification

	Readings			References			Results	
	Zero	Cal		Zero	Cal		Gain	Offset
Short	28.273	101.325		28.684	101.321	Ohm-m	0.994	0.572
Long	152.477	102.843		102.826	102.826	Ohm-m	1.030	-3.065
IEE	249.140	7584.080	counts	0.273	8.300	A		
VSN	79.140	8633.680	counts	1.509	164.677	V		
VLN	106.700	2190.760	counts	2.035	41.786	V		

After Survey Verification compared to Before Survey Calibration

	Zero			Cal		
	Before	After		Before	After	
Short	34.937	28.684	Ohm-m	101.312	101.321	Ohm-m
Long	136.510	153.931	Ohm-m	102.828	102.826	Ohm-m

Gamma Ray Calibration Report

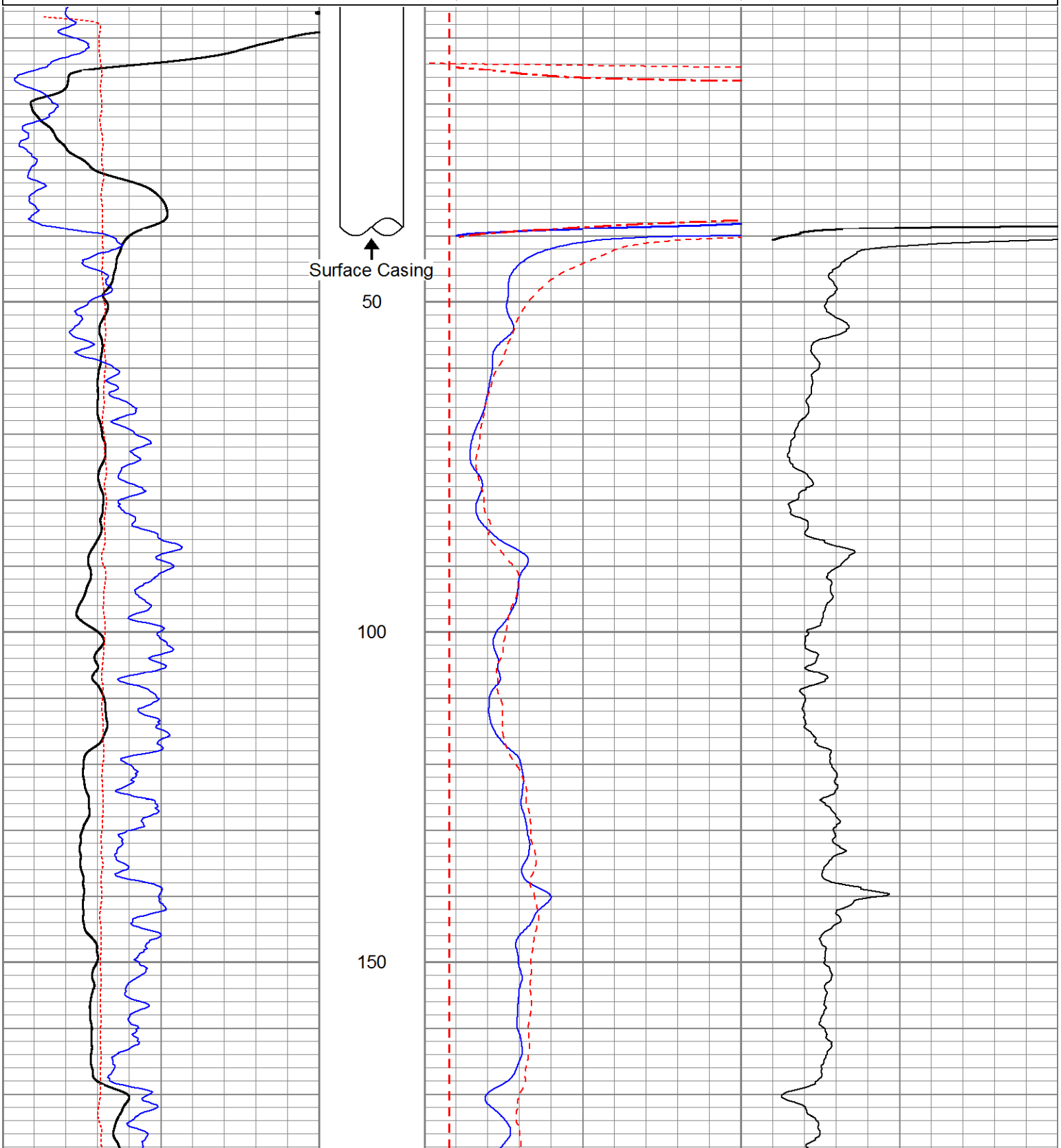
Serial Number:	D4	
Tool Model:	ELOG	
Performed:	Wed Jan 02 16:00:53 2013	
Calibrator Value:	162.0	GAPI
Background Reading:	212.4	cps
Calibrator Reading:	707.5	cps
Sensitivity:	0.3272	GAPI/cps

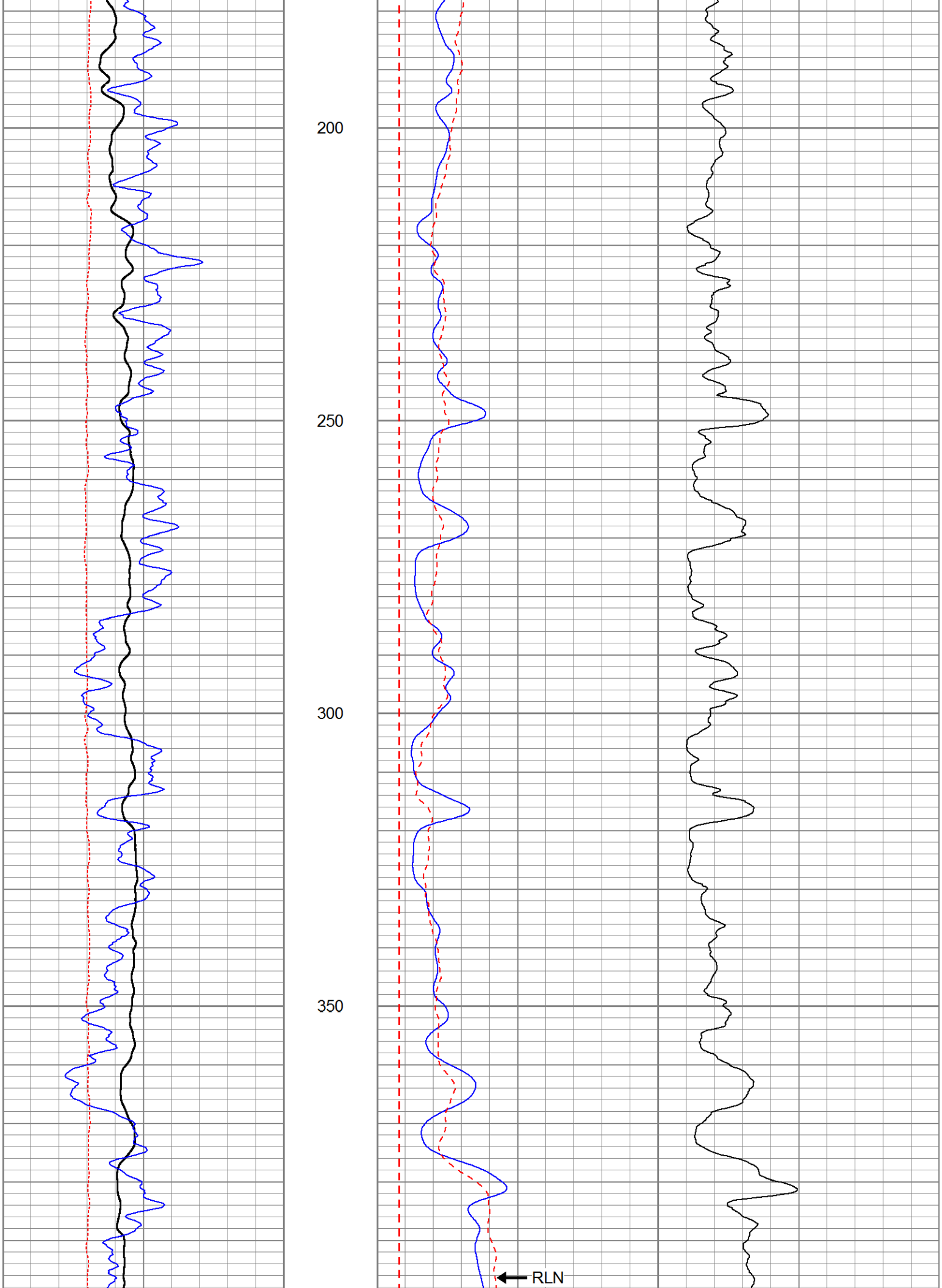
Database File	17501.db
Dataset Pathname	elog2
Presentation Format	elog
Dataset Creation	Thu Jul 18 13:56:49 2013
Charted by	Depth in Feet scaled 1:240

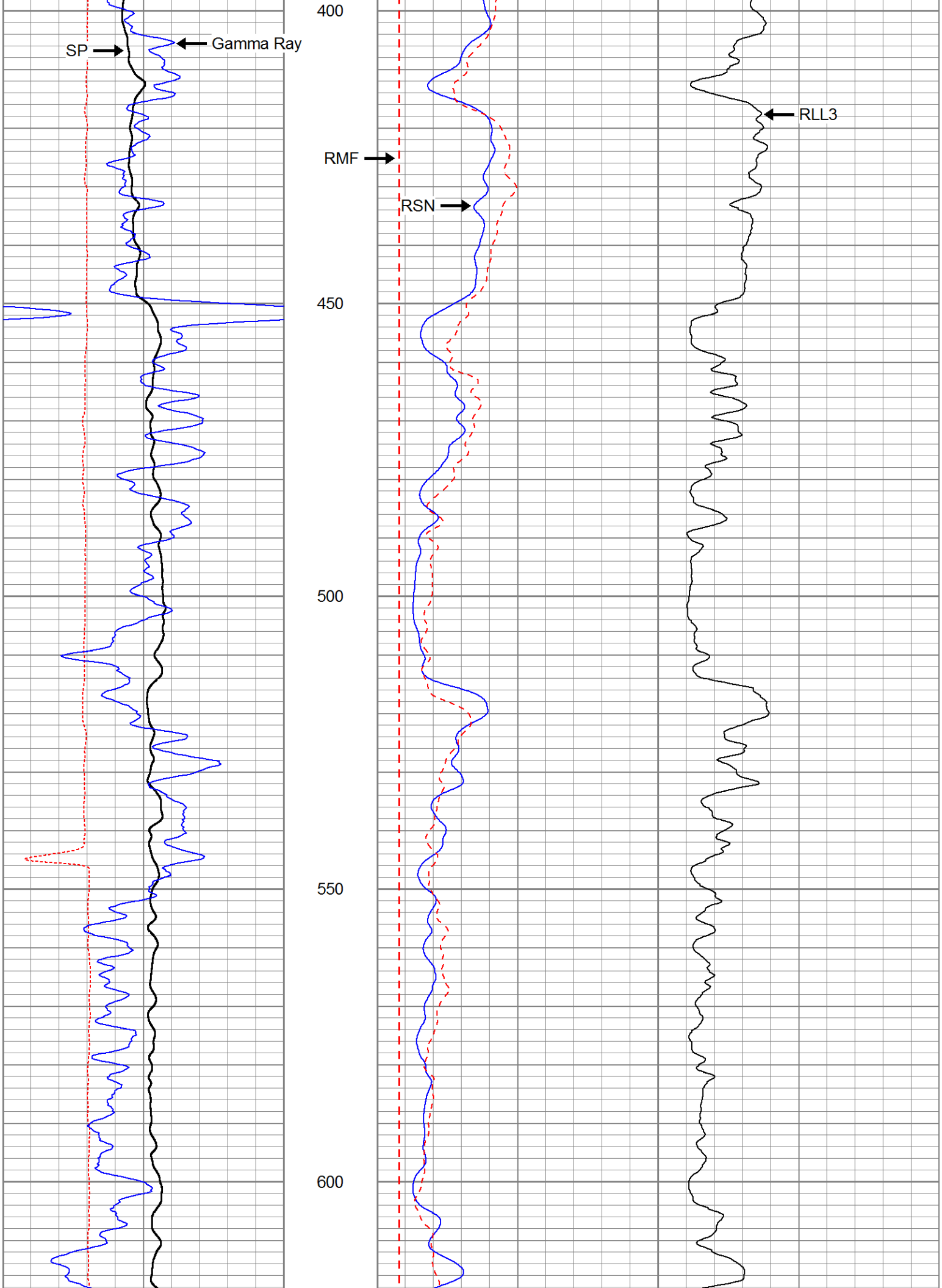
0	SP (mV)	50
0	Line Speed (ft/min)	-100
40	Gamma Ray (GAPI)	140

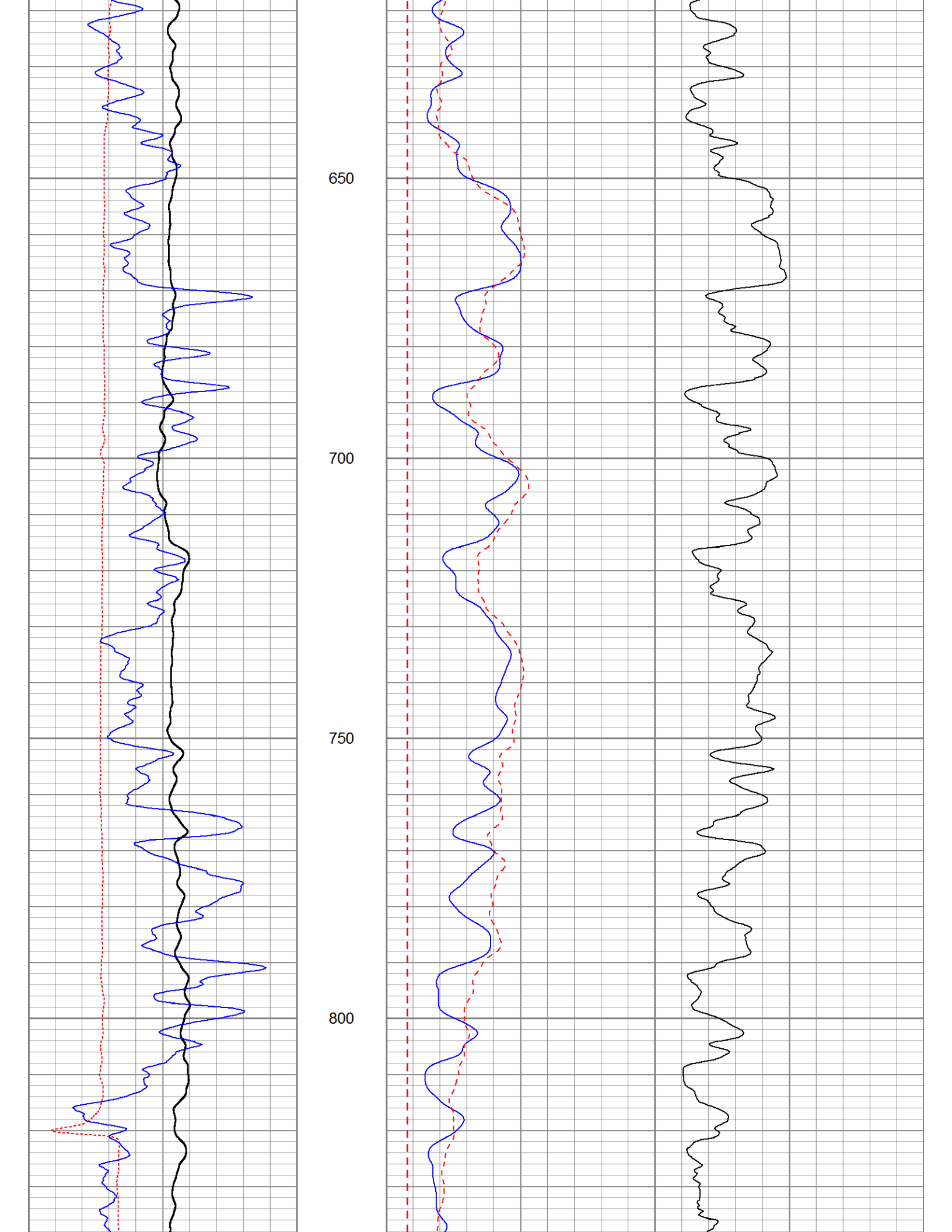
0	RSN (Ohm-m)	100
0	RLN (Ohm-m)	100
0	RMF (Ohm-m)	100
100	RSN x 10 (Ohm-m)	1000
100	RLN x 10 (Ohm-m)	1000

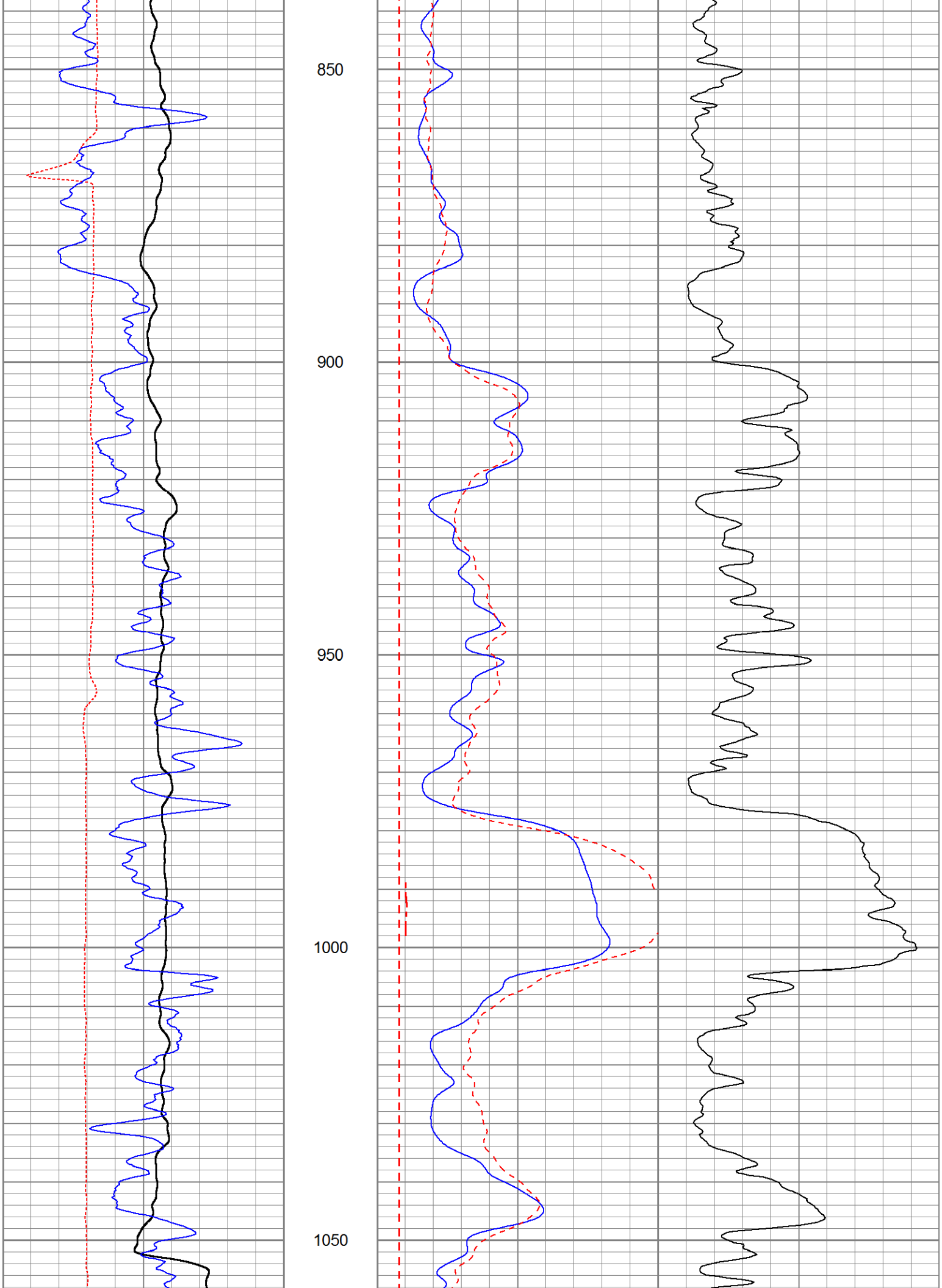
0	RLL3 (Ohm-m)	100
	RLL3 Back-up	
100	(Ohm-m)	1000

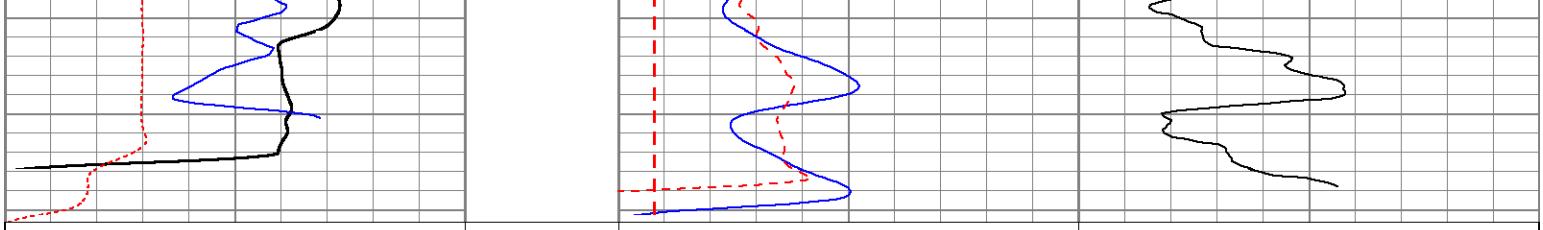



200
250
300
350
RLN


SP
Gamma Ray
400
RMF
RSN
RLL3
450
500
550
600


650
700
750
800


850
900
950
1000
1050



0	SP (mV)	50
0	Line Speed (ft/min)	-100
40	Gamma Ray (GAPI)	140

0	RSN (Ohm-m)	100
0	RLN (Ohm-m)	100
0	RMF (Ohm-m)	100
100	RSN x 10 (Ohm-m)	1000
100	RLN x 10 (Ohm-m)	1000

0	RLL3 (Ohm-m)	100
	RLL3 Back-up	
100	(Ohm-m)	1000

PACIFIC SURVEYS

LATEROLOG 3
GAMMA-RAY

Job No.
17501

File No.

Company HARGIS & ASSOCIATES, INC.
Well MW-39
Field BUENA PARK
County ORANGE State CA

Location:

MALVERN AVE & DALE ST
GPS: 33o 52.639' W117o 59.202'

Sec. Twp. Rge.

Other Services:

ELOG
CALIPER

Permanent Datum	G.L.	Elevation above perm. datum	Elevation K.B.
Log Measured From	G.L.	0'	D.F.
Drilling Measured From	G.L.		G.L.

Date	7-18-2013		
Run Number	TWO		
Depth Driller	1080'		
Depth Logger	1081'		
Bottom Logged Interval	1081'		
Top Log Interval	0'		
Casing Driller	13 3/8" @40'		
Casing Logger	40'		
Bit Size	12.25"		
Type Fluid in Hole	BENTONITE		
Density / Viscosity	N/A		
pH / Fluid Loss	N/A		
Source of Sample	PIT		
Rm @ Meas. Temp	8.0 @ 77F		
Rmf @ Meas. Temp	7.84 @ 77F		
Rmc @ Meas. Temp	N/A		
Source of Rmf / Rmc	MEASURE		
Rm @ BHT	N/A		
Time Circulation Stopped	11:00		
Time Logger on Bottom	12:45		
Max. Recorded Temperature	N/A		
Equipment Number	PS-5		
Location	LA		
Recorded By	WATKINS		
Witnessed By	G. WAGGLE		

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Comments

Calibration Report

Database File 17501.db
Dataset Pathname LL3
Dataset Creation Thu Jul 18 15:07:46 2013

Gamma Ray Calibration Report

Serial Number:	12	
Tool Model:	GROH	
Performed:	Wed Jan 02 12:20:51 2013	
Calibrator Value:	162.0	GAPI
Background Reading:	54.1	
Calibrator Reading:	193.3	
Sensitivity:	1.1641	GAPI/

RLL3 (Resistivity Laterolog 3) Calibration Report:

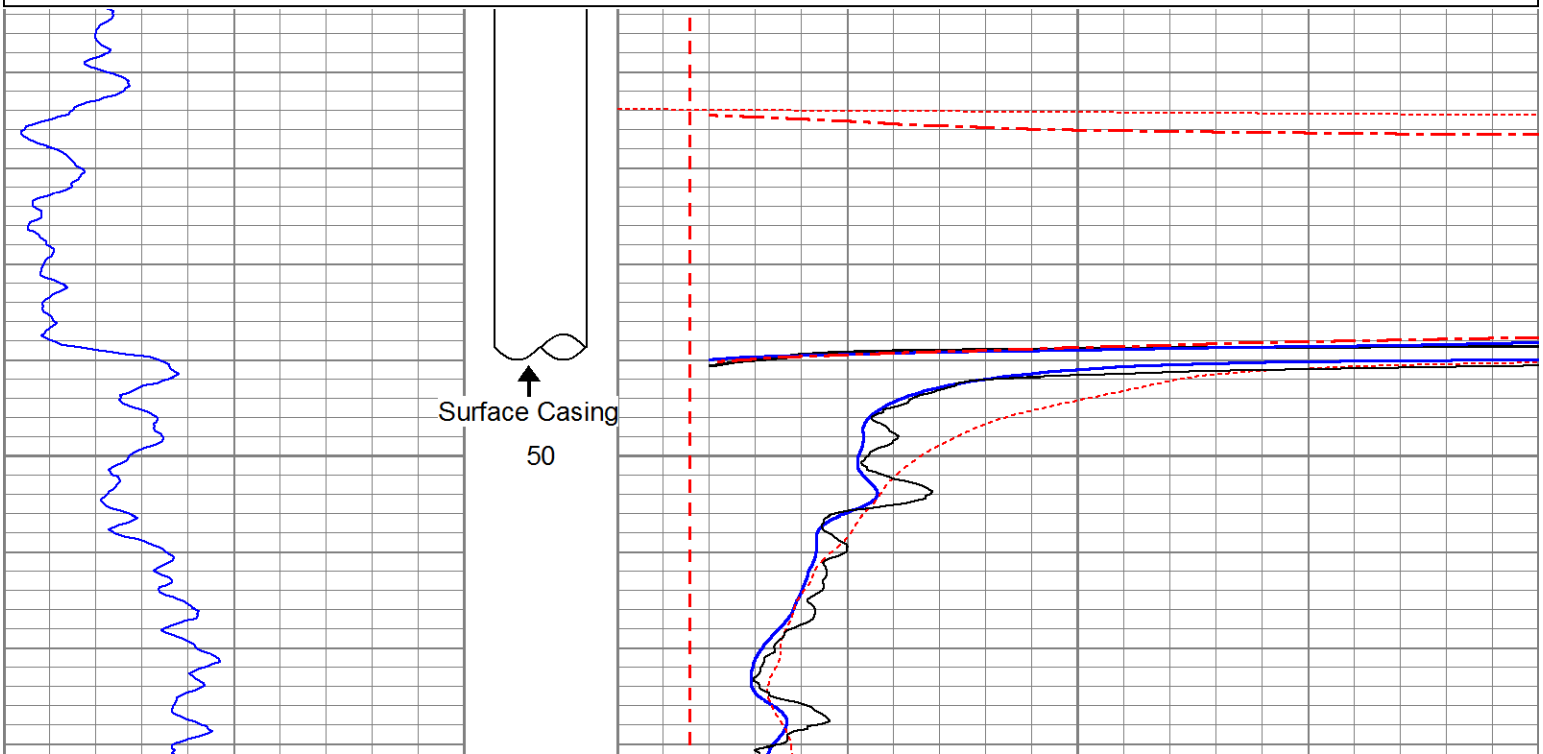
Serial Number:	130	
Tool Model:	M&W	
Performed:	Wed Jan 02 14:38:35 2013	

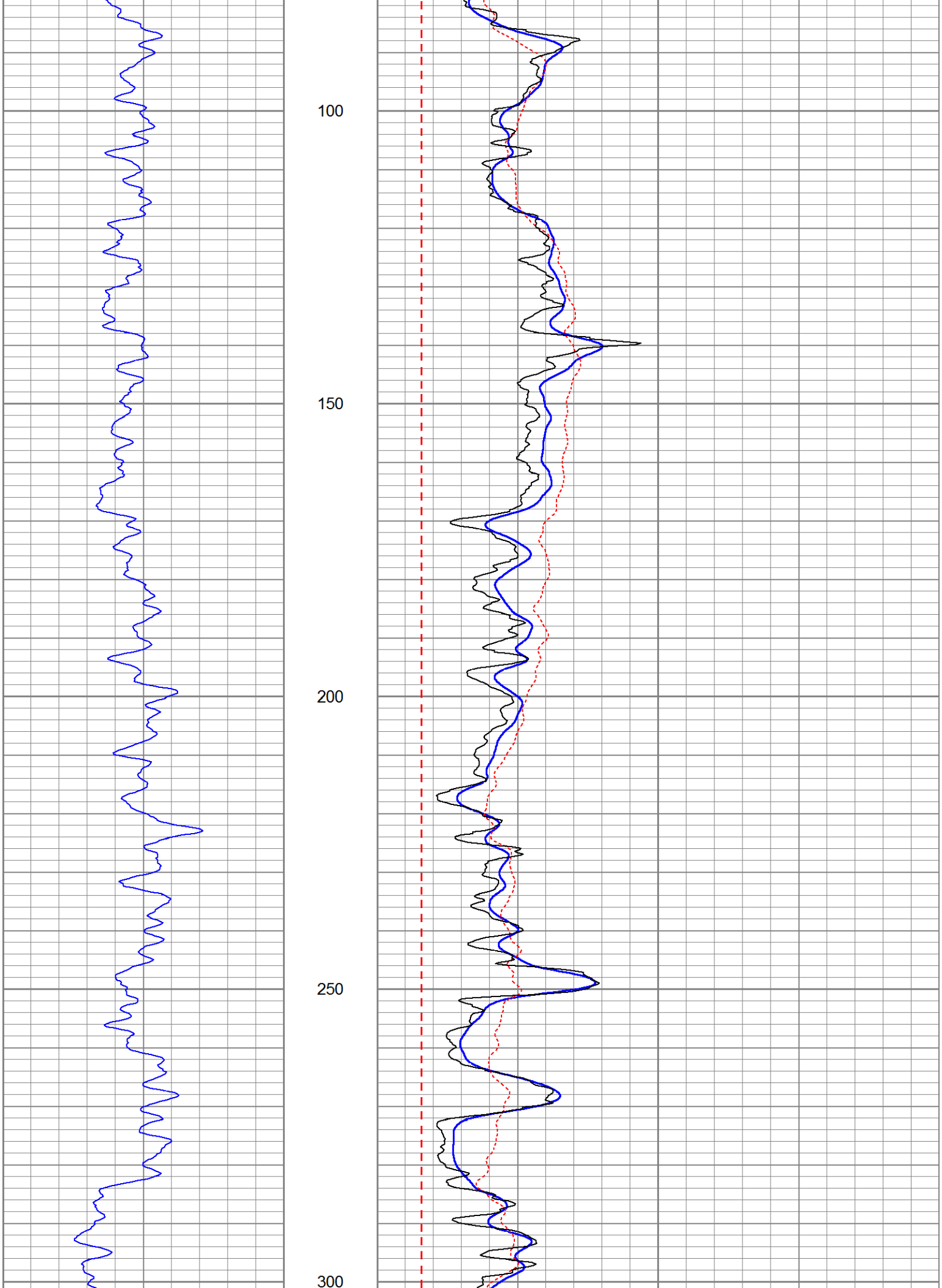
System Reading	Calibration Reference	
0.003	2.500	Ohm-m
0.007	5.000	
0.068	50.000	
0.358	250.000	
0.707	500.000	

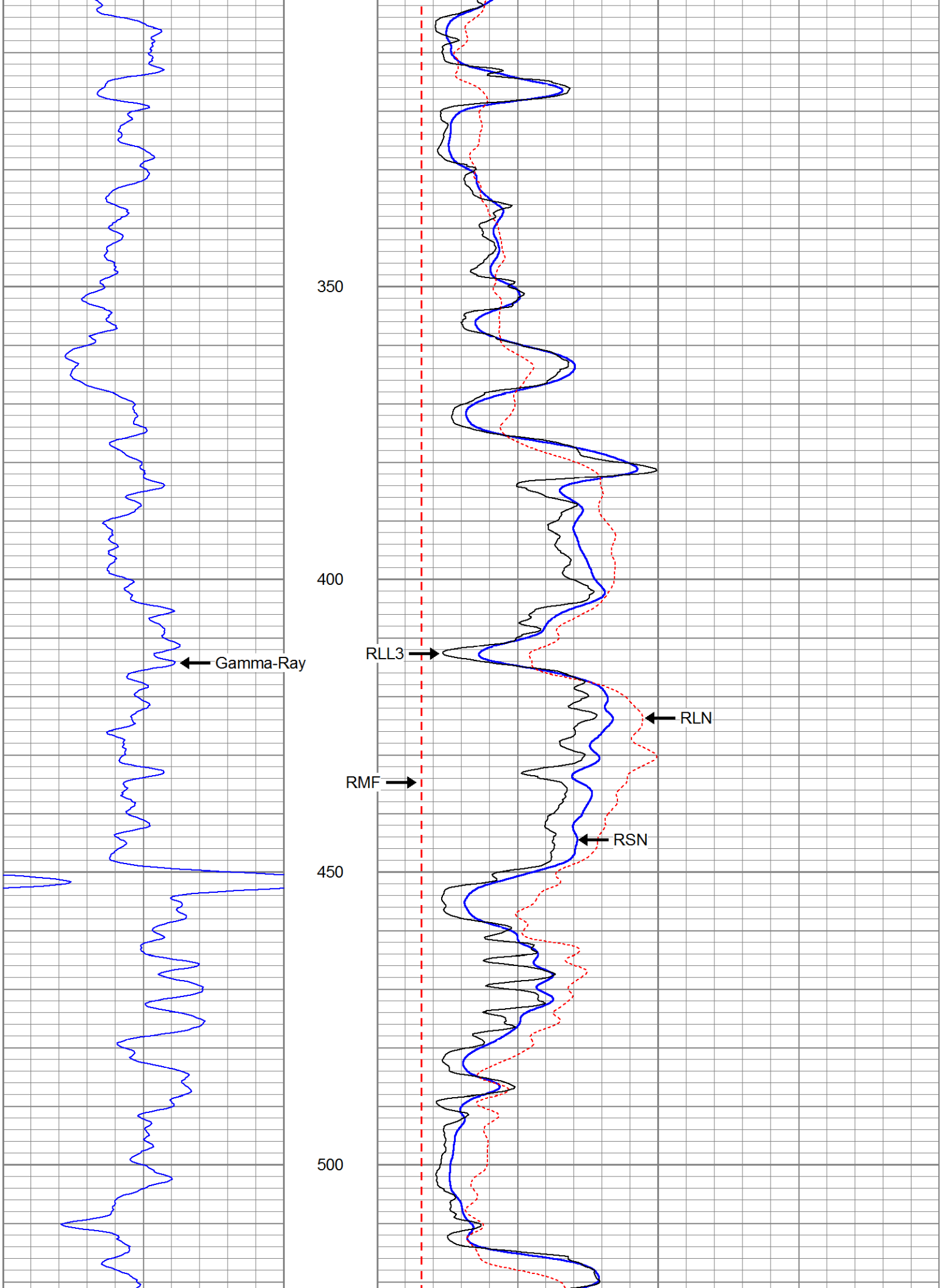
Database File	17501.db
Dataset Pathname	LL3
Presentation Format	guard
Dataset Creation	Thu Jul 18 15:07:46 2013
Charted by	Depth in Feet scaled 1:240

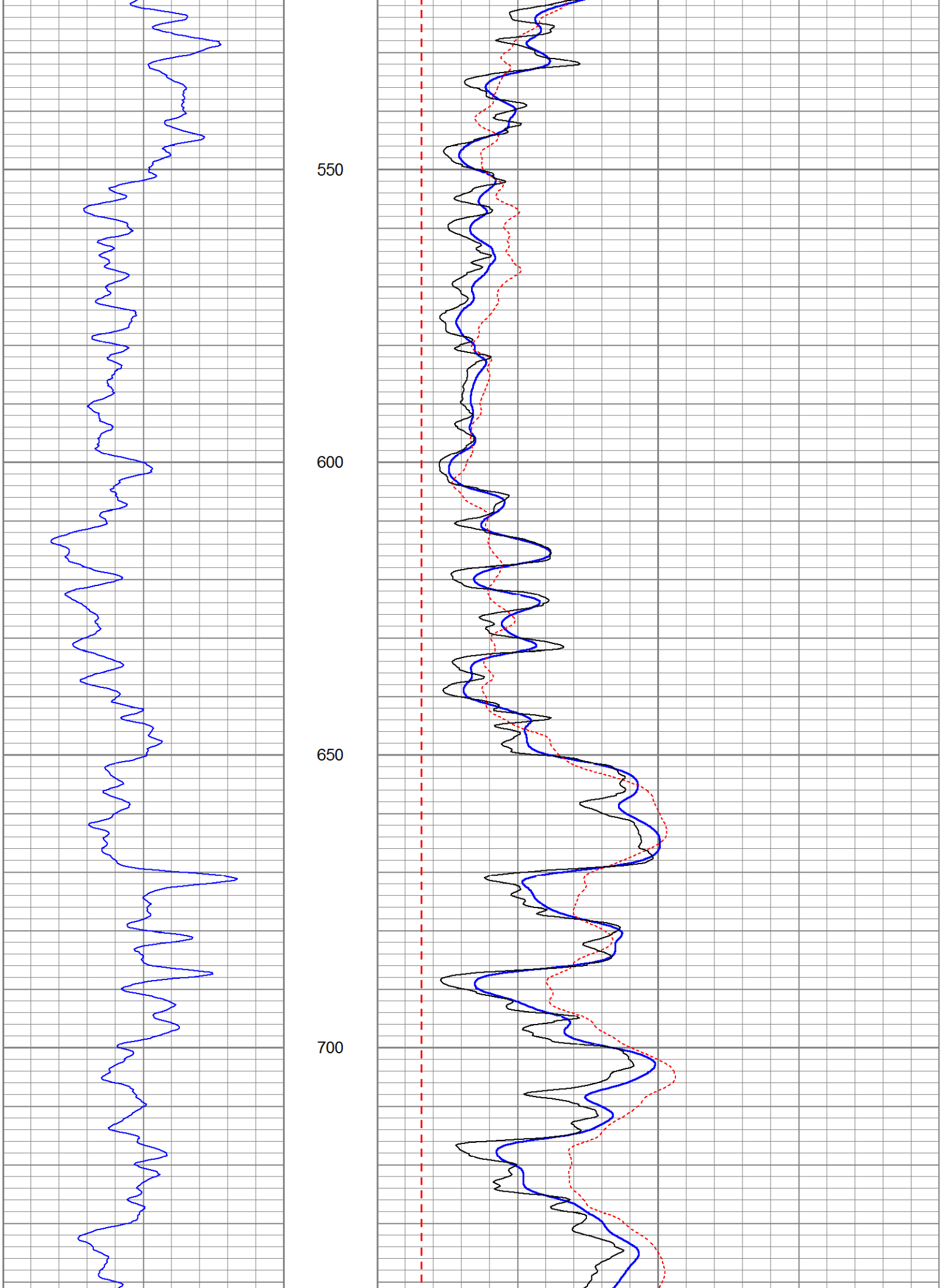
40	Gamma-Ray (GAPI)	140

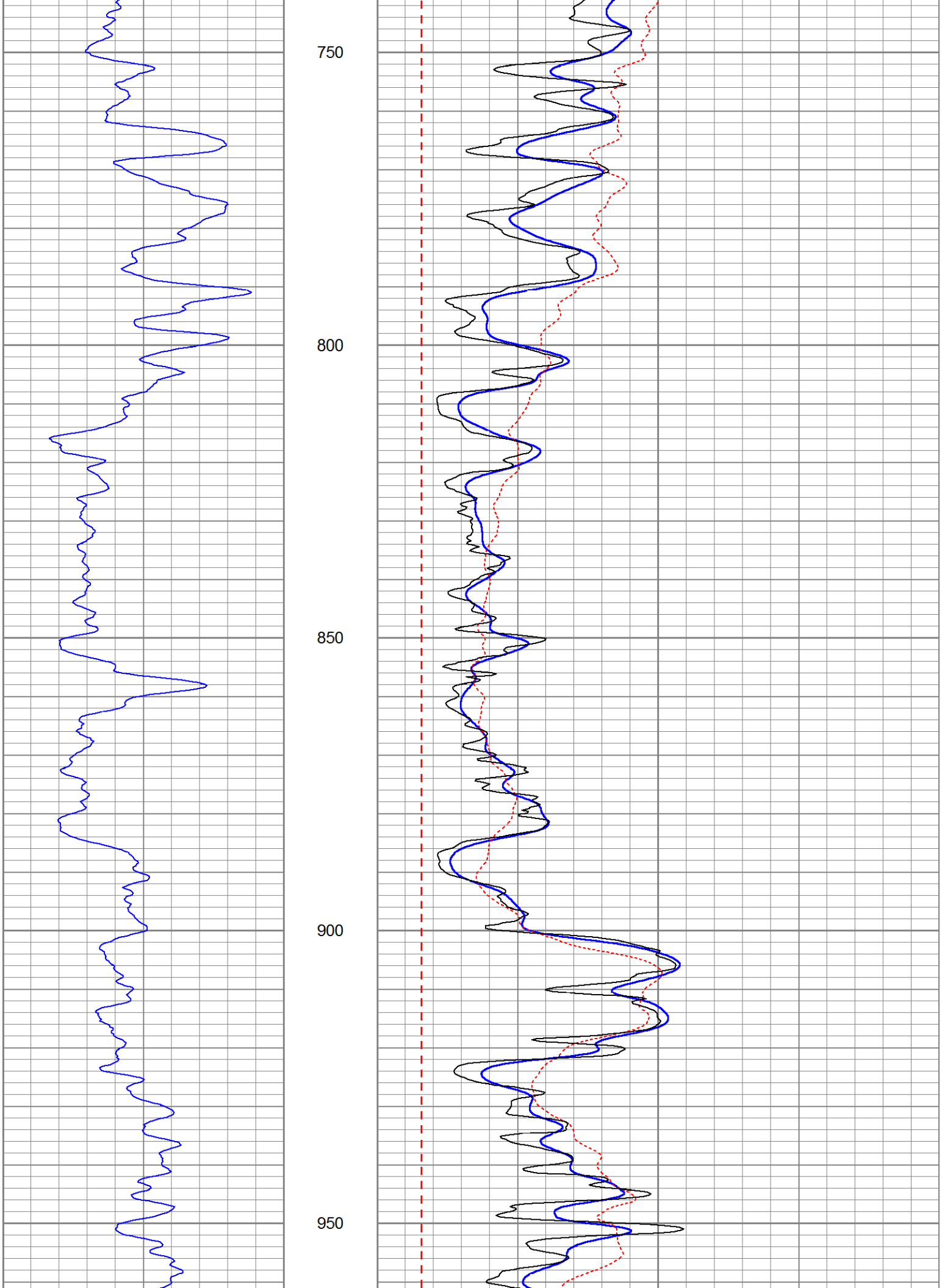
0	RSN (Ohm-m)	100
0	RLN (Ohm-m)	100
0	RMF (Ohm-m)	100
0	RLL3 (Ohm-m)	100
100	RLL3 x 10 (Ohm-m)	1000
100	RSN x 10 (Ohm-m)	1000
100	RLN x 10 (Ohm-m)	1000

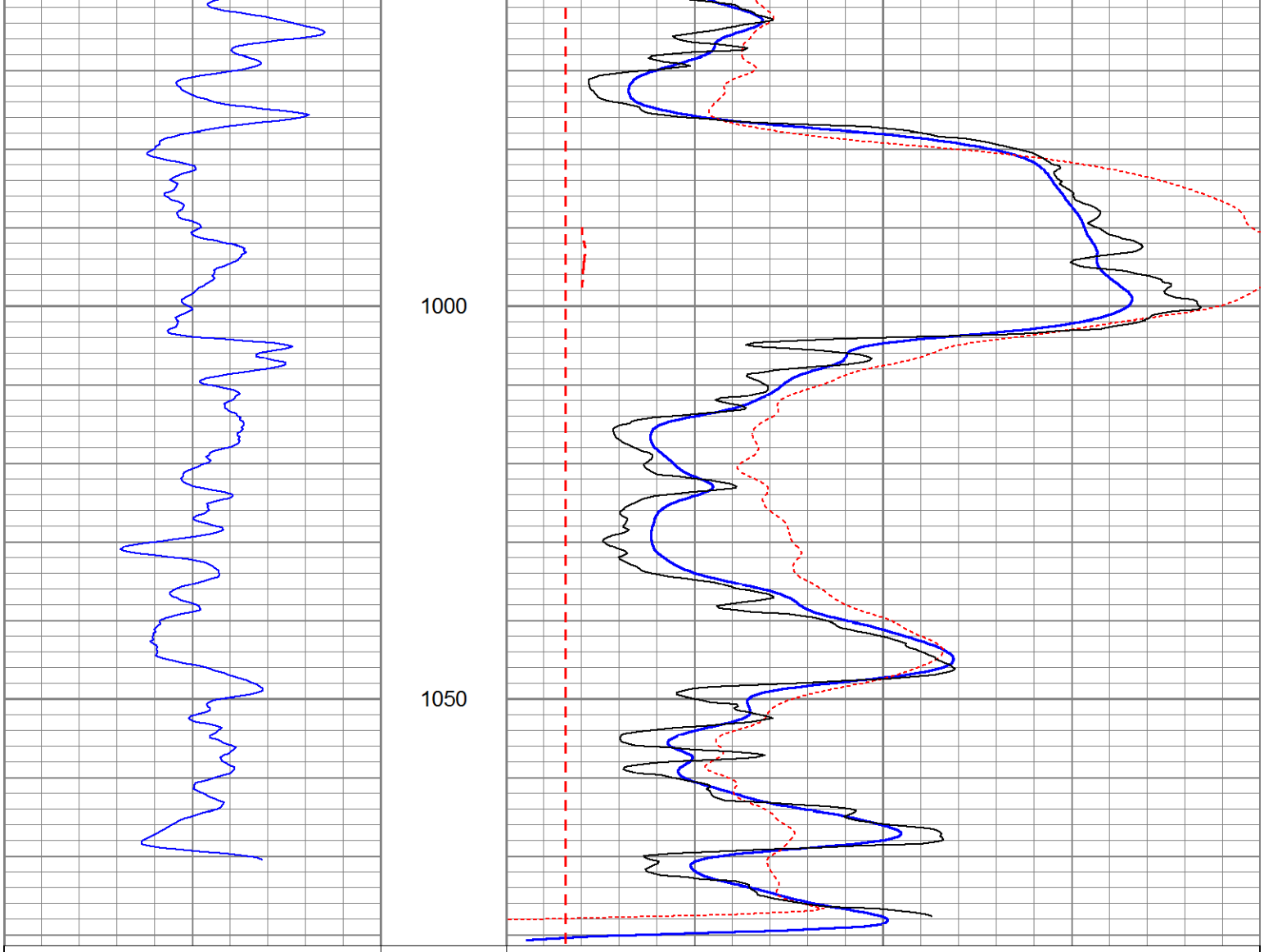



100
150
200
250
300


350
400
450
500
Gamma-Ray
RLL3
RLN
RMF
RSN


550
600
650
700


750
800
850
900
950



40	Gamma-Ray (GAPI)	140
0	RSN (Ohm-m)	100
0	RLN (Ohm-m)	100
0	RMF (Ohm-m)	100
0	RLL3 (Ohm-m)	100
100	RLL3 x 10 (Ohm-m)	1000
100	RSN x 10 (Ohm-m)	1000
100	RLN x 10 (Ohm-m)	1000

PACIFIC SURVEYS

CALIPER
BOREHOLE VOLUMES

Job No. 17392

File No.

Company HARGIS & ASSOCIATES, INC.

Well MW-40

Field FULLERTON

County ORANGE State CA

Location:

1881 W MALVERN AVE.
GPS: N 33o 52.635' W 117o 57.658'

Sec. Twp. Rge.

Other Services:

GR/LL3
ELOG

Permanent Datum	G.L.	Elevation above perm. datum	Elevation K.B.
Log Measured From	G.L. 0'		D.F.
Drilling Measured From	G.L.		G.L.

Date	06-27-2013		
Run Number	ONE		
Depth Driller	1040'		
Depth Logger	1040'		
Bottom Logged Interval	1038'		
Top Log Interval	0'		
Casing Driller	13 3/8" @ 20'		
Casing Logger	20'		
Bit Size	12 1/4"		
Type Fluid in Hole	BENTONITE		
Density / Viscosity	N/A		
pH / Fluid Loss	N/A		
Source of Sample	TANK		
Rm @ Meas. Temp	7.75 @ 77F		
Rmf @ Meas. Temp	7.58 @ 77F		
Rmc @ Meas. Temp	N/A		
Source of Rmf / Rmc	MEASURE		
Rm @ BHT	N/A		
Time Circulation Stopped	1230		
Time Logger on Bottom	1400		
Max. Recorded Temperature	N/A		
Equipment Number	PS-3		
Location	LA		
Recorded By	SCHUMACHER		
Witnessed By	E. HUNTER		

<<< Fold Here >>>

Comments

Calibration Report

Database File 17392.db
Dataset Pathname CAL/CAL
Dataset Creation Thu Jun 27 16:03:54 2013

Temperature Calibration Report

Serial Number:	PS-3_Short		
Tool Model:	Short_GPH		
Performed:	Wed May 29 11:38:07 2013		
	Reference		Reading
Low Reference:	2.94	degF	354.61 cps
High Reference:	10.00	degF	942.65 cps
Gain:	0.01		
Offset:	-1.32		
Delta Spacing	1		

XY Caliper Calibration Report

Serial Number/Model:	Short-Comprobe	
Performed:	Wed May 29 11:35:51 2013	

	Ring		X Caliper		Y Caliper	
1:	3.625	in	266.288	cps	266.288	cps
2:	5.875	in	354.608	cps	354.608	cps
3:	8	in	436.148	cps	436.148	cps
4:	14	in	668.584	cps	668.584	cps
5:	20	in	942.651	cps	942.651	cps
6:		in		cps		cps

Database File	17392.db
Dataset Pathname	CAL/CAL
Presentation Format	xyc_gph
Dataset Creation	Thu Jun 27 16:03:54 2013
Charted by	Depth in Feet scaled 1:240

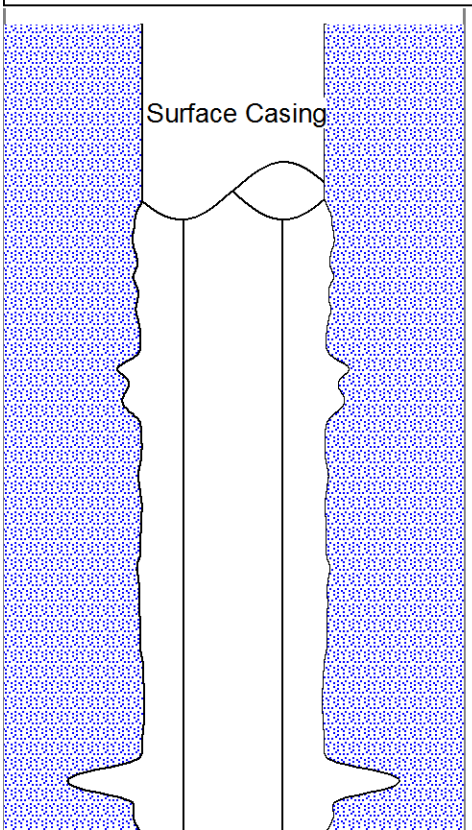
CSG SCHEDULE

Pipe(s) proportional to Hole Size

5 Caliper (in) 25

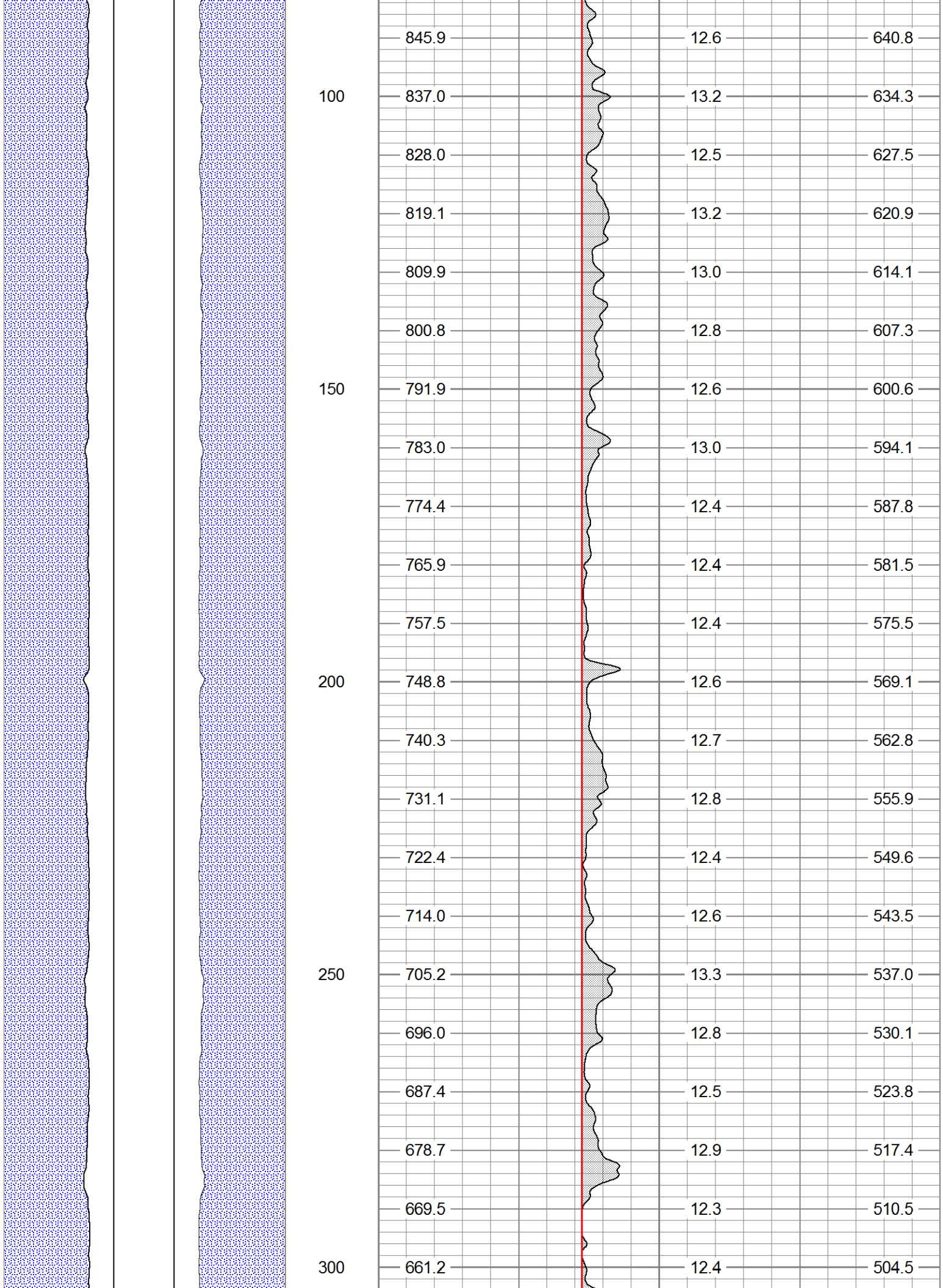
5 Bit Size (in) 25

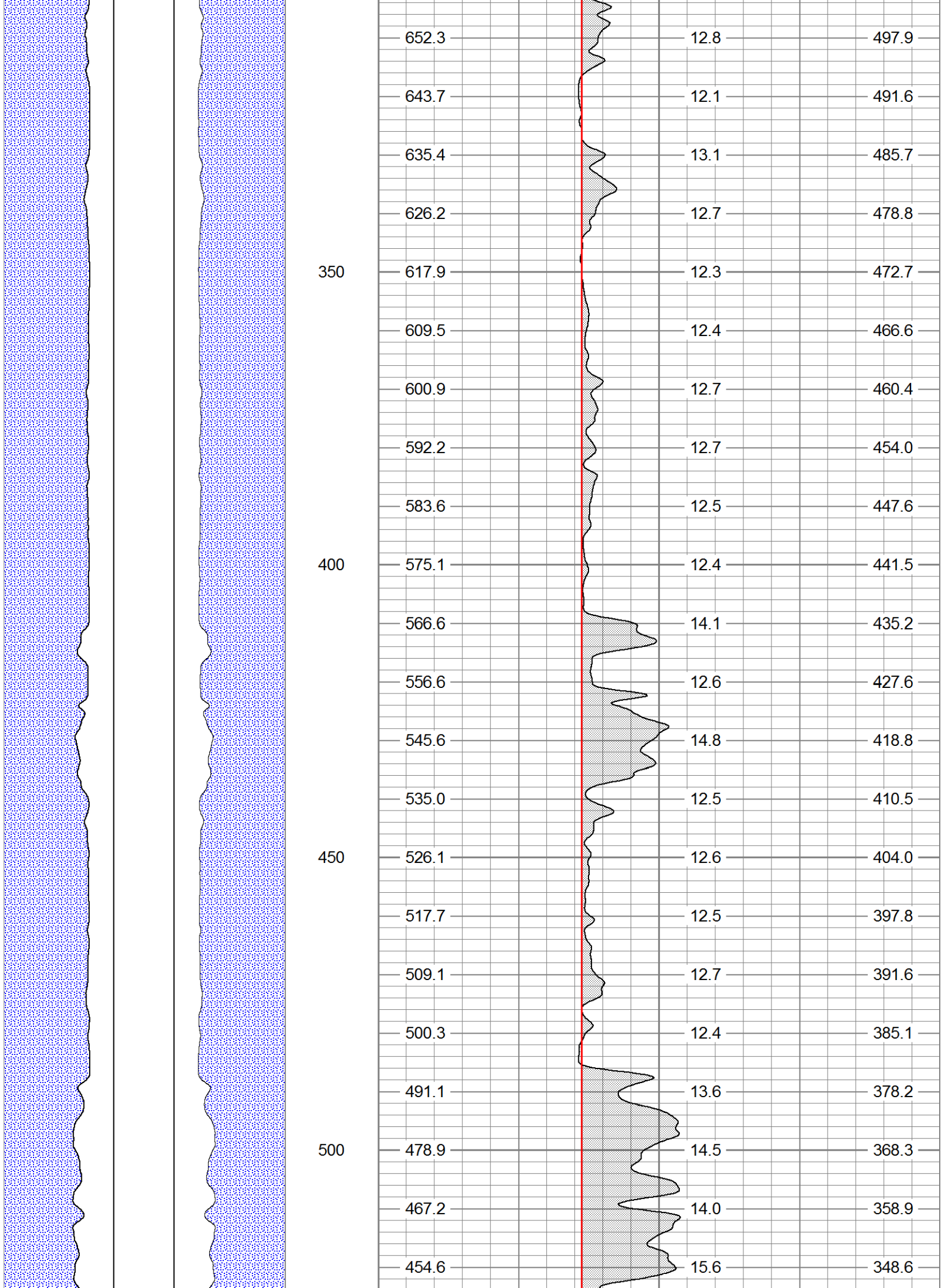
Total BHV ft^3 (ft3) | Caliper (in) | Annular Vol ft^ (ft3)

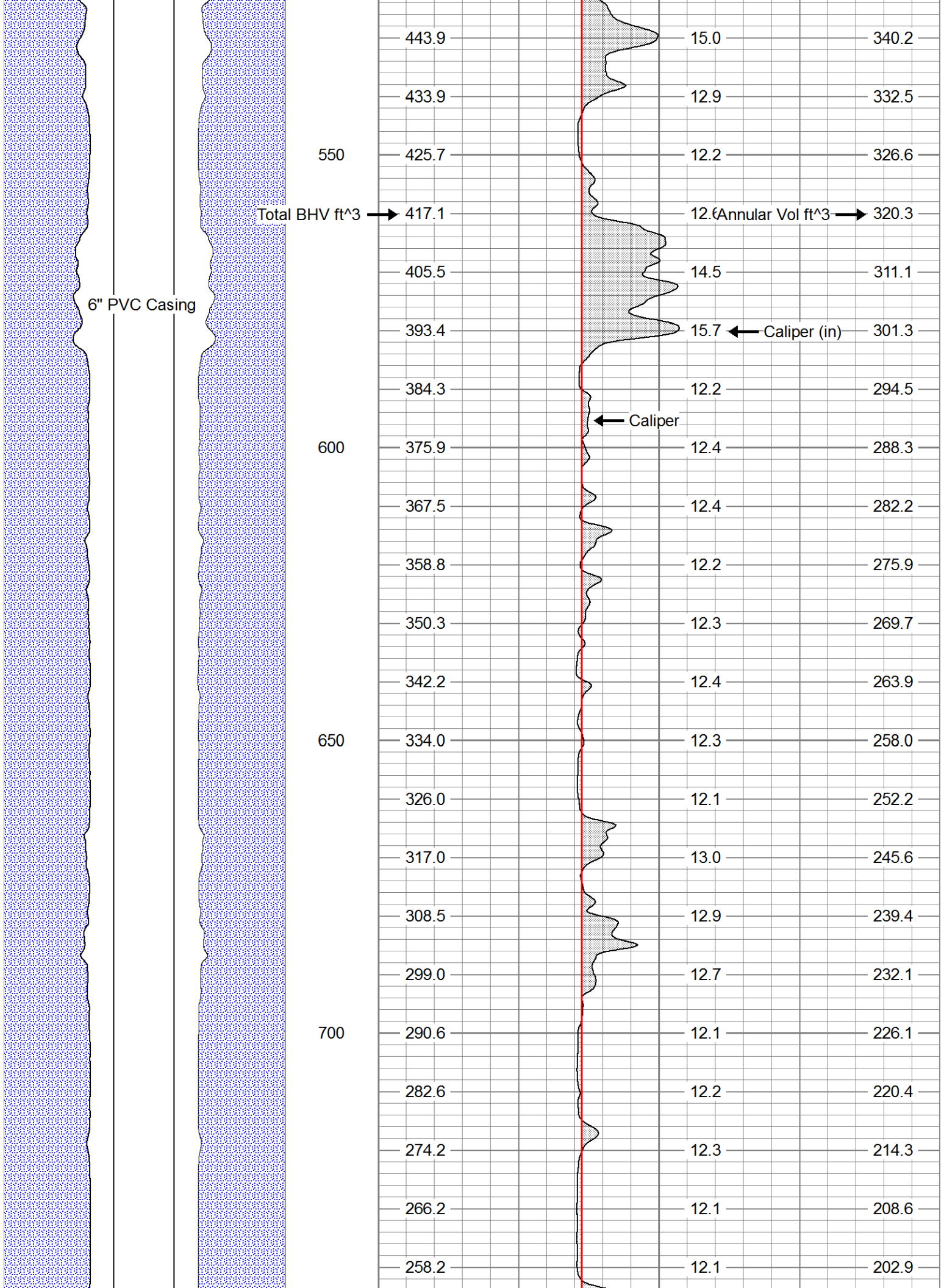


50

923.5	12.4	700.0
914.6	13.8	693.4
904.9	12.8	686.0
894.1	12.6	677.5
885.3	12.7	671.0
876.3	12.8	664.3
867.9	12.2	658.2
854.7	13.7	647.3


100
150
200
250
300
845.9
12.6
640.8
837.0
13.2
634.3
828.0
12.5
627.5
819.1
13.2
620.9
809.9
13.0
614.1
800.8
12.8
607.3
791.9
12.6
600.6
783.0
13.0
594.1
774.4
12.4
587.8
765.9
12.4
581.5
757.5
12.4
575.5
748.8
12.6
569.1
740.3
12.7
562.8
731.1
12.8
555.9
722.4
12.4
549.6
714.0
12.6
543.5
705.2
13.3
537.0
696.0
12.8
530.1
687.4
12.5
523.8
678.7
12.9
517.4
669.5
12.3
510.5
661.2
12.4
504.5


652.3 12.8 497.9
643.7 12.1 491.6
635.4 13.1 485.7
626.2 12.7 478.8
350
617.9 12.3 472.7
609.5 12.4 466.6
600.9 12.7 460.4
592.2 12.7 454.0
583.6 12.5 447.6
400
575.1 12.4 441.5
566.6 14.1 435.2
556.6 12.6 427.6
545.6 14.8 418.8
535.0 12.5 410.5
450
526.1 12.6 404.0
517.7 12.5 397.8
509.1 12.7 391.6
500.3 12.4 385.1
491.1 13.6 378.2
500
478.9 14.5 368.3
467.2 14.0 358.9
454.6 15.6 348.6


6" PVC Casing
Total BHV ft^3
Annular Vol ft^3
Caliper (in)
Caliper
550
600
650
700
443.9
15.0
340.2
433.9
12.9
332.5
425.7
12.2
326.6
417.1
12.6
320.3
405.5
14.5
311.1
393.4
15.7
301.3
384.3
12.2
294.5
375.9
12.4
288.3
367.5
12.4
282.2
358.8
12.2
275.9
350.3
12.3
269.7
342.2
12.4
263.9
334.0
12.3
258.0
326.0
12.1
252.2
317.0
13.0
245.6
308.5
12.9
239.4
299.0
12.7
232.1
290.6
12.1
226.1
282.6
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274.2
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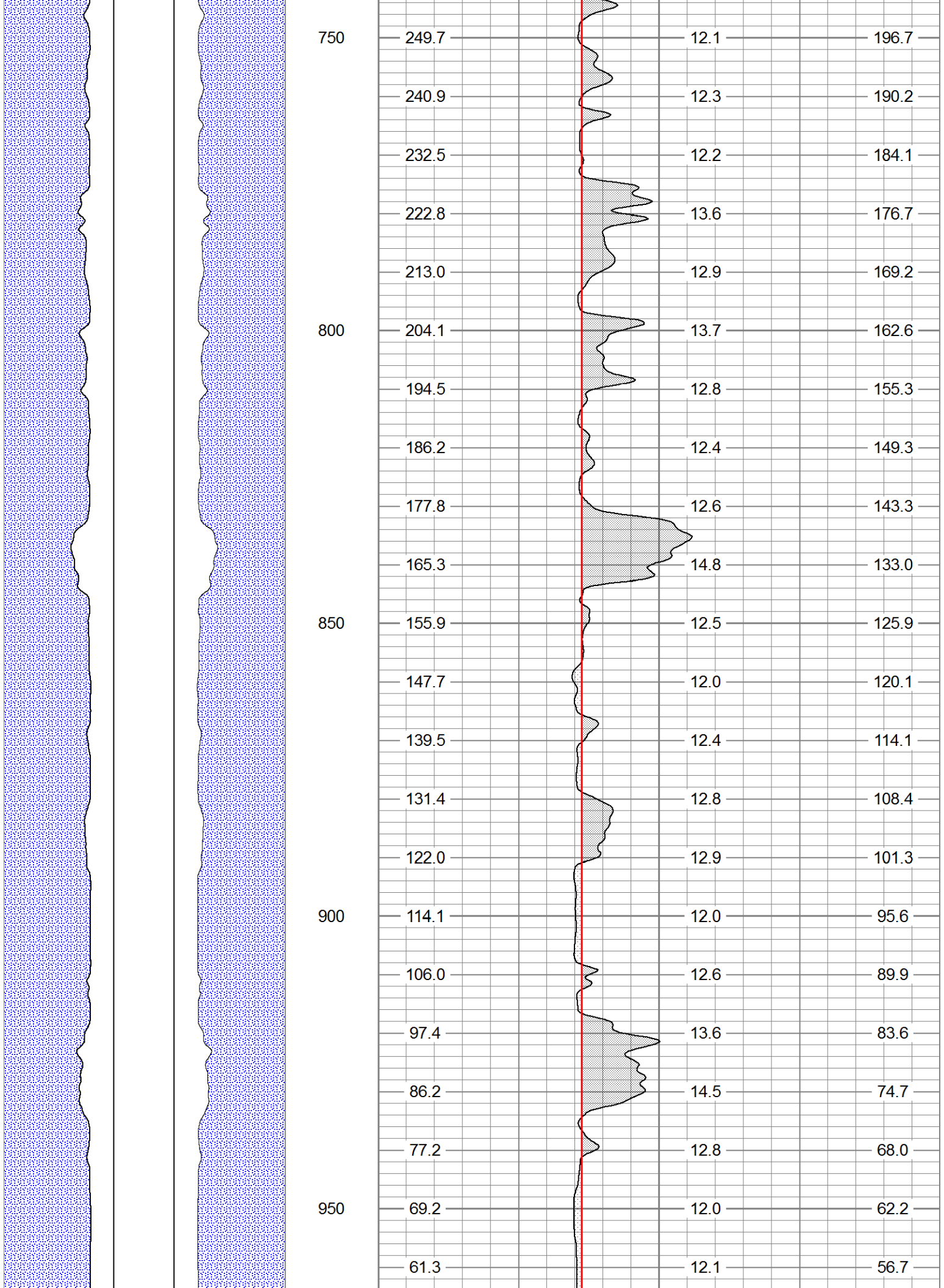
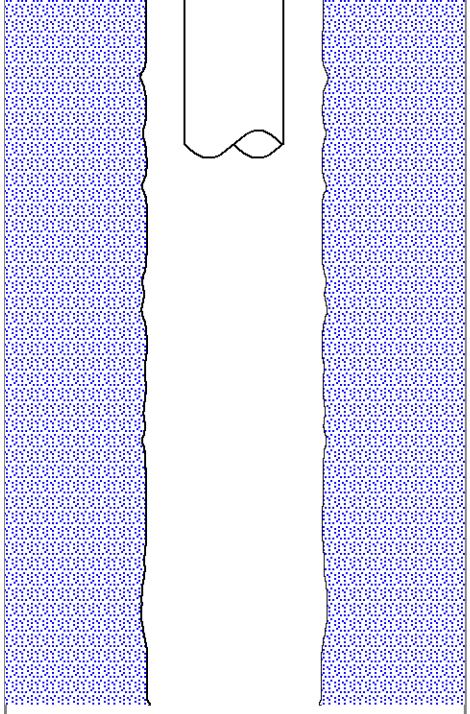
266.2
12.1
208.6
258.2
12.1
202.9


750
249.7
12.1
196.7
240.9
12.3
190.2
232.5
12.2
184.1
222.8
13.6
176.7
213.0
12.9
169.2
800
204.1
13.7
162.6
194.5
12.8
155.3
186.2
12.4
149.3
177.8
12.6
143.3
165.3
14.8
133.0
850
155.9
12.5
125.9
147.7
12.0
120.1
139.5
12.4
114.1
131.4
12.8
108.4
122.0
12.9
101.3
900
114.1
12.0
95.6
106.0
12.6
89.9
97.4
13.6
83.6
86.2
14.5
74.7
77.2
12.8
68.0
950
69.2
12.0
62.2
61.3
12.1
56.7



		53.2	12.8	50.9
		45.1	12.1	45.1
		37.1	12.2	37.1
	1000	28.9	12.2	28.9
		20.6	12.2	20.6
		12.7	12.3	12.7
		4.2	11.9	4.2

CSG SCHEDULE	5	Caliper (in)	25
Pipe(s) proportional to Hole Size	5	Bit Size (in)	25
	Total BHV ft^3 (ft3)	Caliper (in)	nnular Vol ft^ (ft3)

PACIFIC SURVEYS

ELECTRIC LOG
LATEROLOG 3
GAMMA-RAY

Job No.
17392

File No.

Company HARGIS & ASSOCIATES, INC.
Well MW-40
Field FULLERTON
County ORANGE State CA

Location:

1881 W MALVERN AVE.
GPS: N 33o 52.635' W 117o 57.658'

Sec. Twp. Rge.

Other Services:

GR/LL3
CALIPER

Permanent Datum	G.L.	Elevation above perm. datum	Elevation K.B.
Log Measured From	G.L. 0'		D.F.
Drilling Measured From	G.L.		G.L.

Date	06-27-2013		
Run Number	TWO		
Depth Driller	1040'		
Depth Logger	1040'		
Bottom Logged Interval	1040'		
Top Log Interval	0'		
Casing Driller	13 3/8" @ 20'		
Casing Logger	20'		
Bit Size	12 1/4"		
Type Fluid in Hole	BENTONITE		
Density / Viscosity	N/A		
pH / Fluid Loss	N/A		
Source of Sample	TANK		
Rm @ Meas. Temp	7.75 @ 77F		
Rmf @ Meas. Temp	7.58 @ 77F		
Rmc @ Meas. Temp	N/A		
Source of Rmf / Rmc	MEASURE		
Rm @ BHT	N/A		
Time Circulation Stopped	1230		
Time Logger on Bottom	1400		
Max. Recorded Temperature	N/A		
Equipment Number	PS-3		
Location	LA		
Recorded By	SCHUMACHER		
Witnessed By	E. HUNTER		

<<< Fold Here >>>

Comments

Calibration Report

Database File 17392.db
Dataset Pathname elog
Dataset Creation Thu Jun 27 14:00:40 2013

ELOG Calibration Report

Serial:	D4
Model:	DTQ
Shop Calibration Performed:	Wed Jan 02 11:29:40 2013
Before Survey Verification Performed:	Sun Sep 09 13:17:43 2007
After Survey Verification Performed:	Sun Sep 09 13:17:48 2007

Shop Calibration

	Readings			References			Results	
	Zero	Cal		Zero	Cal		Gain	Offset
Short	8.445	99.487		10.200	102.200	Ohm-m	1.011	1.666
Long	4.678	93.358		10.200	102.200	Ohm-m	1.037	-17.100
IEE	67.980	5570.920	counts	0.074	6.097	A		
VSN	144.480	6263.080	counts	2.756	119.461	V		
VLN	25.060	1580.700	counts	0.478	30.150	V		

Before Survey Verification

	Readings			References			Results	
	Zero	Cal		Zero	Cal		Gain	Offset
Short	40.249	101.201		40.505	101.206	Ohm-m	0.996	0.422
Long	142.638	102.842		102.858	102.858	Ohm-m	1.024	-2.408
IEE	212.960	7070.960	counts	0.233	7.738	A		
VSN	96.300	8039.720	counts	1.837	153.348	V		
VLN	85.320	2042.520	counts	1.627	38.959	V		

After Survey Verification

	Readings			References			Results	
	Zero	Cal		Zero	Cal		Gain	Offset
Short	40.270	101.200		40.249	101.201	Ohm-m	1.000	-0.035
Long	142.491	102.843		102.842	102.842	Ohm-m	1.004	-0.383
IEE	213.380	7077.580	counts	0.234	7.746	A		
VSN	96.540	8047.160	counts	1.841	153.490	V		
VLN	85.400	2044.440	counts	1.629	38.995	V		

After Survey Verification compared to Before Survey Calibration

	Zero			Cal		
	Before	After		Before	After	
Short	40.505	40.249	Ohm-m	101.206	101.201	Ohm-m
Long	143.592	142.638	Ohm-m	102.858	102.842	Ohm-m

Gamma Ray Calibration Report

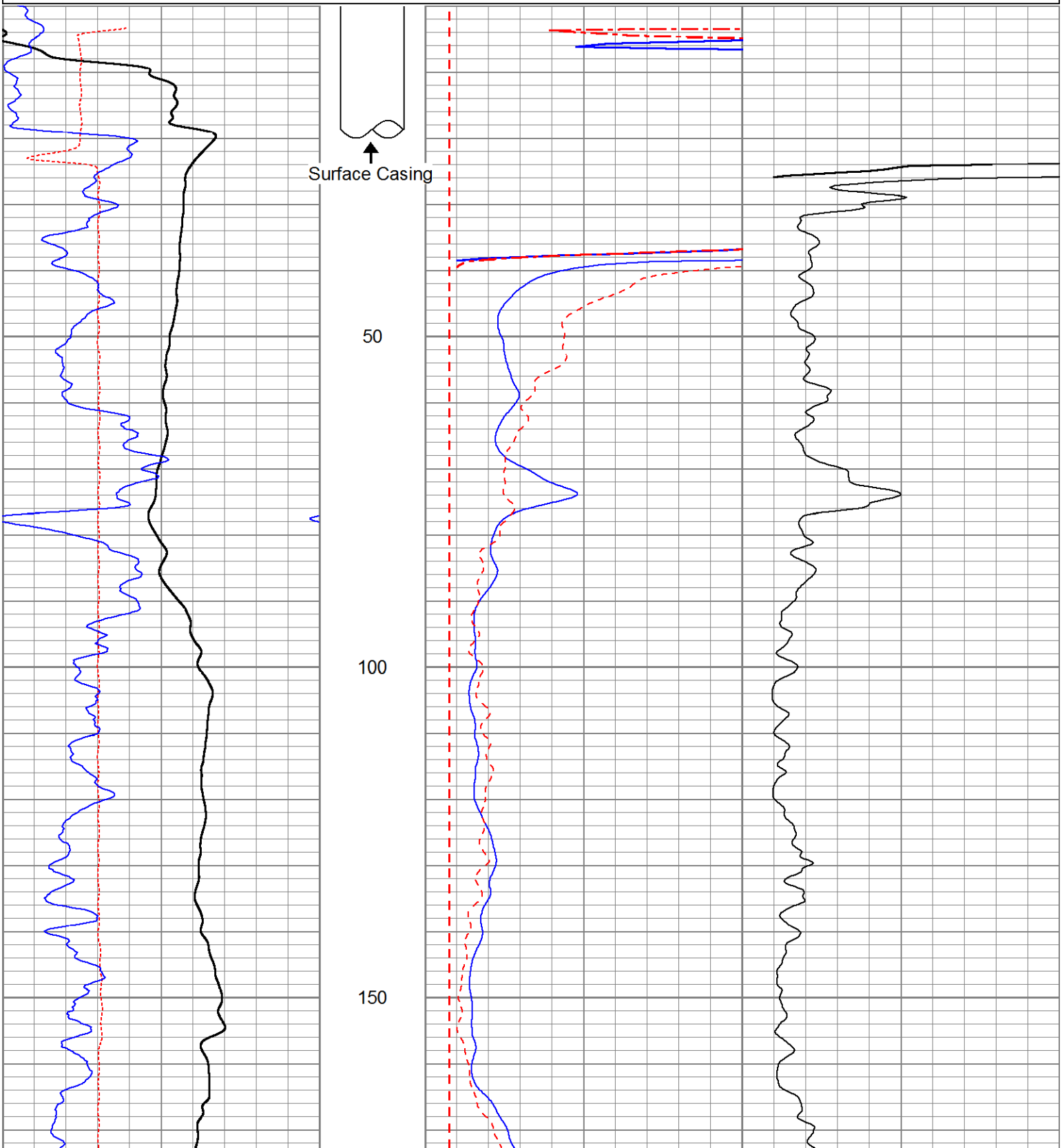
Serial Number:	D4	
Tool Model:	ELOG	
Performed:	Wed Jan 02 15:32:49 2013	
Calibrator Value:	162.0	GAPI
Background Reading:	198.6	cps
Calibrator Reading:	742.0	cps
Sensitivity:	0.2981	GAPI/cps

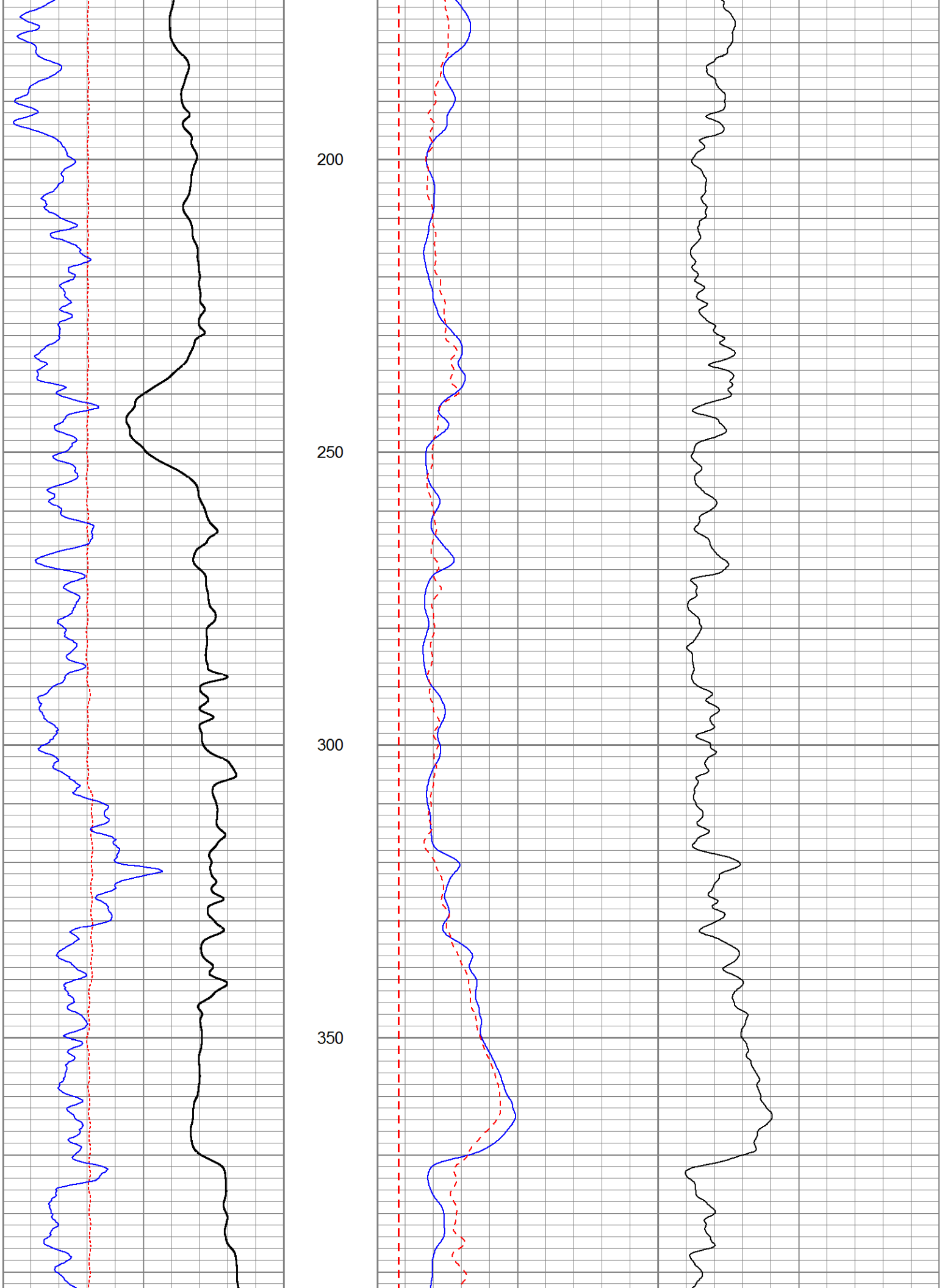
Database File	17392.db
Dataset Pathname	elog
Presentation Format	elog
Dataset Creation	Thu Jun 27 14:00:40 2013
Charted by	Depth in Feet scaled 1:240

-100	SP (mV)	50
0	Line Speed (ft/min)	-100
40	Gamma Ray (GAPI)	140

0	RSN (Ohm-m)	100
0	RLN (Ohm-m)	100
0	RMF (Ohm-m)	100
100	RSN x 10 (Ohm-m)	1000
100	RLN x 10 (Ohm-m)	1000

0	RLL3 (Ohm-m)	100
	RLL3 Back-up	
100	(Ohm-m)	1000

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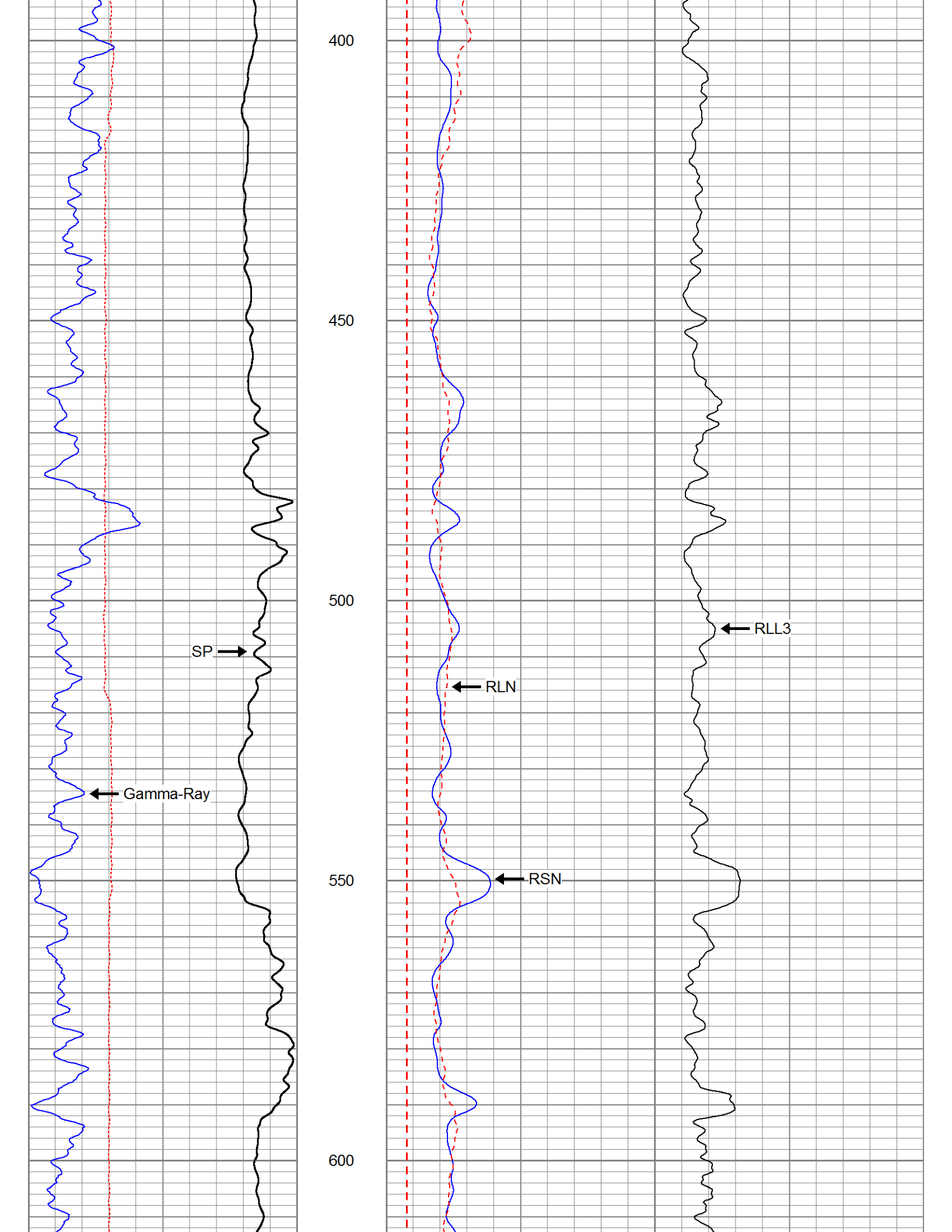
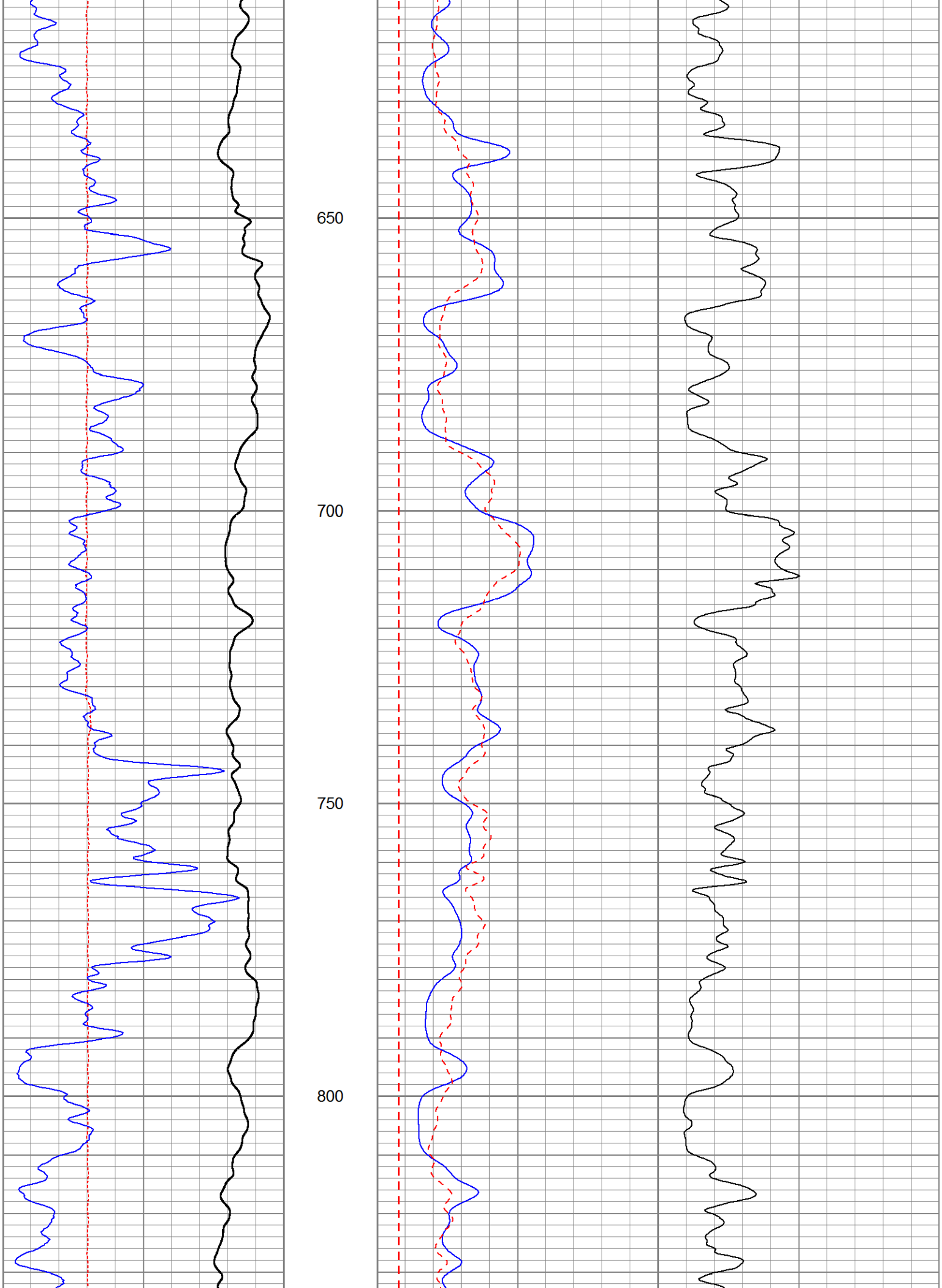
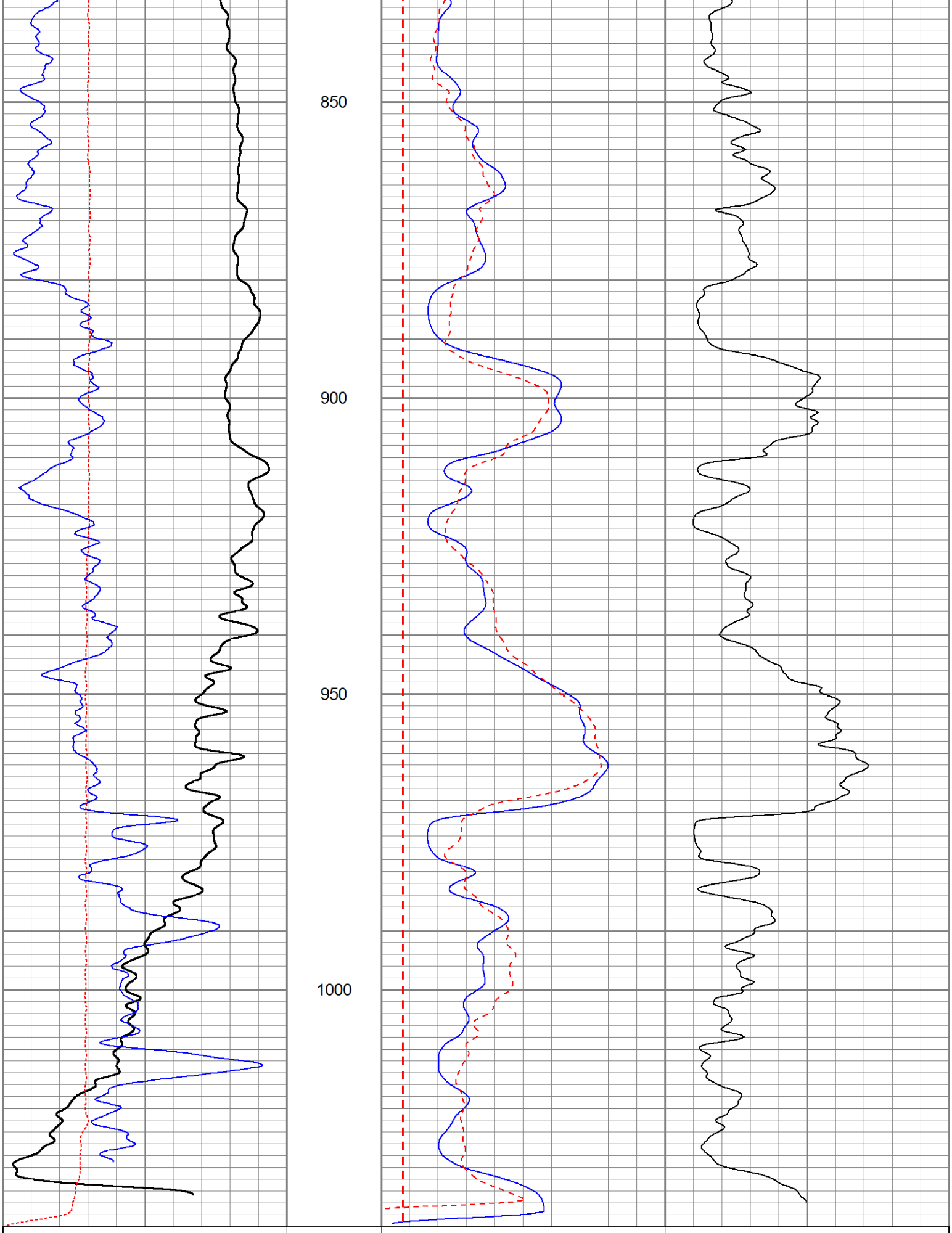
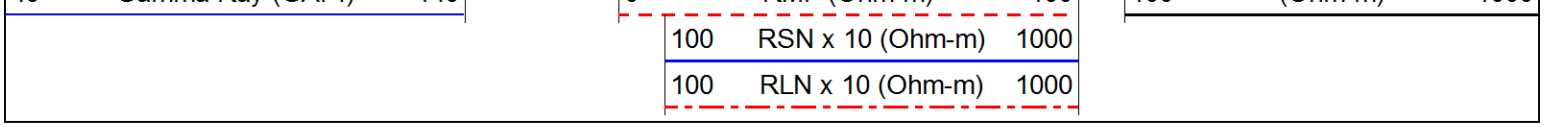
350


400
450
500
550
600
SP
Gamma-Ray
RLN
RSN
RLL3


650
700
750
800


850
900
950
1000
-100 SP (mV) 50
0 Line Speed (ft/min) -100
40 Gamma Ray (GAPI) 140
0 RSN (Ohm-m) 100
0 RLN (Ohm-m) 100
0 RMF (Ohm-m) 100
0 RLL3 (Ohm-m) 100
RLL3 Back-up
100 (Ohm-m) 1000


100 RSN x 10 (Ohm-m) 1000
100 RLN x 10 (Ohm-m) 1000

PACIFIC SURVEYS

LATEROLOG 3
GAMMA-RAY

Job No.
17392

File No.

Company HARGIS & ASSOCIATES, INC.
Well MW-40
Field FULLERTON
County ORANGE State CA

Location:

1881 W MALVERN AVE.
GPS: N 33o 52.635' W 117o 57.658'

Sec. Twp. Rge.

Other Services:

GR/ELOG
CALIPER

Permanent Datum	G.L.	Elevation above perm. datum	Elevation K.B.
Log Measured From	G.L. 0'		D.F.
Drilling Measured From	G.L.		G.L.

Date	06-27-2013		
Run Number	ONE		
Depth Driller	1040'		
Depth Logger	1040'		
Bottom Logged Interval	1040'		
Top Log Interval	0'		
Casing Driller	13 3/8" @ 20'		
Casing Logger	20'		
Bit Size	12 1/4"		
Type Fluid in Hole	BENTONITE		
Density / Viscosity	N/A		
pH / Fluid Loss	N/A		
Source of Sample	TANK		
Rm @ Meas. Temp	7.75 @ 77F		
Rmf @ Meas. Temp	7.58 @ 77F		
Rmc @ Meas. Temp	N/A		
Source of Rmf / Rmc	MEASURE		
Rm @ BHT	N/A		
Time Circulation Stopped	1230		
Time Logger on Bottom	1400		
Max. Recorded Temperature	N/A		
Equipment Number	PS-3		
Location	LA		
Recorded By	SCHUMACHER		
Witnessed By	E. HUNTER		

<<< Fold Here >>>

Comments

Calibration Report

Database File 17392.db
Dataset Pathname LL3
Dataset Creation Thu Jun 27 15:07:04 2013

Gamma Ray Calibration Report

Serial Number:	12	
Tool Model:	GROH	
Performed:	Wed Jan 02 12:20:51 2013	
Calibrator Value:	162.0	GAPI
Background Reading:	54.1	
Calibrator Reading:	193.3	
Sensitivity:	1.1641	GAPI/

RLL3 (Resistivity Laterolog 3) Calibration Report:

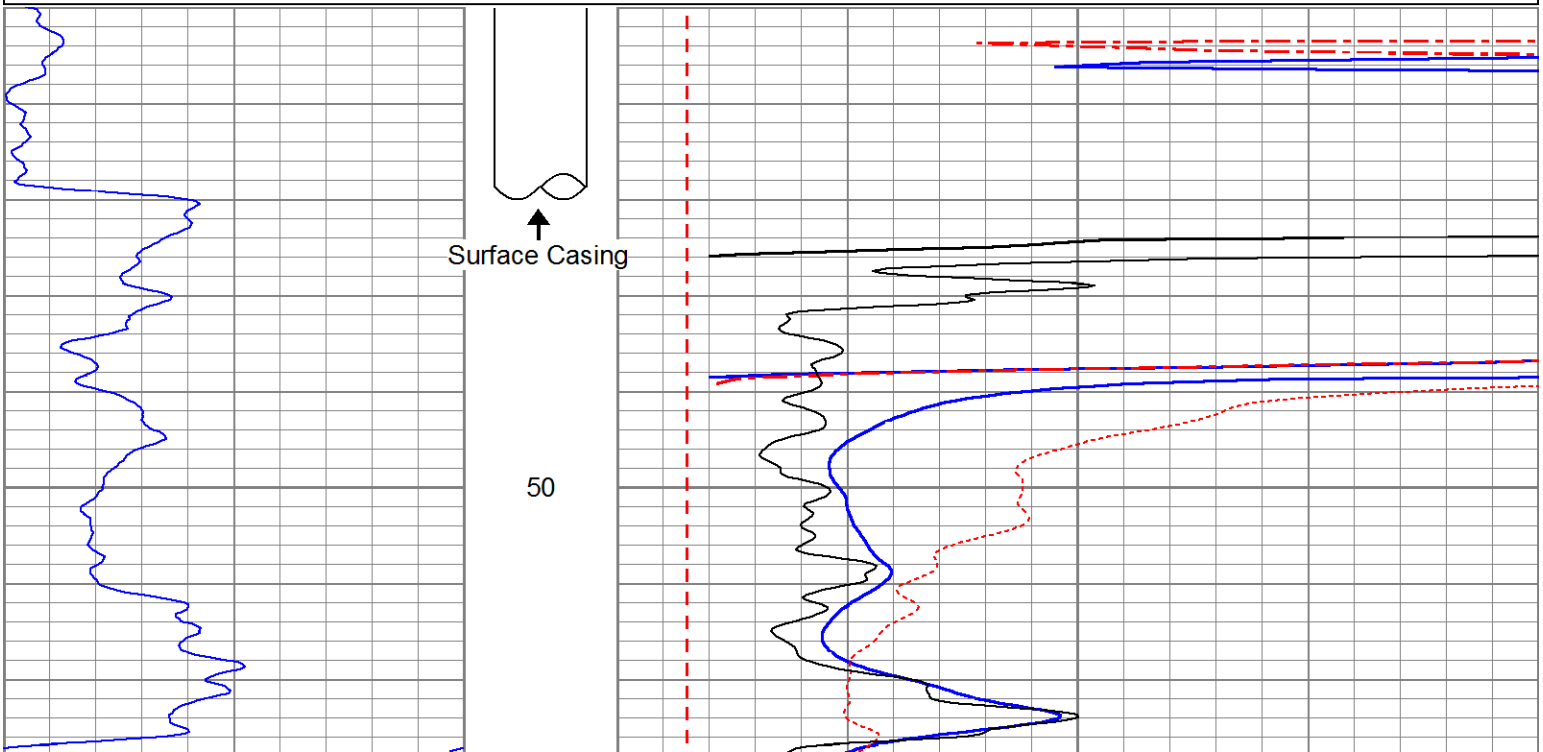
Serial Number:	231	
Tool Model:	M&W	
Performed:	Wed Jan 02 12:02:04 2013	

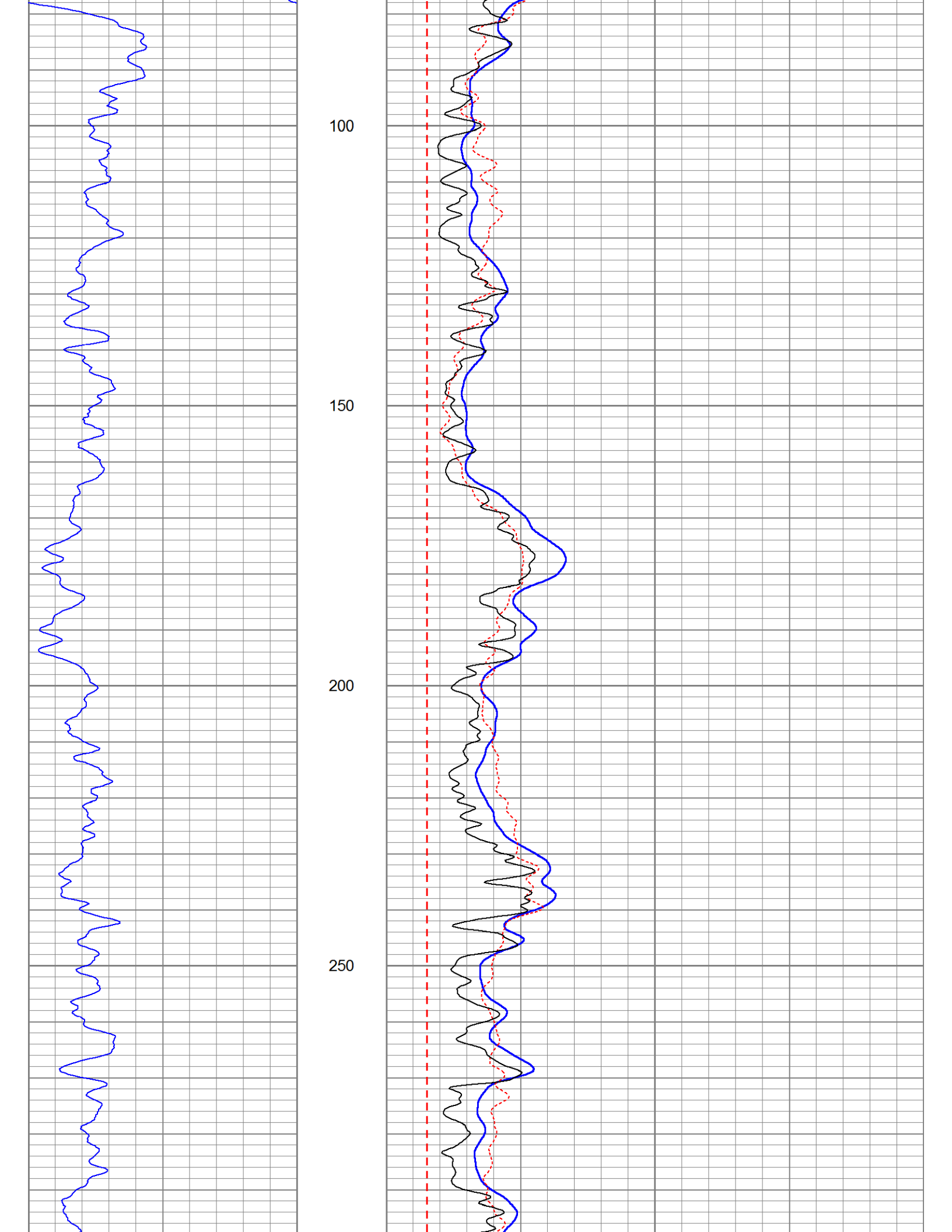
System Reading	Calibration Reference	
0.005	2.500	Ohm-m
0.010	5.000	
0.100	50.000	
0.492	250.000	
0.955	500.000	

Database File	17392.db
Dataset Pathname	LL3
Presentation Format	guard
Dataset Creation	Thu Jun 27 15:07:04 2013
Charted by	Depth in Feet scaled 1:240

40	Gamma-Ray (GAPI)	140

0	RSN (Ohm-m)	100
0	RLN (Ohm-m)	100
0	RMF (Ohm-m)	100
0	RLL3 (Ohm-m)	100
100	RLL3 x 10 (Ohm-m)	1000
100	RSN x 10 (Ohm-m)	1000
100	RLN x 10 (Ohm-m)	1000

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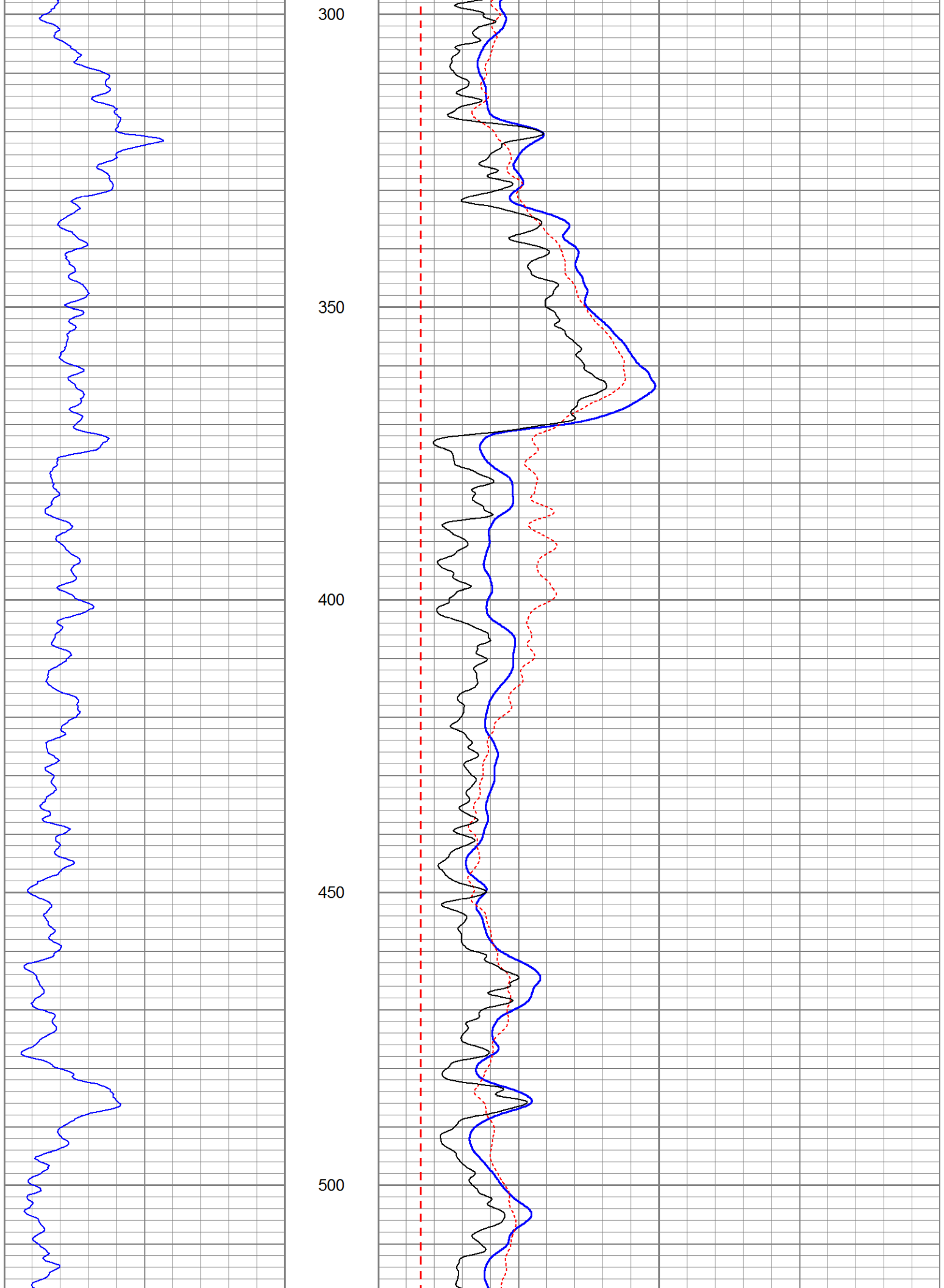
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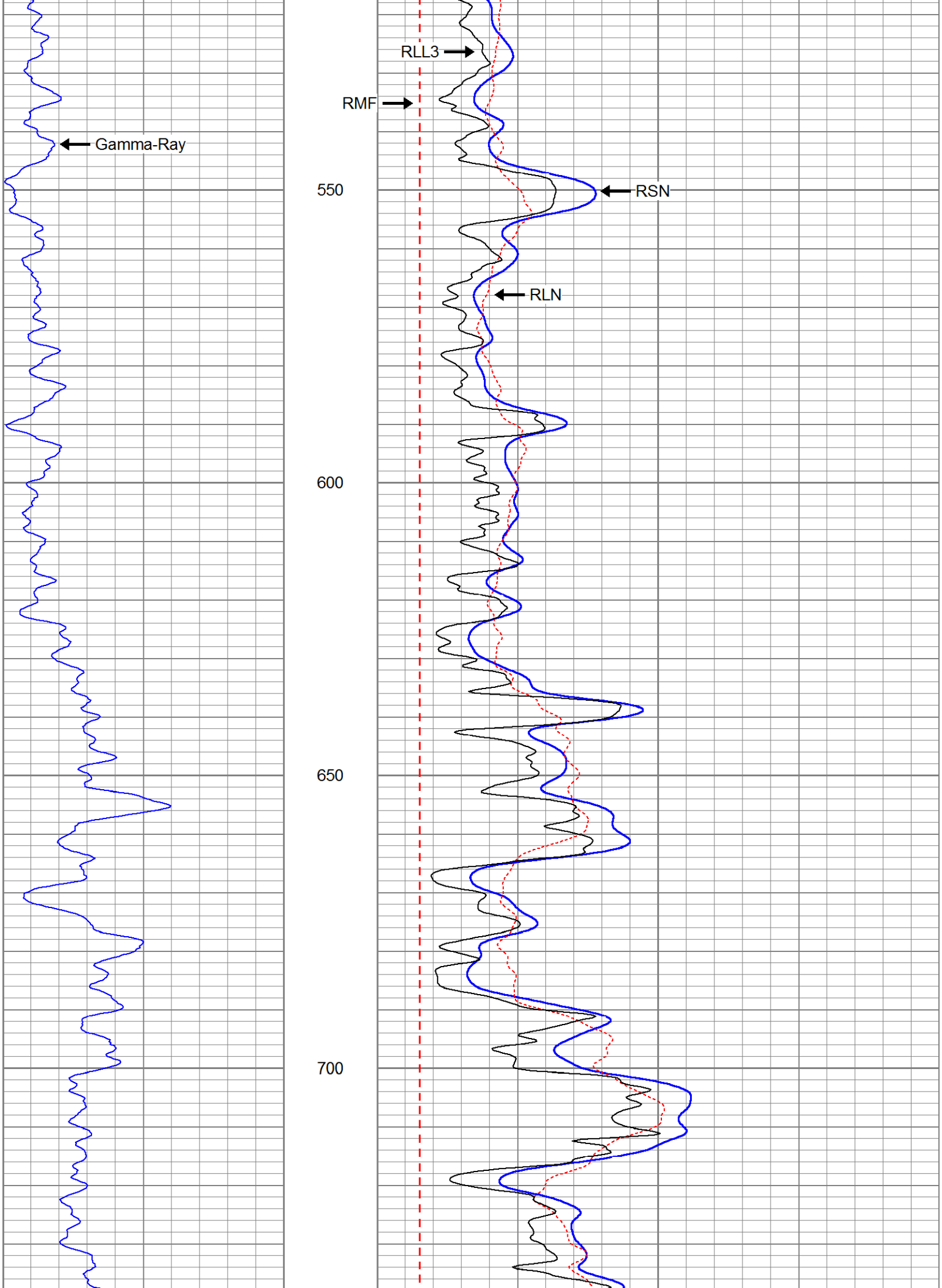
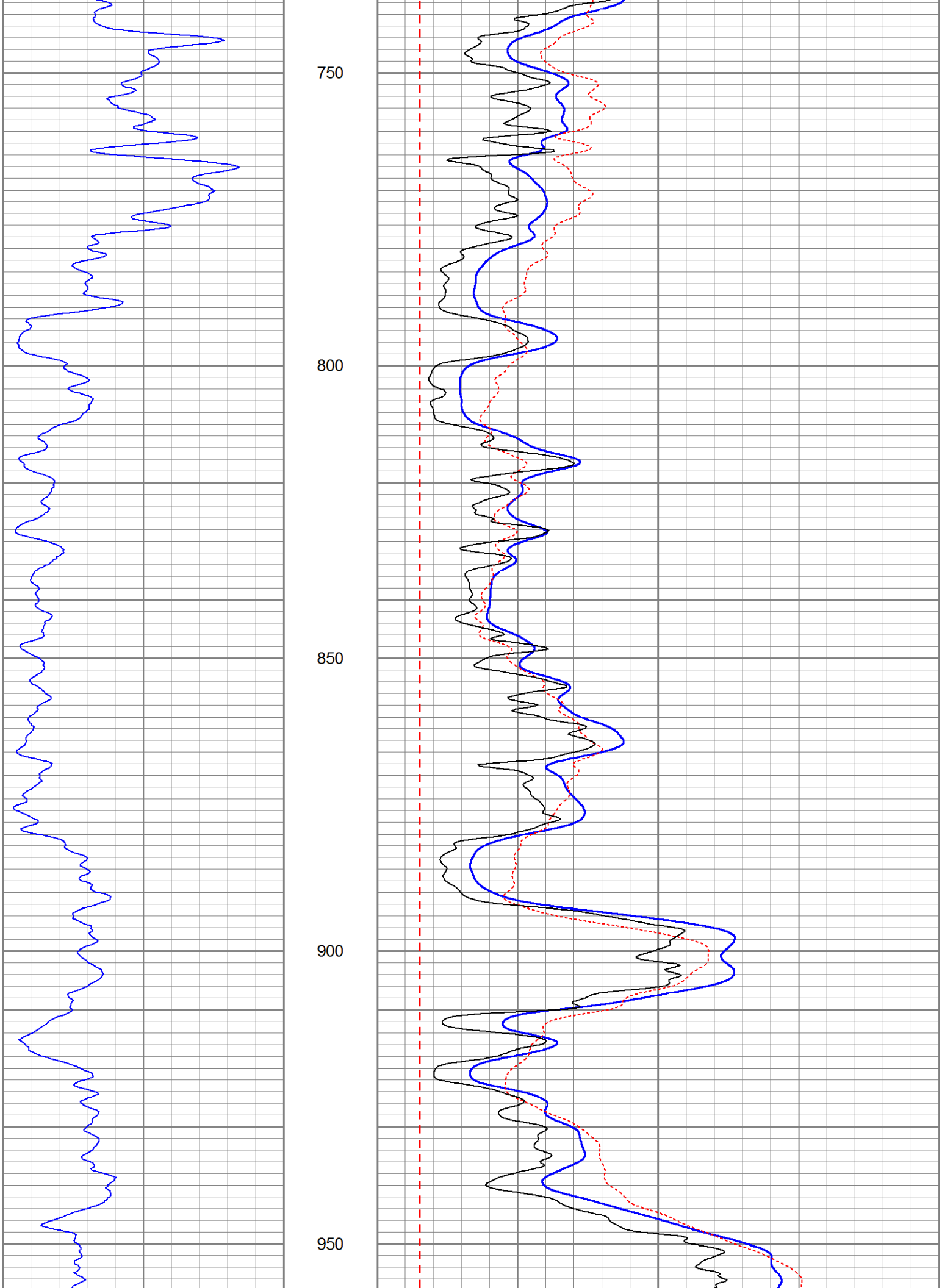
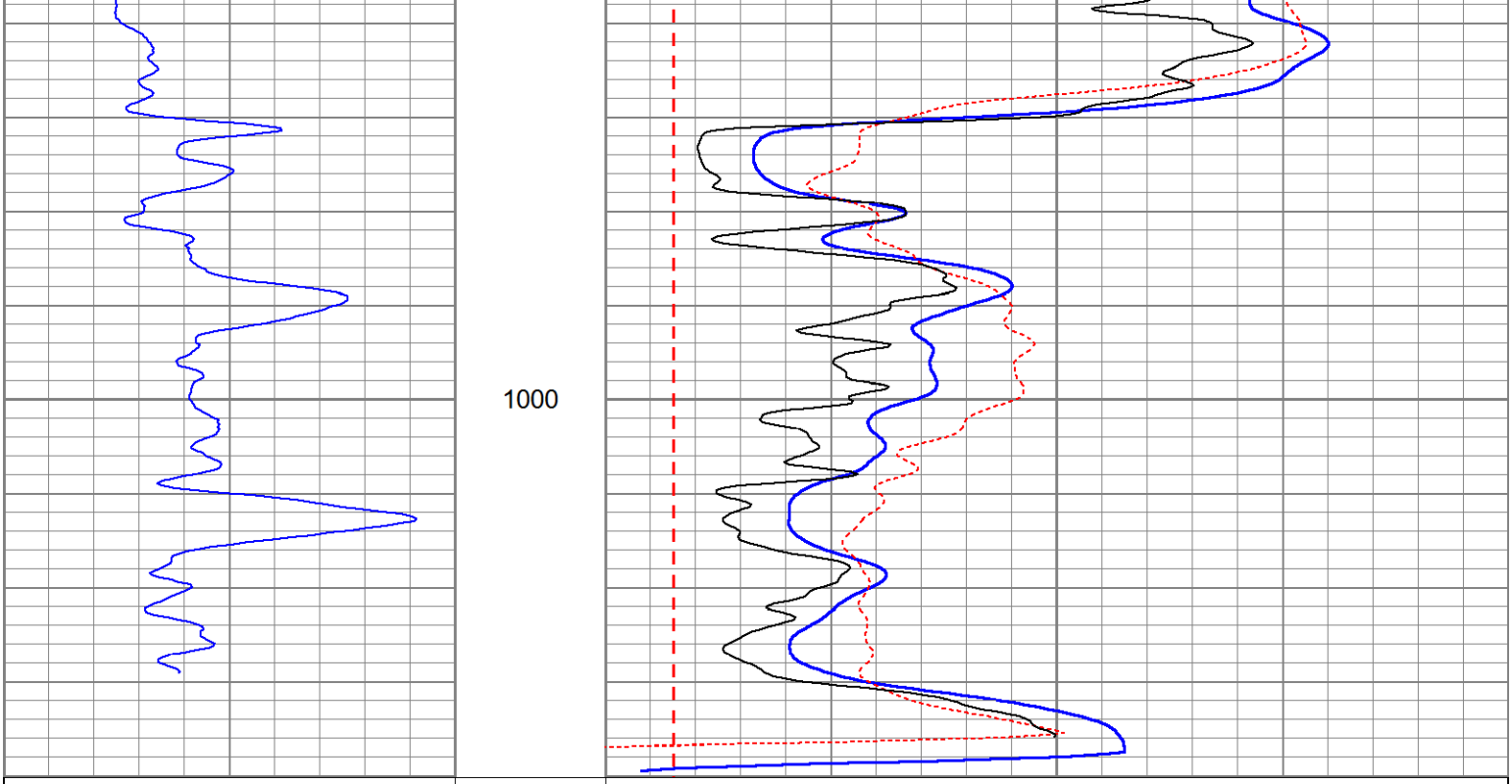
400
450
500


RLL3
RMF
Gamma-Ray
550
RSN
RLN
600
650
700


750
800
850
900
950



40	Gamma-Ray (GAPI)	140
0	RSN (Ohm-m)	100
0	RLN (Ohm-m)	100
0	RMF (Ohm-m)	100
0	RLL3 (Ohm-m)	100
100	RLL3 x 10 (Ohm-m)	1000
100	RSN x 10 (Ohm-m)	1000
100	RLN x 10 (Ohm-m)	1000

APPENDIX D

AQUIFER TEST DATA

MONITOR WELL MW-40

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/18/13 8:53		125.96			0.00	0.00
7/18/13 8:54		125.99			0.00	0.00
7/18/13 8:55		126.01			0.00	0.00
7/18/13 8:56		126.02			0.00	0.00
7/18/13 8:57		126.02			0.00	0.00
7/18/13 8:58		126.02			0.00	0.00
7/18/13 8:59		126.01			0.00	0.00
7/18/13 9:00		126.02			0.00	0.00
7/18/13 9:01		126.02			0.00	0.00
7/18/13 9:02		126.02			0.00	0.00
7/18/13 9:03		126.02			0.00	0.00
7/18/13 9:04		126.02			0.00	0.00
7/18/13 9:05		126.02			0.00	0.00
7/18/13 9:06		126.02			0.00	0.00
7/18/13 9:07		126.02			0.00	0.00
7/18/13 9:08		126.02			0.00	0.00
7/18/13 9:09		126.02			0.00	0.00
7/18/13 9:10		126.02			0.00	0.00
7/18/13 9:11		126.02			0.00	0.00
7/18/13 9:12		126.02			0.00	0.00
7/18/13 9:13		126.02			0.00	0.00
7/18/13 9:14		126.02			0.00	0.00
7/18/13 9:15		126.01			0.00	0.00
7/18/13 9:16		126.01			0.00	0.00
7/18/13 9:17		126.01			0.00	0.00
7/18/13 9:18		126.01			0.00	0.00
7/18/13 9:19		126.01			0.00	0.00
7/18/13 9:20		126.01			0.00	0.00
7/18/13 9:21		126.01			0.00	0.00
7/18/13 9:22		126.01			0.00	0.00
7/18/13 9:23		126.00			0.00	0.00
7/18/13 9:24		126.01			0.00	0.00
7/18/13 9:25		126.00			0.00	0.00
7/18/13 9:26		126.00			0.00	0.00
7/18/13 9:27	126.00	126.00			0.00	0.00
7/18/13 9:28		125.99			0.00	0.00
7/18/13 9:29		126.00			0.00	0.00
7/18/13 9:30		125.99			0.00	0.00
7/18/13 9:31		125.99			0.00	0.00
7/18/13 9:32		125.99			0.00	0.00
7/18/13 9:33		125.99			0.00	0.00
7/18/13 9:34		125.99			0.00	0.00
7/18/13 9:35		125.99			0.00	0.00
7/18/13 9:36		125.99			0.00	0.00
7/18/13 9:37		125.98			0.00	0.00

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/18/13 9:38		125.98			0.00	0.00
7/18/13 9:39		125.98			0.00	0.00
7/18/13 9:40		125.98			0.00	0.00
7/18/13 9:41		125.97			0.00	0.00
7/18/13 9:42		125.98			0.00	0.00
7/18/13 9:43		125.98			0.00	0.00
7/18/13 9:44		125.97			0.00	0.00
7/18/13 9:45		125.97			0.00	0.00
7/18/13 9:46		125.97			0.00	0.00
7/18/13 9:47		125.97			0.00	0.00
7/18/13 9:48		125.97			0.00	0.00
7/18/13 9:49		125.96			0.00	0.00
7/18/13 9:50		125.96			0.00	0.00
7/18/13 9:51		125.96			0.00	0.00
7/18/13 9:52		125.95			0.00	0.00
7/18/13 9:53		125.95			0.00	0.00
7/18/13 9:54		125.95			0.00	0.00
7/18/13 9:55		125.95			0.00	0.00
7/18/13 9:56		125.95			0.00	0.00
7/18/13 9:57		125.95			0.00	0.00
7/18/13 9:58		125.94			0.00	0.00
7/18/13 9:59		125.94			0.00	0.00
7/18/13 10:00		125.94			0.00	0.00
7/18/13 10:01		125.94			0.00	0.00
7/18/13 10:02		125.93			0.00	0.00
7/18/13 10:03	125.94	125.94			0.00	0.00
7/18/13 10:04		125.93			0.00	0.00
7/18/13 10:05		125.93			0.00	0.00
7/18/13 10:06		125.93			0.00	0.00
7/18/13 10:07		125.93			0.00	0.00
7/18/13 10:08		125.92			0.00	0.00
7/18/13 10:09		125.92			0.00	0.00
7/18/13 10:10		125.92			0.00	0.00
7/18/13 10:11		125.92			0.00	0.00
7/18/13 10:12		125.91			0.00	0.00
7/18/13 10:13		125.91			0.00	0.00
7/18/13 10:14		125.91			0.00	0.00
7/18/13 10:15		125.91			0.00	0.00
7/18/13 10:16		125.91			0.00	0.00
7/18/13 10:17		125.91			0.00	0.00
7/18/13 10:18		125.90			0.00	0.00
7/18/13 10:19		125.90			0.00	0.00
7/18/13 10:20		125.90			0.00	0.00
7/18/13 10:21		125.89			0.00	0.00
7/18/13 10:22		125.89			0.00	0.00

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/18/13 10:23		125.89			0.00	0.00
7/18/13 10:24		125.89			0.00	0.00
7/18/13 10:25		125.88			0.00	0.00
7/18/13 10:26		125.89			0.00	0.00
7/18/13 10:27		125.88			0.00	0.00
7/18/13 10:28		125.88			0.00	0.00
7/18/13 10:29		125.88			0.00	0.00
7/18/13 10:30		125.87	START PUMPING		0.00	0.00
7/18/13 10:31	141.50	141.25	1		15.38	15.38
7/18/13 10:32		141.99	2		16.12	16.12
7/18/13 10:33	142.20	142.24	3		16.37	16.37
7/18/13 10:34		142.48	4		16.61	16.61
7/18/13 10:35	142.68	142.73	5		16.86	16.86
7/18/13 10:36		142.80	6		16.93	16.93
7/18/13 10:37		142.99	7		17.12	17.12
7/18/13 10:38		143.09	8		17.22	17.22
7/18/13 10:39	143.23	143.13	9		17.26	17.26
7/18/13 10:40	143.30	143.26	10		17.39	17.39
7/18/13 10:41		143.31	11		17.44	17.44
7/18/13 10:42		143.40	12		17.53	17.53
7/18/13 10:43		143.47	13		17.60	17.60
7/18/13 10:44		143.61	14		17.74	17.74
7/18/13 10:45	143.65	143.57	15		17.70	17.70
7/18/13 10:46		143.68	16		17.81	17.81
7/18/13 10:47		143.73	17		17.86	17.87
7/18/13 10:48		143.82	18		17.95	17.95
7/18/13 10:49		143.83	19		17.96	17.96
7/18/13 10:50	143.89	143.88	20		18.01	18.02
7/18/13 10:51		144.02	21		18.15	18.15
7/18/13 10:52		143.92	22		18.05	18.06
7/18/13 10:53		143.94	23		18.07	18.07
7/18/13 10:54		143.94	24		18.07	18.08
7/18/13 10:55		144.05	25		18.18	18.18
7/18/13 10:56	144.12	144.07	26		18.20	18.20
7/18/13 10:57		144.09	27		18.22	18.22
7/18/13 10:58		144.13	28		18.26	18.26
7/18/13 10:59		144.15	29		18.28	18.28
7/18/13 11:00	144.24	144.27	30		18.40	18.40
7/18/13 11:01		144.25	31		18.38	18.38
7/18/13 11:02		144.19	32		18.32	18.32
7/18/13 11:03		144.27	33		18.40	18.41
7/18/13 11:04		144.30	34		18.43	18.44
7/18/13 11:05	144.39	144.32	35		18.45	18.45
7/18/13 11:06		144.35	36		18.48	18.48
7/18/13 11:07		144.45	37		18.58	18.58

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/18/13 11:08		144.38	38		18.51	18.51
7/18/13 11:09		144.46	39		18.59	18.60
7/18/13 11:10		144.46	40		18.59	18.60
7/18/13 11:11		144.42	41		18.55	18.55
7/18/13 11:12		144.54	42		18.67	18.68
7/18/13 11:13		144.49	43		18.62	18.63
7/18/13 11:14		144.51	44		18.64	18.65
7/18/13 11:15		144.54	45		18.68	18.68
7/18/13 11:16		144.63	46		18.76	18.76
7/18/13 11:17		144.62	47		18.75	18.76
7/18/13 11:18		144.61	48		18.74	18.75
7/18/13 11:19		144.64	49		18.77	18.77
7/18/13 11:20	144.68	144.64	50		18.77	18.78
7/18/13 11:21		144.62	51		18.75	18.76
7/18/13 11:22		144.67	52		18.80	18.81
7/18/13 11:23		144.71	53		18.84	18.85
7/18/13 11:24		144.72	54		18.85	18.86
7/18/13 11:25		144.75	55		18.88	18.89
7/18/13 11:26		144.68	56		18.81	18.82
7/18/13 11:27		144.81	57		18.94	18.94
7/18/13 11:28		144.76	58		18.89	18.90
7/18/13 11:29		144.73	59		18.86	18.87
7/18/13 11:30	144.68	144.78	60		18.91	18.92
7/18/13 11:31		144.81	61		18.94	18.95
7/18/13 11:32		144.82	62		18.95	18.96
7/18/13 11:33		144.91	63		19.04	19.05
7/18/13 11:34		144.77	64		18.90	18.91
7/18/13 11:35		144.83	65		18.96	18.97
7/18/13 11:36		144.93	66		19.06	19.07
7/18/13 11:37		144.90	67		19.03	19.04
7/18/13 11:38		144.82	68		18.95	18.96
7/18/13 11:39		144.90	69		19.03	19.04
7/18/13 11:40		144.97	70		19.10	19.11
7/18/13 11:41		144.95	71		19.08	19.09
7/18/13 11:42		144.89	72		19.02	19.03
7/18/13 11:43		144.96	73		19.09	19.10
7/18/13 11:44		144.97	74		19.10	19.11
7/18/13 11:45		145.04	75		19.17	19.18
7/18/13 11:46	145.02	145.00	76		19.13	19.14
7/18/13 11:47		144.98	77		19.11	19.12
7/18/13 11:48		144.99	78		19.12	19.13
7/18/13 11:49		145.07	79		19.20	19.21
7/18/13 11:50		145.08	80		19.21	19.22
7/18/13 11:51		145.06	81		19.19	19.20
7/18/13 11:52		144.98	82		19.11	19.12

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/18/13 11:53		145.04	83		19.17	19.18
7/18/13 11:54		145.05	84		19.18	19.19
7/18/13 11:55		145.09	85		19.22	19.23
7/18/13 11:56		145.09	86		19.22	19.23
7/18/13 11:57		145.04	87		19.17	19.18
7/18/13 11:58		145.06	88		19.19	19.21
7/18/13 11:59		145.09	89		19.22	19.24
7/18/13 12:00	145.13	145.14	90		19.27	19.28
7/18/13 12:01		145.14	91		19.27	19.28
7/18/13 12:02		145.14	92		19.27	19.28
7/18/13 12:03		145.17	93		19.30	19.31
7/18/13 12:04		145.15	94		19.28	19.30
7/18/13 12:05		145.15	95		19.28	19.30
7/18/13 12:06		145.13	96		19.26	19.28
7/18/13 12:07		145.23	97		19.36	19.37
7/18/13 12:08		145.20	98		19.33	19.35
7/18/13 12:09		145.20	99		19.34	19.35
7/18/13 12:10		145.20	100		19.33	19.34
7/18/13 12:11		145.17	101		19.30	19.31
7/18/13 12:12		145.22	102		19.35	19.37
7/18/13 12:13		145.22	103		19.35	19.36
7/18/13 12:14		145.21	104		19.34	19.36
7/18/13 12:15	145.35	145.23	105		19.36	19.37
7/18/13 12:16		145.28	106		19.41	19.43
7/18/13 12:17		145.27	107		19.40	19.42
7/18/13 12:18		145.27	108		19.40	19.41
7/18/13 12:19		145.23	109		19.36	19.37
7/18/13 12:20		145.26	110		19.39	19.41
7/18/13 12:21		145.28	111		19.41	19.43
7/18/13 12:22		145.30	112		19.43	19.45
7/18/13 12:23		145.29	113		19.42	19.43
7/18/13 12:24		145.28	114		19.41	19.42
7/18/13 12:25		145.26	115		19.39	19.41
7/18/13 12:26		145.29	116		19.42	19.43
7/18/13 12:27		145.29	117		19.42	19.44
7/18/13 12:28		145.30	118		19.43	19.44
7/18/13 12:29		145.31	119		19.44	19.46
7/18/13 12:30		145.32	120		19.45	19.46
7/18/13 12:31		145.33	121		19.46	19.47
7/18/13 12:32		145.31	122		19.45	19.46
7/18/13 12:33		145.29	123		19.42	19.43
7/18/13 12:34		145.34	124		19.47	19.49
7/18/13 12:35		145.36	125		19.49	19.51
7/18/13 12:36		145.38	126		19.51	19.52
7/18/13 12:37		145.36	127		19.49	19.51

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/18/13 12:38		145.38	128		19.51	19.53
7/18/13 12:39		145.41	129		19.54	19.56
7/18/13 12:40	145.40	145.38	130		19.51	19.53
7/18/13 12:41		145.38	131		19.51	19.53
7/18/13 12:42		145.38	132		19.51	19.53
7/18/13 12:43		145.35	133		19.48	19.50
7/18/13 12:44		145.36	134		19.49	19.50
7/18/13 12:45		145.46	135		19.59	19.61
7/18/13 12:46		145.42	136		19.55	19.57
7/18/13 12:47		145.44	137		19.58	19.59
7/18/13 12:48		145.47	138		19.60	19.62
7/18/13 12:49		145.50	139		19.63	19.65
7/18/13 12:50		145.47	140		19.60	19.62
7/18/13 12:51		145.39	141		19.52	19.54
7/18/13 12:52		145.41	142		19.54	19.56
7/18/13 12:53		145.38	143		19.51	19.53
7/18/13 12:54		145.42	144		19.55	19.57
7/18/13 12:55		145.45	145		19.58	19.60
7/18/13 12:56		145.48	146		19.61	19.63
7/18/13 12:57		145.50	147		19.63	19.65
7/18/13 12:58		145.50	148		19.63	19.65
7/18/13 12:59		145.53	149		19.66	19.68
7/18/13 13:00	145.50	145.47	150		19.60	19.62
7/18/13 13:01		145.49	151		19.62	19.64
7/18/13 13:02		145.50	152		19.63	19.66
7/18/13 13:03		145.57	153		19.70	19.73
7/18/13 13:04		145.59	154		19.72	19.74
7/18/13 13:05		145.57	155		19.70	19.72
7/18/13 13:06		145.57	156		19.70	19.73
7/18/13 13:07		145.54	157		19.67	19.69
7/18/13 13:08		145.46	158		19.59	19.62
7/18/13 13:09		145.47	159		19.60	19.63
7/18/13 13:10		145.44	160		19.57	19.59
7/18/13 13:11		145.54	161		19.67	19.70
7/18/13 13:12		145.56	162		19.69	19.71
7/18/13 13:13		145.61	163		19.75	19.77
7/18/13 13:14		145.60	164		19.73	19.75
7/18/13 13:15		145.56	165		19.69	19.71
7/18/13 13:16		145.53	166		19.66	19.68
7/18/13 13:17		145.56	167		19.69	19.71
7/18/13 13:18		145.49	168		19.62	19.64
7/18/13 13:19		145.50	169		19.63	19.65
7/18/13 13:20		145.54	170		19.67	19.70
7/18/13 13:21		145.55	171		19.68	19.71
7/18/13 13:22		145.62	172		19.75	19.78

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/18/13 13:23		145.62	173		19.76	19.78
7/18/13 13:24		145.65	174		19.78	19.80
7/18/13 13:25		145.54	175		19.67	19.69
7/18/13 13:26		145.55	176		19.68	19.70
7/18/13 13:27		145.49	177		19.63	19.65
7/18/13 13:28		145.49	178		19.62	19.64
7/18/13 13:29		145.56	179		19.69	19.71
7/18/13 13:30	145.58	145.58	180		19.71	19.74
7/18/13 13:31		145.63	181		19.76	19.79
7/18/13 13:32		145.57	182		19.70	19.72
7/18/13 13:33		145.60	183		19.73	19.75
7/18/13 13:34		145.58	184		19.71	19.74
7/18/13 13:35		145.54	185		19.67	19.70
7/18/13 13:36		145.55	186		19.68	19.71
7/18/13 13:37		145.53	187		19.66	19.69
7/18/13 13:38		145.57	188		19.70	19.72
7/18/13 13:39		145.63	189		19.76	19.79
7/18/13 13:40		145.59	190		19.72	19.74
7/18/13 13:41		145.62	191		19.75	19.78
7/18/13 13:42		145.59	192		19.72	19.75
7/18/13 13:43		145.59	193		19.72	19.74
7/18/13 13:44		145.56	194		19.69	19.72
7/18/13 13:45		145.58	195		19.71	19.74
7/18/13 13:46		145.64	196		19.77	19.79
7/18/13 13:47		145.62	197		19.75	19.78
7/18/13 13:48		145.63	198		19.76	19.79
7/18/13 13:49		145.61	199		19.74	19.77
7/18/13 13:50		145.62	200		19.75	19.77
7/18/13 13:51		145.60	201		19.73	19.75
7/18/13 13:52		145.61	202		19.74	19.77
7/18/13 13:53	145.63	145.65	203		19.78	19.81
7/18/13 13:54		145.69	204		19.82	19.85
7/18/13 13:55		145.64	205		19.77	19.80
7/18/13 13:56		145.63	206		19.76	19.79
7/18/13 13:57		145.64	207		19.77	19.80
7/18/13 13:58		145.64	208		19.77	19.80
7/18/13 13:59		145.69	209		19.82	19.85
7/18/13 14:00		145.56	210	STOP PUMPING	19.69	19.72
7/18/13 14:01	124.97	125.05	211	211.00	-0.82	-0.79
7/18/13 14:02	125.57	125.83	212	106.00	-0.04	-0.01
7/18/13 14:03		126.68	213	71.00	0.81	0.84
7/18/13 14:04		126.56	214	53.50	0.69	0.72
7/18/13 14:05	126.26	126.28	215	43.00	0.41	0.44
7/18/13 14:06		126.15	216	36.00	0.28	0.31
7/18/13 14:07		126.37	217	31.00	0.50	0.54

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/18/13 14:08		126.51	218	27.25	0.64	0.67
7/18/13 14:09		126.47	219	24.33	0.60	0.63
7/18/13 14:10	126.39	126.43	220	22.00	0.56	0.59
7/18/13 14:11		126.39	221	20.09	0.52	0.55
7/18/13 14:12		126.35	222	18.50	0.48	0.52
7/18/13 14:13		126.32	223	17.15	0.45	0.48
7/18/13 14:14		126.29	224	16.00	0.42	0.45
7/18/13 14:15	126.20	126.26	225	15.00	0.39	0.42
7/18/13 14:16		126.23	226	14.13	0.36	0.39
7/18/13 14:17		126.20	227	13.35	0.33	0.37
7/18/13 14:18		126.18	228	12.67	0.31	0.34
7/18/13 14:19		126.15	229	12.05	0.28	0.32
7/18/13 14:20	126.07	126.13	230	11.50	0.26	0.29
7/18/13 14:21		126.11	231	11.00	0.24	0.27
7/18/13 14:22		126.09	232	10.55	0.22	0.25
7/18/13 14:23		126.07	233	10.13	0.20	0.23
7/18/13 14:24		126.05	234	9.75	0.18	0.21
7/18/13 14:25		126.03	235	9.40	0.16	0.19
7/18/13 14:26		126.01	236	9.08	0.14	0.17
7/18/13 14:27		126.00	237	8.78	0.13	0.16
7/18/13 14:28		125.98	238	8.50	0.11	0.15
7/18/13 14:29		125.96	239	8.24	0.09	0.13
7/18/13 14:30	125.90	125.95	240	8.00	0.08	0.11
7/18/13 14:31		125.94	241	7.77	0.07	0.10
7/18/13 14:32		125.92	242	7.56	0.05	0.08
7/18/13 14:33		125.90	243	7.36	0.03	0.07
7/18/13 14:34		125.89	244	7.18	0.02	0.06
7/18/13 14:35		125.88	245	7.00	0.01	0.04
7/18/13 14:36		125.87	246	6.83	0.00	0.03
7/18/13 14:37		125.85	247	6.68	-0.02	0.02
7/18/13 14:38		125.84	248	6.53	-0.03	0.01
7/18/13 14:39		125.83	249	6.38	-0.04	-0.01
7/18/13 14:40	125.76	125.82	250	6.25	-0.05	-0.02
7/18/13 14:41		125.81	251	6.12	-0.06	-0.03
7/18/13 14:42		125.80	252	6.00	-0.07	-0.04
7/18/13 14:43		125.79	253	5.88	-0.08	-0.05
7/18/13 14:44		125.77	254	5.77	-0.10	-0.06
7/18/13 14:45		125.76	255	5.67	-0.11	-0.07
7/18/13 14:46		125.75	256	5.57	-0.12	-0.08
7/18/13 14:47		125.74	257	5.47	-0.13	-0.09
7/18/13 14:48		125.73	258	5.38	-0.14	-0.10
7/18/13 14:49		125.73	259	5.29	-0.14	-0.11
7/18/13 14:50	125.69	125.72	260	5.20	-0.15	-0.12
7/18/13 14:51		125.71	261	5.12	-0.16	-0.12
7/18/13 14:52		125.70	262	5.04	-0.17	-0.13

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/18/13 14:53		125.69	263	4.96	-0.18	-0.14
7/18/13 14:54		125.68	264	4.89	-0.19	-0.15
7/18/13 14:55		125.67	265	4.82	-0.20	-0.16
7/18/13 14:56		125.66	266	4.75	-0.21	-0.17
7/18/13 14:57		125.66	267	4.68	-0.21	-0.18
7/18/13 14:58		125.65	268	4.62	-0.22	-0.18
7/18/13 14:59		125.64	269	4.56	-0.23	-0.19
7/18/13 15:00	125.55	125.63	270	4.50	-0.24	-0.20
7/18/13 15:01		125.63	271	4.44	-0.24	-0.20
7/18/13 15:02		125.62	272	4.39	-0.25	-0.21
7/18/13 15:03		125.61	273	4.33	-0.26	-0.22
7/18/13 15:04		125.60	274	4.28	-0.27	-0.23
7/18/13 15:05		125.60	275	4.23	-0.27	-0.23
7/18/13 15:06		125.59	276	4.18	-0.28	-0.24
7/18/13 15:07		125.58	277	4.13	-0.29	-0.25
7/18/13 15:08		125.57	278	4.09	-0.29	-0.26
7/18/13 15:09		125.57	279	4.04	-0.30	-0.26
7/18/13 15:10	125.48	125.56	280	4.00	-0.31	-0.27
7/18/13 15:11		125.56	281	3.96	-0.31	-0.27
7/18/13 15:12		125.55	282	3.92	-0.32	-0.28
7/18/13 15:13		125.54	283	3.88	-0.33	-0.29
7/18/13 15:14		125.53	284	3.84	-0.34	-0.30
7/18/13 15:15		125.32	285	3.80	-0.55	-0.51
7/18/13 15:16		125.52	286	3.76	-0.35	-0.31
7/18/13 15:17		125.51	287	3.73	-0.36	-0.32
7/18/13 15:18		125.51	288	3.69	-0.36	-0.32
7/18/13 15:19		125.51	289	3.66	-0.36	-0.32
7/18/13 15:20	125.40	125.50	290	3.63	-0.37	-0.33
7/18/13 15:21		125.49	291	3.59	-0.38	-0.34
7/18/13 15:22		125.49	292	3.56	-0.38	-0.34
7/18/13 15:23		125.48	293	3.53	-0.39	-0.35
7/18/13 15:24		125.48	294	3.50	-0.39	-0.35
7/18/13 15:25		125.47	295	3.47	-0.40	-0.36
7/18/13 15:26		125.46	296	3.44	-0.41	-0.37
7/18/13 15:27		125.46	297	3.41	-0.41	-0.37
7/18/13 15:28		125.45	298	3.39	-0.42	-0.37
7/18/13 15:29		125.45	299	3.36	-0.42	-0.38
7/18/13 15:30	125.35	125.44	300	3.33	-0.43	-0.39
7/18/13 15:31		125.44	301	3.31	-0.43	-0.39
7/18/13 15:32		125.43	302	3.28	-0.44	-0.40
7/18/13 15:33		125.43	303	3.26	-0.44	-0.40
7/18/13 15:34		125.42	304	3.23	-0.45	-0.40
7/18/13 15:35		125.42	305	3.21	-0.45	-0.41
7/18/13 15:36		125.41	306	3.19	-0.46	-0.42
7/18/13 15:37		125.41	307	3.16	-0.46	-0.42

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/18/13 15:38		125.40	308	3.14	-0.47	-0.43
7/18/13 15:39		125.40	309	3.12	-0.47	-0.43
7/18/13 15:40		125.39	310	3.10	-0.48	-0.43
7/18/13 15:41		125.39	311	3.08	-0.48	-0.44
7/18/13 15:42		125.38	312	3.06	-0.49	-0.44
7/18/13 15:43		125.38	313	3.04	-0.49	-0.45
7/18/13 15:44		125.37	314	3.02	-0.50	-0.45
7/18/13 15:45		125.37	315	3.00	-0.50	-0.46
7/18/13 15:46		125.37	316	2.98	-0.50	-0.46
7/18/13 15:47		125.36	317	2.96	-0.51	-0.46
7/18/13 15:48		125.36	318	2.94	-0.51	-0.47
7/18/13 15:49		125.35	319	2.93	-0.52	-0.48
7/18/13 15:50		125.35	320	2.91	-0.52	-0.48
7/18/13 15:51		125.34	321	2.89	-0.53	-0.48
7/18/13 15:52		125.34	322	2.88	-0.53	-0.48
7/18/13 15:53		125.34	323	2.86	-0.53	-0.49
7/18/13 15:54		125.33	324	2.84	-0.54	-0.49
7/18/13 15:55		125.33	325	2.83	-0.54	-0.50
7/18/13 15:56		125.32	326	2.81	-0.55	-0.50
7/18/13 15:57		125.32	327	2.79	-0.55	-0.51
7/18/13 15:58		125.31	328	2.78	-0.56	-0.51
7/18/13 15:59		125.31	329	2.76	-0.56	-0.51
7/18/13 16:00		125.30	330	2.75	-0.57	-0.52
7/18/13 16:01		125.30	331	2.74	-0.57	-0.52
7/18/13 16:02		125.30	332	2.72	-0.57	-0.53
7/18/13 16:03		125.29	333	2.71	-0.58	-0.53
7/18/13 16:04		125.29	334	2.69	-0.58	-0.54
7/18/13 16:05		125.28	335	2.68	-0.59	-0.54
7/18/13 16:06		125.28	336	2.67	-0.59	-0.54
7/18/13 16:07		125.28	337	2.65	-0.59	-0.55
7/18/13 16:08		125.27	338	2.64	-0.60	-0.55
7/18/13 16:09		125.27	339	2.63	-0.60	-0.56
7/18/13 16:10		125.26	340	2.62	-0.61	-0.56
7/18/13 16:11		125.26	341	2.60	-0.61	-0.56
7/18/13 16:12		125.26	342	2.59	-0.61	-0.57
7/18/13 16:13		125.25	343	2.58	-0.62	-0.57
7/18/13 16:14		125.25	344	2.57	-0.62	-0.57
7/18/13 16:15		125.24	345	2.56	-0.63	-0.58
7/18/13 16:16		125.24	346	2.54	-0.63	-0.58
7/18/13 16:17		125.24	347	2.53	-0.63	-0.58
7/18/13 16:18		125.24	348	2.52	-0.63	-0.58
7/18/13 16:19		125.23	349	2.51	-0.64	-0.59
7/18/13 16:20		125.23	350	2.50	-0.64	-0.59
7/18/13 16:21		125.22	351	2.49	-0.65	-0.60
7/18/13 16:22		125.22	352	2.48	-0.65	-0.60

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/18/13 16:23		125.21	353	2.47	-0.66	-0.61
7/18/13 16:24		125.21	354	2.46	-0.66	-0.61
7/18/13 16:25		125.21	355	2.45	-0.66	-0.61
7/18/13 16:26		125.20	356	2.44	-0.67	-0.62
7/18/13 16:27		125.20	357	2.43	-0.67	-0.62
7/18/13 16:28		125.20	358	2.42	-0.67	-0.62
7/18/13 16:29		125.20	359	2.41	-0.67	-0.62
7/18/13 16:30		125.19	360	2.40	-0.68	-0.63
7/18/13 16:31		125.19	361	2.39	-0.68	-0.63
7/18/13 16:32		125.19	362	2.38	-0.68	-0.63
7/18/13 16:33		125.18	363	2.37	-0.69	-0.63
7/18/13 16:34		125.18	364	2.36	-0.69	-0.64
7/18/13 16:35		125.18	365	2.35	-0.69	-0.64
7/18/13 16:36		125.17	366	2.35	-0.70	-0.64
7/18/13 16:37		125.17	367	2.34	-0.70	-0.64
7/18/13 16:38		125.17	368	2.33	-0.70	-0.65
7/18/13 16:39		125.17	369	2.32	-0.70	-0.65
7/18/13 16:40		125.16	370	2.31	-0.71	-0.65
7/18/13 16:41		125.16	371	2.30	-0.71	-0.66
7/18/13 16:42		125.16	372	2.30	-0.71	-0.66
7/18/13 16:43		125.15	373	2.29	-0.72	-0.66
7/18/13 16:44		125.15	374	2.28	-0.72	-0.67
7/18/13 16:45		125.15	375	2.27	-0.72	-0.67
7/18/13 16:46		125.15	376	2.27	-0.72	-0.67
7/18/13 16:47		125.14	377	2.26	-0.73	-0.67
7/18/13 16:48		125.14	378	2.25	-0.73	-0.68
7/18/13 16:49		125.14	379	2.24	-0.73	-0.68
7/18/13 16:50		125.13	380	2.24	-0.74	-0.68
7/18/13 16:51		125.13	381	2.23	-0.74	-0.68
7/18/13 16:52		125.13	382	2.22	-0.74	-0.69
7/18/13 16:53		125.13	383	2.21	-0.74	-0.69
7/18/13 16:54		125.12	384	2.21	-0.75	-0.69
7/18/13 16:55		125.12	385	2.20	-0.75	-0.69
7/18/13 16:56		125.12	386	2.19	-0.75	-0.70
7/18/13 16:57		125.12	387	2.19	-0.75	-0.70
7/18/13 16:58		125.12	388	2.18	-0.75	-0.70
7/18/13 16:59		125.12	389	2.17	-0.75	-0.70
7/18/13 17:00		125.11	390	2.17	-0.76	-0.70
7/18/13 17:01		125.11	391	2.16	-0.76	-0.70
7/18/13 17:02		125.11	392	2.15	-0.76	-0.71
7/18/13 17:03		125.11	393	2.15	-0.76	-0.71
7/18/13 17:04		125.11	394	2.14	-0.76	-0.71
7/18/13 17:05		125.10	395	2.14	-0.77	-0.71
7/18/13 17:06		125.10	396	2.13	-0.77	-0.71
7/18/13 17:07		125.10	397	2.12	-0.77	-0.72

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/18/13 17:08		125.10	398	2.12	-0.77	-0.72
7/18/13 17:09		125.10	399	2.11	-0.77	-0.72
7/18/13 17:10		125.09	400	2.11	-0.78	-0.72
7/18/13 17:11		125.09	401	2.10	-0.78	-0.72
7/18/13 17:12		125.09	402	2.09	-0.78	-0.72
7/18/13 17:13		125.09	403	2.09	-0.78	-0.72
7/18/13 17:14		125.09	404	2.08	-0.78	-0.73
7/18/13 17:15		125.09	405	2.08	-0.78	-0.73
7/18/13 17:16		125.09	406	2.07	-0.78	-0.73
7/18/13 17:17		125.08	407	2.07	-0.79	-0.73
7/18/13 17:18		125.08	408	2.06	-0.79	-0.73
7/18/13 17:19		125.08	409	2.06	-0.79	-0.73
7/18/13 17:20		125.08	410	2.05	-0.79	-0.74
7/18/13 17:21		125.08	411	2.04	-0.79	-0.74
7/18/13 17:22		125.08	412	2.04	-0.79	-0.74
7/18/13 17:23		125.07	413	2.03	-0.80	-0.74
7/18/13 17:24		125.07	414	2.03	-0.80	-0.74
7/18/13 17:25		125.07	415	2.02	-0.80	-0.74
7/18/13 17:26		125.07	416	2.02	-0.80	-0.74
7/18/13 17:27		125.07	417	2.01	-0.80	-0.74
7/18/13 17:28		125.07	418	2.01	-0.80	-0.74
7/18/13 17:29		125.06	419	2.00	-0.80	-0.75
7/18/13 17:30		125.06	420	2.00	-0.81	-0.75
7/18/13 17:31		125.06	421	2.00	-0.81	-0.75
7/18/13 17:32		125.06	422	1.99	-0.81	-0.75
7/18/13 17:33		125.06	423	1.99	-0.81	-0.75
7/18/13 17:34		125.06	424	1.98	-0.81	-0.75
7/18/13 17:35		125.06	425	1.98	-0.81	-0.75
7/18/13 17:36		125.06	426	1.97	-0.81	-0.75
7/18/13 17:37		125.06	427	1.97	-0.81	-0.75
7/18/13 17:38		125.05	428	1.96	-0.82	-0.76
7/18/13 17:39		125.06	429	1.96	-0.81	-0.75
7/18/13 17:40		125.06	430	1.95	-0.81	-0.75
7/18/13 17:41		125.05	431	1.95	-0.82	-0.76
7/18/13 17:42		125.05	432	1.95	-0.82	-0.76
7/18/13 17:43		125.05	433	1.94	-0.82	-0.76
7/18/13 17:44		125.05	434	1.94	-0.82	-0.76
7/18/13 17:45		125.05	435	1.93	-0.82	-0.76
7/18/13 17:46		125.05	436	1.93	-0.82	-0.76
7/18/13 17:47		125.05	437	1.93	-0.82	-0.76
7/18/13 17:48		125.05	438	1.92	-0.82	-0.76
7/18/13 17:49		125.05	439	1.92	-0.82	-0.76
7/18/13 17:50		125.04	440	1.91	-0.83	-0.76
7/18/13 17:51		125.04	441	1.91	-0.83	-0.76
7/18/13 17:52		125.04	442	1.91	-0.83	-0.77

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/18/13 17:53		125.04	443	1.90	-0.83	-0.76
7/18/13 17:54		125.04	444	1.90	-0.83	-0.77
7/18/13 17:55		125.04	445	1.89	-0.83	-0.77
7/18/13 17:56		125.04	446	1.89	-0.83	-0.77
7/18/13 17:57		125.04	447	1.89	-0.83	-0.76
7/18/13 17:58		125.04	448	1.88	-0.83	-0.77
7/18/13 17:59		125.04	449	1.88	-0.83	-0.77
7/18/13 18:00		125.04	450	1.88	-0.83	-0.77
7/18/13 18:01		125.04	451	1.87	-0.83	-0.77
7/18/13 18:02		125.04	452	1.87	-0.83	-0.77
7/18/13 18:03		125.04	453	1.86	-0.83	-0.77
7/18/13 18:04		125.04	454	1.86	-0.83	-0.77
7/18/13 18:05		125.03	455	1.86	-0.84	-0.77
7/18/13 18:06		125.03	456	1.85	-0.84	-0.77
7/18/13 18:07		125.03	457	1.85	-0.84	-0.77
7/18/13 18:08		125.03	458	1.85	-0.84	-0.77
7/18/13 18:09		125.03	459	1.84	-0.84	-0.77
7/18/13 18:10		125.03	460	1.84	-0.84	-0.77
7/18/13 18:11		125.03	461	1.84	-0.84	-0.77
7/18/13 18:12		125.03	462	1.83	-0.84	-0.77
7/18/13 18:13		125.03	463	1.83	-0.84	-0.77
7/18/13 18:14		125.03	464	1.83	-0.84	-0.78
7/18/13 18:15		125.03	465	1.82	-0.84	-0.78
7/18/13 18:16		125.03	466	1.82	-0.84	-0.78
7/18/13 18:17		125.03	467	1.82	-0.84	-0.78
7/18/13 18:18		125.03	468	1.81	-0.84	-0.78
7/18/13 18:19		125.03	469	1.81	-0.84	-0.77
7/18/13 18:20		125.03	470	1.81	-0.84	-0.77
7/18/13 18:21		125.03	471	1.80	-0.84	-0.78
7/18/13 18:22		125.02	472	1.80	-0.85	-0.78
7/18/13 18:23		125.03	473	1.80	-0.84	-0.78
7/18/13 18:24		125.03	474	1.80	-0.84	-0.78
7/18/13 18:25		125.02	475	1.79	-0.85	-0.78
7/18/13 18:26		125.03	476	1.79	-0.84	-0.78
7/18/13 18:27		125.03	477	1.79	-0.84	-0.78
7/18/13 18:28		125.02	478	1.78	-0.85	-0.78
7/18/13 18:29		125.03	479	1.78	-0.84	-0.78
7/18/13 18:30		125.03	480	1.78	-0.84	-0.78
7/18/13 18:31		125.02	481	1.77	-0.85	-0.78
7/18/13 18:32		125.02	482	1.77	-0.85	-0.78
7/18/13 18:33		125.03	483	1.77	-0.84	-0.78
7/18/13 18:34		125.02	484	1.77	-0.85	-0.78
7/18/13 18:35		125.02	485	1.76	-0.85	-0.78
7/18/13 18:36		125.02	486	1.76	-0.85	-0.78
7/18/13 18:37		125.02	487	1.76	-0.85	-0.78

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/18/13 18:38		125.02	488	1.76	-0.85	-0.78
7/18/13 18:39		125.02	489	1.75	-0.84	-0.78
7/18/13 18:40		125.02	490	1.75	-0.85	-0.78
7/18/13 18:41		125.02	491	1.75	-0.85	-0.78
7/18/13 18:42		125.02	492	1.74	-0.85	-0.78
7/18/13 18:43		125.02	493	1.74	-0.85	-0.78
7/18/13 18:44		125.02	494	1.74	-0.85	-0.78
7/18/13 18:45		125.02	495	1.74	-0.85	-0.78
7/18/13 18:46		125.02	496	1.73	-0.85	-0.78
7/18/13 18:47		125.02	497	1.73	-0.85	-0.78
7/18/13 18:48		125.02	498	1.73	-0.85	-0.78
7/18/13 18:49		125.02	499	1.73	-0.85	-0.78
7/18/13 18:50		125.02	500	1.72	-0.85	-0.78
7/18/13 18:51		125.02	501	1.72	-0.85	-0.78
7/18/13 18:52		125.02	502	1.72	-0.85	-0.78
7/18/13 18:53		125.02	503	1.72	-0.85	-0.78
7/18/13 18:54		125.02	504	1.71	-0.85	-0.78
7/18/13 18:55		125.02	505	1.71	-0.85	-0.78
7/18/13 18:56		125.02	506	1.71	-0.85	-0.78
7/18/13 18:57		125.02	507	1.71	-0.85	-0.78
7/18/13 18:58		125.02	508	1.70	-0.85	-0.78
7/18/13 18:59		125.02	509	1.70	-0.85	-0.78
7/18/13 19:00		125.02	510	1.70	-0.85	-0.78
7/18/13 19:01		125.02	511	1.70	-0.85	-0.78
7/18/13 19:02		125.02	512	1.70	-0.85	-0.78
7/18/13 19:03		125.02	513	1.69	-0.85	-0.78
7/18/13 19:04		125.02	514	1.69	-0.85	-0.78
7/18/13 19:05		125.02	515	1.69	-0.85	-0.78
7/18/13 19:06		125.02	516	1.69	-0.85	-0.78
7/18/13 19:07		125.02	517	1.68	-0.85	-0.78
7/18/13 19:08		125.02	518	1.68	-0.85	-0.78
7/18/13 19:09		125.02	519	1.68	-0.85	-0.78
7/18/13 19:10		125.02	520	1.68	-0.85	-0.78
7/18/13 19:11		125.02	521	1.68	-0.85	-0.78
7/18/13 19:12		125.02	522	1.67	-0.85	-0.78
7/18/13 19:13		125.02	523	1.67	-0.85	-0.78
7/18/13 19:14		125.02	524	1.67	-0.85	-0.78
7/18/13 19:15		125.02	525	1.67	-0.85	-0.78
7/18/13 19:16		125.02	526	1.66	-0.85	-0.78
7/18/13 19:17		125.02	527	1.66	-0.85	-0.78
7/18/13 19:18		125.02	528	1.66	-0.85	-0.78
7/18/13 19:19		125.02	529	1.66	-0.85	-0.78
7/18/13 19:20		125.02	530	1.66	-0.85	-0.78
7/18/13 19:21		125.02	531	1.65	-0.85	-0.78
7/18/13 19:22		125.02	532	1.65	-0.85	-0.77

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/18/13 19:23		125.02	533	1.65	-0.85	-0.78
7/18/13 19:24		125.02	534	1.65	-0.85	-0.77
7/18/13 19:25		125.02	535	1.65	-0.85	-0.78
7/18/13 19:26		125.02	536	1.64	-0.85	-0.78
7/18/13 19:27		125.02	537	1.64	-0.85	-0.77
7/18/13 19:28		125.02	538	1.64	-0.85	-0.77
7/18/13 19:29		125.02	539	1.64	-0.85	-0.78
7/18/13 19:30		125.02	540	1.64	-0.85	-0.77
7/18/13 19:31		125.02	541	1.63	-0.85	-0.77
7/18/13 19:32		125.02	542	1.63	-0.85	-0.77
7/18/13 19:33		125.02	543	1.63	-0.85	-0.77
7/18/13 19:34		125.02	544	1.63	-0.85	-0.77
7/18/13 19:35		125.02	545	1.63	-0.85	-0.77
7/18/13 19:36		125.02	546	1.63	-0.85	-0.77
7/18/13 19:37		125.02	547	1.62	-0.85	-0.77
7/18/13 19:38		125.02	548	1.62	-0.85	-0.77
7/18/13 19:39		125.02	549	1.62	-0.85	-0.77
7/18/13 19:40		125.02	550	1.62	-0.85	-0.77
7/18/13 19:41		125.02	551	1.62	-0.85	-0.77
7/18/13 19:42		125.02	552	1.61	-0.85	-0.77
7/18/13 19:43		125.02	553	1.61	-0.85	-0.77
7/18/13 19:44		125.02	554	1.61	-0.85	-0.77
7/18/13 19:45		125.02	555	1.61	-0.85	-0.77
7/18/13 19:46		125.02	556	1.61	-0.85	-0.77
7/18/13 19:47		125.02	557	1.61	-0.85	-0.77
7/18/13 19:48		125.02	558	1.60	-0.85	-0.77
7/18/13 19:49		125.02	559	1.60	-0.85	-0.77
7/18/13 19:50		125.02	560	1.60	-0.85	-0.77
7/18/13 19:51		125.02	561	1.60	-0.85	-0.77
7/18/13 19:52		125.02	562	1.60	-0.85	-0.77
7/18/13 19:53		125.02	563	1.59	-0.85	-0.77
7/18/13 19:54		125.02	564	1.59	-0.85	-0.77
7/18/13 19:55		125.02	565	1.59	-0.85	-0.77
7/18/13 19:56		125.02	566	1.59	-0.85	-0.77
7/18/13 19:57		125.03	567	1.59	-0.84	-0.76
7/18/13 19:58		125.02	568	1.59	-0.85	-0.77
7/18/13 19:59		125.02	569	1.58	-0.85	-0.77
7/18/13 20:00		125.02	570	1.58	-0.85	-0.77
7/18/13 20:01		125.03	571	1.58	-0.84	-0.76
7/18/13 20:02		125.03	572	1.58	-0.84	-0.76
7/18/13 20:03		125.03	573	1.58	-0.84	-0.76
7/18/13 20:04		125.02	574	1.58	-0.84	-0.76
7/18/13 20:05		125.03	575	1.58	-0.84	-0.76
7/18/13 20:06		125.03	576	1.57	-0.84	-0.76
7/18/13 20:07		125.03	577	1.57	-0.84	-0.76

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/18/13 20:08		125.03	578	1.57	-0.84	-0.76
7/18/13 20:09		125.03	579	1.57	-0.84	-0.76
7/18/13 20:10		125.03	580	1.57	-0.84	-0.76
7/18/13 20:11		125.03	581	1.57	-0.84	-0.76
7/18/13 20:12		125.03	582	1.56	-0.84	-0.76
7/18/13 20:13		125.03	583	1.56	-0.84	-0.76
7/18/13 20:14		125.03	584	1.56	-0.84	-0.76
7/18/13 20:15		125.03	585	1.56	-0.84	-0.76
7/18/13 20:16		125.03	586	1.56	-0.84	-0.76
7/18/13 20:17		125.03	587	1.56	-0.84	-0.76
7/18/13 20:18		125.03	588	1.56	-0.84	-0.75
7/18/13 20:19		125.03	589	1.55	-0.84	-0.76
7/18/13 20:20		125.03	590	1.55	-0.84	-0.75
7/18/13 20:21		125.03	591	1.55	-0.84	-0.75
7/18/13 20:22		125.04	592	1.55	-0.83	-0.75
7/18/13 20:23		125.03	593	1.55	-0.84	-0.75
7/18/13 20:24		125.04	594	1.55	-0.83	-0.75
7/18/13 20:25		125.04	595	1.55	-0.83	-0.75
7/18/13 20:26		125.03	596	1.54	-0.84	-0.75
7/18/13 20:27		125.03	597	1.54	-0.84	-0.75
7/18/13 20:28		125.04	598	1.54	-0.83	-0.75
7/18/13 20:29		125.04	599	1.54	-0.83	-0.75
7/18/13 20:30		125.04	600	1.54	-0.83	-0.75
7/18/13 20:31		125.04	601	1.54	-0.83	-0.75
7/18/13 20:32		125.04	602	1.54	-0.83	-0.75
7/18/13 20:33		125.04	603	1.53	-0.83	-0.75
7/18/13 20:34		125.04	604	1.53	-0.83	-0.75
7/18/13 20:35		125.04	605	1.53	-0.83	-0.75
7/18/13 20:36		125.04	606	1.53	-0.83	-0.74
7/18/13 20:37		125.04	607	1.53	-0.83	-0.74
7/18/13 20:38		125.04	608	1.53	-0.83	-0.75
7/18/13 20:39		125.04	609	1.53	-0.83	-0.74
7/18/13 20:40		125.04	610	1.53	-0.83	-0.74
7/18/13 20:41		125.04	611	1.52	-0.82	-0.74
7/18/13 20:42		125.04	612	1.52	-0.83	-0.74
7/18/13 20:43		125.05	613	1.52	-0.82	-0.74
7/18/13 20:44		125.04	614	1.52	-0.83	-0.74
7/18/13 20:45		125.05	615	1.52	-0.82	-0.74
7/18/13 20:46		125.05	616	1.52	-0.82	-0.74
7/18/13 20:47		125.04	617	1.52	-0.83	-0.74
7/18/13 20:48		125.05	618	1.51	-0.82	-0.73
7/18/13 20:49		125.05	619	1.51	-0.82	-0.74
7/18/13 20:50		125.05	620	1.51	-0.82	-0.73
7/18/13 20:51		125.05	621	1.51	-0.82	-0.73
7/18/13 20:52		125.05	622	1.51	-0.82	-0.73

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/18/13 20:53		125.05	623	1.51	-0.82	-0.73
7/18/13 20:54		125.05	624	1.51	-0.82	-0.73
7/18/13 20:55		125.05	625	1.51	-0.82	-0.73
7/18/13 20:56		125.05	626	1.50	-0.82	-0.73
7/18/13 20:57		125.05	627	1.50	-0.82	-0.73
7/18/13 20:58		125.05	628	1.50	-0.82	-0.73
7/18/13 20:59		125.05	629	1.50	-0.82	-0.73
7/18/13 21:00		125.06	630	1.50	-0.81	-0.73
7/18/13 21:01		125.05	631	1.50	-0.81	-0.73
7/18/13 21:02		125.06	632	1.50	-0.81	-0.73
7/18/13 21:03		125.06	633	1.50	-0.81	-0.72
7/18/13 21:04		125.06	634	1.50	-0.81	-0.72
7/18/13 21:05		125.06	635	1.49	-0.81	-0.72
7/18/13 21:06		125.06	636	1.49	-0.81	-0.72
7/18/13 21:07		125.06	637	1.49	-0.81	-0.72
7/18/13 21:08		125.06	638	1.49	-0.81	-0.72
7/18/13 21:09		125.06	639	1.49	-0.81	-0.72
7/18/13 21:10		125.06	640	1.49	-0.81	-0.72
7/18/13 21:11		125.06	641	1.49	-0.81	-0.72
7/18/13 21:12		125.06	642	1.49	-0.81	-0.72
7/18/13 21:13		125.06	643	1.48	-0.81	-0.72
7/18/13 21:14		125.06	644	1.48	-0.81	-0.72
7/18/13 21:15		125.06	645	1.48	-0.81	-0.72
7/18/13 21:16		125.06	646	1.48	-0.81	-0.71
7/18/13 21:17		125.07	647	1.48	-0.80	-0.71
7/18/13 21:18		125.07	648	1.48	-0.80	-0.71
7/18/13 21:19		125.07	649	1.48	-0.80	-0.71
7/18/13 21:20		125.07	650	1.48	-0.80	-0.71
7/18/13 21:21		125.07	651	1.48	-0.80	-0.71
7/18/13 21:22		125.07	652	1.48	-0.80	-0.71
7/18/13 21:23		125.07	653	1.47	-0.80	-0.71
7/18/13 21:24		125.07	654	1.47	-0.80	-0.71
7/18/13 21:25		125.07	655	1.47	-0.80	-0.71
7/18/13 21:26		125.07	656	1.47	-0.80	-0.71
7/18/13 21:27		125.07	657	1.47	-0.80	-0.71
7/18/13 21:28		125.07	658	1.47	-0.80	-0.71
7/18/13 21:29		125.07	659	1.47	-0.80	-0.71
7/18/13 21:30		125.07	660	1.47	-0.80	-0.71
7/18/13 21:31		125.07	661	1.47	-0.80	-0.71
7/18/13 21:32		125.07	662	1.46	-0.80	-0.71
7/18/13 21:33		125.07	663	1.46	-0.80	-0.71
7/18/13 21:34		125.07	664	1.46	-0.80	-0.71
7/18/13 21:35		125.07	665	1.46	-0.80	-0.70
7/18/13 21:36		125.07	666	1.46	-0.80	-0.71
7/18/13 21:37		125.07	667	1.46	-0.80	-0.70

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/18/13 21:38		125.07	668	1.46	-0.80	-0.70
7/18/13 21:39		125.07	669	1.46	-0.80	-0.70
7/18/13 21:40		125.08	670	1.46	-0.79	-0.70
7/18/13 21:41		125.07	671	1.46	-0.80	-0.70
7/18/13 21:42		125.08	672	1.45	-0.79	-0.70
7/18/13 21:43		125.08	673	1.45	-0.79	-0.70
7/18/13 21:44		125.08	674	1.45	-0.79	-0.70
7/18/13 21:45		125.08	675	1.45	-0.79	-0.70
7/18/13 21:46		125.08	676	1.45	-0.79	-0.69
7/18/13 21:47		125.08	677	1.45	-0.79	-0.69
7/18/13 21:48		125.08	678	1.45	-0.79	-0.69
7/18/13 21:49		125.08	679	1.45	-0.79	-0.69
7/18/13 21:50		125.09	680	1.45	-0.78	-0.69
7/18/13 21:51		125.08	681	1.45	-0.79	-0.69
7/18/13 21:52		125.08	682	1.44	-0.79	-0.69
7/18/13 21:53		125.09	683	1.44	-0.78	-0.69
7/18/13 21:54		125.09	684	1.44	-0.78	-0.69
7/18/13 21:55		125.09	685	1.44	-0.78	-0.69
7/18/13 21:56		125.09	686	1.44	-0.78	-0.69
7/18/13 21:57		125.09	687	1.44	-0.78	-0.69
7/18/13 21:58		125.09	688	1.44	-0.78	-0.68
7/18/13 21:59		125.09	689	1.44	-0.78	-0.68
7/18/13 22:00		125.09	690	1.44	-0.78	-0.68
7/18/13 22:01		125.09	691	1.44	-0.78	-0.68
7/18/13 22:02		125.09	692	1.44	-0.78	-0.68
7/18/13 22:03		125.09	693	1.43	-0.78	-0.68
7/18/13 22:04		125.09	694	1.43	-0.78	-0.68
7/18/13 22:05		125.09	695	1.43	-0.78	-0.68
7/18/13 22:06		125.09	696	1.43	-0.78	-0.68
7/18/13 22:07		125.09	697	1.43	-0.77	-0.68
7/18/13 22:08		125.09	698	1.43	-0.77	-0.68
7/18/13 22:09		125.09	699	1.43	-0.78	-0.68
7/18/13 22:10		125.09	700	1.43	-0.78	-0.68
7/18/13 22:11		125.09	701	1.43	-0.78	-0.68
7/18/13 22:12		125.09	702	1.43	-0.78	-0.68
7/18/13 22:13		125.09	703	1.43	-0.78	-0.68
7/18/13 22:14		125.10	704	1.43	-0.77	-0.67
7/18/13 22:15		125.10	705	1.42	-0.77	-0.67
7/18/13 22:16		125.10	706	1.42	-0.77	-0.67
7/18/13 22:17		125.10	707	1.42	-0.77	-0.67
7/18/13 22:18		125.10	708	1.42	-0.77	-0.67
7/18/13 22:19		125.10	709	1.42	-0.77	-0.67
7/18/13 22:20		125.10	710	1.42	-0.77	-0.67
7/18/13 22:21		125.10	711	1.42	-0.77	-0.67
7/18/13 22:22		125.11	712	1.42	-0.76	-0.66

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/18/13 22:23		125.11	713	1.42	-0.76	-0.66
7/18/13 22:24		125.11	714	1.42	-0.76	-0.66
7/18/13 22:25		125.11	715	1.42	-0.76	-0.66
7/18/13 22:26		125.11	716	1.42	-0.76	-0.66
7/18/13 22:27		125.11	717	1.41	-0.76	-0.66
7/18/13 22:28		125.11	718	1.41	-0.76	-0.66
7/18/13 22:29		125.11	719	1.41	-0.76	-0.66
7/18/13 22:30		125.11	720	1.41	-0.76	-0.66
7/18/13 22:31		125.11	721	1.41	-0.76	-0.66
7/18/13 22:32		125.11	722	1.41	-0.76	-0.66
7/18/13 22:33		125.11	723	1.41	-0.76	-0.65
7/18/13 22:34		125.11	724	1.41	-0.75	-0.65
7/18/13 22:35		125.11	725	1.41	-0.76	-0.66
7/18/13 22:36		125.12	726	1.41	-0.75	-0.65
7/18/13 22:37		125.12	727	1.41	-0.75	-0.65
7/18/13 22:38		125.12	728	1.41	-0.75	-0.65
7/18/13 22:39		125.12	729	1.40	-0.75	-0.65
7/18/13 22:40		125.12	730	1.40	-0.75	-0.65
7/18/13 22:41		125.12	731	1.40	-0.75	-0.65
7/18/13 22:42		125.12	732	1.40	-0.75	-0.65
7/18/13 22:43		125.12	733	1.40	-0.75	-0.64
7/18/13 22:44		125.12	734	1.40	-0.75	-0.64
7/18/13 22:45		125.12	735	1.40	-0.75	-0.64
7/18/13 22:46		125.12	736	1.40	-0.75	-0.64
7/18/13 22:47		125.13	737	1.40	-0.74	-0.64
7/18/13 22:48		125.13	738	1.40	-0.74	-0.64
7/18/13 22:49		125.13	739	1.40	-0.74	-0.64
7/18/13 22:50		125.12	740	1.40	-0.75	-0.64
7/18/13 22:51		125.13	741	1.40	-0.74	-0.64
7/18/13 22:52		125.13	742	1.39	-0.74	-0.64
7/18/13 22:53		125.13	743	1.39	-0.74	-0.64
7/18/13 22:54		125.13	744	1.39	-0.74	-0.64
7/18/13 22:55		125.13	745	1.39	-0.74	-0.63
7/18/13 22:56		125.13	746	1.39	-0.74	-0.64
7/18/13 22:57		125.13	747	1.39	-0.74	-0.63
7/18/13 22:58		125.13	748	1.39	-0.74	-0.63
7/18/13 22:59		125.13	749	1.39	-0.74	-0.63
7/18/13 23:00		125.13	750	1.39	-0.74	-0.63
7/18/13 23:01		125.13	751	1.39	-0.74	-0.63
7/18/13 23:02		125.14	752	1.39	-0.73	-0.63
7/18/13 23:03		125.14	753	1.39	-0.73	-0.63
7/18/13 23:04		125.14	754	1.39	-0.73	-0.63
7/18/13 23:05		125.14	755	1.39	-0.73	-0.62
7/18/13 23:06		125.14	756	1.38	-0.73	-0.62
7/18/13 23:07		125.14	757	1.38	-0.73	-0.62

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/18/13 23:08		125.14	758	1.38	-0.73	-0.62
7/18/13 23:09		125.14	759	1.38	-0.73	-0.62
7/18/13 23:10		125.14	760	1.38	-0.73	-0.62
7/18/13 23:11		125.14	761	1.38	-0.73	-0.62
7/18/13 23:12		125.15	762	1.38	-0.72	-0.62
7/18/13 23:13		125.14	763	1.38	-0.73	-0.62
7/18/13 23:14		125.15	764	1.38	-0.72	-0.62
7/18/13 23:15		125.15	765	1.38	-0.72	-0.61
7/18/13 23:16		125.15	766	1.38	-0.72	-0.61
7/18/13 23:17		125.15	767	1.38	-0.72	-0.61
7/18/13 23:18		125.15	768	1.38	-0.72	-0.61
7/18/13 23:19		125.15	769	1.38	-0.72	-0.61
7/18/13 23:20		125.15	770	1.38	-0.72	-0.61
7/18/13 23:21		125.15	771	1.37	-0.72	-0.61
7/18/13 23:22		125.15	772	1.37	-0.72	-0.61
7/18/13 23:23		125.15	773	1.37	-0.71	-0.61
7/18/13 23:24		125.15	774	1.37	-0.71	-0.61
7/18/13 23:25		125.16	775	1.37	-0.71	-0.60
7/18/13 23:26		125.16	776	1.37	-0.71	-0.60
7/18/13 23:27		125.16	777	1.37	-0.71	-0.60
7/18/13 23:28		125.16	778	1.37	-0.71	-0.60
7/18/13 23:29		125.16	779	1.37	-0.71	-0.60
7/18/13 23:30		125.16	780	1.37	-0.71	-0.60
7/18/13 23:31		125.16	781	1.37	-0.71	-0.60
7/18/13 23:32		125.16	782	1.37	-0.71	-0.60
7/18/13 23:33		125.16	783	1.37	-0.70	-0.60
7/18/13 23:34		125.17	784	1.37	-0.70	-0.59
7/18/13 23:35		125.17	785	1.37	-0.70	-0.59
7/18/13 23:36		125.17	786	1.36	-0.70	-0.59
7/18/13 23:37		125.17	787	1.36	-0.70	-0.59
7/18/13 23:38		125.17	788	1.36	-0.70	-0.59
7/18/13 23:39		125.17	789	1.36	-0.70	-0.59
7/18/13 23:40		125.17	790	1.36	-0.70	-0.59
7/18/13 23:41		125.17	791	1.36	-0.70	-0.59
7/18/13 23:42		125.17	792	1.36	-0.70	-0.59
7/18/13 23:43		125.18	793	1.36	-0.69	-0.58
7/18/13 23:44		125.18	794	1.36	-0.69	-0.58
7/18/13 23:45		125.18	795	1.36	-0.69	-0.58
7/18/13 23:46		125.18	796	1.36	-0.69	-0.58
7/18/13 23:47		125.18	797	1.36	-0.69	-0.58
7/18/13 23:48		125.18	798	1.36	-0.69	-0.58
7/18/13 23:49		125.18	799	1.36	-0.69	-0.58
7/18/13 23:50		125.18	800	1.36	-0.69	-0.58
7/18/13 23:51		125.18	801	1.36	-0.69	-0.58
7/18/13 23:52		125.18	802	1.35	-0.69	-0.58

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/18/13 23:53		125.18	803	1.35	-0.69	-0.58
7/18/13 23:54		125.18	804	1.35	-0.69	-0.58
7/18/13 23:55		125.18	805	1.35	-0.69	-0.57
7/18/13 23:56		125.18	806	1.35	-0.69	-0.58
7/18/13 23:57		125.18	807	1.35	-0.69	-0.57
7/18/13 23:58		125.19	808	1.35	-0.68	-0.57
7/18/13 23:59		125.19	809	1.35	-0.68	-0.57
7/19/13 0:00		125.19	810	1.35	-0.68	-0.57
7/19/13 0:01		125.19	811	1.35	-0.68	-0.57
7/19/13 0:02		125.19	812	1.35	-0.68	-0.57
7/19/13 0:03		125.19	813	1.35	-0.68	-0.56
7/19/13 0:04		125.19	814	1.35	-0.68	-0.56
7/19/13 0:05		125.19	815	1.35	-0.68	-0.56
7/19/13 0:06		125.19	816	1.35	-0.68	-0.56
7/19/13 0:07		125.19	817	1.35	-0.68	-0.56
7/19/13 0:08		125.19	818	1.35	-0.68	-0.56
7/19/13 0:09		125.19	819	1.34	-0.68	-0.56
7/19/13 0:10		125.20	820	1.34	-0.67	-0.56
7/19/13 0:11		125.20	821	1.34	-0.67	-0.56
7/19/13 0:12		125.20	822	1.34	-0.67	-0.56
7/19/13 0:13		125.20	823	1.34	-0.67	-0.56
7/19/13 0:14		125.20	824	1.34	-0.67	-0.56
7/19/13 0:15		125.20	825	1.34	-0.67	-0.56
7/19/13 0:16		125.20	826	1.34	-0.67	-0.55
7/19/13 0:17		125.20	827	1.34	-0.67	-0.55
7/19/13 0:18		125.20	828	1.34	-0.67	-0.55
7/19/13 0:19		125.21	829	1.34	-0.66	-0.55
7/19/13 0:20		125.20	830	1.34	-0.67	-0.55
7/19/13 0:21		125.20	831	1.34	-0.67	-0.55
7/19/13 0:22		125.21	832	1.34	-0.66	-0.55
7/19/13 0:23		125.21	833	1.34	-0.66	-0.54
7/19/13 0:24		125.21	834	1.34	-0.66	-0.54
7/19/13 0:25		125.21	835	1.34	-0.66	-0.54
7/19/13 0:26		125.21	836	1.34	-0.66	-0.54
7/19/13 0:27		125.21	837	1.33	-0.66	-0.54
7/19/13 0:28		125.21	838	1.33	-0.66	-0.54
7/19/13 0:29		125.21	839	1.33	-0.66	-0.54
7/19/13 0:30		125.21	840	1.33	-0.66	-0.54
7/19/13 0:31		125.21	841	1.33	-0.66	-0.54
7/19/13 0:32		125.21	842	1.33	-0.66	-0.54
7/19/13 0:33		125.22	843	1.33	-0.65	-0.54
7/19/13 0:34		125.21	844	1.33	-0.66	-0.54
7/19/13 0:35		125.21	845	1.33	-0.66	-0.54
7/19/13 0:36		125.21	846	1.33	-0.66	-0.54
7/19/13 0:37		125.21	847	1.33	-0.66	-0.54

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/19/13 0:38		125.21	848	1.33	-0.66	-0.54
7/19/13 0:39		125.21	849	1.33	-0.66	-0.54
7/19/13 0:40		125.22	850	1.33	-0.65	-0.53
7/19/13 0:41		125.22	851	1.33	-0.65	-0.53
7/19/13 0:42		125.22	852	1.33	-0.65	-0.53
7/19/13 0:43		125.22	853	1.33	-0.65	-0.53
7/19/13 0:44		125.22	854	1.33	-0.65	-0.53
7/19/13 0:45		125.22	855	1.33	-0.65	-0.53
7/19/13 0:46		125.22	856	1.33	-0.65	-0.53
7/19/13 0:47		125.22	857	1.32	-0.65	-0.53
7/19/13 0:48		125.22	858	1.32	-0.65	-0.53
7/19/13 0:49		125.22	859	1.32	-0.65	-0.53
7/19/13 0:50		125.22	860	1.32	-0.65	-0.53
7/19/13 0:51		125.22	861	1.32	-0.65	-0.53
7/19/13 0:52		125.23	862	1.32	-0.64	-0.52
7/19/13 0:53		125.23	863	1.32	-0.64	-0.52
7/19/13 0:54		125.22	864	1.32	-0.65	-0.52
7/19/13 0:55		125.23	865	1.32	-0.64	-0.52
7/19/13 0:56		125.23	866	1.32	-0.64	-0.52
7/19/13 0:57		125.23	867	1.32	-0.64	-0.52
7/19/13 0:58		125.23	868	1.32	-0.64	-0.52
7/19/13 0:59		125.23	869	1.32	-0.64	-0.52
7/19/13 1:00		125.23	870	1.32	-0.64	-0.52
7/19/13 1:01		125.23	871	1.32	-0.64	-0.52
7/19/13 1:02		125.23	872	1.32	-0.64	-0.52
7/19/13 1:03		125.23	873	1.32	-0.64	-0.52
7/19/13 1:04		125.23	874	1.32	-0.64	-0.52
7/19/13 1:05		125.23	875	1.32	-0.64	-0.52
7/19/13 1:06		125.23	876	1.32	-0.64	-0.51
7/19/13 1:07		125.24	877	1.31	-0.63	-0.51
7/19/13 1:08		125.23	878	1.31	-0.64	-0.51
7/19/13 1:09		125.23	879	1.31	-0.64	-0.51
7/19/13 1:10		125.23	880	1.31	-0.63	-0.51
7/19/13 1:11		125.24	881	1.31	-0.63	-0.51
7/19/13 1:12		125.23	882	1.31	-0.63	-0.51
7/19/13 1:13		125.24	883	1.31	-0.63	-0.51
7/19/13 1:14		125.24	884	1.31	-0.63	-0.51
7/19/13 1:15		125.24	885	1.31	-0.63	-0.51
7/19/13 1:16		125.24	886	1.31	-0.63	-0.51
7/19/13 1:17		125.24	887	1.31	-0.63	-0.51
7/19/13 1:18		125.24	888	1.31	-0.63	-0.51
7/19/13 1:19		125.24	889	1.31	-0.63	-0.51
7/19/13 1:20		125.24	890	1.31	-0.63	-0.51
7/19/13 1:21		125.24	891	1.31	-0.63	-0.51
7/19/13 1:22		125.23	892	1.31	-0.63	-0.51

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/19/13 1:23		125.24	893	1.31	-0.63	-0.51
7/19/13 1:24		125.24	894	1.31	-0.63	-0.51
7/19/13 1:25		125.24	895	1.31	-0.63	-0.51
7/19/13 1:26		125.24	896	1.31	-0.63	-0.51
7/19/13 1:27		125.24	897	1.31	-0.63	-0.50
7/19/13 1:28		125.24	898	1.31	-0.63	-0.51
7/19/13 1:29		125.24	899	1.30	-0.63	-0.50
7/19/13 1:30		125.24	900	1.30	-0.63	-0.50
7/19/13 1:31		125.24	901	1.30	-0.63	-0.50
7/19/13 1:32		125.24	902	1.30	-0.63	-0.50
7/19/13 1:33		125.24	903	1.30	-0.63	-0.50
7/19/13 1:34		125.24	904	1.30	-0.63	-0.50
7/19/13 1:35		125.24	905	1.30	-0.63	-0.50
7/19/13 1:36		125.24	906	1.30	-0.63	-0.50
7/19/13 1:37		125.24	907	1.30	-0.63	-0.50
7/19/13 1:38		125.24	908	1.30	-0.63	-0.50
7/19/13 1:39		125.24	909	1.30	-0.63	-0.50
7/19/13 1:40		125.24	910	1.30	-0.63	-0.50
7/19/13 1:41		125.24	911	1.30	-0.63	-0.50
7/19/13 1:42		125.24	912	1.30	-0.63	-0.50
7/19/13 1:43		125.24	913	1.30	-0.63	-0.50
7/19/13 1:44		125.24	914	1.30	-0.63	-0.50
7/19/13 1:45		125.24	915	1.30	-0.63	-0.50
7/19/13 1:46		125.24	916	1.30	-0.63	-0.50
7/19/13 1:47		125.24	917	1.30	-0.63	-0.50
7/19/13 1:48		125.24	918	1.30	-0.63	-0.50
7/19/13 1:49		125.24	919	1.30	-0.63	-0.50
7/19/13 1:50		125.24	920	1.30	-0.63	-0.50
7/19/13 1:51		125.24	921	1.30	-0.63	-0.50
7/19/13 1:52		125.24	922	1.29	-0.63	-0.50
7/19/13 1:53		125.24	923	1.29	-0.63	-0.50
7/19/13 1:54		125.24	924	1.29	-0.63	-0.50
7/19/13 1:55		125.24	925	1.29	-0.63	-0.50
7/19/13 1:56		125.24	926	1.29	-0.63	-0.50
7/19/13 1:57		125.24	927	1.29	-0.63	-0.50
7/19/13 1:58		125.24	928	1.29	-0.63	-0.50
7/19/13 1:59		125.24	929	1.29	-0.63	-0.50
7/19/13 2:00		125.24	930	1.29	-0.63	-0.50
7/19/13 2:01		125.23	931	1.29	-0.64	-0.51
7/19/13 2:02		125.23	932	1.29	-0.64	-0.50
7/19/13 2:03		125.23	933	1.29	-0.64	-0.51
7/19/13 2:04		125.23	934	1.29	-0.64	-0.51
7/19/13 2:05		125.23	935	1.29	-0.64	-0.51
7/19/13 2:06		125.23	936	1.29	-0.64	-0.51
7/19/13 2:07		125.23	937	1.29	-0.64	-0.51

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/19/13 2:08		125.23	938	1.29	-0.64	-0.51
7/19/13 2:09		125.23	939	1.29	-0.64	-0.51
7/19/13 2:10		125.23	940	1.29	-0.64	-0.51
7/19/13 2:11		125.23	941	1.29	-0.64	-0.51
7/19/13 2:12		125.23	942	1.29	-0.64	-0.51
7/19/13 2:13		125.22	943	1.29	-0.65	-0.51
7/19/13 2:14		125.22	944	1.29	-0.65	-0.51
7/19/13 2:15		125.23	945	1.29	-0.64	-0.51
7/19/13 2:16		125.22	946	1.29	-0.65	-0.51
7/19/13 2:17		125.22	947	1.28	-0.65	-0.51
7/19/13 2:18		125.22	948	1.28	-0.65	-0.51
7/19/13 2:19		125.22	949	1.28	-0.65	-0.52
7/19/13 2:20		125.22	950	1.28	-0.65	-0.52
7/19/13 2:21		125.22	951	1.28	-0.65	-0.52
7/19/13 2:22		125.22	952	1.28	-0.65	-0.52
7/19/13 2:23		125.22	953	1.28	-0.65	-0.52
7/19/13 2:24		125.22	954	1.28	-0.65	-0.52
7/19/13 2:25		125.22	955	1.28	-0.65	-0.52
7/19/13 2:26		125.22	956	1.28	-0.65	-0.52
7/19/13 2:27		125.21	957	1.28	-0.66	-0.52
7/19/13 2:28		125.21	958	1.28	-0.66	-0.52
7/19/13 2:29		125.21	959	1.28	-0.66	-0.52
7/19/13 2:30		125.21	960	1.28	-0.66	-0.52
7/19/13 2:31		125.21	961	1.28	-0.66	-0.53
7/19/13 2:32		125.21	962	1.28	-0.66	-0.53
7/19/13 2:33		125.21	963	1.28	-0.66	-0.53
7/19/13 2:34		125.21	964	1.28	-0.66	-0.53
7/19/13 2:35		125.21	965	1.28	-0.66	-0.53
7/19/13 2:36		125.21	966	1.28	-0.66	-0.53
7/19/13 2:37		125.21	967	1.28	-0.66	-0.53
7/19/13 2:38		125.20	968	1.28	-0.67	-0.53
7/19/13 2:39		125.20	969	1.28	-0.67	-0.53
7/19/13 2:40		125.20	970	1.28	-0.67	-0.53
7/19/13 2:41		125.20	971	1.28	-0.67	-0.53
7/19/13 2:42		125.20	972	1.28	-0.67	-0.54
7/19/13 2:43		125.20	973	1.28	-0.67	-0.53
7/19/13 2:44		125.20	974	1.27	-0.67	-0.53
7/19/13 2:45		125.19	975	1.27	-0.68	-0.54
7/19/13 2:46		125.19	976	1.27	-0.68	-0.54
7/19/13 2:47		125.19	977	1.27	-0.68	-0.54
7/19/13 2:48		125.19	978	1.27	-0.68	-0.54
7/19/13 2:49		125.19	979	1.27	-0.68	-0.54
7/19/13 2:50		125.19	980	1.27	-0.68	-0.54
7/19/13 2:51		125.19	981	1.27	-0.68	-0.54
7/19/13 2:52		125.19	982	1.27	-0.68	-0.55

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/19/13 2:53		125.19	983	1.27	-0.68	-0.54
7/19/13 2:54		125.18	984	1.27	-0.69	-0.55
7/19/13 2:55		125.18	985	1.27	-0.69	-0.55
7/19/13 2:56		125.18	986	1.27	-0.69	-0.55
7/19/13 2:57		125.18	987	1.27	-0.69	-0.55
7/19/13 2:58		125.18	988	1.27	-0.69	-0.55
7/19/13 2:59		125.18	989	1.27	-0.69	-0.55
7/19/13 3:00		125.18	990	1.27	-0.69	-0.55
7/19/13 3:01		125.18	991	1.27	-0.69	-0.55
7/19/13 3:02		125.18	992	1.27	-0.69	-0.55
7/19/13 3:03		125.17	993	1.27	-0.70	-0.56
7/19/13 3:04		125.17	994	1.27	-0.70	-0.56
7/19/13 3:05		125.17	995	1.27	-0.70	-0.56
7/19/13 3:06		125.17	996	1.27	-0.70	-0.56
7/19/13 3:07		125.17	997	1.27	-0.70	-0.56
7/19/13 3:08		125.17	998	1.27	-0.70	-0.56
7/19/13 3:09		125.17	999	1.27	-0.70	-0.56
7/19/13 3:10		125.17	1,000	1.27	-0.70	-0.56
7/19/13 3:11		125.16	1,001	1.27	-0.71	-0.56
7/19/13 3:12		125.17	1,002	1.27	-0.70	-0.56
7/19/13 3:13		125.16	1,003	1.26	-0.71	-0.57
7/19/13 3:14		125.16	1,004	1.26	-0.71	-0.57
7/19/13 3:15		125.16	1,005	1.26	-0.71	-0.57
7/19/13 3:16		125.16	1,006	1.26	-0.71	-0.57
7/19/13 3:17		125.16	1,007	1.26	-0.71	-0.57
7/19/13 3:18		125.16	1,008	1.26	-0.71	-0.57
7/19/13 3:19		125.15	1,009	1.26	-0.72	-0.57
7/19/13 3:20		125.15	1,010	1.26	-0.72	-0.57
7/19/13 3:21		125.15	1,011	1.26	-0.72	-0.58
7/19/13 3:22		125.15	1,012	1.26	-0.72	-0.58
7/19/13 3:23		125.15	1,013	1.26	-0.72	-0.58
7/19/13 3:24		125.15	1,014	1.26	-0.72	-0.58
7/19/13 3:25		125.14	1,015	1.26	-0.72	-0.58
7/19/13 3:26		125.14	1,016	1.26	-0.73	-0.59
7/19/13 3:27		125.14	1,017	1.26	-0.73	-0.59
7/19/13 3:28		125.14	1,018	1.26	-0.73	-0.59
7/19/13 3:29		125.14	1,019	1.26	-0.73	-0.59
7/19/13 3:30		125.14	1,020	1.26	-0.73	-0.59
7/19/13 3:31		125.13	1,021	1.26	-0.74	-0.59
7/19/13 3:32		125.13	1,022	1.26	-0.74	-0.59
7/19/13 3:33		125.13	1,023	1.26	-0.74	-0.59
7/19/13 3:34		125.13	1,024	1.26	-0.74	-0.60
7/19/13 3:35		125.13	1,025	1.26	-0.74	-0.60
7/19/13 3:36		125.13	1,026	1.26	-0.74	-0.60
7/19/13 3:37		125.13	1,027	1.26	-0.74	-0.60

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/19/13 3:38		125.12	1,028	1.26	-0.74	-0.60
7/19/13 3:39		125.13	1,029	1.26	-0.74	-0.60
7/19/13 3:40		125.12	1,030	1.26	-0.74	-0.60
7/19/13 3:41		125.12	1,031	1.26	-0.75	-0.60
7/19/13 3:42		125.12	1,032	1.26	-0.75	-0.61
7/19/13 3:43		125.12	1,033	1.26	-0.75	-0.61
7/19/13 3:44		125.12	1,034	1.25	-0.75	-0.61
7/19/13 3:45		125.12	1,035	1.25	-0.75	-0.61
7/19/13 3:46		125.11	1,036	1.25	-0.76	-0.61
7/19/13 3:47		125.11	1,037	1.25	-0.76	-0.61
7/19/13 3:48		125.11	1,038	1.25	-0.76	-0.61
7/19/13 3:49		125.11	1,039	1.25	-0.76	-0.62
7/19/13 3:50		125.11	1,040	1.25	-0.76	-0.61
7/19/13 3:51		125.11	1,041	1.25	-0.76	-0.61
7/19/13 3:52		125.11	1,042	1.25	-0.76	-0.62
7/19/13 3:53		125.11	1,043	1.25	-0.76	-0.62
7/19/13 3:54		125.10	1,044	1.25	-0.77	-0.62
7/19/13 3:55		125.10	1,045	1.25	-0.77	-0.62
7/19/13 3:56		125.10	1,046	1.25	-0.77	-0.62
7/19/13 3:57		125.10	1,047	1.25	-0.77	-0.62
7/19/13 3:58		125.09	1,048	1.25	-0.78	-0.63
7/19/13 3:59		125.09	1,049	1.25	-0.77	-0.63
7/19/13 4:00		125.09	1,050	1.25	-0.78	-0.63
7/19/13 4:01		125.09	1,051	1.25	-0.78	-0.63
7/19/13 4:02		125.09	1,052	1.25	-0.78	-0.64
7/19/13 4:03		125.09	1,053	1.25	-0.78	-0.64
7/19/13 4:04		125.08	1,054	1.25	-0.79	-0.64
7/19/13 4:05		125.08	1,055	1.25	-0.79	-0.64
7/19/13 4:06		125.08	1,056	1.25	-0.79	-0.64
7/19/13 4:07		125.08	1,057	1.25	-0.79	-0.64
7/19/13 4:08		125.08	1,058	1.25	-0.79	-0.65
7/19/13 4:09		125.07	1,059	1.25	-0.80	-0.65
7/19/13 4:10		125.07	1,060	1.25	-0.80	-0.65
7/19/13 4:11		125.07	1,061	1.25	-0.80	-0.65
7/19/13 4:12		125.07	1,062	1.25	-0.80	-0.65
7/19/13 4:13		125.07	1,063	1.25	-0.80	-0.66
7/19/13 4:14		125.07	1,064	1.25	-0.80	-0.65
7/19/13 4:15		125.06	1,065	1.25	-0.81	-0.66
7/19/13 4:16		125.06	1,066	1.25	-0.80	-0.66
7/19/13 4:17		125.07	1,067	1.25	-0.80	-0.66
7/19/13 4:18		125.06	1,068	1.24	-0.81	-0.66
7/19/13 4:19		125.06	1,069	1.24	-0.81	-0.66
7/19/13 4:20		125.06	1,070	1.24	-0.81	-0.66
7/19/13 4:21		125.06	1,071	1.24	-0.81	-0.66
7/19/13 4:22		125.05	1,072	1.24	-0.81	-0.66

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/19/13 4:23		125.05	1,073	1.24	-0.82	-0.67
7/19/13 4:24		125.05	1,074	1.24	-0.82	-0.67
7/19/13 4:25		125.05	1,075	1.24	-0.82	-0.67
7/19/13 4:26		125.05	1,076	1.24	-0.82	-0.67
7/19/13 4:27		125.05	1,077	1.24	-0.82	-0.67
7/19/13 4:28		125.04	1,078	1.24	-0.83	-0.68
7/19/13 4:29		125.04	1,079	1.24	-0.83	-0.68
7/19/13 4:30		125.04	1,080	1.24	-0.83	-0.68
7/19/13 4:31		125.04	1,081	1.24	-0.83	-0.68
7/19/13 4:32		125.04	1,082	1.24	-0.83	-0.68
7/19/13 4:33		125.03	1,083	1.24	-0.83	-0.68
7/19/13 4:34		125.03	1,084	1.24	-0.84	-0.69
7/19/13 4:35		125.03	1,085	1.24	-0.84	-0.69
7/19/13 4:36		125.03	1,086	1.24	-0.84	-0.69
7/19/13 4:37		125.02	1,087	1.24	-0.85	-0.69
7/19/13 4:38		125.03	1,088	1.24	-0.84	-0.69
7/19/13 4:39		125.02	1,089	1.24	-0.85	-0.69
7/19/13 4:40		125.02	1,090	1.24	-0.85	-0.70
7/19/13 4:41		125.02	1,091	1.24	-0.85	-0.70
7/19/13 4:42		125.02	1,092	1.24	-0.85	-0.70
7/19/13 4:43		125.01	1,093	1.24	-0.86	-0.71
7/19/13 4:44		125.01	1,094	1.24	-0.86	-0.70
7/19/13 4:45		125.01	1,095	1.24	-0.86	-0.71
7/19/13 4:46		125.01	1,096	1.24	-0.86	-0.71
7/19/13 4:47		125.01	1,097	1.24	-0.86	-0.71
7/19/13 4:48		125.00	1,098	1.24	-0.87	-0.71
7/19/13 4:49		125.00	1,099	1.24	-0.87	-0.71
7/19/13 4:50		125.00	1,100	1.24	-0.87	-0.71
7/19/13 4:51		125.00	1,101	1.24	-0.87	-0.71
7/19/13 4:52		124.99	1,102	1.24	-0.87	-0.72
7/19/13 4:53		125.00	1,103	1.24	-0.87	-0.72
7/19/13 4:54		124.99	1,104	1.23	-0.88	-0.72
7/19/13 4:55		124.99	1,105	1.23	-0.88	-0.72
7/19/13 4:56		124.99	1,106	1.23	-0.88	-0.72
7/19/13 4:57		124.99	1,107	1.23	-0.88	-0.73
7/19/13 4:58		124.99	1,108	1.23	-0.88	-0.73
7/19/13 4:59		124.99	1,109	1.23	-0.88	-0.73
7/19/13 5:00		124.98	1,110	1.23	-0.89	-0.73
7/19/13 5:01		124.98	1,111	1.23	-0.89	-0.73
7/19/13 5:02		124.98	1,112	1.23	-0.89	-0.73
7/19/13 5:03		124.98	1,113	1.23	-0.89	-0.73
7/19/13 5:04		124.98	1,114	1.23	-0.89	-0.74
7/19/13 5:05		124.98	1,115	1.23	-0.89	-0.74
7/19/13 5:06		124.97	1,116	1.23	-0.90	-0.74
7/19/13 5:07		124.97	1,117	1.23	-0.90	-0.74

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/19/13 5:08		124.97	1,118	1.23	-0.90	-0.74
7/19/13 5:09		124.97	1,119	1.23	-0.90	-0.74
7/19/13 5:10		124.97	1,120	1.23	-0.90	-0.75
7/19/13 5:11		124.96	1,121	1.23	-0.91	-0.75
7/19/13 5:12		124.96	1,122	1.23	-0.91	-0.75
7/19/13 5:13		124.96	1,123	1.23	-0.91	-0.75
7/19/13 5:14		124.96	1,124	1.23	-0.91	-0.75
7/19/13 5:15		124.96	1,125	1.23	-0.91	-0.75
7/19/13 5:16		124.96	1,126	1.23	-0.91	-0.76
7/19/13 5:17		124.95	1,127	1.23	-0.92	-0.76
7/19/13 5:18		124.95	1,128	1.23	-0.92	-0.76
7/19/13 5:19		124.95	1,129	1.23	-0.92	-0.76
7/19/13 5:20		124.95	1,130	1.23	-0.92	-0.76
7/19/13 5:21		124.95	1,131	1.23	-0.92	-0.76
7/19/13 5:22		124.94	1,132	1.23	-0.93	-0.77
7/19/13 5:23		124.94	1,133	1.23	-0.93	-0.77
7/19/13 5:24		124.94	1,134	1.23	-0.93	-0.77
7/19/13 5:25		124.94	1,135	1.23	-0.93	-0.77
7/19/13 5:26		124.94	1,136	1.23	-0.93	-0.77
7/19/13 5:27		124.93	1,137	1.23	-0.94	-0.78
7/19/13 5:28		124.93	1,138	1.23	-0.94	-0.78
7/19/13 5:29		124.93	1,139	1.23	-0.94	-0.78
7/19/13 5:30		124.93	1,140	1.23	-0.94	-0.78
7/19/13 5:31		124.93	1,141	1.23	-0.94	-0.78
7/19/13 5:32		124.92	1,142	1.23	-0.95	-0.79
7/19/13 5:33		124.92	1,143	1.23	-0.95	-0.79
7/19/13 5:34		124.92	1,144	1.22	-0.95	-0.79
7/19/13 5:35		124.92	1,145	1.22	-0.95	-0.79
7/19/13 5:36		124.92	1,146	1.22	-0.95	-0.79
7/19/13 5:37		124.92	1,147	1.22	-0.95	-0.79
7/19/13 5:38		124.91	1,148	1.22	-0.96	-0.80
7/19/13 5:39		124.91	1,149	1.22	-0.96	-0.80
7/19/13 5:40		124.91	1,150	1.22	-0.96	-0.80
7/19/13 5:41		124.91	1,151	1.22	-0.96	-0.80
7/19/13 5:42		124.90	1,152	1.22	-0.97	-0.80
7/19/13 5:43		124.90	1,153	1.22	-0.97	-0.81
7/19/13 5:44		124.90	1,154	1.22	-0.97	-0.81
7/19/13 5:45		124.90	1,155	1.22	-0.97	-0.81
7/19/13 5:46		124.90	1,156	1.22	-0.97	-0.81
7/19/13 5:47		124.90	1,157	1.22	-0.97	-0.81
7/19/13 5:48		124.90	1,158	1.22	-0.97	-0.81
7/19/13 5:49		124.90	1,159	1.22	-0.97	-0.81
7/19/13 5:50		124.89	1,160	1.22	-0.98	-0.82
7/19/13 5:51		124.89	1,161	1.22	-0.98	-0.82
7/19/13 5:52		124.89	1,162	1.22	-0.98	-0.82

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/19/13 5:53		124.89	1,163	1.22	-0.98	-0.82
7/19/13 5:54		124.88	1,164	1.22	-0.98	-0.82
7/19/13 5:55		124.88	1,165	1.22	-0.99	-0.82
7/19/13 5:56		124.88	1,166	1.22	-0.99	-0.82
7/19/13 5:57		124.88	1,167	1.22	-0.99	-0.83
7/19/13 5:58		124.88	1,168	1.22	-0.99	-0.83
7/19/13 5:59		124.88	1,169	1.22	-0.99	-0.83
7/19/13 6:00		124.88	1,170	1.22	-0.99	-0.83
7/19/13 6:01		124.87	1,171	1.22	-1.00	-0.83
7/19/13 6:02		124.87	1,172	1.22	-1.00	-0.83
7/19/13 6:03		124.87	1,173	1.22	-1.00	-0.83
7/19/13 6:04		124.87	1,174	1.22	-1.00	-0.83
7/19/13 6:05		124.87	1,175	1.22	-1.00	-0.83
7/19/13 6:06		124.87	1,176	1.22	-1.00	-0.84
7/19/13 6:07		124.86	1,177	1.22	-1.01	-0.84
7/19/13 6:08		124.86	1,178	1.22	-1.01	-0.84
7/19/13 6:09		124.86	1,179	1.22	-1.01	-0.84
7/19/13 6:10		124.86	1,180	1.22	-1.01	-0.84
7/19/13 6:11		124.86	1,181	1.22	-1.01	-0.85
7/19/13 6:12		124.85	1,182	1.22	-1.02	-0.85
7/19/13 6:13		124.85	1,183	1.22	-1.02	-0.85
7/19/13 6:14		124.85	1,184	1.22	-1.02	-0.85
7/19/13 6:15		124.85	1,185	1.22	-1.02	-0.85
7/19/13 6:16		124.85	1,186	1.22	-1.02	-0.85
7/19/13 6:17		124.85	1,187	1.21	-1.02	-0.86
7/19/13 6:18		124.85	1,188	1.21	-1.02	-0.86
7/19/13 6:19		124.84	1,189	1.21	-1.03	-0.86
7/19/13 6:20		124.84	1,190	1.21	-1.03	-0.86
7/19/13 6:21		124.84	1,191	1.21	-1.03	-0.86
7/19/13 6:22		124.84	1,192	1.21	-1.03	-0.86
7/19/13 6:23		124.84	1,193	1.21	-1.03	-0.87
7/19/13 6:24		124.83	1,194	1.21	-1.04	-0.87
7/19/13 6:25		124.83	1,195	1.21	-1.04	-0.87
7/19/13 6:26		124.83	1,196	1.21	-1.04	-0.87
7/19/13 6:27		124.83	1,197	1.21	-1.04	-0.87
7/19/13 6:28		124.83	1,198	1.21	-1.04	-0.87
7/19/13 6:29		124.83	1,199	1.21	-1.04	-0.87
7/19/13 6:30		124.83	1,200	1.21	-1.04	-0.87
7/19/13 6:31		124.83	1,201	1.21	-1.04	-0.88
7/19/13 6:32		124.82	1,202	1.21	-1.05	-0.88
7/19/13 6:33		124.82	1,203	1.21	-1.05	-0.88
7/19/13 6:34		124.82	1,204	1.21	-1.05	-0.88
7/19/13 6:35		124.82	1,205	1.21	-1.05	-0.88
7/19/13 6:36		124.82	1,206	1.21	-1.05	-0.88
7/19/13 6:37		124.82	1,207	1.21	-1.05	-0.88

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/19/13 6:38		124.81	1,208	1.21	-1.05	-0.89
7/19/13 6:39		124.81	1,209	1.21	-1.06	-0.89
7/19/13 6:40		124.81	1,210	1.21	-1.06	-0.89
7/19/13 6:41		124.81	1,211	1.21	-1.06	-0.89
7/19/13 6:42		124.81	1,212	1.21	-1.06	-0.89
7/19/13 6:43		124.80	1,213	1.21	-1.07	-0.90
7/19/13 6:44		124.80	1,214	1.21	-1.07	-0.90
7/19/13 6:45		124.80	1,215	1.21	-1.07	-0.90
7/19/13 6:46		124.80	1,216	1.21	-1.07	-0.90
7/19/13 6:47		124.80	1,217	1.21	-1.07	-0.90
7/19/13 6:48		124.79	1,218	1.21	-1.08	-0.91
7/19/13 6:49		124.79	1,219	1.21	-1.08	-0.91
7/19/13 6:50		124.79	1,220	1.21	-1.08	-0.91
7/19/13 6:51		124.79	1,221	1.21	-1.08	-0.91
7/19/13 6:52		124.79	1,222	1.21	-1.08	-0.91
7/19/13 6:53		124.79	1,223	1.21	-1.08	-0.91
7/19/13 6:54		124.78	1,224	1.21	-1.09	-0.92
7/19/13 6:55		124.78	1,225	1.21	-1.09	-0.92
7/19/13 6:56		124.78	1,226	1.21	-1.09	-0.92
7/19/13 6:57		124.78	1,227	1.21	-1.09	-0.92
7/19/13 6:58		124.78	1,228	1.21	-1.09	-0.92
7/19/13 6:59		124.78	1,229	1.21	-1.09	-0.92
7/19/13 7:00		124.78	1,230	1.21	-1.09	-0.92
7/19/13 7:01		124.78	1,231	1.21	-1.09	-0.92
7/19/13 7:02		124.77	1,232	1.21	-1.10	-0.92
7/19/13 7:03		124.77	1,233	1.21	-1.10	-0.92
7/19/13 7:04		124.77	1,234	1.21	-1.10	-0.92
7/19/13 7:05		124.77	1,235	1.20	-1.10	-0.93
7/19/13 7:06		124.77	1,236	1.20	-1.10	-0.93
7/19/13 7:07		124.77	1,237	1.20	-1.10	-0.93
7/19/13 7:08		124.77	1,238	1.20	-1.10	-0.93
7/19/13 7:09		124.76	1,239	1.20	-1.11	-0.93
7/19/13 7:10		124.76	1,240	1.20	-1.11	-0.93
7/19/13 7:11		124.76	1,241	1.20	-1.11	-0.94
7/19/13 7:12		124.76	1,242	1.20	-1.11	-0.94
7/19/13 7:13		124.76	1,243	1.20	-1.11	-0.94
7/19/13 7:14		124.76	1,244	1.20	-1.11	-0.94
7/19/13 7:15		124.76	1,245	1.20	-1.11	-0.94
7/19/13 7:16		124.75	1,246	1.20	-1.12	-0.94
7/19/13 7:17		124.75	1,247	1.20	-1.12	-0.94
7/19/13 7:18		124.75	1,248	1.20	-1.12	-0.95
7/19/13 7:19		124.75	1,249	1.20	-1.12	-0.94
7/19/13 7:20		124.75	1,250	1.20	-1.12	-0.95
7/19/13 7:21		124.75	1,251	1.20	-1.12	-0.95
7/19/13 7:22		124.74	1,252	1.20	-1.13	-0.95

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/19/13 7:23		124.74	1,253	1.20	-1.13	-0.95
7/19/13 7:24		124.74	1,254	1.20	-1.13	-0.95
7/19/13 7:25		124.74	1,255	1.20	-1.13	-0.95
7/19/13 7:26		124.74	1,256	1.20	-1.13	-0.96
7/19/13 7:27		124.74	1,257	1.20	-1.13	-0.96
7/19/13 7:28		124.74	1,258	1.20	-1.13	-0.96
7/19/13 7:29		124.73	1,259	1.20	-1.14	-0.96
7/19/13 7:30		124.74	1,260	1.20	-1.13	-0.96
7/19/13 7:31		124.73	1,261	1.20	-1.14	-0.96
7/19/13 7:32		124.73	1,262	1.20	-1.14	-0.96
7/19/13 7:33		124.73	1,263	1.20	-1.14	-0.97
7/19/13 7:34		124.73	1,264	1.20	-1.14	-0.97
7/19/13 7:35		124.72	1,265	1.20	-1.15	-0.97
7/19/13 7:36		124.72	1,266	1.20	-1.15	-0.97
7/19/13 7:37		124.72	1,267	1.20	-1.15	-0.97
7/19/13 7:38		124.72	1,268	1.20	-1.15	-0.97
7/19/13 7:39		124.72	1,269	1.20	-1.15	-0.97
7/19/13 7:40		124.72	1,270	1.20	-1.15	-0.98
7/19/13 7:41		124.72	1,271	1.20	-1.15	-0.98
7/19/13 7:42		124.71	1,272	1.20	-1.16	-0.98
7/19/13 7:43		124.71	1,273	1.20	-1.16	-0.98
7/19/13 7:44		124.71	1,274	1.20	-1.16	-0.98
7/19/13 7:45		124.71	1,275	1.20	-1.16	-0.98
7/19/13 7:46		124.71	1,276	1.20	-1.16	-0.98
7/19/13 7:47		124.71	1,277	1.20	-1.16	-0.98
7/19/13 7:48		124.71	1,278	1.20	-1.16	-0.98
7/19/13 7:49		124.71	1,279	1.20	-1.16	-0.98
7/19/13 7:50		124.70	1,280	1.20	-1.17	-0.99
7/19/13 7:51		124.70	1,281	1.20	-1.17	-0.99
7/19/13 7:52		124.70	1,282	1.20	-1.17	-0.99
7/19/13 7:53		124.70	1,283	1.20	-1.17	-0.99
7/19/13 7:54		124.70	1,284	1.20	-1.17	-0.99
7/19/13 7:55		124.70	1,285	1.20	-1.17	-0.99
7/19/13 7:56		124.70	1,286	1.20	-1.17	-0.99
7/19/13 7:57		124.70	1,287	1.19	-1.17	-0.99
7/19/13 7:58		124.70	1,288	1.19	-1.17	-0.99
7/19/13 7:59		124.69	1,289	1.19	-1.18	-1.00
7/19/13 8:00		124.69	1,290	1.19	-1.18	-1.00
7/19/13 8:01		124.69	1,291	1.19	-1.18	-1.00
7/19/13 8:02		124.69	1,292	1.19	-1.18	-1.00
7/19/13 8:03		124.68	1,293	1.19	-1.19	-1.00
7/19/13 8:04		124.68	1,294	1.19	-1.19	-1.00
7/19/13 8:05		124.68	1,295	1.19	-1.19	-1.01
7/19/13 8:06		124.68	1,296	1.19	-1.19	-1.01
7/19/13 8:07		124.68	1,297	1.19	-1.19	-1.01

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/19/13 8:08		124.68	1,298	1.19	-1.19	-1.01
7/19/13 8:09		124.68	1,299	1.19	-1.19	-1.01
7/19/13 8:10		124.67	1,300	1.19	-1.20	-1.01
7/19/13 8:11		124.67	1,301	1.19	-1.20	-1.02
7/19/13 8:12		124.67	1,302	1.19	-1.20	-1.02
7/19/13 8:13		124.67	1,303	1.19	-1.20	-1.02
7/19/13 8:14		124.67	1,304	1.19	-1.20	-1.02
7/19/13 8:15		124.67	1,305	1.19	-1.20	-1.02
7/19/13 8:16		124.67	1,306	1.19	-1.20	-1.02
7/19/13 8:17		124.66	1,307	1.19	-1.21	-1.02
7/19/13 8:18		124.67	1,308	1.19	-1.20	-1.02
7/19/13 8:19		124.67	1,309	1.19	-1.20	-1.02
7/19/13 8:20		124.66	1,310	1.19	-1.21	-1.02
7/19/13 8:21		124.66	1,311	1.19	-1.21	-1.02
7/19/13 8:22		124.66	1,312	1.19	-1.21	-1.03
7/19/13 8:23		124.66	1,313	1.19	-1.21	-1.03
7/19/13 8:24		124.66	1,314	1.19	-1.21	-1.03
7/19/13 8:25		124.66	1,315	1.19	-1.21	-1.03
7/19/13 8:26		124.66	1,316	1.19	-1.21	-1.03
7/19/13 8:27		124.65	1,317	1.19	-1.22	-1.03
7/19/13 8:28		124.65	1,318	1.19	-1.22	-1.03
7/19/13 8:29		124.65	1,319	1.19	-1.22	-1.03
7/19/13 8:30		124.65	1,320	1.19	-1.22	-1.03
7/19/13 8:31		124.65	1,321	1.19	-1.22	-1.04
7/19/13 8:32		124.65	1,322	1.19	-1.22	-1.03
7/19/13 8:33		124.65	1,323	1.19	-1.22	-1.04
7/19/13 8:34		124.65	1,324	1.19	-1.22	-1.04
7/19/13 8:35		124.65	1,325	1.19	-1.22	-1.04
7/19/13 8:36		124.65	1,326	1.19	-1.22	-1.04
7/19/13 8:37		124.64	1,327	1.19	-1.23	-1.04
7/19/13 8:38		124.64	1,328	1.19	-1.23	-1.04
7/19/13 8:39		124.64	1,329	1.19	-1.23	-1.04
7/19/13 8:40		124.64	1,330	1.19	-1.23	-1.05
7/19/13 8:41		124.64	1,331	1.19	-1.23	-1.04
7/19/13 8:42		124.64	1,332	1.19	-1.23	-1.05
7/19/13 8:43		124.64	1,333	1.19	-1.23	-1.04
7/19/13 8:44		124.64	1,334	1.19	-1.23	-1.05
7/19/13 8:45		124.63	1,335	1.19	-1.24	-1.05
7/19/13 8:46		124.63	1,336	1.19	-1.24	-1.05
7/19/13 8:47		124.63	1,337	1.19	-1.24	-1.05
7/19/13 8:48		124.63	1,338	1.19	-1.24	-1.05
7/19/13 8:49		124.63	1,339	1.19	-1.24	-1.06
7/19/13 8:50		124.63	1,340	1.19	-1.24	-1.06
7/19/13 8:51		124.62	1,341	1.19	-1.25	-1.06
7/19/13 8:52		124.62	1,342	1.19	-1.25	-1.06

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/19/13 8:53		124.62	1,343	1.19	-1.25	-1.06
7/19/13 8:54		124.62	1,344	1.19	-1.25	-1.06
7/19/13 8:55		124.62	1,345	1.19	-1.25	-1.06
7/19/13 8:56		124.62	1,346	1.18	-1.25	-1.06
7/19/13 8:57		124.62	1,347	1.18	-1.25	-1.06
7/19/13 8:58		124.62	1,348	1.18	-1.25	-1.06
7/19/13 8:59		124.62	1,349	1.18	-1.25	-1.07
7/19/13 9:00		124.61	1,350	1.18	-1.26	-1.07
7/19/13 9:01		124.62	1,351	1.18	-1.25	-1.06
7/19/13 9:02		124.61	1,352	1.18	-1.26	-1.07
7/19/13 9:03		124.61	1,353	1.18	-1.26	-1.07
7/19/13 9:04		124.61	1,354	1.18	-1.26	-1.07
7/19/13 9:05		124.61	1,355	1.18	-1.26	-1.07
7/19/13 9:06		124.61	1,356	1.18	-1.26	-1.07
7/19/13 9:07		124.62	1,357	1.18	-1.25	-1.06
7/19/13 9:08		124.61	1,358	1.18	-1.26	-1.07
7/19/13 9:09		124.61	1,359	1.18	-1.26	-1.07
7/19/13 9:10		124.61	1,360	1.18	-1.26	-1.07
7/19/13 9:11		124.61	1,361	1.18	-1.26	-1.07
7/19/13 9:12		124.61	1,362	1.18	-1.26	-1.07
7/19/13 9:13		124.61	1,363	1.18	-1.26	-1.07
7/19/13 9:14		124.61	1,364	1.18	-1.26	-1.07
7/19/13 9:15		124.60	1,365	1.18	-1.27	-1.07
7/19/13 9:16		124.60	1,366	1.18	-1.27	-1.07
7/19/13 9:17		124.60	1,367	1.18	-1.27	-1.07
7/19/13 9:18		124.60	1,368	1.18	-1.27	-1.08
7/19/13 9:19		124.60	1,369	1.18	-1.27	-1.08
7/19/13 9:20		124.60	1,370	1.18	-1.27	-1.08
7/19/13 9:21		124.60	1,371	1.18	-1.27	-1.08
7/19/13 9:22		124.60	1,372	1.18	-1.27	-1.08
7/19/13 9:23		124.59	1,373	1.18	-1.27	-1.08
7/19/13 9:24		124.59	1,374	1.18	-1.28	-1.08
7/19/13 9:25		124.59	1,375	1.18	-1.28	-1.09
7/19/13 9:26		124.59	1,376	1.18	-1.28	-1.08
7/19/13 9:27		124.59	1,377	1.18	-1.28	-1.08
7/19/13 9:28		124.59	1,378	1.18	-1.28	-1.09
7/19/13 9:29		124.59	1,379	1.18	-1.28	-1.09
7/19/13 9:30		124.59	1,380	1.18	-1.28	-1.09
7/19/13 9:31		124.58	1,381	1.18	-1.29	-1.09
7/19/13 9:32		124.58	1,382	1.18	-1.29	-1.09
7/19/13 9:33		124.58	1,383	1.18	-1.29	-1.09
7/19/13 9:34		124.58	1,384	1.18	-1.29	-1.10
7/19/13 9:35		124.58	1,385	1.18	-1.29	-1.09
7/19/13 9:36		124.58	1,386	1.18	-1.29	-1.10
7/19/13 9:37		124.58	1,387	1.18	-1.29	-1.10

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/19/13 9:38		124.58	1,388	1.18	-1.29	-1.10
7/19/13 9:39		124.58	1,389	1.18	-1.29	-1.10
7/19/13 9:40		124.58	1,390	1.18	-1.29	-1.10
7/19/13 9:41		124.58	1,391	1.18	-1.29	-1.10
7/19/13 9:42		124.57	1,392	1.18	-1.30	-1.10
7/19/13 9:43		124.57	1,393	1.18	-1.30	-1.10
7/19/13 9:44		124.57	1,394	1.18	-1.30	-1.10
7/19/13 9:45		124.57	1,395	1.18	-1.30	-1.11
7/19/13 9:46		124.57	1,396	1.18	-1.30	-1.11
7/19/13 9:47		124.56	1,397	1.18	-1.31	-1.11
7/19/13 9:48		124.57	1,398	1.18	-1.30	-1.11
7/19/13 9:49		124.56	1,399	1.18	-1.31	-1.11
7/19/13 9:50		124.56	1,400	1.18	-1.31	-1.11
7/19/13 9:51		124.56	1,401	1.18	-1.31	-1.11
7/19/13 9:52		124.56	1,402	1.18	-1.31	-1.11
7/19/13 9:53		124.56	1,403	1.18	-1.31	-1.11
7/19/13 9:54		124.56	1,404	1.18	-1.31	-1.11
7/19/13 9:55		124.56	1,405	1.18	-1.31	-1.12
7/19/13 9:56		124.56	1,406	1.18	-1.31	-1.12
7/19/13 9:57		124.56	1,407	1.18	-1.31	-1.12
7/19/13 9:58		124.55	1,408	1.18	-1.32	-1.12
7/19/13 9:59		124.55	1,409	1.18	-1.32	-1.12
7/19/13 10:00		124.55	1,410	1.18	-1.32	-1.12
7/19/13 10:01		124.55	1,411	1.17	-1.32	-1.12
7/19/13 10:02		124.55	1,412	1.17	-1.32	-1.12
7/19/13 10:03		124.55	1,413	1.17	-1.32	-1.13
7/19/13 10:04		124.55	1,414	1.17	-1.32	-1.13
7/19/13 10:05		124.54	1,415	1.17	-1.33	-1.13
7/19/13 10:06		124.54	1,416	1.17	-1.32	-1.13
7/19/13 10:07		124.54	1,417	1.17	-1.33	-1.13
7/19/13 10:08		124.54	1,418	1.17	-1.33	-1.13
7/19/13 10:09		124.54	1,419	1.17	-1.33	-1.13
7/19/13 10:10		124.54	1,420	1.17	-1.33	-1.13
7/19/13 10:11		124.54	1,421	1.17	-1.33	-1.13
7/19/13 10:12		124.54	1,422	1.17	-1.33	-1.13
7/19/13 10:13		124.54	1,423	1.17	-1.33	-1.13
7/19/13 10:14		124.54	1,424	1.17	-1.33	-1.14
7/19/13 10:15		124.53	1,425	1.17	-1.34	-1.14
7/19/13 10:16		124.53	1,426	1.17	-1.34	-1.14
7/19/13 10:17		124.53	1,427	1.17	-1.34	-1.14
7/19/13 10:18		124.53	1,428	1.17	-1.34	-1.14
7/19/13 10:19		124.53	1,429	1.17	-1.34	-1.14
7/19/13 10:20		124.53	1,430	1.17	-1.34	-1.14
7/19/13 10:21		124.53	1,431	1.17	-1.34	-1.14
7/19/13 10:22		124.52	1,432	1.17	-1.35	-1.14

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/19/13 10:23		124.52	1,433	1.17	-1.34	-1.14
7/19/13 10:24		124.52	1,434	1.17	-1.35	-1.15
7/19/13 10:25		124.52	1,435	1.17	-1.35	-1.15
7/19/13 10:26		124.52	1,436	1.17	-1.35	-1.15
7/19/13 10:27		124.52	1,437	1.17	-1.35	-1.15
7/19/13 10:28		124.52	1,438	1.17	-1.35	-1.15
7/19/13 10:29		124.52	1,439	1.17	-1.35	-1.15
7/19/13 10:30		124.52	1,440	1.17	-1.35	-1.15
7/19/13 10:31		124.52	1,441	1.17	-1.35	-1.15
7/19/13 10:32		124.51	1,442	1.17	-1.36	-1.15
7/19/13 10:33		124.51	1,443	1.17	-1.36	-1.15
7/19/13 10:34		124.51	1,444	1.17	-1.36	-1.15
7/19/13 10:35		124.51	1,445	1.17	-1.36	-1.15
7/19/13 10:36		124.51	1,446	1.17	-1.36	-1.16
7/19/13 10:37		124.51	1,447	1.17	-1.36	-1.16
7/19/13 10:38		124.51	1,448	1.17	-1.36	-1.16
7/19/13 10:39		124.51	1,449	1.17	-1.36	-1.16
7/19/13 10:40		124.51	1,450	1.17	-1.36	-1.16
7/19/13 10:41		124.51	1,451	1.17	-1.36	-1.16
7/19/13 10:42		124.50	1,452	1.17	-1.37	-1.16
7/19/13 10:43		124.50	1,453	1.17	-1.37	-1.16
7/19/13 10:44		124.50	1,454	1.17	-1.37	-1.17
7/19/13 10:45		124.50	1,455	1.17	-1.37	-1.17
7/19/13 10:46		124.50	1,456	1.17	-1.37	-1.17
7/19/13 10:47		124.50	1,457	1.17	-1.37	-1.17
7/19/13 10:48		124.50	1,458	1.17	-1.37	-1.17
7/19/13 10:49		124.50	1,459	1.17	-1.37	-1.17
7/19/13 10:50		124.49	1,460	1.17	-1.38	-1.17
7/19/13 10:51		124.50	1,461	1.17	-1.37	-1.17
7/19/13 10:52		124.49	1,462	1.17	-1.38	-1.17
7/19/13 10:53		124.49	1,463	1.17	-1.38	-1.17
7/19/13 10:54		124.49	1,464	1.17	-1.38	-1.17
7/19/13 10:55		124.49	1,465	1.17	-1.38	-1.18
7/19/13 10:56		124.49	1,466	1.17	-1.38	-1.18
7/19/13 10:57		124.49	1,467	1.17	-1.38	-1.18
7/19/13 10:58		124.48	1,468	1.17	-1.39	-1.18
7/19/13 10:59		124.48	1,469	1.17	-1.39	-1.18
7/19/13 11:00		124.48	1,470	1.17	-1.39	-1.18
7/19/13 11:01		124.48	1,471	1.17	-1.39	-1.18
7/19/13 11:02		124.48	1,472	1.17	-1.39	-1.19
7/19/13 11:03		124.48	1,473	1.17	-1.39	-1.18
7/19/13 11:04		124.48	1,474	1.17	-1.39	-1.18
7/19/13 11:05		124.48	1,475	1.17	-1.39	-1.18
7/19/13 11:06		124.48	1,476	1.17	-1.39	-1.18
7/19/13 11:07		124.48	1,477	1.17	-1.39	-1.18

APPENDIX D

AQUIFER TEST DATA
MONITOR WELL MW-40

DATE & TIME	DEPTH TO WATER (Manual) (feet)	DEPTH TO WATER (Transducer) (feet)	TIME SINCE START OF TEST (minutes)	(t/t') (unitless ratio)	TRANSDUCER BASED MEASURED DRAWDOWN (feet)	CORRECTED* DRAWDOWN (feet)
7/19/13 11:08		124.48	1,478	1.17	-1.39	-1.18
7/19/13 11:09		124.48	1,479	1.17	-1.39	-1.19
7/19/13 11:10		124.48	1,480	1.17	-1.39	-1.19
7/19/13 11:11		124.47	1,481	1.17	-1.40	-1.19
7/19/13 11:12		124.47	1,482	1.17	-1.40	-1.19
7/19/13 11:13		124.47	1,483	1.16	-1.39	-1.19
7/19/13 11:14		124.47	1,484	1.16	-1.40	-1.19
7/19/13 11:15		124.47	1,485	1.16	-1.40	-1.19
7/19/13 11:16		124.47	1,486	1.16	-1.40	-1.19
7/19/13 11:17		124.47	1,487	1.16	-1.40	-1.19
7/19/13 11:18		124.47	1,488	1.16	-1.40	-1.19
7/19/13 11:19		124.47	1,489	1.16	-1.40	-1.19
7/19/13 11:20		124.47	1,490	1.16	-1.40	-1.19
7/19/13 11:21		124.47	1,491	1.16	-1.40	-1.19
7/19/13 11:22		124.47	1,492	1.16	-1.40	-1.19
7/19/13 11:23		124.47	1,493	1.16	-1.40	-1.19
7/19/13 11:24		124.46	1,494	1.16	-1.41	-1.20
7/19/13 11:25		124.46	1,495	1.16	-1.41	-1.20
7/19/13 11:26		124.46	1,496	1.16	-1.41	-1.20
7/19/13 11:27		124.46	1,497	1.16	-1.41	-1.20
7/19/13 11:28		124.46	1,498	1.16	-1.41	-1.20
7/19/13 11:29		124.46	1,499	1.16	-1.41	-1.20
7/19/13 11:30		124.46	1,500	1.16	-1.41	-1.20
7/19/13 11:31		124.46	1,501	1.16	-1.41	-1.20
7/19/13 11:32		124.46	1,502	1.16	-1.41	-1.20

EXPLANATIONS

ºC = Degrees Centigrade

t/t' = Time since pumping started divided by time since pumping stopped.

* = Corrected for regional drift observed in wells EW-01, EW-02, MW-27 and MW-29 from July 1st through July 17th, 2013 (average regional drift of -0.00014 feet/minute).