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Hydrogeology of the Hanford Site Central Plateau – A Status Report for the 200 West Area

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August 2009

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Hydrogeology of the Hanford Site Central Plateau – A Status Report for the 200 West Area

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Preface

This technical report was originally completed in June 2008 for limited distribution to Fluor Hanford, Inc., then manager of the Groundwater Remediation Project. CH2M HILL Plateau Remediation Company assumed management of the Groundwater Remediation Project in October 2009. Their staff and subcontractor staff completed a review of the report during spring 2009. Those comments led to significant improvements to this final report.

Summary

The Remediation Decisions Support (RDS) function of the Soil and Groundwater Remediation Project (managed by CH2M HILL Plateau Remediation Company [CHPRC]) is responsible for facilitating the development of consistent data, parameters, and conceptual models to resolve technical issues and support efforts to estimate contaminant migration and impacts (i.e., the assessment process). In particular, the RDS function is working to update electronic data sources and conceptual models of the geologic framework and associated hydraulic and geochemical parameters to facilitate traceability, transparency, defensibility, and consistency in support of environmental assessments. This report summarizes the efforts conducted by Pacific Northwest National Laboratory (PNNL) scientists in fiscal year 2008 (FY08) that focused primarily on the 200 West Area, as well as a secondary effort initiated on the 200 East Area.

This work relied heavily on previous geologic data compilations and conceptual models developed for the Hanford Site and Central Plateau, as well as on recent efforts to standardize, manage, and analyze borehole (and other subsurface) geologic data. The aim of this work is to support development of a regional stratigraphic hydrogeologic model to constrain the spatial distribution of physical, hydrological, and geochemical properties.

The technical approach for this work was to assemble a regional stratigraphic model for the Central Plateau using previously published interpretations of the major geologic units to refine and update a database of major stratigraphic contacts. Best-estimate contacts and ground-surface elevations were then selected, based on professional judgment and general consensus, and a three-dimensional solid-earth geologic model developed of these major stratigraphic units. Anomalies in the geologic model and boreholes with high variability for specific contacts were reevaluated to verify or revise the best-estimate geologic contacts relative to raw and standardized borehole data.

Best-estimate stratigraphic contacts were compiled for 447 wells and boreholes in and adjacent to the 200 West Area. The primary approach for this work was to build on the existing database compiled by B. N. Bjornstad of PNNL, convert it from an elevation-based database to a depth-below-ground-surface database, update it with additional documented and new geologic contact information and to select best-estimate contact values to be used in the a priori geologic model of the 200 West Area.

Stratigraphic contact values (either in elevation or depth) were compiled from 17 published documents as well as some unpublished data sources, where contact information had been tabulated and/or graphically displayed on cross sections or structure contour maps. Many of these documents and data sources used different nomenclature and level of detail to call out specific stratigraphic contacts. To provide the integrated physical model presented in this document, the stratigraphy used in each document was mapped to a common set of stratigraphic units. Once the data were compiled, all contact values were converted to depth-below-ground-surface and best-estimate values selected for each well or borehole. While this compilation most likely is incomplete, it is believed to represent the bulk (i.e., 90%) of available tabulated data sets.

Best estimates for the ground-surface elevation (presumably at the time of drilling, sampling, and geophysical logging) were also compiled using vertical survey values from the Hanford Well Information System. These two best-estimate data sets (the stratigraphic contacts, in depth in feet, and the

ground-surface elevation, in meters) were used to develop best-estimate stratigraphic contact elevations (in meters) for input into EarthVision[1] and generation of a solid model representation of the geology beneath the 200 West Area.

Uncertainties and anomalies identified in the best-estimate databases and solid model were prioritized for in-depth review and analysis of selected borehole data for verification and validation of selected contacts and to resolve discrepancies. The three-dimensional stratigraphic model documented in this report presents the current, integrated understanding of the subsurface beneath the 200 West Area. The hydrogeologic conceptual model for the Central Plateau will continue to evolve as new stratigraphic contact data sets are assembled for the 200 East Area and the 200 North Area and as new information is developed regarding physically based property transport models and upscaling.

[1] EarthVision® is a registered trademark of Dynamic Graphics, Inc., Alameda, California.

Acknowledgments

The authors acknowledge the valuable contributions of staff and interns who willingly contributed their time and energy to standardize borehole geologic data sets and produce summary logs for boreholes in the Central Plateau. A number of these individuals also developed cross sections and geologic contact interpretations of selected data sets that have been integrated into this study. In particular, we acknowledge the contributions of Kelsey Winsor, Tamara Jeppson, Nicole McMahon, Randell Taylor, James Reider, and Steve Forrester.

The authors also acknowledge the contributions of technical reviewers, including Virginia Rohay and Marcus Wood (CH2M HILL Plateau Remediation Company) and Chris Murray (Pacific Northwest National Laboratory) for his technical reviews of both the original 2008 report and the revised 2009 version. Special thanks are provided also to Andrea Currie for copyediting, editorial reviews, and managing document production and to Kay Hass for text processing support for the 2009 version of this technical report.

Acronyms and Abbreviations

3D	three-dimensional
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CHPRC	CH2M HILL Plateau Remediation Company
CRBG	Columbia River Basalt Group
DOE	U.S. Department of Energy
FH	Fluor Hanford, Inc.
FY	fiscal year
HBGIS	Hanford Borehole Geologic Information System
HEIS	Hanford Environmental Information System
HWIS	Hanford Well Information System
NAVD88	North American Vertical Datum of 1988
NEPA	National Environmental Policy Act of 1969
NGVD29	National Geodetic Vertical Datum of 1929
PNNL	Pacific Northwest National Laboratory
RCRA	Resource Conservation and Recovery Act of 1976
RDS	Remediation Decision Support

Definitions of Terms

borehole	A circular hole drilled into soil or rock for subsurface sampling or construction of a well (ASTM D 4750, http://wapi.isu.edu/envgeo/glossary.html).
boring	A temporary borehole intended for one-time use that is immediately grouted and abandoned.
logplot	Informal term for a one-dimensional graphical plot used to visualize borehole geologic data. Vertical changes in sedimentary, lithologic, geophysical, chemical, and other physical properties are shown using a variety of colors, textures, patterns, and textual comments. The term *logplot* is similar to, but distinct from, the name of a software program, LogPlot[1], used in the industry to create them. The informal term is preferred when discussing the graphical plots themselves and not the software package used to create them.
stickup	Informal term for the distance the well casing extends (sticks up) above the ground surface.
well	A permanent to semi-permanent borehole (often cased) designed for long-term repeated use.

[1] LogPlot™ is a trademark of RockWare Inc., Golden, Colorado.

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1.0 Introduction

The U.S. Department of Energy (DOE) Hanford Site is the site of the largest and most complex environmental cleanup project in the United States (Gephart 2003). Cleanup decisions have focused predominantly on remediating individual aspects of the larger system. However, the DOE "Report to the House and Senate Committees on Appropriation on Groundwater Vadose Zone Organization and Operations at the Hanford Site"[1] indicates that future cleanup decisions will be based on a systems approach, such that remedial actions are sequenced and mutually supported, and based on an integrated understanding of how contaminants move through the environment. To this end, DOE is taking efforts to ensure that a consistent set of data, conceptual models, and numerical approaches are used in support of environmental assessments performed for the National Environmental Policy Act (NEPA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and the Resource Conservation and Recovery Act (RCRA).

The Remediation Decision Support (RDS) project at Pacific Northwest National Laboratory (PNNL) supports the RDS function of the Soil and Groundwater Remediation Project (managed by CH2M HILL Plateau Remediation Company [CHPRC]). The RDS function is responsible for facilitating the development of consistent data, parameters, and conceptual models to resolve technical issues and support efforts to estimate contaminant migration and impacts (i.e., the assessment process). In particular, the RDS function is working to update electronic data sources and conceptual models of the geologic framework and associated hydraulic and geochemical parameters to facilitate traceability, transparency, defensibility, and consistency in support of environmental assessments.

The objective of this report is to summarize the status of efforts conducted in Fiscal Year 2008 (FY08) to update the hydrogeologic conceptual model for the Hanford Site Central Plateau Area. The scope of this work was focused primarily on the 200 West Area, with a secondary effort initiated on the 200 East Area. The aim of this work is to provide a comprehensive overview of the available hydrogeologic data and conceptual model(s) of the subsurface framework, building on previous compilations by Tallman et al. (1979); Lindsey (1991, 1992); Connelly et al. (1992a, 1992b); Williams et al. (2000, 2002); and Reidel and Chamness (2007).

This report contains nine sections and four appendices. Section 2 provides background on the Hanford Site Central Plateau and the need for a unified conceptual model of its hydrogeologic framework. Section 3 outlines the technical approach used to assemble and integrate available data and information into a holistic understanding of the Central Plateau hydrogeology. Section 4 provides an overview of the geologic history of the Pasco Basin and Hanford Site, to provide context for development of a sequence stratigraphic hydrogeologic model for the Central Plateau. Section 5 describes development and refinement of a stratigraphic contacts database to define the tops of major stratigraphic units (e.g., formations, members, and mappable facies associations). Section 6 describes the development of a large-scale three-dimensional stratigraphic model of the Central Plateau (focusing on the 200 West Area). Section 7 presents a summary of the existing physical and hydraulic properties for stratigraphic units and associated lithofacies defined in the 3D stratigraphic model. Also described in Section 7 are the

[1] Rispoli JA. 2006. Letter to the Honorable Thad Cochran (Chairman, Senate Appropriations Committee) from James A. Rispoli (Assistant Secretary for Environmental Management, U.S. Department of Energy), March 29, 2006.

petrologic, mineralogic, bulk rock geochemistry, and other geochemical properties of the subsurface that contribute to understanding the provenance, stratigraphic correlation, and contaminant retardation properties of the stratigraphic units and intra-unit facies. Section 8 describes the limitations and sources of errors associated with compilation of the stratigraphic contacts, development of the geologic model, and assignment of physical, hydrologic, and geochemical properties. Literature sources cited in the report are listed in Section 9. Appendix A contains the stratigraphic contacts database, Appendix B contains the ground-surface database, Appendix C contains the geologic model data and graphical image files, and Appendix D illustrates selected detailed geologic cross sections through the 200 West Area.

2.0 Background

The Hanford Site Central Plateau encompasses about 194 km^2 (75 mi^2) near the center of the Hanford Site (Figure 2.1). It contains the 200 West Area and 200 East Area, referred to as Separations Areas. These areas once housed five chemical separations buildings and other facilities that separated and recovered plutonium and other special nuclear materials. Process operations and waste management activities resulted in the storage and disposal of large quantities of solid and liquid wastes. More than 1.7 billion m^3 (450 billion gal) of liquid waste, some containing radionuclides and hazardous chemicals, have been discharged to the ground, with much of the contamination remaining above the water table. Cleanup of the Central Plateau is organized into several different CERCLA-related operable units and RCRA-related waste management units.

The geologic framework of the subsurface is the physical structure that, along with hydrologic and geochemical properties, controls the migration and distribution of contaminants. Of particular interest are the interrelationships between the coarser- and finer-grained facies, and the degree of contrast in their physical and geochemical properties. These interrelationships are often linked in predictable ways to small-scale lithofacies heterogeneity and larger-scale stratigraphic packaging (Fogg et al. 1989; Anderson 1990). Heinz et al. (2003) recognized three scales of heterogeneity: 1) large architectural-scale heterogeneities among major unconformity-bound stratigraphic sequences (e.g., Formations), 2) intermediate-scale heterogeneities of depositional sequences or sedimentary packages (e.g., Members), and 3) small-scale heterogeneities of discrete lithofacies within the larger sedimentary sequences. Last et al. (2007) recognized that even finer-scale (fourth-order) heterogeneities could occur within lithofacies. The primary focus of this work is to refine and improve traceability of a large-scale geologic model for the Central Plateau that captures both formation and subformation stratigraphic units (i.e., first-and second-order heterogeneities).

A unified conceptual model (including uncertainties and alternative conceptual models) of the larger-scale hydrogeologic framework for both the vadose zone and groundwater throughout the entire Central Plateau is needed to provide the defensible technical basis for, and consistency among, the conceptual site models developed for operable units and waste management units. Often there are boundary faults (arbitrary discontinuities and inconsistencies) among projects and differences in stratigraphic nomenclature—this has led to confusion and reduced credibility with regulators.

The most-recent holistic geologic conceptual model completed for the Central Plateau was done in 1979 by Tallman et al. Updates to the 200 East Area and 200 West Area hydrogeologic conceptual models completed to support the Central Plateau remediation were conducted in 1991 and 1992 (Lindsey 1991, 1992; Connelly et al. 1992a, 1992b). Additional updates relative to the hydrogeology of the supra-basalt aquifer beneath the 200 East and 200 West Areas were conducted in 2000 and 2002, respectively (Williams et al. 2000, 2002). However, several hundred wells have been drilled since then, providing much-needed data to refine the large-scale stratigraphic units and resolve discrepancies among nomenclature and project- and site-specific interpretations.

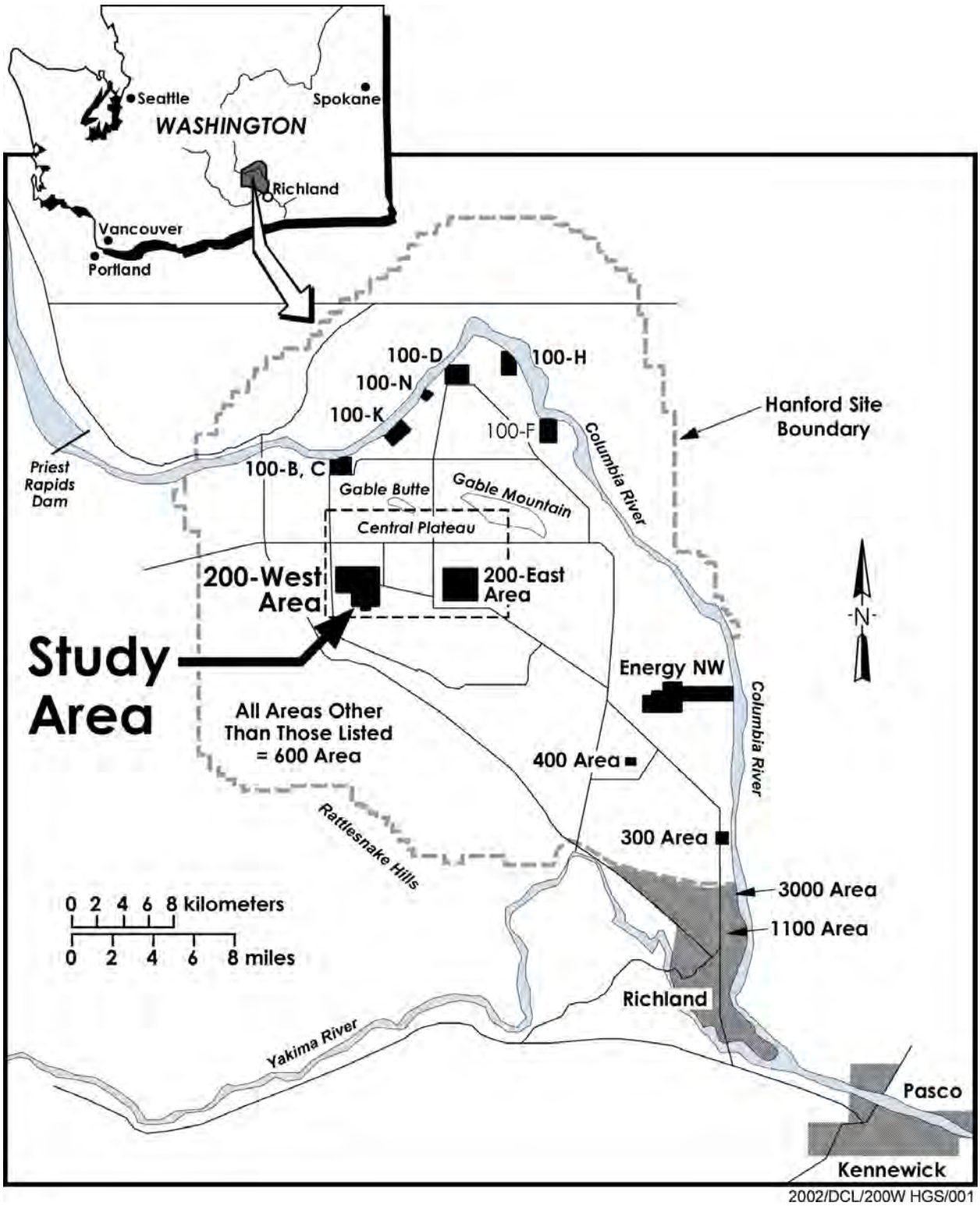

Figure 2.1. Location of the Central Plateau and 200 West Area (after Williams et al. 2002)

Recent studies in 2002 and 2007 have revised and updated the nomenclature (DOE 2002) and presented a geologic data package for selected portions of the Central Plateau but have left gaps or raised new issues regarding that holistic understanding of the hydrogeology of the Central Plateau. Williams et al. (2000, 2002) updated the hydrogeologic conceptual model for the supra-basalt aquifer beneath the 200 East and 200 West Areas but did not address the vadose zone. Reidel and Chamness (2007) updated the geology of the single-shell tanks waste management areas but provided limited data on the areas between. Bjornstad and Lanigan (2007) updated the geology of the Low-Level Burial Grounds but did not address other areas. Furthermore, recent borehole data, particularly from northeast of the 200 West area, suggest that refinements to the existing geologic model are needed.

Traditional approaches to modeling the stratigraphic framework at the Hanford Site have used simple homogeneous and horizontally stratified hydrogeologic units. However, as computer-processing capabilities have advanced, more emphasis has been placed on improving spatial resolution and quantifying uncertainty in representing the geologic framework and its key model parameters. Newer approaches are focusing on geostatistical simulation of the sequence-stratigraphic relations of lithofacies and on the geostatistical distribution of flow-and-transport properties within those facies. These newer approaches require more rigorous quantitative treatment of geologic data than are normally supported by the mostly qualitative nature of borehole geologic information. Thus, efforts are being made to standardize borehole geologic data so they can be used in a systematic and quantitative way to define the spatial distribution of flow-and-transport properties (Last et al. 2007, p. 906). These efforts improve traceability of the interpreted large-scale stratigraphic contacts relative to the raw and standardized borehole data sets.

3.0 Technical Approach

The scope of work for FY08 was focused primarily on the 200 West Area; a secondary effort focused on the 200 East Area was initiated. The technical approach for this work was to assemble a regional stratigraphic model for the Central Plateau using previously published interpretations of the major geologic units to refine and update a database of major stratigraphic contacts. Best-estimate contacts and ground-surface elevations were then selected, based on professional judgment and general consensus, to develop a three-dimensional solid-earth geologic model of the major stratigraphic units. Anomalies in the geologic model and boreholes with high variability for specific contacts were reevaluated to verify the best-estimate geologic contacts relative to raw and standardized borehole data. A brief description of the technical activities and methodologies used is provided in this section. Note that many of these activities were conducted in parallel to hasten completion of the work.

3.1 Assemble Initial Large-Scale Stratigraphic Model

The objective of this activity was to assemble a large-scale stratigraphic model of the Central Plateau to capture existing published interpretations on the major heterogeneities within the subsurface framework distinguished by unconformity-bounded stratigraphic sequences, most of which correspond to geologic formations. Where possible, intermediate-scale stratigraphic units representing second-order heterogeneities identified by depositional sedimentary sequences or packages (e.g., members and facies associations) also were included. Their inclusion was accomplished by revising and updating an existing stratigraphic contacts database (Bjornstad 2004), assembling the geologic model, and evaluating areas of high variability or uncertainty to focus additional data analysis.

3.1.1 Revise and Update Stratigraphic Contact Database

One of the first activities was to revise and update the existing stratigraphic contact database (Bjornstad 2004) with new interpretive data published in more recent documents (e.g., Reidel and Chamness 2007) or from unpublished sources. The stratigraphic contacts database was revised to capture the depths of stratigraphic contacts in feet below ground surface to make the stratigraphic contact interpretations more easily traceable to raw and standardized borehole data. Necessarily, a database of best-estimate ground-surface elevations at the time of drilling also had to be developed such that contact elevations could be calculated. During FY08, the stratigraphic contacts database for the 200 West Area and its surroundings was revised and updated, and a new best-estimate ground-surface elevation database was developed. Where multiple contact interpretations were found for an individual borehole, a best-estimate set of contacts was selected based on the traceability and defensibility of the contact estimates, professional judgment, and a general consensus among the various contacts. Details on the development of the stratigraphic contacts database and best-estimate ground-surface elevation database for the 200 West Area are provided in Section 5. Efforts to revise and update the stratigraphic contacts database for the 200 East Area and its surroundings also were initiated. However, these data are not complete, have not been reviewed, and lack selection of the best estimates, nor has a best-estimate ground-surface elevation database been developed for the 200 East Area. Thus, neither the stratigraphic contacts database nor the geologic model for the 200 East Area is discussed further in this report.

3.1.2 Generate Initial Stratigraphic Model

The objective of this activity was to develop a geologic model of the major stratigraphic units contained in the stratigraphic contacts database. Stratigraphic contact elevations, in meters, calculated from the stratigraphic contacts database and the best-estimate ground-surface elevation database, were used to develop a 3D solid model of the stratigraphic structure beneath the 200 West Area. This was accomplished using EarthVision[1] software. The resulting geologic model was then used to graphically display structure contour and isopach maps, cross sections, and solid model representations of the major stratigraphic contact surfaces and unit thicknesses.

3.1.3 Evaluate Areas of High Variability or Uncertainty

An evaluation of potential anomalies in the spatial geometry of individual stratigraphic units within the solid model and variability within the stratigraphic contact database was used to identify key data gaps and conflicting interpretations. Those spatial locations and boreholes with the greatest variability or uncertainty were selected for further data analysis. Among those boreholes selected for further data analysis were 299-W11-6, 299-W26-12, 699-37-82B, 699-37-84, 699-45-69A & C, and 699-48-77A & C.

3.2 Reduce Uncertainty and Improve Traceability

Additional data analysis was conducted to reduce uncertainty in the geologic model and to improve traceability of the geologic contact interpretations to raw borehole data.

3.2.1 Select Boreholes and Other Data Sources for Supplemental Data Analysis

Key boreholes and other data sources (e.g., near-surface outcrops, surface geophysical survey data) were selected for detailed geologic interpretation, based on uncertainties in the geologic model or contacts database and the availability of data from newly drilled boreholes. Their selection involved development of criteria (e.g., location, quantity and quality of data) for selection and ranking to prioritize boreholes for data entry and analysis and to help weight the interpretation of contact picks and correlations used in the conceptual model (Table 3.1). Note: geologic contact picks in those wells with a higher quality and quantity of data, which provide more confidence, are given higher weight compared to other wells with poorer-quality data.

3.2.2 Borehole Data Analysis and Refinement of Best-Estimate Contacts

Borehole data (including geophysical logs) from new boreholes and selected high-priority boreholes were standardized and entered into the Hanford Borehole Geologic Information System (HBGIS) to produce summary logplots of the standardized raw borehole data. These summary logplots and their supporting data were used to define, refine, or verify the major stratigraphic contacts (formation, major facies associations) and to improve traceability of the interpretations directly back to the raw borehole data.

[1] EarthVision® is a registered trademark of Dynamic Graphics, Inc., Alameda, California.

Table 3.1. Point System for Prioritizing Borehole Data Analyses

Borehole Information Ranking Criteria (maximum points)	Points
Borehole depth (20)	
Bottom in basalt	20
Bottom in CCU or Ringold Formation	10
Bottom in Hanford formation	0
<100 ft	−10
Drill Method (20)	
>50% split spoon or diamond core	20
25%–50% split spoon	15
100% drive barrel	10
100% hard tool, air rotary, ODEX, sonic, and/or Becker hammer	5
Cone penetrometer	0
Field Logs (35)	
Geologists' log	30
Drillers' log	5
Neither	0
Geophysical Logs (40)	
Gross gamma	10
Spectral gamma	10
Neutron moisture	20
No geophysical logs	0
Physical Properties (50)	
Grain size (ROCSAN)	30
Lab moisture	15
Other physical measurements (e.g., permeability, density, porosity)	10
Chemical Properties (20)	
$CaCO_3$ (ROCSAN)	10
Other chemical measurements (e.g., mineralogy, x-ray fluorescence, x-ray diffraction, water/acid extracts, anions, cations, cation exchange capacity, metals)	10
Other (15)	
Age dating (paleomagnetic signatures, carbon-14, other radiometric dates)	5
Digital photographs of core and cuttings	5
Maximum number of points possible	**(200)**
Rank	**Points Range**
1 (best)	101–200
2	71–100
3	41–70
4	21–40
5 (worst)	0–20

Logplots and supporting data from individual new boreholes were compared with the logplots and data from existing nearby boreholes (particularly when a borehole with poor data is adjacent to boreholes with good data) to improve consistency and confidence in the interpretations. For lower-priority boreholes for which standardized semiquantitative data are not fully available, qualitative subjective analyses were conducted to check against contact interpretations from previous reports.

3.3 Revise and Update Contacts Database and Stratigraphic Model

New and revised best-estimate stratigraphic contact interpretations were incorporated into the stratigraphic contact database following change control protocols. The revised and updated best-estimate contacts were then used to generate a revised 3D solid model of the stratigraphy beneath the 200 West Area. This geologic model was used to develop structure contour and isopach maps, cross sections, and solid model representations of the major stratigraphic contact surfaces and unit thicknesses.

Detailed cross sections were constructed independently of the 3D solid model using interpreted and raw borehole data for selected boreholes along selected transects, to provide another consistency check of the stratigraphic contacts database. The larger-scale stratigraphic correlations were used to further refine and adjust the sequence stratigraphic model to honor major lithologic changes that are correlative between multiple boreholes and to revise the stratigraphic contacts database and solid model as needed. Reanalysis of the uncertainty in the geologic model provides a measure of the improvements to the revised model and identifies the next priorities for reducing the data gaps and resolving conflicting interpretations. Some degree of iteration was necessary to revise and refine the geometry and orientation of the major stratigraphic units. The revised stratigraphic conceptual model will be placed under configuration control using the stratigraphic contacts and ground-surface elevation databases, the EarthVision input files, and resulting graphics and shape files.

4.0 Regional Geology of the Pasco Basin and Hanford Site

This section provides an overview of the geologic history of the Pasco Basin and Hanford Site, to provide context and defensibility for development of a sequence stratigraphic hydrogeologic model for the Central Plateau. This discussion is taken largely from a previous overview of the geologic history of the Hanford Site and Central Plateau provided by Reidel and Chamness (2007). An understanding of the geologic history of the area is key to interpretation of the major stratigraphic units and their spatial configuration. Of primary interest to this study are the large unconformity-bound sedimentary sequences overlying the basalt bedrock.

The Hanford Site lies within the Pasco Basin, which is a structural and topographic basin within the Yakima Fold Belt structural subprovince of the Columbia Plateau (Myers et al. 1979, p. II-72). The Columbia Plateau is a broad plain situated between the Cascade Range to the west and the Rocky Mountains to the east, and is underlain by the Miocene Columbia River Basalt Group (CRBG) (Figure 4.1). Structural basins within the Yakima Fold Belt, including the Pasco Basin, are filled with sedimentary sequences from ancestral river systems, cataclysmic Ice Age floods, and localized deposits of coluvium and loess. The broad chronology of these events is described in the following sections.

4.1 Columbia River Basalt Volcanism and Deposition of the Ellensburg Formation

During the period from 17 to 6 million years ago, vast quantities of tholeiitic flood-basalt erupted from north-northwest–trending fissures or linear vent systems in north-central and northeastern Oregon, eastern Washington, and western Idaho (Swanson et al. 1979b). These basalt flows constitute the Columbia River Basalt Group (CRBG) that forms the main bedrock of the Pasco Basin and Hanford Site. The CRBG consists of more than 200,000 km^3 of basalt flows that cover approximately 230,000 km^2 (Camp et al. 2003). Some eruptions had volumes as great as 5,000 km^3 (Reidel et al. 1989), with the greatest amounts being erupted between 16.5 and 14.5 million years before present.

Subsidence during and since the Columbia River basalt volcanism formed the Pasco Basin, while other tectonic forces folded the basalt flows into narrow anticlinal ridges and broad synclinal valleys (Reidel et al. 1989). Weathering, soil development, erosion, and/or sediment deposition occurred between eruptions, particularly between the younger basalt flows. Intercalated with and, in some places, overlying the CRBG are sedimentary rocks of the Ellensburg Formation (Swanson et al. 1979a). In the western Columbia Basin, the Ellensburg Formation is mostly volcanic-derived sediment; in the central and eastern basin, fluvial sediments of the ancestral Clearwater and Columbia Rivers form the dominant lithologies (Fecht et al. 1987).

Based on chemical composition, paleomagnetic data, lithology, and stratigraphic correlation, the CRBG has been divided into five formations (Swanson et al. 1979b)—the Picture Gorge Basalt, the Imnaha Basalt, the Grande Ronde Basalt, the Wanapum Basalt, and the Saddle Mountains Basalt. Only the Picture Gorge Basalt has not been found beneath the Hanford Site. The youngest basalt formations—the Wanapum Basalt and the Saddle Mountains Basalt—have been subdivided into four and ten members, respectively.

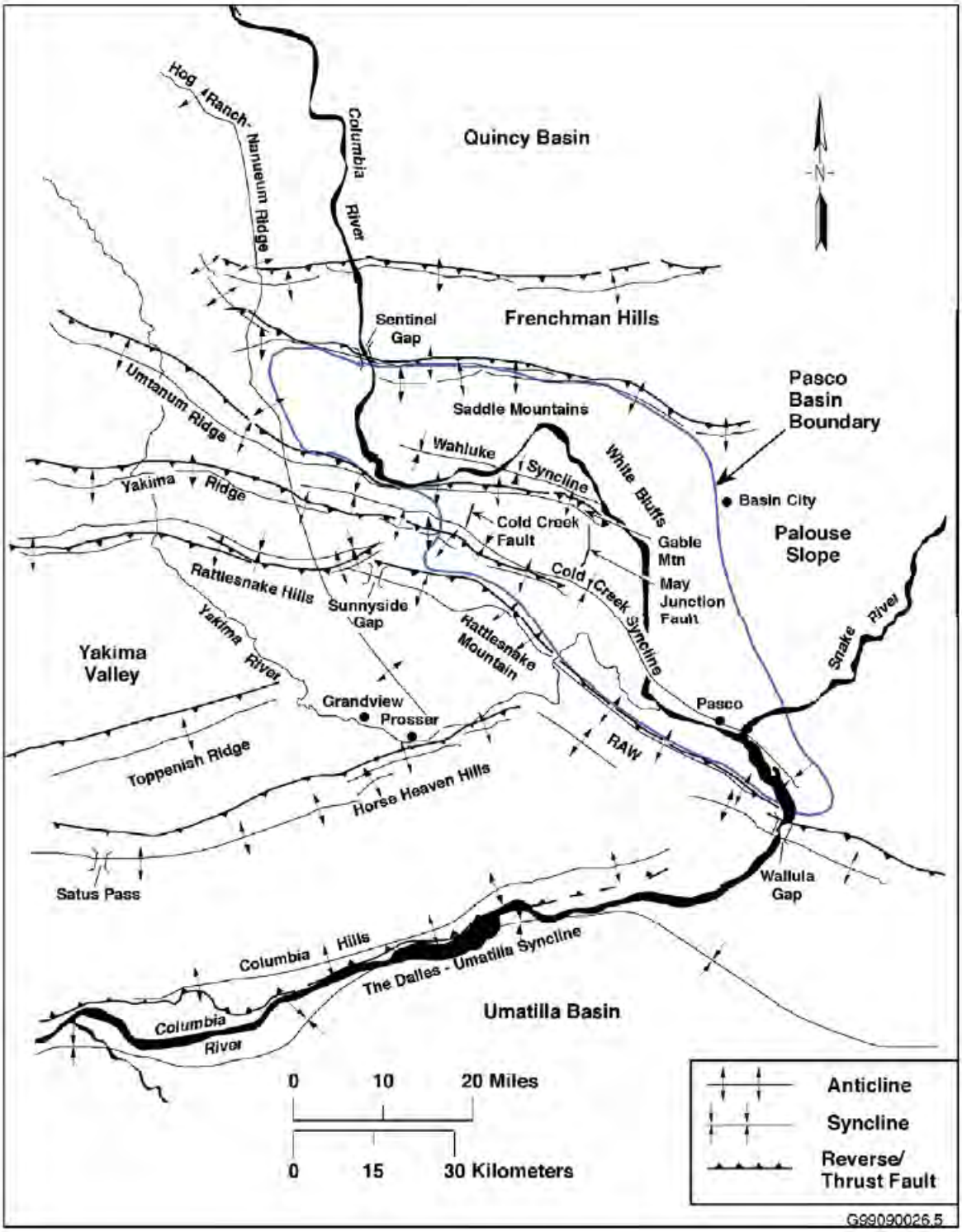

Figure 4.1. Main Structural Features of the Pasco Basin and Surrounding Area (after Reidel and Chamness 2007)

The Wanapum and Saddle Mountains Basalts on the Hanford Site have been locally eroded to various degrees. Some erosion of the basalt occurred between eruptions, as well as before, during, and following deposition of the oldest Ringold Formation sediments. Uplift along anticlinal ridges has resulted in erosion to different depths along the margin of the Pasco Basin. North of the Central Plateau near Gable Gap, the Saddle Mountains Basalt has been locally eroded by fluvial activity and proglacial flooding down to its oldest member, the Umatilla Member.

4.2 Deposition of the Ringold Formation

Ancestral rivers draining south-central Washington were diverted by the rising anticlines and subsiding basins. Rivers progressively shifted courses into the structural and topographic lows of the Columbia Basin, eventually converging on the Pasco Basin (Swanson and Wright 1979; Fecht et al. 1987). The rivers deposited their sediment load of gravel, sand, silt, and clay in and adjacent to the major channelways (Newcomb et al. 1972; Tallman et al. 1981; Waitt and Swanson 1987; Lindsey 1996). These alluvial (river-deposited) sediments, together with volcanic ash, sidestream, and colluvial (landslide) debris, are interbedded with and overlie CRBG basalt flows. These sedimentary sequences are collectively referred to as the Ringold Formation (Newcomb et al. 1972). A diverse assemblage of fossils, paleomagnetic data, and reconstruction of the Columbia River indicate that the Ringold Formation was deposited between 3.4 and 10.5 million years ago (Gustafson 1978; Tallman et al. 1981; Fecht et al. 1987). Although the sedimentary record is incomplete, the sedimentation pattern is what would be expected in an area with limited rainfall and significant structural development (Fecht et al. 1987).

The coarse-grained sediments of the Ringold Formation were deposited in a fluvial environment associated with a through-flowing Columbia River system, whereas the fine-grained sediments represent a sluggish or impounded river system and lacustrine (lake) environments. These Ringold sediments were deposited within a subsiding Pasco Basin, where the rivers' hydraulic base levels were controlled by rising structural ridges or possibly temporary dams of lava in the Columbia River Gorge (Fecht et al. 1987; Waitt and Swanson 1987).

Lindsey (1995) identified five facies associations within the Ringold Formation and divided the Ringold into three informal members—the member of Wooded Island, the member of Taylor Flat, and the member of Savage Island (Lindsey 1995)—each dominated by different facies associations. Lindsey further subdivided the member of Wooded Island into five stratigraphic units, designated A, B, C, D, and E, dominated by fluvial gravel and separated by several widespread overbank/paleosol and lacustrine intervals.

The first record of the Columbia River at Hanford, after cessation of the Columbia River basalt volcanism, is the extensive gravel and interbedded sand of Unit A, Ringold Formation member of Wooded Island. This unit records the gravelly braid plain and paleosol system of the Columbia River that meandered across the Hanford Site, leaving the Pasco Basin through the present Yakima River water gap along the southeast end of the Rattlesnake Mountain anticline (Figure 4.1) (Fecht et al. 1987; Reidel et al. 1994; Lindsey 1995).

About 6.7 million years ago, the Columbia River abandoned this Yakima River water gap and began to exit the Pasco Basin via Wallula Gap (Figure 4.1). Its main channel was still through the Hanford Site; however, the depositional environment had changed to one of a sandy alluvial system with extensive

lacustrine and overbank deposits (Fecht et al. 1987; Reidel et al. 1994; Lindsey 1995). A widespread lacustrine-overbank deposit called the lower mud was deposited over some of the Hanford Site at this time. The lower mud was then covered by another extensive sequence of fluvial gravels and sands. The most extensive of these is called Unit E, Ringold Formation member of Wooded Island, but locally other sequences are recognized (e.g., Units C and D). To the north near the 100 Areas, Ringold Formation sediments reflect mostly overbank deposition of fine-grained sediments during this time.

About 5 million years ago, the Columbia River sediments became more sand-dominated, and more than 90 m (295 ft) of interbedded fluvial sand and overbank deposits accumulated at Hanford. These deposits are collectively called the Ringold Formation member of Taylor Flat (Lindsey 1995). The fluvial sands of the member of Taylor Flat dominate the lower cliffs of the White Bluffs.

Between 4.8 and 3.4 million years ago, lacustrine deposits dominated Ringold Formation deposition. A series of three successive lakes is recognized along the White Bluffs and elsewhere along the margin of the Pasco Basin (Lindsey 1995). The lakes probably resulted from damming of the Columbia River farther downstream, possibly in the Columbia Gorge. The lacustrine and related deposits in the Pasco Basin are collectively called the Ringold Formation member of Savage Island.

4.3 Incision of the Ringold Formation and Deposition of Isolated Cold Creek Unit Deposits

About 3.4 million years ago, western North America underwent regional uplift, resulting in a major drop in the hydraulic base level for the ancestral Columbia River system and an end to deposition of Ringold sediments. The base level change resulted in regional erosion and downcutting causing the ancestral rivers to incise deeply into the Ringold Formation, removing nearly 100 m of Ringold Formation sediments from the Hanford Site. As incision progressed eastward across Hanford, more and more erosion occurred, leaving surface elevation changes in the Ringold Formation and culminating in maximum erosion near the current river channel. In some places, erosion cut completely through the Ringold to the top of basalt.

During and immediately following the downcutting period, the basin reached a temporary base level, and alluvial sediments and windblown loess began depositing in lower elevations of the basin. In addition, thick calcic paleosols developed across extensive parts of the area due to the arid climate. The sediments and paleosols are superimposed disconformably on the erosional surface of the Ringold Formation. Alluvial gravel, sand, and silt deposits accumulated along the channelways of the ancestral river system. In places, these coarse-grained clastic sediments are referred to as pre-Missoula gravels (PSPL 1981). On the basin margins, sidestreams were actively eroding rocks and sediments from the emerging ridges and depositing gravel (mainly basalt clasts), sand, and silt into ancestral sidestreams such as in the Cold Creek and Dry Creek valleys. The deposits, sandwiched between the Ringold Formation and the overlying Hanford formation, are locally referred to on the Hanford Site as the Cold Creek Unit (DOE 2002).

4.4 Ice Age Flooding and Deposition of the Hanford formation

With the onset of the last major Ice Age some 2.6 million years ago, cataclysmic floods (including the Missoula floods) repeatedly inundated the Pasco Basin, depositing a thick sequence of sediment

informally called the Hanford formation (Baker et al. 1991; DOE 2002; Bjornstad 2006). These huge floods (some containing more than 500 mi^3 of water) occurred when ice dams failed, releasing large volumes of water from ice marginal lakes (e.g., glacial Lake Missoula). These outburst floods occurred repeatedly during regular glacial cycles. The largest of these floods had flow rates up to about 17 million cubic meters per second, ten times the combined flow rate of all the modern rivers of the world, making them arguably the largest recorded floods known to have occurred on Earth (O'Conner and Costa 2004). In addition to larger major flood episodes, numerous smaller individual flood events are also likely to have occurred. As many as 100 separate flood events have been postulated to have occurred during the last glacial cycle alone, 15,000 to 20,000 years ago (Waitt 1994). Deciphering the history of cataclysmic flooding in the Pasco Basin is complicated, not only because of floods from multiple sources but also because the paths of Missoula floodwaters migrated and changed course with the advance and retreat of the Cordilleran Ice Sheet. Recent studies using paleomagnetic signatures in fine-grained sediments of the Hanford formation suggest that the earliest floods may have occurred as early as 2 million years ago. Pluhar et al. (2006) found four magnetic polarity reversals preserved in Hanford formation sediment. The uppermost reversed paleomagnetic signatures suggest that some cataclysmic floods exceed 780,000 years ago (Baker et al. 1991; Pluhar et al. 2006). Radiometric age dating using thorium and uranium has put other flood deposits at 200,000 to 220,000 years old (Baker et al. 1991).

Along with sedimentological evidence for cataclysmic flooding in the Pasco Basin, high-water marks and faint strandlines occur along the basin margins. Temporary ponding of the Ice Age floodwaters behind Wallula Gap created the short-lived Lake Lewis and left behind ice-rafted erratic boulders and mounds of iceberg debris (berg mounds) as well as fossils of mammoths and other creatures caught up in the floods (Barton 1999; Bjornstad 2006). High watermark elevations for Lake Lewis, inferred from ice-rafted erratics on ridges, range from 370 to 385 m (1,214 to 1,261 ft) above sea level (Reidel and Chamness 2007).

The sediment deposited by the cataclysmic floodwaters has been informally called the Hanford formation. Gravel-dominated sediments are generally confined to relatively narrow tracts within or near flood channelways. Sand-dominated sediments, on the other hand, occur primarily as a broad sheet over most of the central basin. Paleocurrent indicators within the plane-laminated sand facies (DOE 2002) generally indicate flow toward the south and east within the Pasco Basin. Sediments dominated by interbedded silt and sand rhythmites occur in slackwater areas around the margins of the basin and display multidirectional currents, including upvalley currents, and generally seem to become finer and thinner both laterally and vertically.

4.5 Holocene Deposits

After the last Ice Age flood drained from the Pasco Basin, winds moved the loose, unconsolidated material until vegetation was able to stabilize it. Stabilized sand dunes cover much of the Pasco Basin, but there are areas, such as along the Hanford Reach National Monument, where sand dunes remain active. Locally, fluvial and colluvial processes also have shaped the landscape and deposited locally derived sediments.

5.0 Stratigraphic Contacts Beneath the Central Plateau

This section describes the methodology used to compile and integrate available information on the vertical location of stratigraphic contacts that define the tops of major stratigraphic units (e.g., formations, members, and mappable facies associations) beneath the Central Plateau. The resulting updated and revised database is intended to be used to 1) update and revise a solid model of the geology beneath the 200 West Area and, subsequently, the 200 East Area; 2) provide an a priori data set with which to evaluate areas of high uncertainty or disagreement; and 3) identify and prioritize boreholes for detailed evaluation to resolve those discrepancies and reach agreement on the best-estimate contact locations.

The primary methodology was to 1) build on the existing database compiled by Bjornstad (2004), 2) convert it from a computed elevation-based database to a depth-below-ground-surface database, 3) update it with additional documented geologic contact information (e.g., from Reidel and Chamness 2007), 4) verify and evaluate the various contact data sets, and 5) select best-estimate contact values to be used in the a priori geologic model of the 200 West Area.

Some of the main concerns or sources of error among various documented contact elevation data sets have been differences in stratigraphic nomenclature, the ground-surface elevations used to calculate the contact elevations, and rounding errors introduced in conversion from contact depths in feet below ground surface to elevation in meters or, in some cases, conversion from elevations in meters to depths in feet. Thus, our approach was to compile previously documented stratigraphic contacts in terms of depth in feet below ground surface so as to improve traceability back to the raw borehole data collected at the time of drilling. Previously documented elevation-based data sets have been developed by subtracting the interpreted depth of geologic contacts from surveyed or estimated ground-surface elevations (presumably at the time of drilling) for each particular borehole. However, the quality of ground-surface elevation data and reference datum has varied over time, and some repeat estimates have been shown to vary by as much as a meter. Thus, for each documented source of contact elevation information, the reported contact elevations were subtracted from the reported ground-surface elevation to yield the previous investigators' working contact depths.

To support update and revision of the geologic model for the 200 West Area, the best-estimate contact depths (in feet below ground surface) need to be converted to elevations (in meters above mean sea level). To support this effort, a best-estimate ground-surface elevation database (representing the ground surface at the time of drilling) was developed based on vertical survey and well construction data extracted from the Hanford Well Information System (HWIS) and a set of logic rules.

This section describes the stratigraphic nomenclature (and assumed correlations to previous nomenclature) used in this study, as well as the efforts made to develop the stratigraphic contact depths database and the best-estimate ground-surface elevation database.

5.1 Stratigraphic Nomenclature

Stratigraphic nomenclature has historically varied by project and principal investigator, so it is difficult to directly relate the documented and undocumented geologic contacts to one another. However, Bjornstad (2004) evaluated the various sources of contact information and translated them into 12 main stratigraphic units that could be correlated over most of the 200 Areas. These units were based on the

standardized stratigraphic nomenclature for post-Ringold sediments defined by DOE (2002) and in part on the Hanford formation subdivisions (H1, H2, and so on) identified by Lindsey et al. (1994, 2000, 2001) and Wood et al. (2000). The nomenclature for units within the Ringold Formation was based on that defined by Lindsey (1995).

Although Lindsey et al. (2000, 2001) and Wood et al. (2000) used similar subdivisions within the Hanford formation in both the 200 East Area and 200 West Area, paleomagnetic polarity data indicate that the subdivisions in the 200 East Area are not necessarily time correlative with those in the 200 West Area (Pluhar et al. 2006). Thus, they do not represent the same sedimentary sequences (Reidel and Chamness 2007). Discrete sedimentary packages from individual flood events, particularly within the coarser facies associations of the Hanford formation have only been recognized in excavations (e.g., 218-E-12b burial ground, Pit #30, U.S. Ecology, Environmental Restoration Disposal Facility, Fuels and Materials Examination Facility) and are yet to be recognized from borehole samples alone. For all intents and purposes, the coarse facies associations within the Hanford formation appear to be completely interbedded and display considerable lateral as well as vertical facies variations. Nevertheless, we have chosen to use the following general nomenclature—upper coarse-dominated (H1), sand-dominated (H2), and lower coarse-dominated (H3) to represent the main subdivisions of the Hanford formation in the 200 West Area.

Table 5.1 provides a brief description of the stratigraphic units used in this report. Figure 5.1 illustrates how the nomenclature used by different investigators compares with the nomenclature selected for this compilation of geologic contacts.

5.2 Stratigraphic Contact Data

Stratigraphic contact data (Appendix A) were compiled from published reports in addition to some unpublished data (Table 5.2). Over 1,190 records were compiled for 446 different boreholes located in and around the 200 West Area (Figure 5.2). The source used as the basis for the vertical location of stratigraphic contacts for each borehole was included in this compilation (see Appendix A). In many cases, published contact information has been presented in terms of the elevation, in feet above mean sea level, of the top of a specific stratigraphic unit (e.g., Last et al. 1989; Rohay et al. 1994; Reidel and Chamness 2007). Often, these published contact elevations have been rounded to the nearest foot. To convert these contact elevations to depth below ground surface, the reported contact elevation was subtracted from the reported ground-surface elevation. Where metric data are presented (e.g., Last et al. 2006; Oostrom et al. 2006; Thorne et al. 2006), the contact elevations (in meters) were first converted to feet (using a conversion factor of 0.3048 m/ft (Thompson and Taylor 2008); 3.28084 ft/m) and then the contact depths were calculated. Where contact data were reported as depth in feet (e.g., Bjornstad 1984; Last et al. 1989; Serne et al. 2004a, 2004b), the contact data were taken directly. Unpublished data were generally assigned a low priority but were used where published data for a given well and contact were unavailable or were considered an improvement over the previously published contacts. A brief description of the published data sources, and how they were used to derive the contact depths compiled in this report, is provided in Table 5.2.

Table 5.1. Stratigraphic Nomenclature and Symbols Used in This Report

Stratigraphy Unit (symbol) Used in This Report	Descriptions Summarized from DOE (2002), Lindsey et al. (1994), Lindsey (1995), Lindsey et al. (2000), and Reidel and Chamness (2007)
Backfill (Bf)	Poorly sorted, massive, gravel, sand, and silt removed from and subsequently returned to excavations.
Holocene deposits, sand (HDs)	Medium to fine-grained massive to weakly laminated eolian sand to silty sand, equivalent to the fine-grained, massive, well-sorted and medium-grained cross-bedded, well-sorted Holocene deposits described by DOE (2002).
Hanford formation Unit 1 (HF1)	Upper gravel-dominated sequence, consisting of high-energy Ice Age flood deposits, which in places grades upward into a mix of sandy and gravelly sediments. Generally contains a high percentage of subangular basaltic clasts. Equivalent to Lindsey et al. (2000) Unit H1a and Unit H1.
Hanford formation Unit 2 (HF2)	Middle sand-dominated sequence, consisting of moderate- to high-energy Ice Age flood deposits consisting of graded sandy and silty sediments often characterized as basaltic, salt-and-pepper sand. Equivalent to Lindsey et al. (2000) Unit H2.
Hanford formation Unit 3 (HF3)	Lower gravel-dominated sequence, consisting of high-energy Ice Age flood deposits containing a high percentage of subangular basaltic clasts, equivalent to Unit 3 of Lindsey et al. (1994) and Unit H3 of Lindsey et al. (2000). The base of this unit includes some fine-grained materials equivalent to Lindsey et al. (2000) Unit H4.
Cold Creek Unit silt (CCUz)	Fine sand, silt, and/or clay, laminated to massive, often characterized as very micaceous, oxidized, and containing pedogenic calcium carbonate, with high natural gamma activity. It is equivalent to the early Palouse Soil of Brown (1959, 1960), a portion of the "locally derived subunit" of the Plio-Pleistocene Unit of Lindsey et al. (1994), and the fine-grained, laminated to massive facies association of the Cold Creek Unit of DOE (2002).
Cold Creek Unit carbonate (CCUc)	Pedogenic calcium carbonate cemented clay, silt, sand, and/or gravel, equivalent to the Caliche of Brown (1959, 1960), a portion of the "locally derived subunit" of the Plio-Pleistocene Unit of Lindsey et al. (1994) and the coarse- to fine-grained, carbonate-cemented facies association of the Cold Creek Unit of DOE (2002).
Ringold Formation Member of Taylor Flat (Rtf)	Interstratified deposits of fine-grained fluvial sand and silt deposits.
Ringold Formation Member of Wooded Island – Unit E (Rwie)	Well-rounded fluvial gravel of mixed lithologies, in a sand and silt matrix. Cementation varies from well to poorly indurated.
Ringold Formation – lower mud (Rlm)	Primarily consists of lacustrine silt and clay, overlying a well-developed paleosol noted beneath 200 West Area.
Ringold Formation Member of Wooded Island – Unit A (Rwia)	Similar to Unit E (Rwie). Generally described as a conglomerate with clasts of basalt and other lithologies in a silty sand matrix intercalated with beds of sand and silt. The sediments are strongly cemented with silica or calcite in places.
Saddle Mountains Basalt Formation, Elephant Mountain Member (Tem)	Tholeiitic flood-basalt of the Elephant Mountain Member.

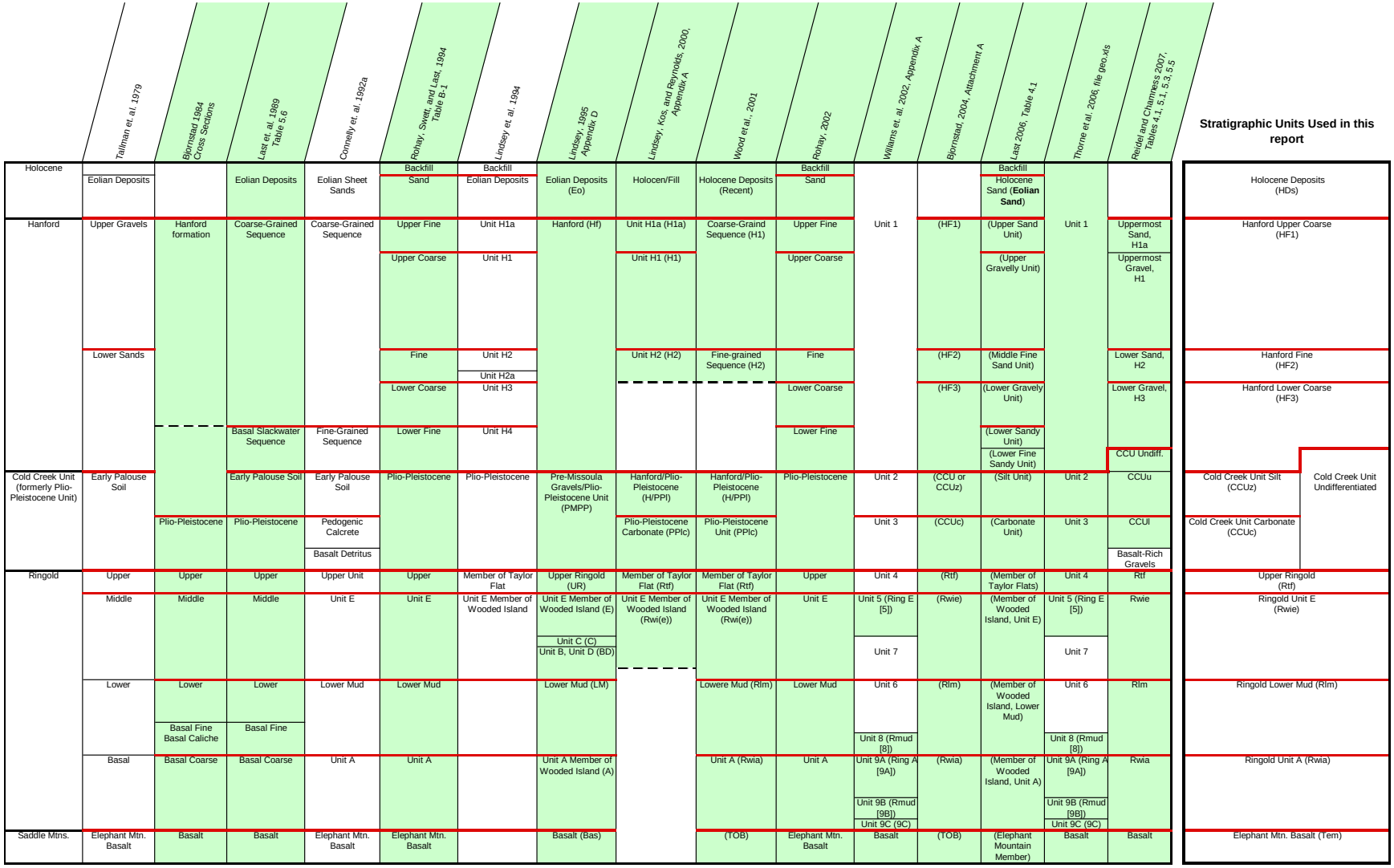

Figure 5.1. Correlation of Stratigraphic Units Used by Different Investigators to Those Used in This Report

Table 5.2. Sources of Stratigraphic Contacts Data for the 200 West Area

Reference	Symbol Used in Database	Rank/ Priority	Comments
Bjornstad (1984, cross sections)	Bjornstad84	2	Stratigraphic contacts in depth in feet (and meters) were identified on geologic cross sections. Holocene, Hanford formation, and Cold Creek Unit silt deposits were undifferentiated. The lower Ringold Unit was differentiated from a basal unit, consisting of basal fine, basal caliche, and basalt gravel subunits. Note that for this report, the lower Ringold, basalt fine, and basal caliche units were grouped together as the Ringold lower mud unit.
Last et al. (1989, Table 5.6)	Last89	1	Stratigraphic contacts for the 200 West Area were tabulated (in Table 5.6, p. 5.61) in depth in feet (and elevation in feet) and shown on borehole summary logs. Note that the depth-in-feet values were used for this report, and that Holocene and Hanford formation deposits were left undifferentiated.
Rohay (1994, Table B-1)	Rohay94	2	Geologic contacts were tabulated in elevation in feet and shown on geologic cross sections, structure-contour maps, and isopach maps. Contact depths for this report were derived by subtracting the contact elevation from the reported ground-surface elevation. Holocene deposits of backfill and sand were reported separately but for this report were grouped together. The Hanford formation was subdivided into five textural subunits, which for this report were mapped to the H1, H2, and H3 units (see Figure 5.1). The Plio-Pleistocene Unit was not subdivided; however, for this report, the top of this unit is interpreted to be equivalent to the Cold Creek Unit silt.
Lindsey (1995, Appendix D)	Lindsey95	2	Contact elevations were tabulated in feet and represented on geologic cross sections, structure-contour maps, and isopach maps. Contact depths for this report were derived by subtracting the contact elevation from the reported ground-surface elevation. Holocene deposits were not differentiated and neither were the Hanford formation or Pre-Missoula/Plio-Pleistocene deposits. A number of sub-units (e.g., Sub E) were called out within larger units (e.g., Unit E) of the Ringold Formation; however, only the top contact for the larger units was used in this report.
Lindsey et al. (2000, Appendix A)	Lindsey00	1	Contact elevations were reported in feet and shown on summary borehole logs and geologic cross sections. Contact depths for this report were derived by subtracting the contact elevation from the reported ground-surface elevation. Note that Units H1a and H1 were grouped together for this report. Also note that contacts for Hanford Unit H3 were not reported and that the reported values for the Hanford/Plio-Pleistocene Unit are used here to represent the Cold Creek Unit silt.
Wood et al. (2001, Table 2-2)	Wood01	1	Contact elevations were reported in feet. Contact depths for this report were derived by subtracting the contact elevation from the reported ground-surface elevation. Note that contacts for Hanford Unit H3 were not reported and that the reported values for Hanford/ Plio-Pleistocene are used here to represent the Cold Creek Unit silt.

Table 5.2. (contd)

Reference	Symbol Used in Database	Rank/ Priority	Comments
Serne et al. (2002a, Figures 2.18 and 2.19)	PNNL-13757-1	1	Contacts depths for the 299-W22-48 and 299–W22-50 boreholes were reported on borehole summary logs (Figures 2.18 and 2.19).
Serne et al. (2002d, Figure 2.2 [and text], and Figure 2.3)	PNNL-13757-2	1	Contacts depths for the 299-W23-19 borehole were reported in feet on a borehole summary log (Figure 2.2) and within the text (pp. 2.6 through 2.10).
		2	Contact depths were reported in feet for selected boreholes along a southwest-to-northeast cross section (Figure 2.3).
Serne et al. (2002b, Figure 2.6 and text, and Figures 2.3 and 2.4)	PNNL-13757-3	1	Contacts depths for the 299-W23-234 (410-09-39) borehole were illustrated in a borehole summary log (Figure 2.6) and reported in feet within the text (pp. 2.7 through 2.15). Some interpretation was necessary to calculate depths from thicknesses.
		2	Contact depths were reported in feet for selected boreholes along two cross sections (Figures 2.3 and 2.4).
Serne et al. (2002c, Figure 2.9 and text, and Figure 2.5)	PNNL-13757-4	1	Contacts depths for borehole C3082 (slant borehole) were illustrated in a borehole summary log (Figure 2.9) and reported in feet within the text (pp. 2.15 through 2.21).
		2	Contact depths were reported in feet for selected boreholes along a northwest-to-southeast cross section (Figure 2.5).
Williams et al. (2002, Appendix A)	Williams02	1	Contact elevations were reported in feet. Contact depths for this report were derived by subtracting the contact elevation from the reported ground-surface elevation. Note that no strata above the top of the Ringold Unit E were differentiated and that Ringold A Units 9A, 9B, and 9C were grouped together for this report. Note also that contact values listed as "0," "NDE," "ND," or "*" were assumed to represent undetermined values and were left blank. Contact elevations reported as "greater than" or "less than" were also left blank.
Serne et al. (2004a, Figures 2.5 and 2.6 and text)	Serne04a	1	Contacts depths for the subject boreholes were reported in feet within the text (pp. 2-21 through 2-53).
		3	Contact depths, in feet, were reported on cross sections A-A' and B-B' (Figures 2.5 and 2.6), apparently reproduced or modified from Wood et al. (2001).
Serne et al. (2004b, Figures 2.5 and 2.6 and text)	Serne04b	1	Contacts depths for the subject boreholes were also reported in feet within the text (pp. 2-22 through 2-50).
		3	Contact depths, in feet, were reported on cross sections A-A' and B-B' (Figures 2.5 and 2.6), apparently reproduced or modified from Wood et al. (2001).

Table 5.2. (contd)

Reference	Symbol Used in Database	Rank/ Priority	Comments
Last et al. (2006, Table 4.1, Appendix B)	Last06	1	Best-estimate ground-surface and contact elevations were tabulated in meters. Contact elevations in feet were shown on detailed logplots. Contact depths for this report were derived by subtracting the contact elevation (in meters) from the reported ground-surface elevation (in meters) and then converting to depth. Note that the Holocene deposits of backfill and eolian sand were grouped together for this report. Note also that the upper sand unit and upper gravelly unit were grouped together as representing the H1 Unit; the middle fine sand unit was taken as equivalent to the H2 Unit; and the lower gravelly unit, lower sandy unit, and lower fine sandy unit were grouped together as representing the H3 Unit. Note also that the borehole data for wells 299-W18-6 and W18-7 were found to have been reversed and corrected, as noted on the logplots.
Oostrom et al. (2006, Table 3.2)	Oostrom06	3, 2	Contact elevations were tabulated in meters, modified from Last et al. (2006). Selected contacts are also displayed on geologic cross sections. This source was not used to derive contact depths.
Thorne et al. (2006, geo.xls)	Thorne06	3	Contact elevations were tabulated in meters, based on the NGVD29 elevation datum. Ground surface was not explicitly reported; however, the top of Unit 1 was taken as ground surface. Contact elevations in meters were then converted to feet using a conversion of 3.28084 ft/m. Contact depths for this report (in feet) were derived by subtracting the contact elevation (in feet) from the ground-surface (top of Unit 1) elevation (in feet). Note that Holocene and Hanford formation units were undifferentiated. Note also that for this report, Unit 6 was grouped with Unit 8 and Unit 7 was grouped with Unit 5.
Reidel and Chamness (2007, Tables 4.1, 5.1, 5.3, and 5.5)	Reidel07	3	Contact elevations were reported in feet, and selected contacts were illustrated on cross sections. Much of this appears to be taken or modified from other documents (e.g., Wood et al. 2001). Contact depths for this report were derived by subtracting the contact elevation from the reported ground-surface elevation. Note that undifferentiated Holocene deposits were not specifically called out but were assumed to be the same as the ground-surface elevation. Note also that the H1a and H1 units were grouped together for this report and that the "Post Ringold Basalt-Rich Gravels" identified in Table 4.1were not explicitly identified in this report.
Jeppson (2007[1] Table 1)	Jeppson07	4	Bottom contact elevations and depths were reported in meters, and selected contacts were illustrated on a cross section in Figure 4. Logplots are provided in Appendix A without contacts. Contact depths in feet were converted from the depth in meters.
Sexton (2008; SGW-37703, DRAFT)	Sexton08	2	Contact depths were reported in feet. Section 3 contains a brief summary of the borehole stratigraphy for wells 299-W11-88, 699-43-69, and 699-45-69C. Interpretations of the geology were based on analysis of borehole logs in addition to firsthand observation by J. A. Horner, during the drilling of borehole 699-43-69.

[1] Jeppson TN. 2007. *Heterogeneity of Aquifer Materials and Spatial Variability in the Carbon Tetrachloride Plume in the 200-West Area, Hanford Site*. Science Undergraduate Laboratory Internship (SULI) Report. Pacific Northwest National Laboratory, Richland, Washington.

Table 5.2. (contd)

Reference	Symbol Used in Database	Rank/ Priority	Comments
Williams (unpublished)	Williams08	4, 5	Contact depths and elevations were reported in feet. The upper Ringold (Rtf) and Unit E (Rwie) were undifferentiated with the undifferentiated Ringold contact reported as Rtf. Contact depths were taken directly as reported (personal communication via email from B. A. Williams dated March 5, 2008). This source was used only for indication purposes and where no other published data were available.
Last (unpublished)	Last	4, 5	The date and pedigree of these unpublished data are uncertain. Both contact elevations and depths were provided in feet. This source was used only for indication purposes and where no other published data were available.
Thorne (unpublished)	Thorne	4, 5	The date and pedigree of these unpublished data are uncertain. Both contact elevations and depths were provided in feet. This source was used only for indication purposes and where no other published data were available.
Bjornstad (this report)	Bjornstad08	Unranked	Best-estimate contact elevations were provided in feet as an update to the geologic contacts data published by Bjornstad in 2004. These values were based on one or more records from other sources, often with some correction to account for differences in ground-surface elevation. The recorded best-estimate picks were taken from a spreadsheet provided via email from B. N. Bjornstad on January 16, 2008.
Last (this report)	Last08	Unranked	Best-estimate contact depths in feet were selected for this report based primarily on a combination of records from other sources.
Horner (this report)	Horner08	Unranked	Contact depths in feet were selected for some new wells and to provide some new interpretations influenced by cross section analyses.

Source Rank/Priority Criteria:

1 – Reported contacts are directly traceable to raw borehole data (e.g., through summary logs with contacts) and firsthand geologic interpretation (e.g., cross sections, structure contour maps).

2 – Reported contacts are indirectly traceable to raw borehole data (i.e., no summary logs) but are represented in firsthand geologic interpretation.

3 – Reported contacts are not readily traced to raw borehole data or firsthand geologic interpretation (e.g., data and/or interpretations taken from other documents).

4 – Unpublished contact data where no other data are available from that principal investigator(s).

5 – Unpublished contact data that has been superseded by other published data by the same principal investigator(s).

Note: Contact data developed for this report were not assigned a rank.

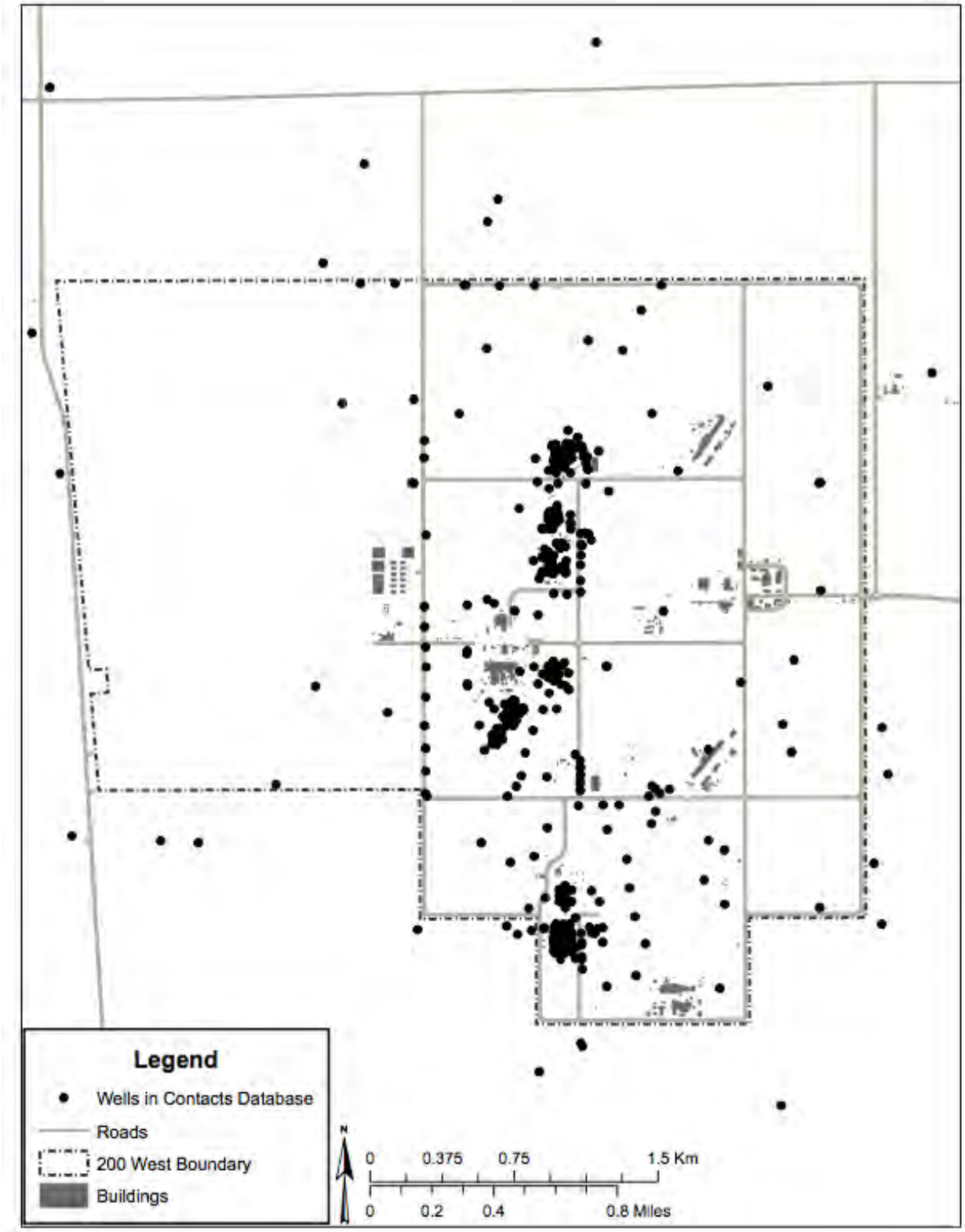

Figure 5.2. Location of Boreholes in and Adjacent to the 200 West Area, with Stratigraphic Contact Data

In keeping with the approach used by Bjornstad (2004), where a given stratigraphic unit was identified as not present (NP), the unit was assigned a top contact depth equal to the top of the underlying unit, resulting in a stratigraphic thickness of zero. Unit contacts that were labeled as "undetermined" or "not documented" were left blank. Note that if a stratigraphic unit was labeled as "not present" directly above a unit where the contact was undetermined, then its contact was also left blank. However, when the upper unit contact was undetermined (e.g., H1) but a lower unit contact (e.g., H2) possessed a known depth, then the upper unit was given the same contact depth as the next lower unit, to provide the greatest accuracy in unit thickness. Where all units were marked as undetermined, the unit was left blank. Also, at the time of this writing, Holocene deposits (including backfill and eolian sand) were not differentiated from each other and often were not assigned a specific depth to their top contact. Instead, the top contact for this unit was assumed to be the ground-surface elevation at a depth of zero feet.

The compiled stratigraphic contact data were organized into an electronic spreadsheet database (Appendix A). In keeping with the desire to provide the major (i.e., first-order) formation contacts as well as the second-order (e.g., member or facies association) architectural (mappable) stratigraphic units, columns for the formation level contacts were added to this spreadsheet. Where the uppermost subunit (e.g., member or facies association) of the formation had been identified, that depth value was used as the depth to the top of the formation. However, where the uppermost subunit was not determined either to be present or to be missing, then the depth to the top of the formation was left blank.

Where multiple depths were recorded for a given contact in a given borehole, a subjective evaluation was made to select the best-estimate contact depth. Best-estimate contact depths were identified for 452 different boreholes in and around the 200 West Area. These best-estimate picks were selected based on the professional judgment of Washington State licensed geologists. In many cases, the best estimate was taken as the most recently reported value. Other considerations included the extent of analysis and documentation provided by the source documents (see Table 5.2). For example, contacts from source documents that presented good detailed description of the borehole geology that was traceable back to the raw borehole data (e.g., Serne et al. 2004a, 2004b) and/or provided geologic interpretation in the context of surrounding boreholes through the use of cross sections, structure contour maps, isopach maps, and so on (e.g., Williams et al. 2002) were given a higher rank and priority over those that appeared to mostly summarize previous studies (e.g., Reidel and Chamness 2007). In a great number of cases, particularly in boreholes with older interpretations, the best-estimate pick developed for this report was based on a composite of the recorded contacts.(1) These new best-estimate picks are identified in Appendix A with the source code of "Bjornstad08" and the date published as "This Report." Other best-estimate contact records made specifically for this study were similarly identified with the name of the geologist making the picks and identified with the date published as "This Report." Note that best-estimate picks developed for this study were not ranked. The best-estimate depths were evaluated and revised based on integrated geologic interpretation of other nearby contacts in the context of geologic cross sections, structure contour maps, isopach maps, and solid model representations.

[1] B. N. Bjornstad, personal communication, Excel files sent to G. V. Last via email dated January 16, 2008.

5.3 Evaluation and Verification of Best-Estimate Contacts to Raw Borehole Data

An evaluation of the best-estimate contact picks was conducted by graphically comparing the stratigraphic contact picks to summary logplots of the raw and standardized borehole data (where available). Figure 5.3 illustrates the location of the 198 boreholes in and adjacent to the 200 West Area, for which logplots are available. Of these 198 boreholes, 115 also had best-estimate contact data available. A graphical comparison of the best-estimate contacts to the raw, standardized borehole data summarized in the logplots was conducted using Adobe Illustrator.[1] This allowed the imported logplot files to be directly overlain with stratigraphic contact lines based on the best-estimate contact depths found in the stratigraphic contacts database (as it was in the file titled *Contact Depths_2008-06-25.xls*, tab *200 W Contact Depths NRV* dated June 25, 2008). The depths of the contact lines were then compared to the logplots to evaluate their validity and adjusted where necessary. Of the 115 wells evaluated, 26 (23%) had contact picks that lined up exactly with lithologic units shown on the logplots, 61 (52%) had contacts within 2 ft of agreement, 19 (17%) had contacts within 5 ft of agreement, and 9 (7%) had areas of undetermined lithologic contacts. Note that the evaluation categorized above represents the worst case for a particular borehole, as some boreholes had contacts ranging from perfect agreement to within 5 ft of agreement.

5.4 Ground-Surface Elevation Data

Appendix B presents the best-estimate ground-surface elevations, in meters, based on data available through the HWIS when available. The best-estimate ground surface elevations (presumably at the time of drilling, and presumably relative to NAVD88 [North American Vertical Datum of 1988]) used in this report were calculated using the following set of logic rules:

1. If the HWIS contained a ground surface elevation value in meters with a survey point described as "brass survey marker," "ground surface," or "ground surface (assumed)," that value was used as the ground surface elevation (in meters).
2. If the HWIS did not contain vertical survey value as described above but did contain a "DISC_Z" value, that value was used as a proxy for the ground-surface elevation. Note that, when compared, those values identified as the elevation of the brass survey marker and the DISC_Z values were identical when rounded to the nearest 0.01 m.
3. If neither 1 nor 2 above was applicable, then the ground-surface elevation was calculated from the HWIS vertical survey value described as having been surveyed from the top of one of the casings or the top of the pump plate using the HWIS stickup value (converted from feet to meters using a conversion factor of 0.3048 m/ft [Thompson and Taylor 2008]; 3.28084 ft/m). If multiple stickup values were found, then the stickup value associated with the earliest documented inspection date was used as most representative to yield the ground-surface elevation at the time of drilling.
4. If a stickup value was not available from the HWIS, then a default stickup value of 0.914 m (3 ft) was used to calculate the ground-surface elevation.

[1] Adobe® and Illustrator® are registered trademarks of Adobe Systems Incorporated, San Jose, California.

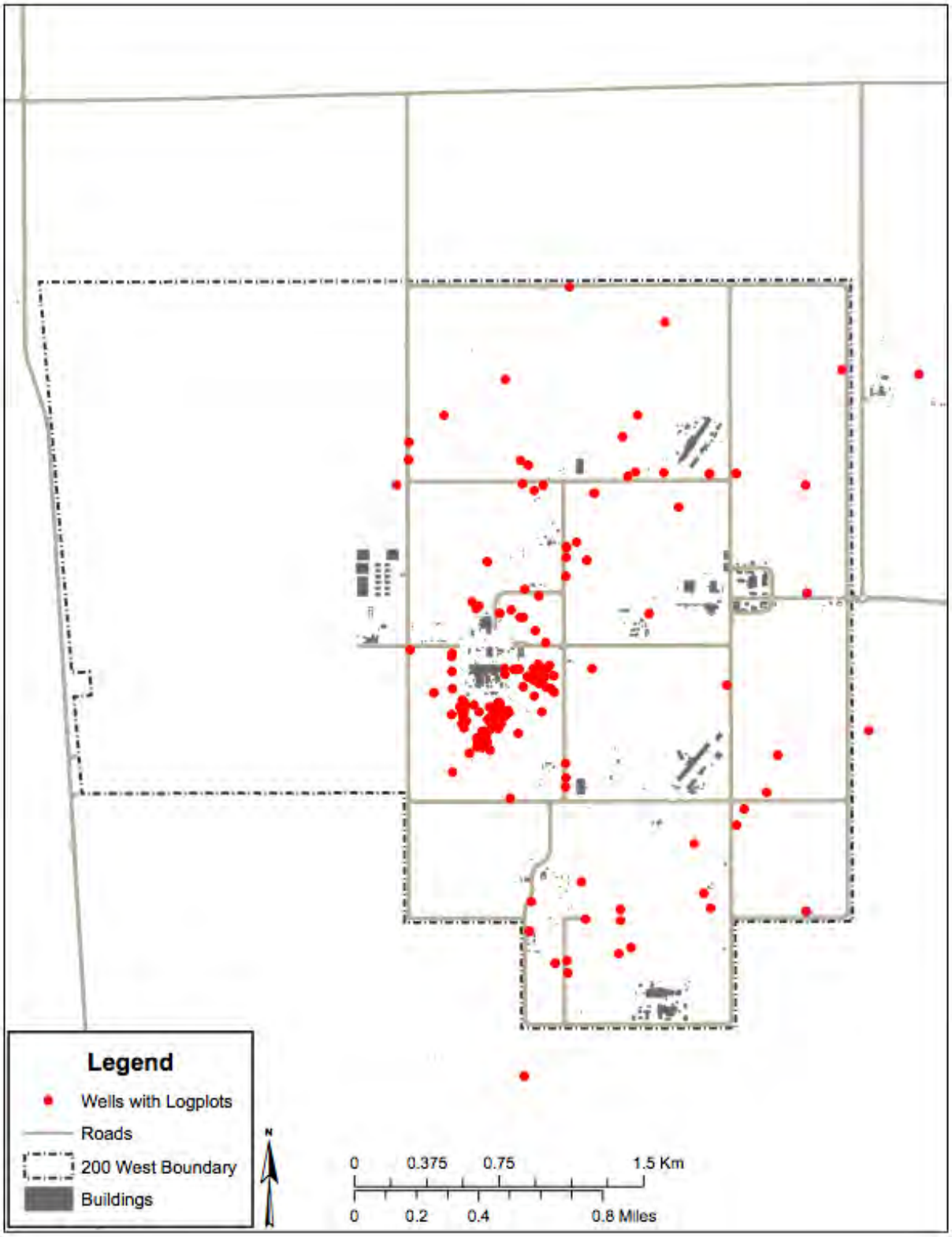

Figure 5.3. Location of Boreholes in and Adjacent to the 200 West Area, for Which Logplots Are Available

5. If there was no vertical survey value for the top of casing, then the ground-surface elevation was left blank and flagged for future estimation using professional judgment, or it was estimated based on the ground-surface elevations for nearby wells and/or the surrounding topography. In some cases, elevation data were found in borehole completion reports or other reference sources.
6. Where the ground-surface elevation is known to have been altered after the borehole was drilled (e.g., soil cover added at BC cribs), and/or the estimated ground-surface elevation based on the HWIS data is suspected to not be representative of the time of drilling, then historical ground-surface elevation data from old Hanford Site wells documents (e.g., McGhan 1989) were used to estimate the ground surface at the time of drilling.

The HWIS vertical survey data are reported in meters using the NAVD88. However, stickup values and other older elevation values (e.g., *Hanford Wells* [McGhan 1989]) often are in feet using the NGVD29. Thus, these values first were converted to meters using the NAVD88 prior to calculating the best-estimate ground-surface elevation at the time of drilling. Current and historical stickup values also are documented in feet, so these also were converted to meters for subsequent calculations.

5.5 Contact Elevations

Contact elevations (in meters) were calculated by subtracting the best-estimate stratigraphic contact depths (converted to meters using a conversion factor of 0.3048 m/ft) from the best-estimate ground-surface elevation in meters (see Section 6). These results were then used to develop a solid earth representation of the hydrogeology beneath the 200 West Area.

6.0 Stratigraphic Model of the Central Plateau

A large-scale stratigraphic model of the Central Plateau (focusing on the 200 West Area) was developed to capture existing published interpretations on the major heterogeneities within the subsurface framework distinguished by unconformity-bound stratigraphic sequences (e.g., formations). Intermediate-scale stratigraphic units representing second-order heterogeneities defined by depositional sedimentary sequences or packages (e.g., members or facies associations) also were included. This inclusion was accomplished by assembling the stratigraphic contacts information described in Section 5 into a three-dimensional geologic model and then verifying and refining the geologic model through evaluation of anomalies and independent cross section analyses.

6.1 Three-Dimensional Model

The best-estimate stratigraphic contact data and best-estimate ground-surface elevation data (Section 5) were manipulated to create an input file of best-estimate contact elevations in meters for use in EarthVision software to create a 3D model of the major stratigraphic units beneath the 200 West Area. Minimum tension gridding was used to fit the unit surfaces to the data points. Minimum tension gridding produces an initial estimate for each grid node based on the distance weighting of the nearest data points, and then an iterative biharmonic spline function is used to minimize curvature in the estimated surface topography while maintaining an accurate fit to the data points.

The resulting EarthVision model consists of a "facies" file that represents each unit as a zone within a solid 3D block. The surface of each unit is defined by an XYZ grid with XY spacing of 10 m. The model domain is 9,100 m wide and 6,100 m long. The vertical extent of the model is from −20 m to 250 m in elevation (NAVD88). Figure 6.1 shows the model domain and also shows the location of key facilities. The facies file or XYZ grids can be sampled using utilities provided in the EarthVision software to create input files for numerical flow models. Three-dimensional property distributions can also be applied within one or more geologic units of the model.

The following procedure was used to build and revise the geologic model:

1. Grids representing the tops of extensive stratigraphic units (present over most of the model domain) were created based on the elevation contact picks for 446 boreholes and wells. Information from boreholes where particular units were interpreted as missing was used to constrain unit extents. Control points (pseudo data) were added in areas where borehole data were sparse, particularly on the edges of the model domain, to control model extrapolation. Other control points were sometimes used to control the configuration of a unit surface using professional judgment based on knowledge of the depositional and erosional environment.
2. Thickness (isopach) grids were calculated for less extensive geologic units based on the thickness measured at wells and zero thickness for the not present (NP) flags in the well data. For these less extensive units, it was generally assumed that the unit was not present in areas where there were no data for the unit.
3. Starting from the base of the model, grids for the top elevation of each less extensive geologic unit were calculated by adding the thickness grid to the elevation grid for whichever unit exists below it.

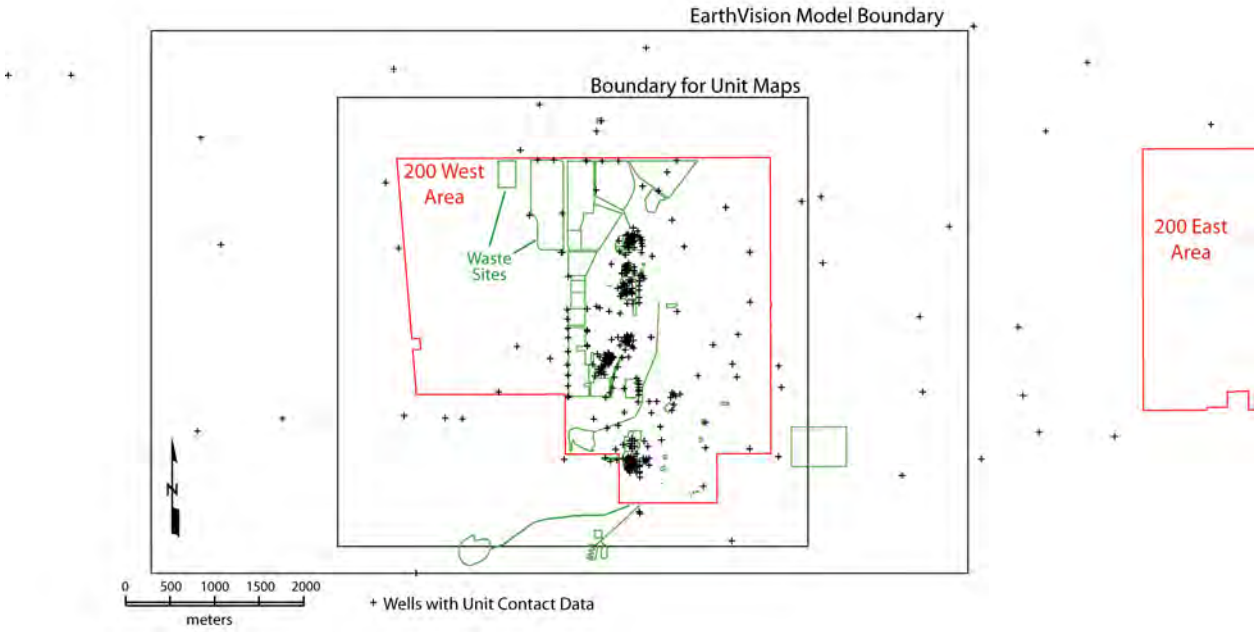

Figure 6.1. EarthVision Model Domain for the 200 West Area Geologic Model. Note that the model boundary extends beyond the study area boundary used in subsequent figures, to reduce edge effects.

4. The model was examined to determine if any units had incorrectly "pinched-out" because the top of a deeper unit was being extrapolated above the elevation of the well pick. If this occurred, control points were added to control the top surface of the deeper unit.

Development of the solid geologic model in EarthVision was an iterative process because examination of the model identified a few wells (estimated at less than 5% of the wells) where elevation picks were inconsistent. The geologic data were then reevaluated by reviewing/evaluating the raw borehole data to determine whether the picks were valid. The EarthVision model is displayed as a block diagram (Figure 6.2) and as a series of structure contour maps (Figures 6.3–6.12). Appendix C provides additional visual representations of the model (including additional block diagrams, isopach maps, and cross sections), as well as the input file for the model. Measurements used in these figures are in metric units.

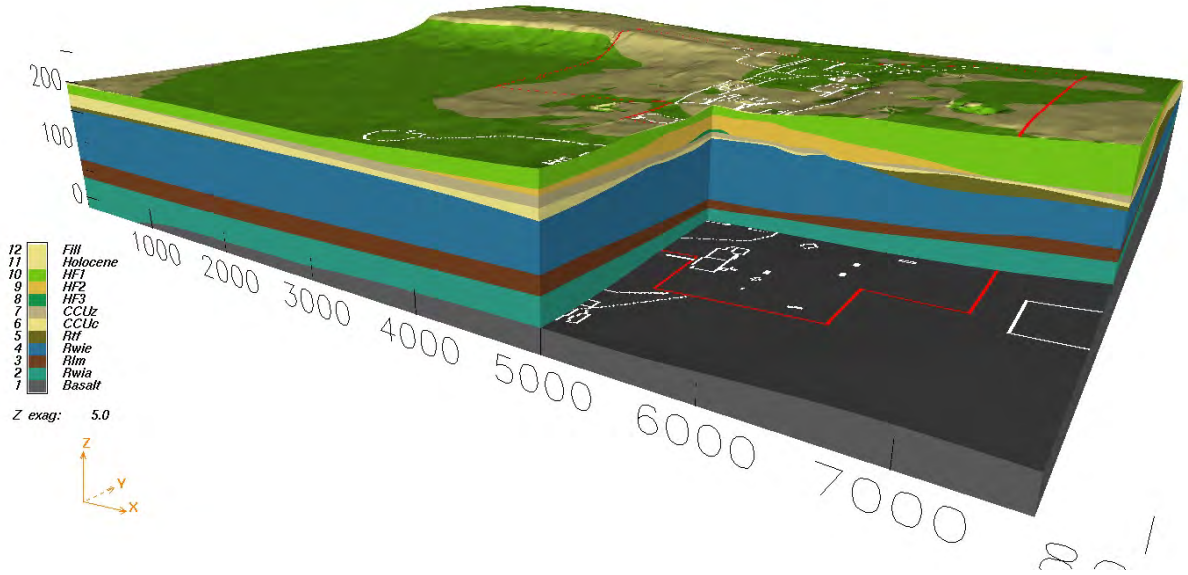

Figure 6.2. Three-Dimensional Geologic Model with Cutout Through the Central and Northern 200 West Area, Approximating Cross Sections B-B' and F-F'. View is to the north-northwest, with the *y*-axis pointing north and the *x*-axis pointing east; scales are in meters. Vertical exaggeration is 5 times the horizontal.

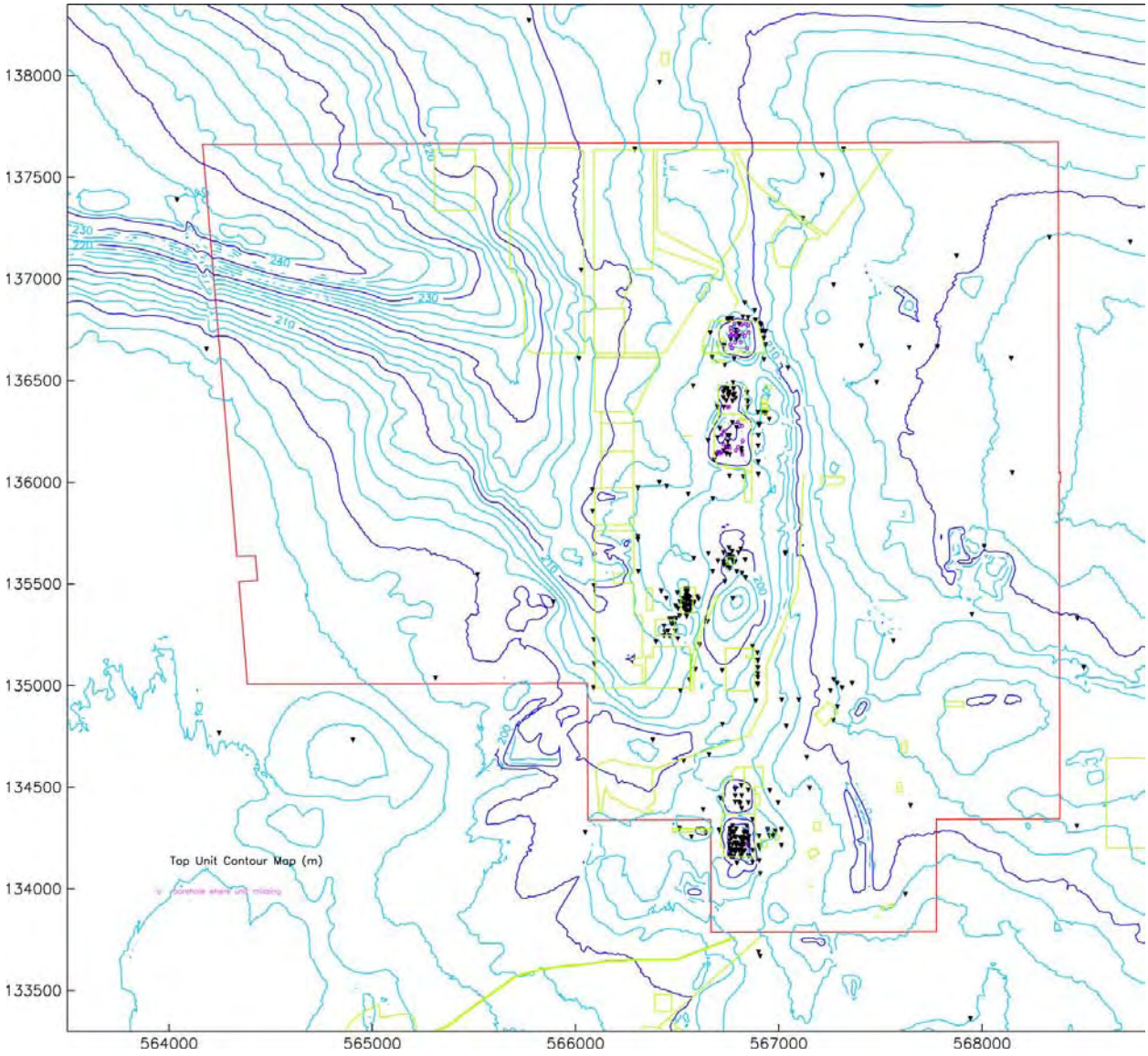

Figure 6.3. Structure Contour Map for the Top of the Hanford H1 Unit in and Around the 200 West Area. The irregular surface in the central and southern 200 West Area is due to man-made excavations associated with subsurface facilities (e.g., tank farms). Contours are in meters above mean sea level (MSL).

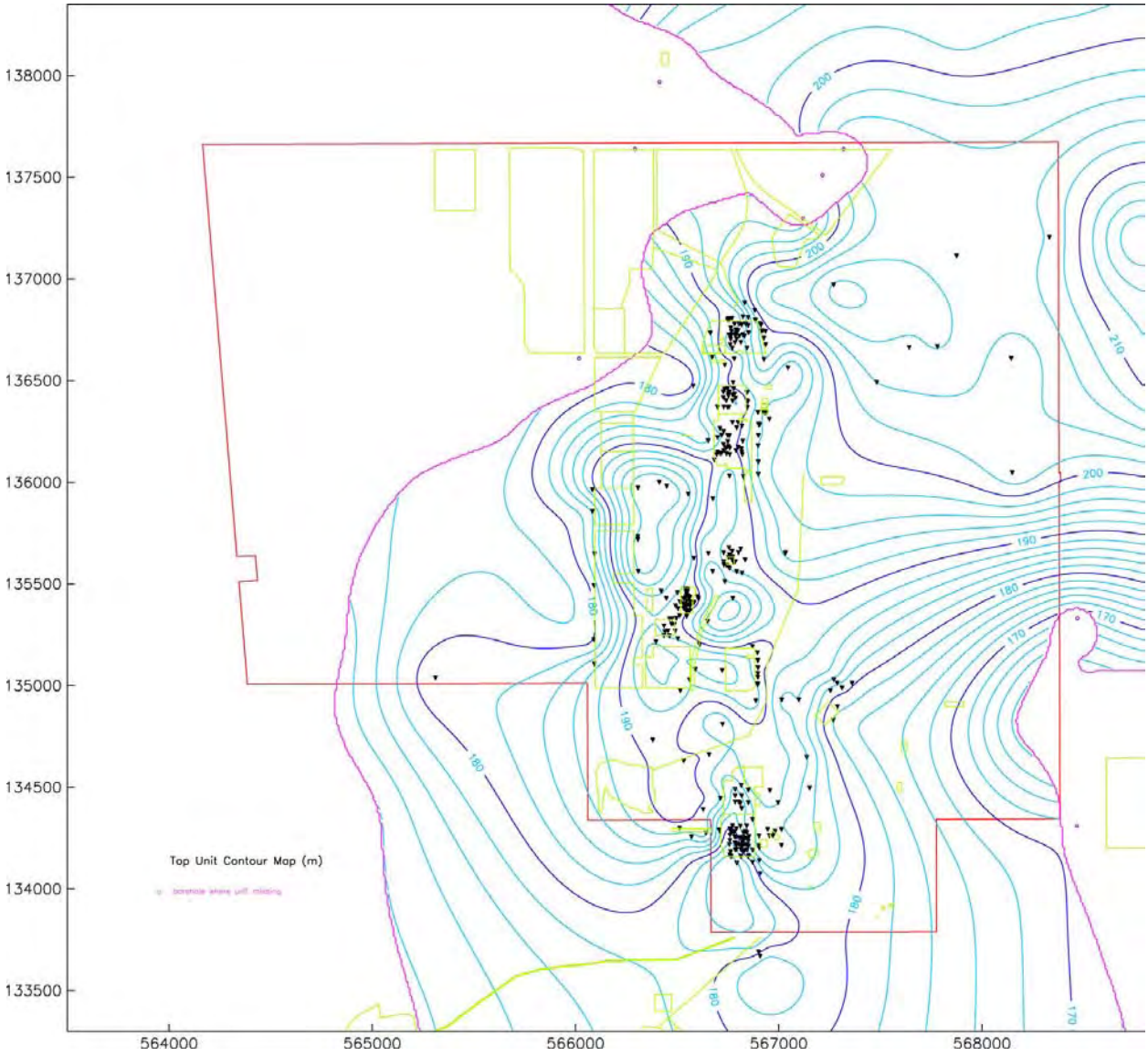

Figure 6.4. Structure Contour Map for the Top of the Hanford H2 Unit in and Around the 200 West Area. Contours are in meters above mean sea level (MSL).

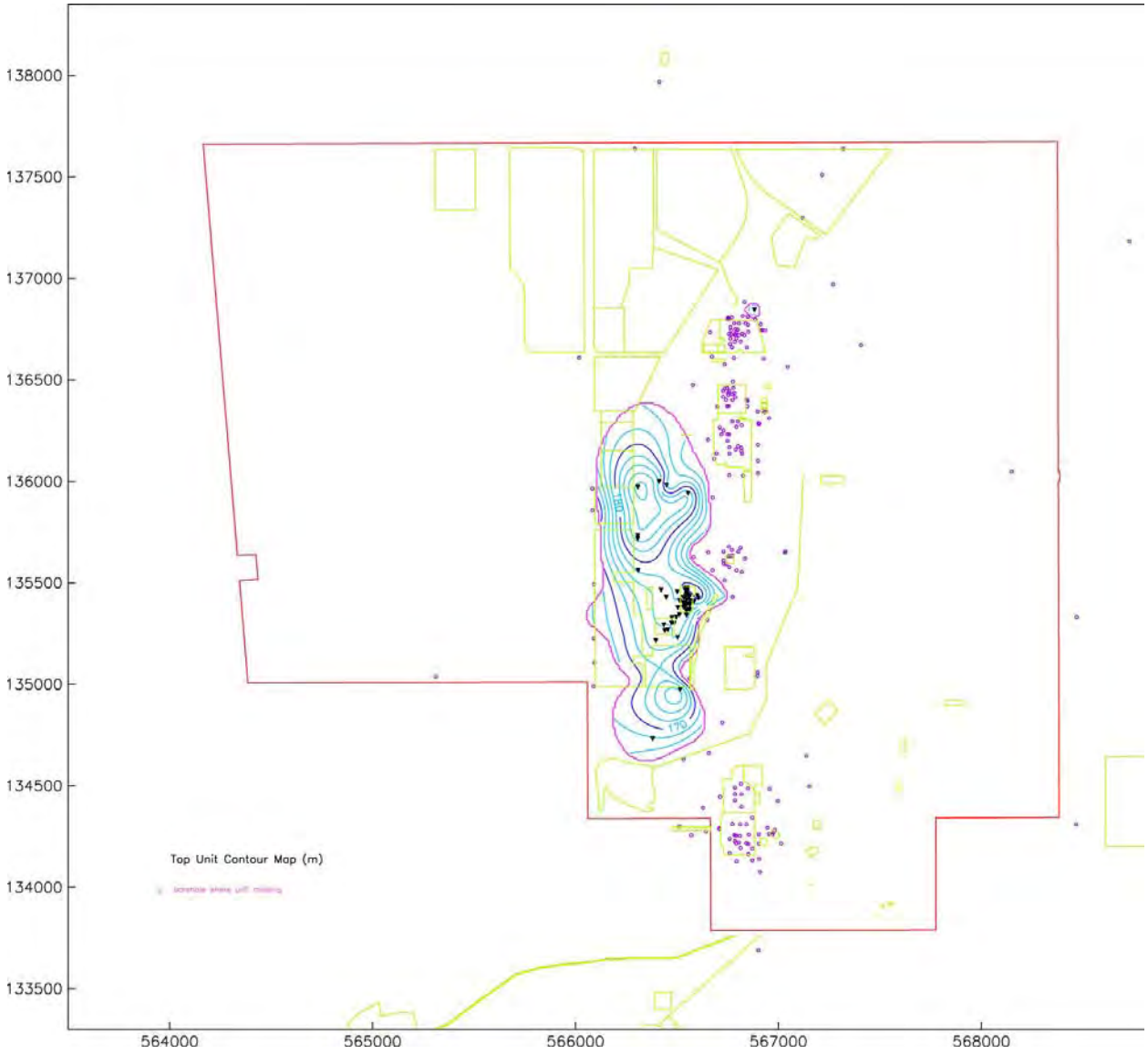

Figure 6.5. Structure Contour Map for the Top of the Hanford H3 Unit in and Around the 200 West Area. Contours are in meters above mean sea level (MSL).

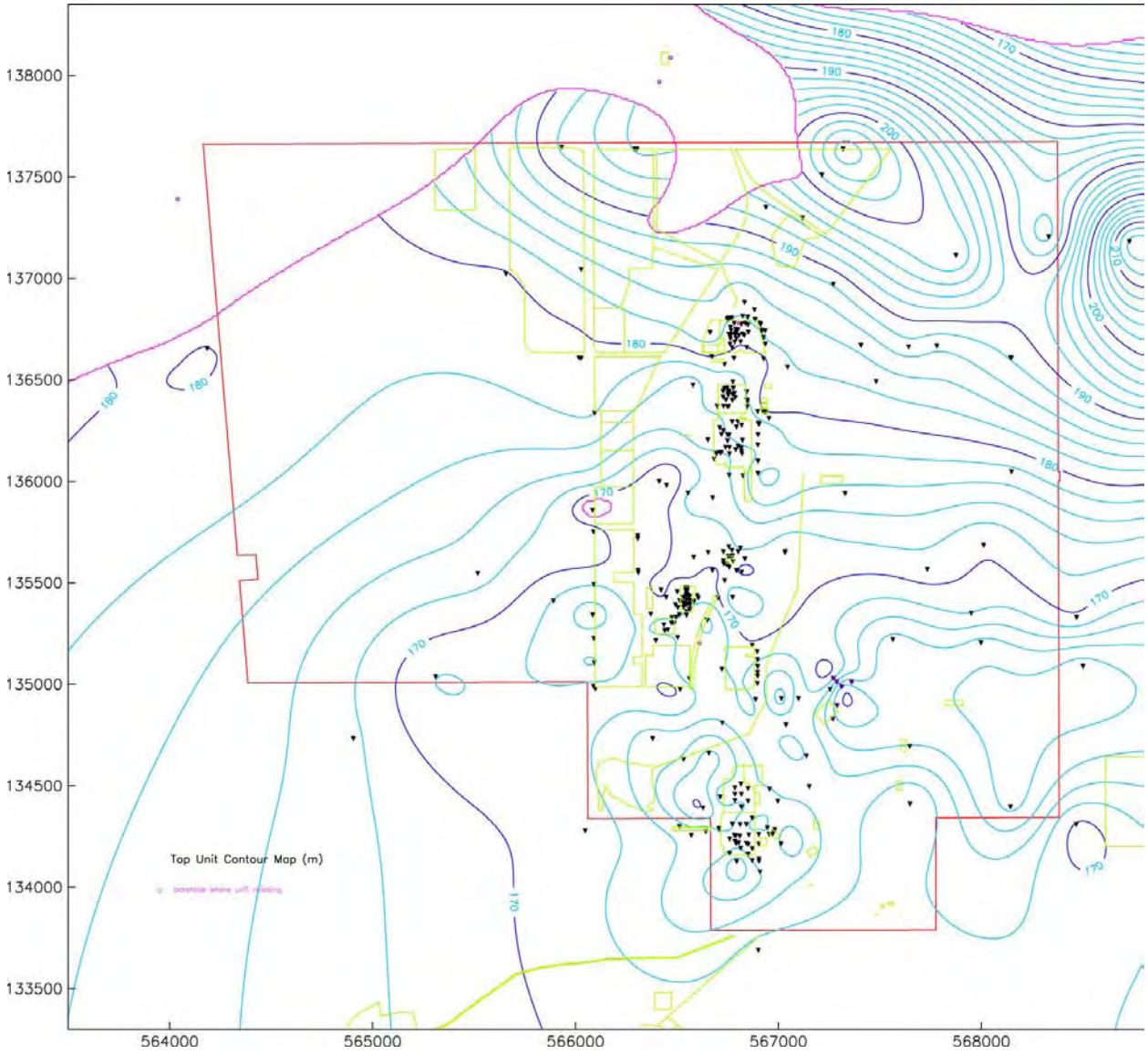

Figure 6.6. Structure Contour Map for the Top of the Cold Creek Unit Silt in and Around the 200 West Area. Contours are in meters above mean sea level (MSL). Note that this unit is missing along the northern portion of the study area.

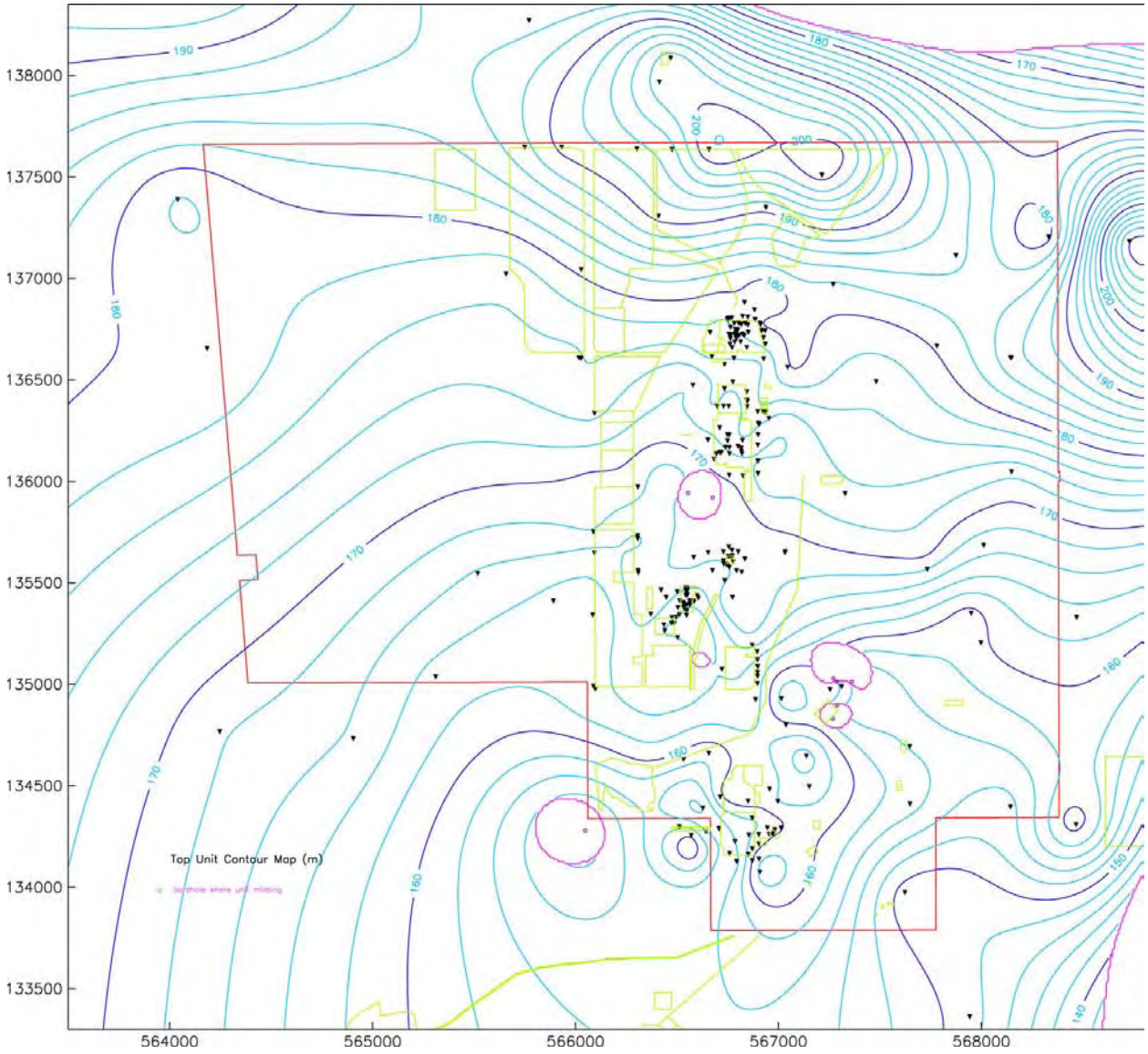

Figure 6.7. Structure Contour Map for the Top of the Cold Creek Unit Carbonate Unit in and Around the 200 West Area. Contours are in meters above mean sea level (MSL).

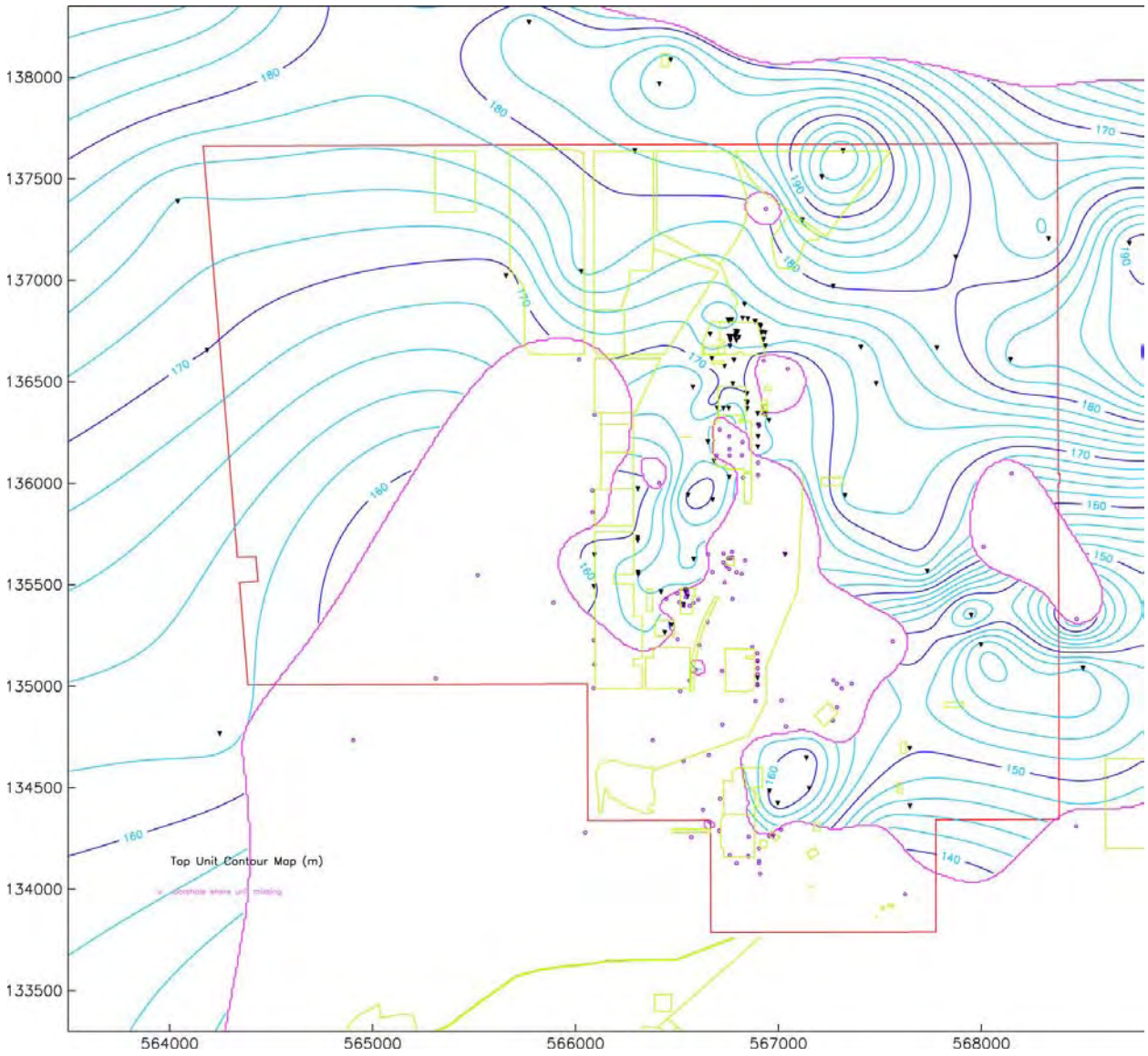

Figure 6.8. Structure Contour Map for the Top of the Ringold Formation, Member of Taylor Flat, in and Around the 200 West Area. Contours are in meters above mean sea level (MSL).

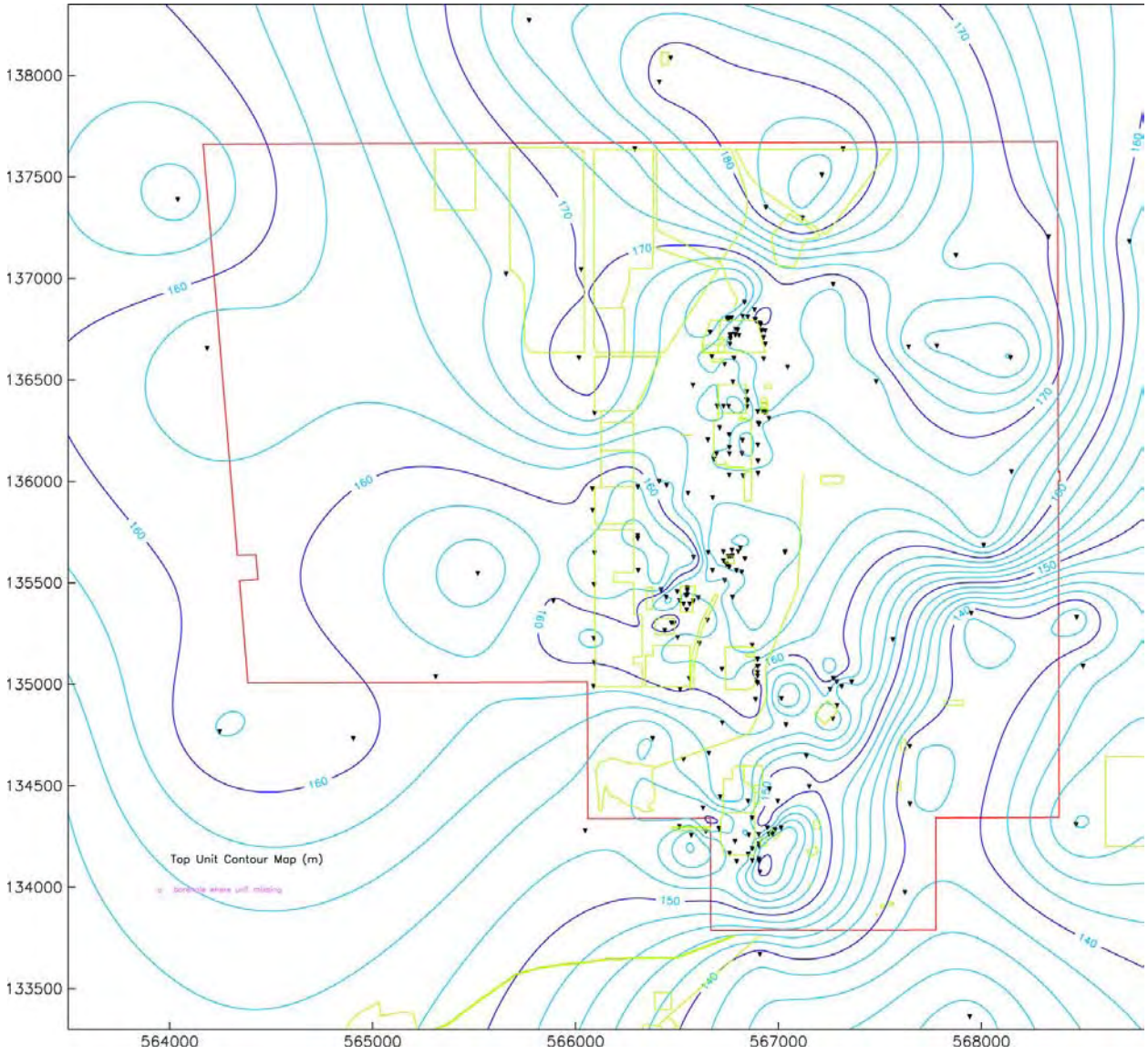

Figure 6.9. Structure Contour Map of the Top of the Ringold Formation, Member of Wooded Island, Unit E, in and Around the 200 West Area. Contours are in meters above mean sea level (MSL).

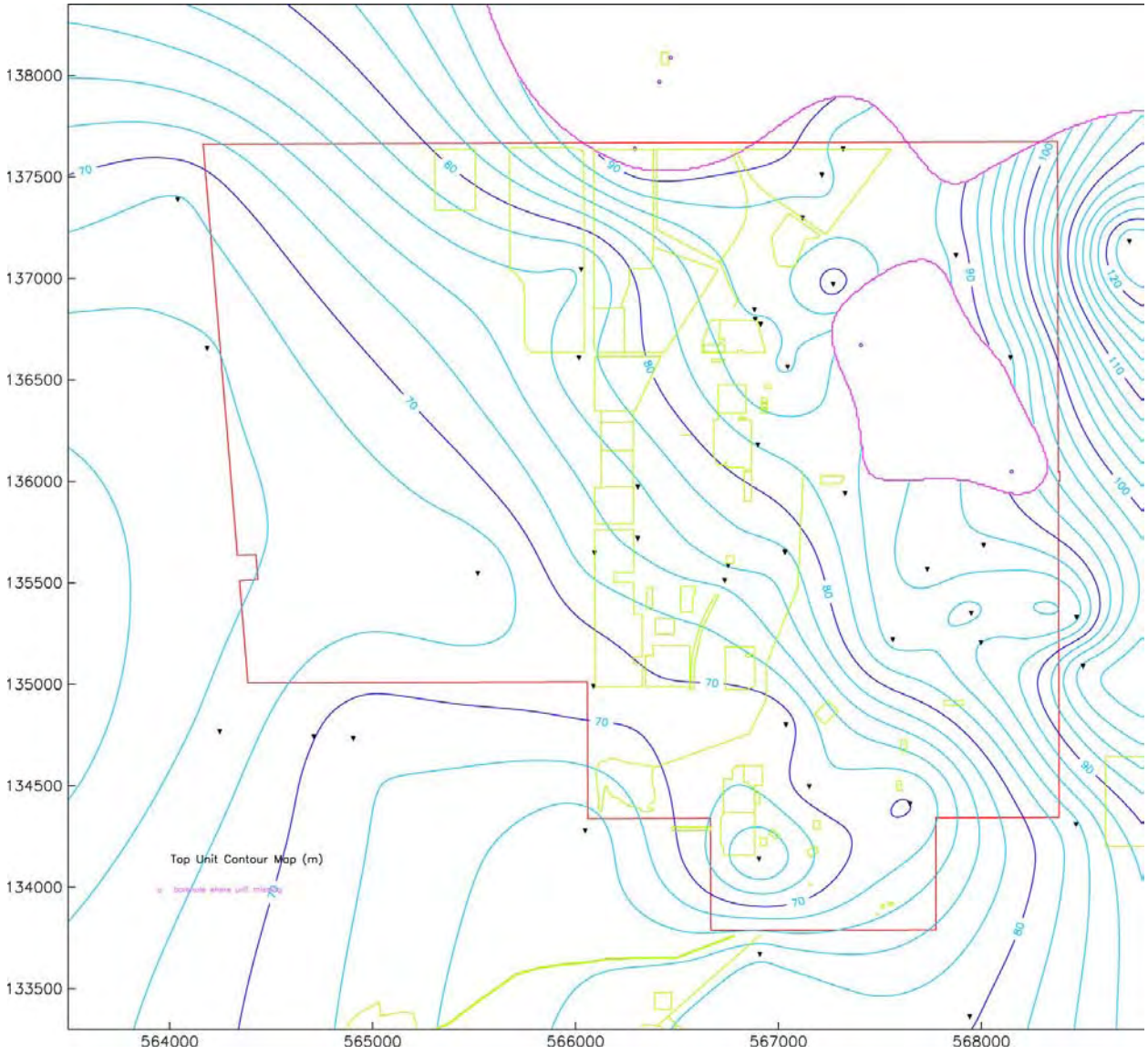

Figure 6.10. Structure Contour Map of the Top of the Ringold Formation, Lower Mud Unit, in and Around the 200 West Area. Contours are in meters above mean sea level (MSL).

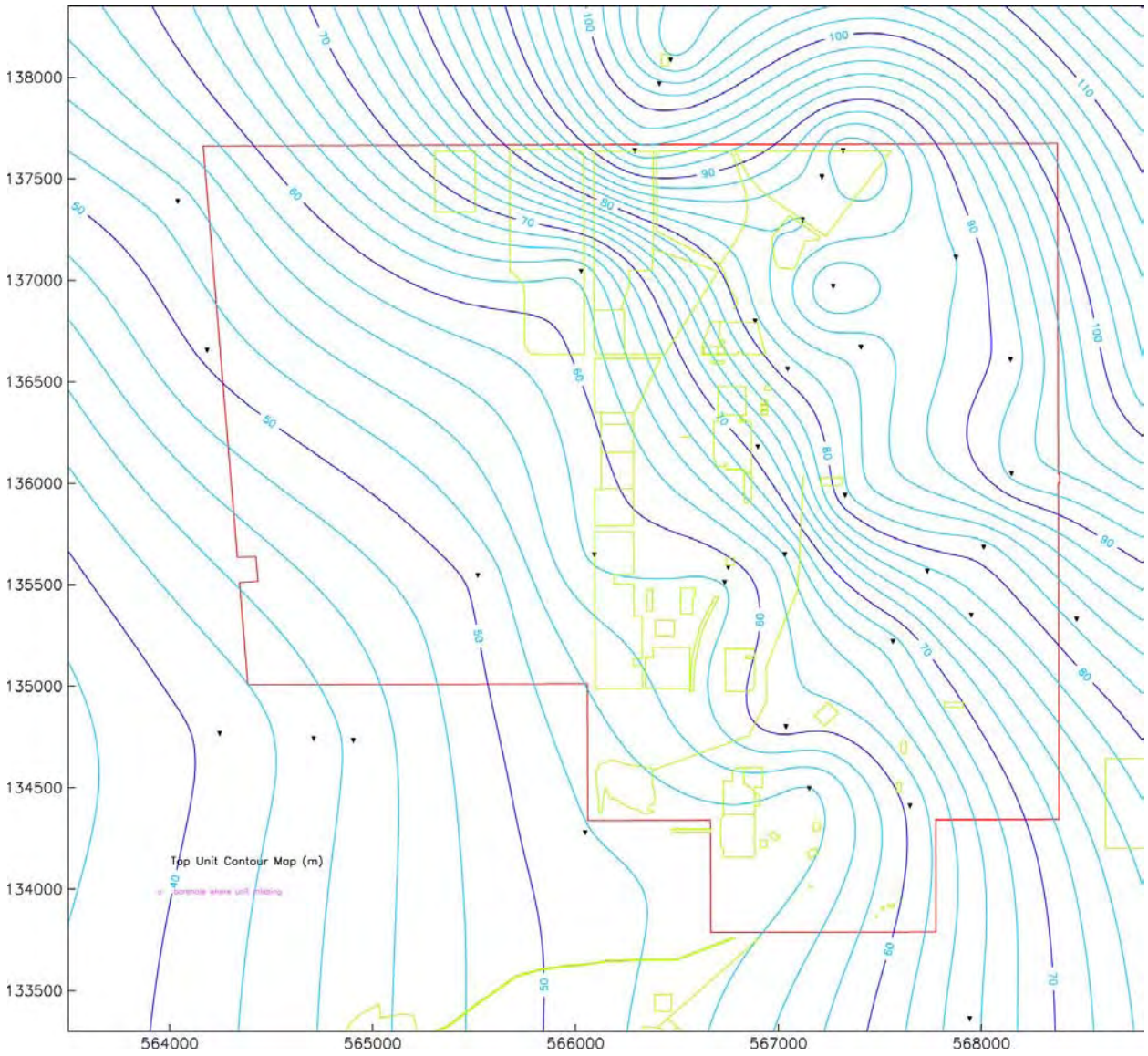

Figure 6.11. Structure Contour Map of the Top of the Ringold Formation, Member of Wooded Island, Unit A, in and Around the 200 West Area. Contours are in meters above mean sea level (MSL).

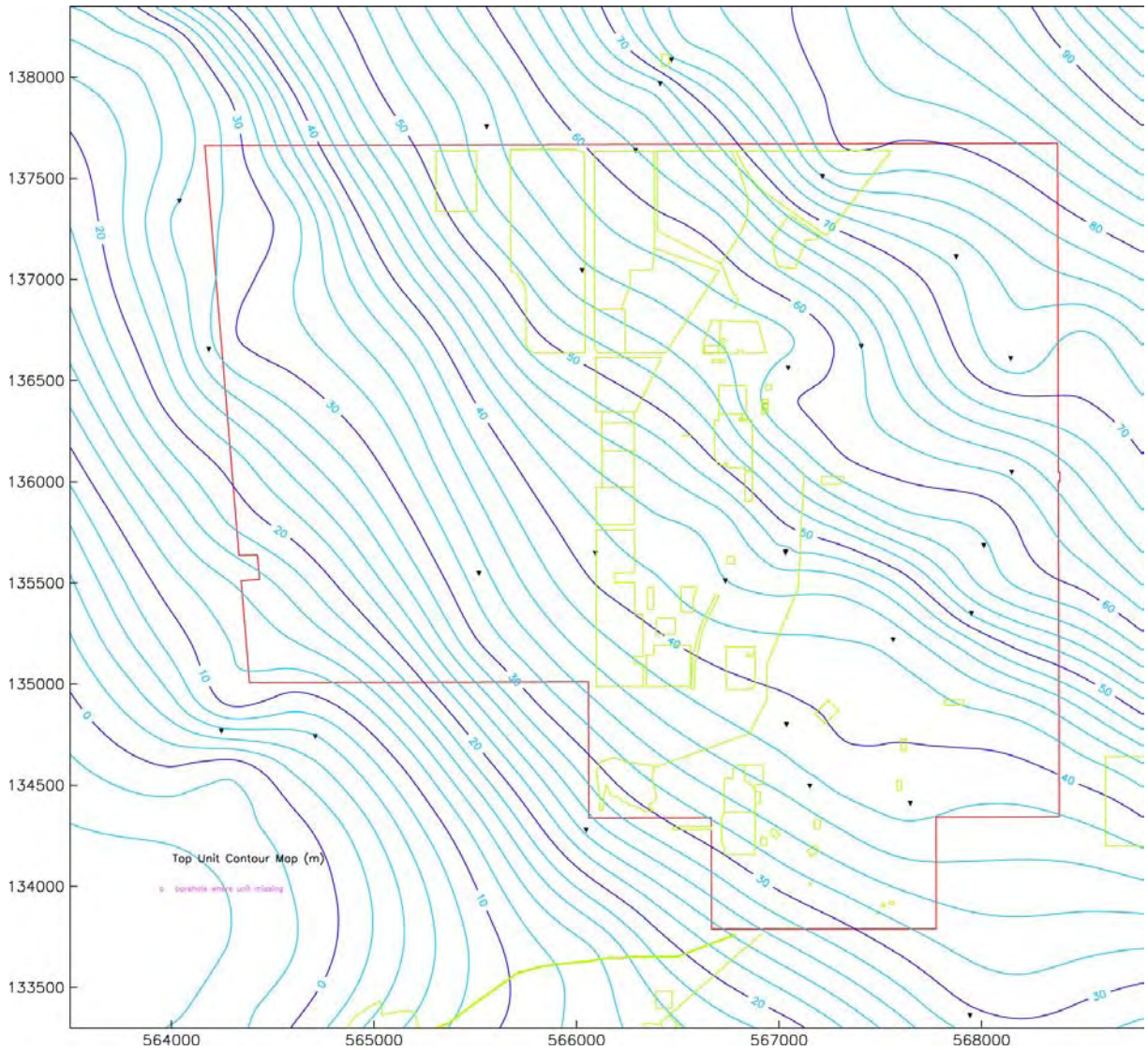

Figure 6.12. Structure Contour Map of the Top of Basalt (undifferentiated) in and Around the 200 West Area. Contours are in meters above mean sea level (MSL).

6.2 Detailed Geologic Cross Sections

Two geologic cross sections were constructed independently from the 3D model to help verify and refine the stratigraphic contacts data and 3D model and to provide additional details on finer-scale (third-order) heterogeneities found within some of the stratigraphic packages (Figure 6.13). A north–south-oriented geologic cross section (Figure 6.14 and Appendix D; B-B') was selected to capture an abundance of borehole data through the center of the 200 West Area and roughly follows previously published geologic cross sections (Tallman et al. 1979; Lindsey 1991; Williams et al. 2002), allowing nearly direct comparison. This north-south cross section runs through the single-shell tank waste management areas, S, SX, T, TX, TY, and U. A second cross section was oriented east-west (Figure 6.15 and Appendix D; F-F') to provide additional detail across the northern portion of the 200 West Area and also roughly follows previously published geologic cross sections (Tallman et al. 1979; Lindsey 1991; Williams et al. 2002).

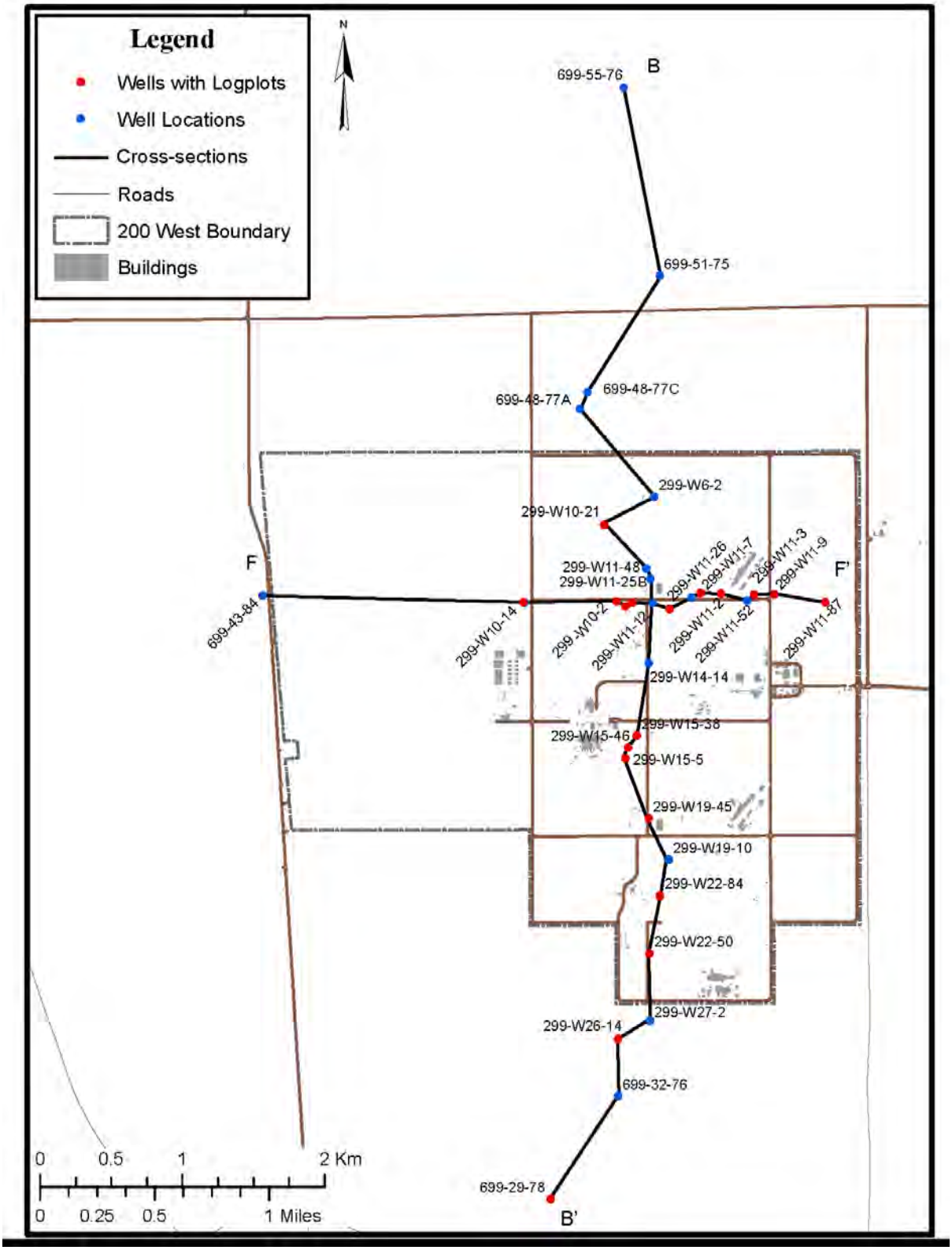

Figure 6.13. Location of Potential and Completed Cross Sections

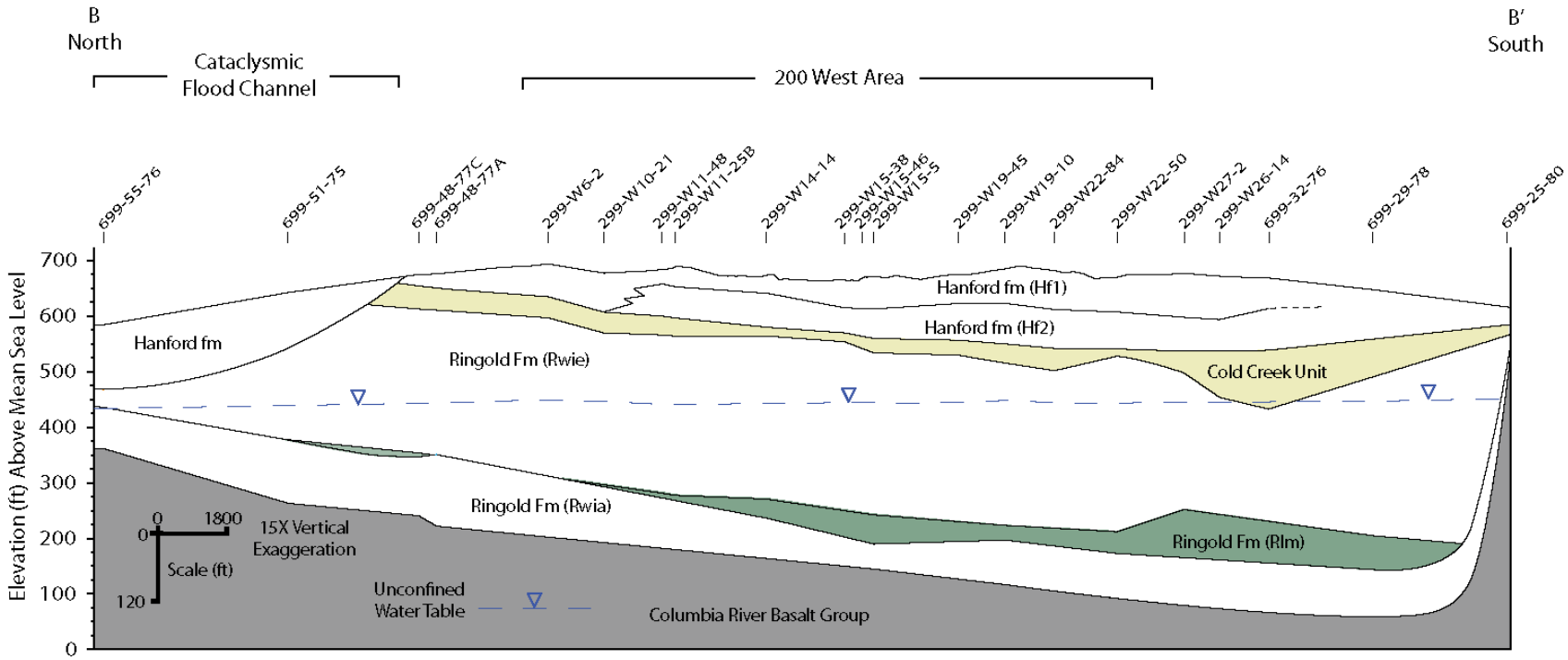

Figure 6.14. North-South Cross Section B-B’

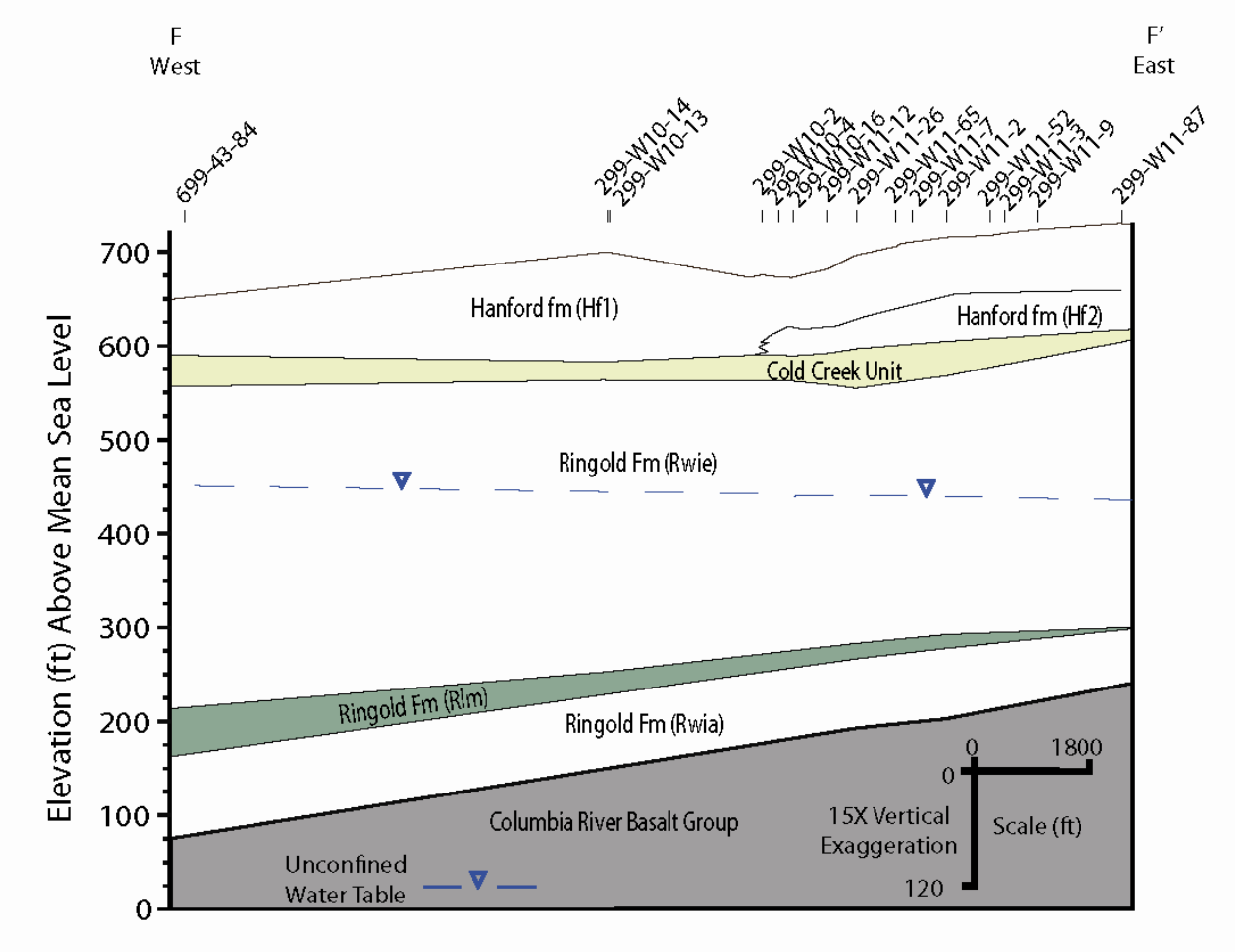

Figure 6.15. East-West Cross Section F-F'

The following procedure was used to build and revise the geologic cross sections:

1. Several potential cross sections were identified based on visual observation of borehole arrangement in relation to key areas of interest, such as waste sites, geologic structures, and stratigraphy (Figure 6.13). A list of selected boreholes for each transect was identified based on relative location to cross section lines of interest. Two cross sections (B-B' and F-F') were selected for completion during this phase of the study, based on abundance of boreholes with available logplots and/or published stratigraphic contacts.
2. An Excel[1] file was produced from the list of selected boreholes, and multiple data fields (i.e., northing and easting coordinates, elevation, and borehole depth) were populated with data queried from the HWIS.
3. The Excel file was used to sort boreholes in order of arrangement along the selected cross section lines, and relative borehole distances were calculated using northing and easting coordinates published in the HWIS.

[1] Excel® is a registered trademark of the Microsoft Corporation, Redmond, Washington.

4. An Adobe Illustrator file was created with multiple layers using a cross-section scale of 10:1 vertical exaggeration. Graphic borehole logs created in LogPlot 2003[1] were exported as .jpg files and placed into the Adobe Illustrator file. Best-estimate geologic contacts for each well (if available) were taken from the 200 W Contact Depths Database (dated September 11, 2008) and plotted on each borehole, and correlation lines drawn between boreholes for each formation and subformation contact. Measurements on the cross sections were reported in English units (feet) because most well logs and drillers' records are recorded using the English units as the standard unit of measurement, thereby making these measurements directly traceable to the raw borehole data. The best-estimate ground-surface elevations with respect to the NAVD88 were taken from the Best Estimate Ground Surface Elevation database (dated June 25, 2008) where available and converted to English units.

These cross sections are intended to help illustrate the current interpretation of the lateral and vertical extent and variability of the major stratigraphic units (formation and member/facies associations) beneath the 200 West Area. Each borehole identified for inclusion in cross sections B-B' and F-F' was evaluated and included or excluded from the final cross section based on the set of borehole quality ranking criteria outlined in Table 3.1 (Point System for Prioritizing Borehole Data Analyses). These geologic cross sections were used to help verify the geologic contacts in the contacts database and to help evaluate and resolve anomalies and areas of high uncertainty in the geologic solid model.

6.2.1 North-South Cross Section (B-B')

Cross section B-B' (Appendix D) was constructed with a total of 84 boreholes. A generalized schematic of this cross section is presented in Figure 6.14. Twenty-six of the 84 boreholes (31%) along this cross section have available logplot files, and 52 boreholes (62%) have available geologic contact data. Figure 6.16 illustrates a cross section through the solid-earth geologic model (created using EarthVision) coincident with, and for comparison against, that of Figure 6.14 and Appendix D, cross section B-B'.

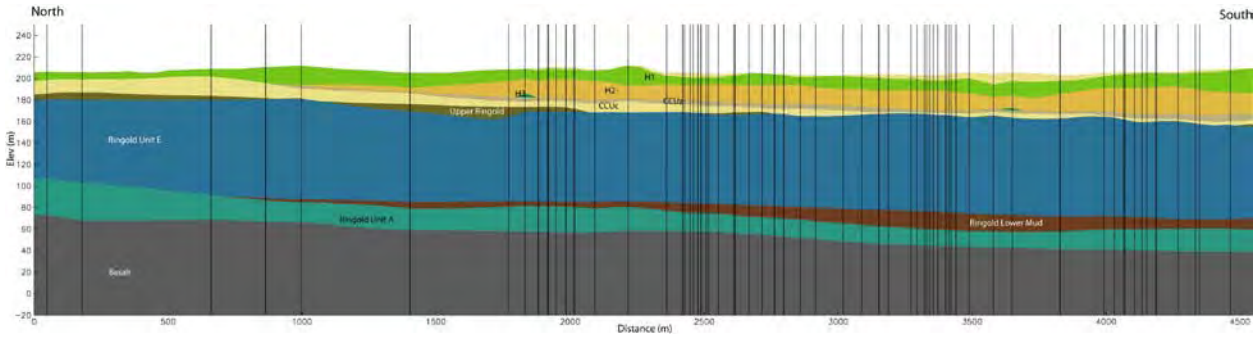

Figure 6.16. North-South Cross Section Through the Solid-Earth Geologic Model Coincident with That of Cross Section B-B' (Figure 6.14)

[1] LogPlot™ is a trademark of RockWare Inc., Golden, Colorado.

6.2.2 East-West Cross Section (F-F')

Cross section F-F' (Appendix D) was constructed with a total of 20 boreholes. A generalized schematic of this cross section is presented in Figure 6.15. Currently, 12 of the 20 boreholes (60%) have available logplot files, and 12 boreholes (60%) have available geologic contact data. Figure 6.17 illustrates a cross section through the solid-earth geologic model (crated using EarthVision) coincident with, and for comparison against, that of Figure 6.15 and Appendix D, cross section F-F'.

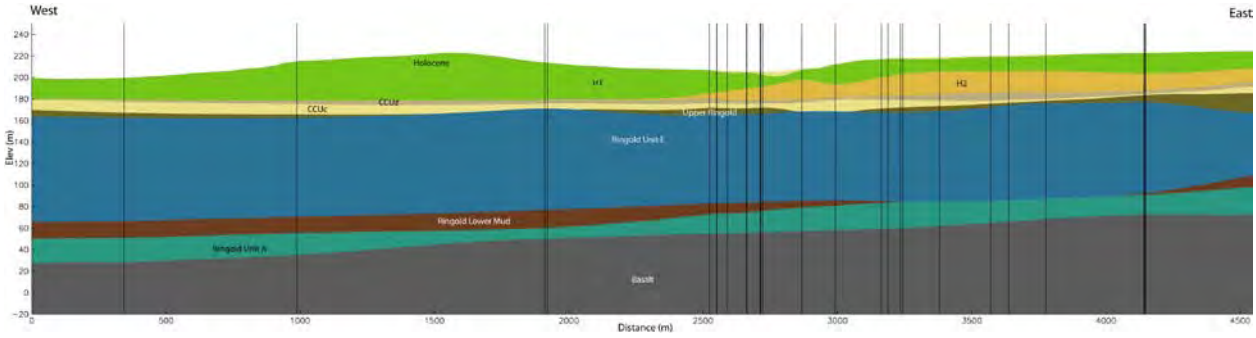

Figure 6.17. West-East Cross Section Through the Solid Earth Geologic Model Coincident with That of Cross Section F-F' (Figure 6.15)

7.0 Physical, Hydraulic, and Geochemical Properties

A compilation of the existing physical, hydraulic, and geochemical properties for stratigraphic units and associated lithofacies defined in the 3D stratigraphic model can be found in Last et al. (2009). The hydrostratigraphy and associated flow and transport parameters are highly site-specific and are generally applicable to a select set of conditions under which the parameters were measured or estimated. Many physical, hydrologic, and geochemical factors affect these parameter values, including the depositional environment, particle size distribution, sedimentary structures, compaction and cementation, and sediment mineralogy. As a result, determining the appropriate flow and transport parameters for a specific application generally requires the expert judgment of a hydrogeologist or soil scientist familiar with the environmental conditions and the conditions under which the parameter values were measured or estimated and the needs of the model being constructed.

Petrologic, mineralogic, bulk rock geochemistry, and other geochemical properties of the subsurface geologic materials provide information on the provenance, stratigraphic correlation, and contaminant retardation properties of the stratigraphic units and intra-unit facies. A summary of the available petrologic, mineralogic, bulk rock geochemistry, and cation exchange data was partially documented by Mackley and Last (2003) and Xie et al. (2003). Efforts are in progress to develop a Hanford Site-wide database for this information (Mackley et al. 2008). A summary of these data relative to the stratigraphic and hydrostratigraphic units is presented below.

7.1 Mineralogy, Petrology, and Bulk Rock Geochemistry

Mineralogic data have been derived primarily from electron microprobe (EM), x-ray diffraction (XRD), or petrologic analyses. Bulk rock geochemistry data has primarily been derived from x-ray fluorescence spectrometry. Xie et al. (2003) suggest that there are significant differences between the Hanford and Ringold formations; however, there is also significant spatial variability within each formation.

7.1.1 Hanford Formation

The Hanford formation sediment consists of glaciofluvial materials deposited by Ice Age floods. The mineralogy of this sediment is highly variable, depending on grain size. Gravel-dominated sediment tends to have a high degree of rock fragments (mostly basaltic, with some plutonic, metamorphic, and detrital caliche fragments) (DOE 2002). Microprobe analysis of the sand and finer-grained fraction has found it to be dominated by quartz (18% to 67.1% by weight), plagioclase (5.1% to 41.5%), and microcline (1.8% to 30.1%) (Tallman et al. 1979; Serne et al. 1993; Xie et al. 2003). Other dominant minerals include amphiboles up to 36.6%, pyroxenes up to 27.5%, mica (biotite/illite) up to 13.1%, and calcite up to 6.5% by weight. Smectite clays represent a few weight percent of the bulk sand fraction (3.3% to 5% [Serne et al. 1993]) and generally dominate in the clay fraction (Tallman et al. 1979). Reidel (2004) reported chlorite concentrations generally less than 3 wt%, except for one sample that had 8 wt% chlorite.

Hanford formation sediment is typified as having low organic carbon content generally less than 0.1% by weight (Serne et al. 1993) and low-to-moderate cation exchange capacity (2.6 to 7.8 milliequivalents per 100 grams; Serne et al. 1993). The sediment has a slightly basic pH when wetted (Serne et al. 1993 found that the pH of saturation extract ranged from 7.66 to 8.17). Small amounts of detrital calcium carbonate (calcite) are common and can act as a weak buffer.

7.1.2 Cold Creek Unit

Much less mineralogy data are available for the Cold Creek unit. Tallman et al. (1979) found that the sediments they referred to as Early Palouse Soil are fairly similar in mineralogy to that of the Hanford formation sediments (25.3% to 29.4% quartz, 15.1% to 18.2% plagioclase, 15% to 17.8% microcline, 7.9% to 10% amphiboles, 1.3% to 12.5% micas) but generally are higher in calcite (8% to 8.8%) and lack pyroxenes. Bjornstad (1990) found similar results for these fine-grained sediments but found that the carbonate-rich facies (referred to as the Plio-Pleistocene unit) consisted predominantly of calcium carbonate and/or sedimentary rock fragments, with lesser amounts of quartz and feldspars. Thin beds of caliche with calcite predominate, and variable amounts of ferric oxide exist in the 200 West Area in the Cold Creek unit just above the Ringold Formation.

7.1.3 Ringold Formation

Xie et al. (2003) found significant differences in electron microprobe and petrographic results between the Hanford and Ringold formations. The Ringold Formation sediment is generally higher in quartz than the Hanford formation but lower in plagioclase and pyroxene. Deeper within the Ringold Formation, calcic and ferric oxide cements are often present. The cementing can alter significantly the permeability of the otherwise coarse-grained Ringold sediment.

7.2 Contaminant Distribution Coefficients

Most recent Hanford Site assessments have primarily relied on, or built on, the generic distribution coefficients assembled by Last et al. (2006). Thus, these values provide the most logical basis for Hanford-specific K_d values for use with RESRAD (Last et al. 2009). However, these generic Hanford Site K_d values should be used only in the absence of waste-site–specific data.

7.3 Limitations and Data Gaps

The location of mineralogic and geochemical samples should be correlated to the geologic model to reassess the units to which they are assigned.

8.0 Limitations and Uncertainty

Several sources of error and limitations are associated with compilation of so many diverse sets of stratigraphic contacts and the assignment of physical, hydrologic, and geochemical properties. These data compilations and databases are evolving, and different versions of the databases have been used in different parts of this analysis. However, the differences among these database versions are relatively minor and are not believed to be significant to the overall analysis. These data compilations and databases and are subject to future refinement as additional data are incorporated and as further evaluations are made.

8.1 Uncertainty in Stratigraphic Interpretations

Borehole geologic data are of variable quality, and a number of sources of uncertainty are associated with these data and interpretation of the geologic units, their top and bottom contacts, their lateral continuity, and their thicknesses.

8.1.1 Identification of Geologic Units and Contacts

The principal source of uncertainty for identification of geologic units and their contacts is the descriptive quality of the drilling, sampling, and logging techniques used during borehole drilling, as well as the methods and materials used in well construction. The variable quality or lack of availability of borehole geophysical logs and laboratory data from borehole samples also contribute to this uncertainty. Many boreholes installed prior to the 1980s were drilled without a well site geologist present to describe the drill cuttings and samples. For these boreholes, only drillers' logs are available, and their quality varies greatly. Furthermore, varying quality of descriptions of subtle differences and gradational changes among geologic facies and across stratigraphic units can hamper reliable spatial correlation of sediment packages and individual facies.

As a result of the variability of data and the experience and professional judgment of the different investigators, many of the same geologic contacts have been picked at slightly different locations by different investigators. Different investigators may use different criteria for choosing contacts, depending on the objectives of the specific project (e.g., geologic in nature or hydrologic). Therefore, contact selection can be subjective and inconsistent. In some cases, the difference in contact elevation may be attributable to differences in the ground-surface elevations used by the different investigators.

8.1.2 Vertical Survey and Depth Control

Uncertainties in contact estimates can be derived from poor vertical survey and depth control. Sources of uncertainty include poorly documented information such as ground-surface elevation at the time of drilling and sampling, the reference point elevation at the time of borehole geophysical logging or other measurements, and the accuracy of depth measurements. Multiple survey estimates for some wells suggest that the uncertainty in ground-surface elevation is often on the order of 1 m (3 ft) and can be as much as 2.4 m (8 ft). This can impart errors in the slopes of the geologic surfaces and associated extrapolation of the 3D configuration of the stratigraphic unit.

8.1.3 Depth and Thickness of Sedimentary Units

The spacing and accuracy of depth-discrete observations and samples also can influence the interpretation of the depth and thickness of geologic units. Drill cuttings and samples have routinely been collected at 1.5-m (5-ft) intervals. However, the accuracy of depth measurements for these samples and observations is rather uncertain due to the variability in measurement techniques used by various drillers. The resulting uncertainty associated with interpretation of the depth and thicknesses of geologic units is estimated to be within the range of 0.7 to 3 m (2.5 to 10 ft). Borehole geophysical logging data can help to significantly reduce depth uncertainties for geologic units with distinct geophysical signatures.

A minor source of uncertainty contributing to the accuracy of depth measurements is the straightness and plumpness of the borehole. While small deviations can have a significant effect on water-level measurements, this source of uncertainty is deemed to be rather minor relative to the scale of borehole sampling because most boreholes have been shown to have only minor deviations when casing liners and/or groundwater pumps have been installed.

9.0 References

Anderson MP. 1990. "Aquifer Heterogeneity—A Geological Perspective." In *Proceedings of the Fifth Canadian/American Conference on Hydrogeology: Parameter Identification and Estimation for Aquifer and Reservoir Characterization*, pp. 3–22. September 18–20, 1990, Calgary, Alberta. National Ground Water Association, Westerville, Ohio.

Baker VR, BN Bjornstad, AJ Busacca, KR Fecht, EP Kiver, UL Moddy, JG Rigby, DF Stradling, and AM Tallman. 1991. "Quaternary Geology of the Columbia Plateau." Vol. K-2, Chapter 8 in *The Geology of North America, Quaternary Nonglacial Geology: Conterminous U.S.*, pp. 215–250. Geological Society of America Meeting, Boulder, Colorado.

Barton BR. 1999. "Some Notable Finds of Columbian Mammoths from Washington State." *Washington Geology* 27(2/3/4).

Bjornstad BN. 1984. *Suprabasalt Stratigraphy Within and Adjacent to the Reference Repository Location*. SD-BWI-DP-039, Rockwell Hanford Operations, Richland, Washington.

Bjornstad BN. 1990. *Geohydrology of the 218-W-5 Burial Ground, 200 West Area, Hanford Site*. PNNL-7336, Pacific Northwest National Laboratory, Richland, Washington.

Bjornstad BN. 2004. *Geologic Contacts Database for the 200 Areas of the Hanford Site*. WMP-22817, Rev. 0, Fluor Hanford, Inc., Richland, Washington.

Bjornstad BN. 2006. *On the Trail of the Ice Age Floods*. Keokee Co. Publishing, Inc., Sandpoint, Idaho.

Bjornstad BN and DC Lanigan. 2007. *Geologic Descriptions for the Solid-Waste Low Level Burial Grounds*. PNNL-16887, Pacific Northwest National Laboratory, Richland, Washington.

Brown DJ. 1959. *Subsurface Geology of the Hanford Separation Areas*. HW-61780, General Electric Company, Richland, Washington.

Brown DJ. 1960. *An Eolian Deposit Beneath 200-West Area*. HW-67549, General Electric Company, Richland, Washington.

Camp VE, ME Ross, and WE Hanson. 2003. "Genesis of Flood Basalts and Basin and Range Volcanic Rocks from Steens Mountain to the Malheur River Gorge, Oregon." *Geological Society of America Bulletin* 115(1):105–128.

Connelly MP, JV Borghese, CD Delaney, BH Ford, JW Lindberg, and SJ Trent. 1992a. *Hydrogeologic Model for the 200 East Groundwater Aggregate Area*. WHC-SD-EN-TI-019, Westinghouse Hanford Company, Richland, Washington.

Connelly MP, BH Ford, and JV Borghese. 1992b. *Hydrogeologic Model for the 200 West Groundwater Aggregate Area*. WHC-SD-EN-TI-014, Rev. 0, Westinghouse Hanford Company, Richland, Washington.

DOE. 2002. *Standardized Stratigraphic Nomenclature for Post-Ringold Formation Sediments Within the Central Pasco Basin*. DOE/RL-2002-39, Rev. 0, U.S. Department of Energy, Richland Operations Office, Richland, Washington.

Fecht KR, RP Reidel, and AM Tallman. 1987. "Paleodrainage of the Columbia River System on the Columbia Plateau of Washington State – A Summary." In *Selected Papers on the Geology of Washington, Bulletin 77*, pp. 219–248. Division of Geology and Earth Resources, Washington State Department of Natural Resources, Olympia, Washington.

Fogg GE, CD Noyes, and SF Carle. 1989. "Geologically Based Model of Heterogeneous Hydraulic Conductivity in an Alluvial Setting." *Hydrogeology Journal* 6:131–143.

Gephart RE. 2003. *Hanford – A Conversation About Nuclear Waste and Cleanup*. Battelle Press, Columbus, Ohio.

Gustafson EP. 1978. *The Vertebrate Faunas of the Pliocene Ringold Formation, Southcentral Washington*. Bulletin 23, University of Oregon Museum of Natural History, Eugene, Oregon.

Heinz J, S Kleineidam, G Teutsch, and T Aigner. 2003. "Heterogeneity Patterns of Quaternary Glaciofluvial Gravel Bodies (SW Germany): Application to Hydrogeology." *Sedimentary Geology* 158:1–23.

Last GV, BN Bjornstad, MP Bergeron, DW Wallace, DR Newcomer, JA Schramke, MA Chamness, CS Cline, SP Airhart, and JS Wilbur. 1989. *Hydrogeology of the 200 Areas Low-Level Burial Grounds – An Interim Report*. PNL-6820, Vol. 1 and 2, Pacific Northwest Laboratory, Richland, Washington.

Last GV, RD Mackley, and DC Lanigan. 2006. *Borehole Geologic Data for the 216-Z Crib Facilities - A Status of Data Assembled through the Hanford Borehole Geologic Information System (HBGIS)*. PNNL-16103, Rev. 0, Pacific Northwest National Laboratory, Richland, Washington.

Last GV, CJ Murray, DA Bush, EC Sullivan, ML Rockhold, RD Mackley, and BN Bjornstad. 2007. "Standardization of Borehole Data to Support Vadose Zone Flow and Transport Modeling." *Vadose Zone Journal* 6(4):906–912.

Last GV, ML Rockhold, CJ Murray, and KJ Cantrell. 2009. *Selection and Traceability of Parameters To Support Hanford-Specific RESRAD Analyses.* PNNL-18564, Pacific Northwest National Laboratory, Richland, Washington.

Lindsey KA. 1991. *Geologic Setting of the 200 West Area: An Update*. WHC-SD-EN-TI-008, Westinghouse Hanford Company, Richland, Washington.

Lindsey KA. 1992. *Geologic Setting of the 200 East Area: An Update*. WHC-SD-EN-TI-012, Westinghouse Hanford Company, Richland, Washington.

Lindsey KA. 1995. *Miocene- to Pliocene-Aged Suprabasalt Sediments of the Hanford Site, South-Central Washington*. BHI-00184, Bechtel Hanford, Inc., Richland, Washington.

Lindsey KA. 1996. *The Miocene to Pliocene Ringold Formation and Associated Deposits of the Ancestral Columbia River System, South-Central Washington and North-Central Oregon.* Open-File Report 96-8, Division of Geology and Earth Resources, Washington State Department of Natural Resources, Olympia, Washington.

Lindsey KA, SE Kos, and KD Reynolds. 2000. *Vadose Zone Geology of Boreholes 299-W22-50 and 299-W23-19 S-SX Waste Management Area Hanford Site, South-Central Washington*. RPP-6149, Rev. 0, CH2M HILL Hanford Group, Inc., Richland, Washington.

Lindsey KA, KD Reynolds, and SE Kos. 2001. *Vadose Zone Geology of Boreholes 299-E33-45 and 299-E33-46 B-BX-BY Waste Management Area Hanford Site, South-Central Washington*. RPP-8681, CH2M HILL Hanford Group, Inc., Richland, Washington.

Lindsey KA, JL Slate, GK Jaeger, KJ Swett, and RB Mercer. 1994. *Geologic Setting of the Low-Level Burial Grounds*. WHC-SD-EN-TI-290, Rev. 0, Westinghouse Hanford Company, Richland, Washington.

Mackley RD and G Last. 2003. "Mineralogical and Bulk-Rock Geochemical Signatures of Ringold and Hanford Formation Sediments." *Journal of Undergraduate Research* 3:107. Office of Science, U.S. Department of Energy, Washington, D.C.

Mackley RD, JA Serkowski, and G Last. 2008. *Status Report on the Creation of a Preliminary Data Model and Dictionary for a New Petrologic Database*. PNNL-17663, Pacific Northwest National Laboratory, Richland, Washington.

McGhan VL. 1989. *Hanford Wells*. PNL-6907, Pacific Northwest Laboratory, Richland, Washington.

Myers CW, SM Price, JA Caggiano, MP Cochran, WJ Czimer, NJ Davidson, RC Edwards, KR Fecht, GE Holmes, MG Jones, JR Kunk, RD Landon, RK Ledgerwood, JT Lillie, PE Long, TH Mitchell, EH Price, RP Reidel, and AM Tallman. 1979. *Geologic Studies of the Columbia Plateau – A Status Report: October 1979*. RHO-BWI-ST-4, Rockwell Hanford Operations, Richland, Washington.

Newcomb RC, JR Strand, and FJ Frank. 1972. *Geology and Ground-Water Characteristics of the Hanford Reservation of the U.S. Atomic Energy Commission, Washington*. Professional Paper 717, U.S. Geological Survey, Washington, D.C.

O'Conner JE and JE Costa. 2004. *The World's Largest Floods, Past and Present – Their Causes and Magnitudes*. Circular 1254, U.S. Geological Survey, Washington, D.C.

Oostrom M, ML Rockhold, PD Thorne, GV Last, and MJ Truex. 2006. *Carbon Tetrachloride Flow and Transport in the Subsurface of the 216-Z-18 Crib and 216-Z-1A Tile Field at the Hanford Site: Multifluid Flow Simulations and Conceptual Model Update*. PNNL-16198, Pacific Northwest National Laboratory, Richland, Washington.

Pluhar CJ, BN Bjornstad, RP Reidel, RS Cole, and PB Nelson. 2006. "Magnetostratigraphic Evidence from the Cold Creek Bar for Onset of Ice-Age Cataclysmic Floods in Eastern Washington During the Early Pleistocene." *Quaternary Research* 65:123–135.

PSPL. 1981. *Skagit/Hanford Nuclear Project, Preliminary Safety Analysis Report, Vol. 1*. Puget Sound Power and Light Company, Tacoma, Washington.

Reidel SP. 2004. *Geologic Data Package for 2005 Integrated Disposal Facility Waste Performance Assessment*. PNNL-14586, Pacific Northwest National Laboratory, Richland, Washington.

Reidel SP, NP Campbell, KR Fecht, and KA Lindsey. 1994. "Late Cenozoic Structure and Stratigraphy of South-Central Washington." In *Regional Geology of Washington State, Bulletin 80*, pp. 159–180. Division of Geology and Earth Resources, Washington State Department of Natural Resources, Olympia, Washington.

Reidel SP and MA Chamness. 2007. *Geology Data Package for the Single-Shell Tank Waste Management Areas at the Hanford Site*. PNNL-15955, Rev. 1, Pacific Northwest National Laboratory, Richland, Washington. Available at http://www.pnl.gov/main/publications/external/technical_reports/PNNL-15955rev1.pdf.

Reidel SP, TL Tolan, PR Hooper, MH Beeson, KR Fecht, RD Bentley, and JL Anderson. 1989. "The Grande Ronde Basalt, Columbia River Basalt Group; Stratigraphic Descriptions and Correlations in Washington, Oregon, and Idaho." In *Volcanism and Tectonism in the Columbia River Flood-Basalt Province, Special Paper 239*, pp. 21–53. Geological Society of America, Boulder, Colorado.

Rohay VJ, KJ Swett, and GV Last. 1994. *1994 Conceptual Model of the Carbon Tetrachloride Contamination in the 200 West Area at the Hanford Site*. WHC-SD-EN-TI-248, Rev. 0, Westinghouse Hanford Company, Richland, Washington.

Serne RJ, BN Bjornstad, DG Horton, DC Lanigan, CW Lindenmeier, MJ Lindberg, RE Clayton, VL LeGore, RD Orr, IV Kutnyakov, SR Baum, KN Geiszler, MM Valenta, and TS Vickerman. 2004a. *Characterization of Vadose Zone Sediments Below the TX Tank Farm: Boreholes C3830, C3831, C3832 and RCRA Borehole 299-W10-27*. PNNL-14594, Pacific Northwest National Laboratory, Richland, Washington.

Serne RJ, BN Bjornstad, DG Horton, DC Lanigan, HT Schaef, CW Lindenmeier, MJ Lindberg, RE Clayton, VL LeGore, KN Geiszler, SR Baum, MM Valenta, IV Kutnyakov, TS Vickerman, RD Orr and CF Brown. 2004b. *Characterization of Vadose Zone Sediments Below the T Tank Farm: Boreholes C4104, C4105, 299-W10-196, and RCRA Borehole 299-W11-39*. PNNL-14849, Pacific Northwest National Laboratory, Richland, Washington.

Serne RJ, BN Bjornstad, HT Schaef, BA Williams, DC Lanigan, DG Horton, RE Clayton, AV Mitroshkov, VL LeGore, MJ O'Hara, CF Brown, KE Parker, IV Kutnyakov, JN Serne, G Last, SC Smith, CW Lindemeier, JM Zachara, and DB Burke. 2002a. *Characterization of Vadose Zone Sediment: Uncontaminated RCRA Borehole Core Samples and Composite Samples*. PNNL-13757-1, Pacific Northwest National Laboratory, Richland, Washington.

Serne RJ, JL Conca, VL LeGore, KJ Cantrell, CW Lindenmeier, JA Campbell, JE Amonette, and MI Wood. 1993. *Solid Waste Leach Characteristics and Contaminant–Sediment Interactions. Volume 1: Batch Leach and Adsorption Tests and Sediment Characterization*. PNL-8889, Pacific Northwest Laboratory, Richland, Washington.

Serne RJ, G Last, HT Schaef, DC Lanigan, CW Lindenmeier, CC Ainsworth, RE Clayton, VL LeGore, MJ O'Hara, CF Brown, RD Orr, IV Kutnyakov, TC Wilson, KB Wagnon, BA Williams, and DS Burke. 2002b. *Characterization of Vadose Zone Sediment: Borehole 41-09-39 in the S-SX Management Area*. PNNL-13757-3, Pacific Northwest National Laboratory, Richland, Washington.

Serne RJ, GV Last, HT Schaef, DC Lanigan, CW Lindenmeier, CC Ainsworth, RE Clayton, VL LeGore, MJ O'Hara, CF Brown, RD Orr, IV Kutnyakov, TC Wilson, KB Wagnon, BA Williams, and DS Burke. 2002c. *Characterization of Vadose Zone Sediment: Slant Borehole SX-108 in the S-SX Waste Management Area*. PNNL-13757-4, Pacific Northwest National Laboratory, Richland, Washington.

Serne RJ, HT Schaef, BN Bjornstad, DC Lanigan, GW Gee, CW Lindemeier, RE Clayton, VL LeGore, RD Orr, MJ O'Hara, CF Brown, GV Last, IV Kutnyakov, DS Burke, TC Wilson, and BA Williams. 2002d. *Characterization of Vadose Zone Sediment: Borehole 299-W23-19 [SX-115] in the S-SX Waste Management Area*. PNNL-13757-2, Pacific Northwest National Laboratory, Richland, Washington.

Sexton SM. 2008. *Borehole Summary Report for the Installation of Wells 299-W11-88 (C5572), 699-43-69 (C5573) and 699-45-69C (C5574) for the 200-ZP-1 Operable Unit, FY 2007*. SGW-37703, Rev. 0, CH2M HILL Plateau Remediation Company, Richland, Washington.

Swanson DA and TL Wright. 1979. "Paleogeography of Southeast Washington During the Middle and Late Miocene Based on the Distribution of Intracanyon Basalt Flows (Abstract)." In *Cenozoic Paleogeography of the Western United States, Pacific Coast Paleogeography Symposium 3*, p. 331. Society of Economic Paleontologists and Mineralogists, Pacific Section, Los Angeles, California.

Swanson DA, JL Anderson, RD Bentley, VE Camp, JN Gardner, and TL Wright. 1979a. *Reconnaissance Geologic Map of the Columbia River Basalt Group in Eastern Washington and Northern Idaho*. Open File Report 79-1363, U.S. Geological Survey, Reston, Virginia.

Swanson DA, TL Wright, PR Hooper, and RD Bentley. 1979b. *Revisions in Stratigraphic Nomenclature of the Columbia River Basalt Group*. Bulletin 1457-G, U.S. Geological Survey, Reston, Virginia.

Tallman AM, KR Fecht, MC Marratt, and GV Last. 1979. *Geology of the Separation Areas, Hanford Site, South-Central Washington*. RHO-ST-23, Rockwell Hanford Operations, Richland, Washington.

Tallman AM, JT Lillie, and KR Fecht. 1981. "Suprabaslt sediments of the Cold Creek Syncline Area." In *Subsurface Geology of the Cold Creek Syncline*, CW Myers and SM Price (eds). RHO-BWI-ST-14, Rockwell Hanford Operations, Richland, Washington.

Thompson A and BN Taylor. 2008. *Guide for Use of the International System of Units (SI)*. NIST Special Publication 811, 2008 Edition, National Institute of Standards and Technology, Gaithersburg, Maryland.

Thorne PD, MP Bergeron, MD Williams, and VL Freedman. 2006. *Groundwater Data Package for Hanford Assessments*. PNNL-14753, Rev. 1, Pacific Northwest National Laboratory, Richland, Washington.

Waitt RB. 1994. "Scores of Gigantic, Successively Smaller Lake Missoula Floods Through Channeled Scabland and Columbia Valley." In *Geological Field Trips in the Pacific Northwest: 1994 Geologic Society of America Meeting*, pp. 1K-1 to 1K-88. Geological Society of America Meeting, Boulder, Colorado.

Waitt RB and DA Swanson. 1987. "Geomorphic Evolution of the Columbia Plain and River." In *Geomorphic Systems of North America (Centennial Special, Vol 2)*, WL Graf (ed), pp. 403–416. Geological Society of America, Boulder, Colorado.

Williams BA, BN Bjornstad, R Schalla, and WD Webber. 2000. *Revised Hydrogeology for the Suprabasalt Aquifer System, 200-East Area and Vicinity, Hanford Site, Washington*. PNNL-12261, Pacific Northwest National Laboratory, Richland, Washington.

Williams BA, BN Bjornstad, R Schalla, and WD Webber. 2002. *Revised Hydrogeology for the Suprabasalt Aquifer System, 200-West Area and Vicinity*. PNNL-13858, Pacific Northwest National Laboratory, Richland, Washington.

Wood MI, R Schalla, BN Bjornstad, and SM Narbutovskih. 2000. *Subsurface Conditions Description of the B-BX-BY Waste Management Area*. HNF-5507, Rev. 0, Fluor Hanford, Richland, Washington.

Wood MI, TE Jones, R Schalla, BN Bjornstad, and FN Hodges. 2001. *Subsurface Conditions Description of the T and TX-TY Waste Management Areas*. RPP-7123, Revision 0, CH2M HILL Hanford Group, Inc., Richland, Washington.

Xie Y, CJ Murray, GV Last, and RD Mackley. 2003. *Mineralogical and Bulk-Rock Geochemical Signatures of Ringold and Hanford Formation Sediments*. PNNL-14202, Pacific Northwest National Laboratory, Richland, Washington.

Appendix A

Stratigraphic Contacts for the 200 West Area and Vicinity

Appendix A

Stratigraphic Contacts for the 200 West Area and Vicinity

Stratigraphic contact data[1] were taken from an electronic database of contact information compiled from published reports as well as some unpublished data, including new or revised interpretations made specifically for this report. This database contains nearly 1,190 records representing stratigraphic contact information for 446 different boreholes. Only the contact depths (in feet below ground surface) are provided here. The source used as the basis for the vertical location of these stratigraphic contacts in each well is identified in the "Source" column (see Table 5.2 for explanation). The source information was used to identify a principal investigator and the date on which the information was published.

Where multiple depths were recorded for a given contact in a given borehole, a subjective ranking and evaluation was made to select the best-estimate contact depths for each borehole (see column "Rank/Priority"). Selection of the best-estimate contacts was based in part on a relative ranking of the traceability and defensibility of the contact data sources:

1 – Reported contacts are directly traceable to raw borehole data (e.g., through summary logs with contacts) and firsthand geologic interpretation (e.g., cross sections, structure contour maps).

2 – Reported contacts are indirectly traceable to raw borehole data (i.e., no summary logs) but are represented in firsthand geologic interpretation.

3 – Reported contacts are not readily traced to raw borehole data or firsthand geologic interpretation (e.g., data and/or interpretations taken from other documents).

4 – Unpublished contact data where no other data are available from that principal investigator(s).

5 – Unpublished contact data that have been superseded by other published data by the same principal investigator(s).

Note that most of these best-estimate picks were taken from unpublished work by Bjornstad, with the source identified as "Bjornstad08" and the date published as "This Report." Other best estimates made specifically for this study were identified with a specific record and existing source. Where the contacts were defined specifically for this report, they were similarly identified by the geologist picking the contacts (e.g., "Last08") and with the date published listed as "This Report." Note that these newly developed contact sets were not ranked.

[1] The database is included in an Excel file, *200 W Contact Depths_2009-08-17.xls*, in this Appendix A subfolder.

200 West Area			Data Source Information					Reported and/or Calculated Contact Depths (ft)																		
Well # (from HWIS)	Hanford Well ID (from HWIS)	Drill Depth (ft) (from HWIS)	Rank / Priority Best Est.?	Source	Principal Investigator	Date Published	Comments / Technical Basis	Holocene (Eolian or backfill?)	Top of Hanford formation	Top HF1	Top HF2	Top HF3	Top CCU	Top CCU (undif)	Top CCUz	Top CCUc	Top of Ringold Formation	Top Rtf	Top Rwie	Top Rwic	Top Rlm	Top Rwia	TOB	Date Last Changed	Reason Last Changed
299-W06-001	A4996		1	Last89	Last	1989							39		39	39	98	98	98				4662		
299-W06-001	A4996		2	Lindsey95	Lindsey	1995		0	5	5			40	40			60	60	100		425	435	470		
299-W06-001	A4996		1	Williams02	Williams	2002													98				457		
299-W06-001	A4996		3	Thorne06	Thorne	2006			0.0	0.0			44.0	44.0	44.0	44.0	56.8	56.8	96.8		411.7	424.9	453.7		
299-W06-001	A4996		Best Est.	Bjornstad08	Bjornstad	This Report		0	6	6	41	41	41	41		45	61	61	99		413	426	455		
299-W06-001	A4996		5	Thorne	Thorne	UP										44					412	425	454		
299-W06-002	A4997		1. Best Est.	Last89	Last	1989							59		59	68	97	97	97						
299-W06-002	A4997		3	Thorne06	Thorne	2006			0.0	0.0			52.2	52.2	52.2	52.2	82.3	82.3	87.3						
299-W06-002	A4997		5	Thorne	Thorne	UP										52									
299-W06-003	A4998		2	Lindsey95	Lindsey	1995		0	0	0			61	61			88	88	98		415	425			
299-W06-003	A4998		1	Williams02	Williams	2002													97		404	510			
299-W06-003	A4998		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	61	61	61	61			88	88	98		415	425			
299-W06-006	A5001		2	Lindsey95	Lindsey	1995		0	0	0			29	29			60	60	108		425	439			
299-W06-006	A5001		1	Williams02	Williams	2002													106						
299-W06-006	A5001		Best Est.	Bjornstad08	Bjornstad	This Report			1	1	30	30	30	30			61	61	109		426	440			
299-W07-001	A5004		1	Last89	Last	1989							60		60	73	108	108	143						
299-W07-001	A5004		3	Thorne06	Thorne	2006			0.0	0.0			56.8	56.8	56.8	66.6	106.6	106.6	136.8						
299-W07-001	A5004		Best Est.	Bjornstad08	Bjornstad	This Report							61		61	67									
299-W07-001	A5004		5	Thorne	Thorne	UP							57		57	67									
299-W07-002	A5008		1	Last89	Last	1989							33		33	42	83	83	98						
299-W07-002	A5008		3	Thorne06	Thorne	2006			0.0	0.0			31.5	31.5	31.5	41.7	81.7	81.7	86.6						
299-W07-002	A5008		Best Est.	Bjornstad08	Bjornstad	This Report							32		32	42									
299-W07-002	A5008		5	Thorne	Thorne	UP							32		32	42									
299-W07-003	A5009		1	Last89	Last	1989							30		30	40	78	78	100				476		
299-W07-003	A5009		2	Lindsey95	Lindsey	1995		0	0	0			34	34			80	80	105		365	365	474		
299-W07-003	A5009		1	Williams02	Williams	2002																404	473		
299-W07-003	A5009		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	34	34	34	34			80	80	105		365	365	474		
299-W07-004	A5010		1	Last89	Last	1989							55		55	64	81	81	103						
299-W07-004	A5010		3	Thorne06	Thorne	2006			0.0	0.0			46.6	46.6	46.6	46.6	71.5	71.5	96.8						
299-W07-004	A5010		Best Est.	Bjornstad08	Bjornstad	This Report										47									
299-W07-004	A5010		5	Thorne	Thorne	UP										47									
299-W07-005	A5011		1	Last89	Last	1989							24		24	35	76	76	76						
299-W07-005	A5011		3	Thorne06	Thorne	2006			0.0	0.0			31.8	31.8	31.8	31.8	71.9	71.9	71.9						
299-W07-005	A5011		Best Est.	Bjornstad08	Bjornstad	This Report										33									
299-W07-005	A5011		5	Thorne	Thorne	UP										32									
299-W07-006	A5012		1	Last89	Last	1989							18		18	18	76	76	76						
299-W07-006	A5012		3	Thorne06	Thorne	2006			0.0	0.0			16.4	16.4	16.4	16.4	71.5	71.5	71.5						
299-W07-006	A5012		Best Est.	Bjornstad08	Bjornstad	This Report										17									
299-W07-006	A5012		5	Thorne	Thorne	UP										17									
299-W08-001	A5016		1	Last89	Last	1989							72		72	87	119	119	152						
299-W08-001	A5016		3	Thorne06	Thorne	2006			0.0	0.0			88.3	88.3	88.3	88.3	117.1	117.1	147.3						
299-W08-001	A5016		Best Est.	Bjornstad08	Bjornstad	This Report										88									
299-W08-001	A5016		5	Thorne	Thorne	UP										88									
299-W09-001	A5017		1	Last89	Last	1989							149		149	159	184	184	193						
299-W09-001	A5017		Best Est.	Last08	Last	This Report							149		149	159	184	184	193						
299-W10-001	A7136		1	Last89	Last	1989							76		76	94	115	115	142						
299-W10-001	A7136		1	Wood01	Wood	2001		0	0	0	62		76		76	94	110	110	141						
299-W10-001	A7136		3	Serne04b	Serne	2004	From PNNL-14849, Figure 2.5.	0	0	0	62	76	76		76	94	110	110	141						
299-W10-001	A7136		3	Reidel07-T5.3	Reidel	2007		0	0	0	62	76	76		76	94	110	110	141						
299-W10-001	A7136		Best Est.	Bjornstad08	Bjornstad	This Report			1	1	63	77	77		77	95	111	111	142						
299-W10-002	A4896		1	Wood01	Wood	2001		0	7	7	63		85		85	97	113	113	127						
299-W10-002	A4896		Best Est.	Bjornstad08	Bjornstad	This Report			7	7	63	85	85		85	97	113	113	127						
299-W10-003	A4897		1	Wood01	Wood	2001		0	23	23	85		85		85	93	110	110	127						
299-W10-003	A4897		3	Reidel07-T5.3	Reidel	2007		0	23	23			85		85	93	110	110	127						
299-W10-003	A4897		Best Est.	Bjornstad08	Bjornstad	This Report			23	23	85	85	85		85	93	110	110	127						
299-W10-004	A7137		1	Wood01	Wood	2001		0	0	0	52		89		89	99	115	115	132						
299-W10-004	A7137		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	52	89	89		89	99	115	115	132						
299-W10-005	A4898		1	Wood01	Wood	2001		0	0	0	85		100		100	110	129	129	135						

200 West Area			Data Source Information					Reported and/or Calculated Contact Depths (ft)																		
Well # (from HWIS)	Hanford Well ID (from HWIS)	Drill Depth (ft) (from HWIS)	Rank / Priority	Source	Principal Investigator	Date Published	Comments / Technical Basis	Holocene (Eolian or backfill?)	Top of Hanford formation	Top HF1	Top HF2	Top HF3	Top CCU	Top CCU (undif)	Top CCUz	Top CCUc	Top of Ringold Formation	Top Rtf	Top Rwie	Top Rwic	Top Rlm	Top Rwia	TOB	Date Last Changed	Reason Last Changed
299-W10-005	A4898		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	85	100	100		100	110	129	129	135						
299-W10-008	A4899		1	Wood01	Wood	2001		0	0	0	44		85		85	94	116	116	125						
299-W10-008	A4899		3	Reidel07-T5.3	Reidel	2007		0	0	0	44		85		85	94	116	116	125						
299-W10-008	A4899		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	44	85	85		85	94	116	116	125						
299-W10-009	A4900		1	Wood01	Wood	2001		0	0	0	50		83		83	93	134	134	134						
299-W10-009	A4900		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	50	83	83		83	93	134	134	134						
299-W10-010	A4887		1	Wood01	Wood	2001		0	0	0	28		73		73	90	116	116	134						
299-W10-010	A4887		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	28	73	73		73	90	116	116	134						
299-W10-011	A4888		1	Wood01	Wood	2001		0	0	0	28		83		83	95	123	123	134						
299-W10-011	A4888		Best Est.	Bjornstad08	Bjornstad	This Report			1	1	29	84	84		84	96	124	124	135						
299-W10-012	A4889		1	Wood01	Wood	2001		-1	-1	-1	60		82		82	90	113	113	135						
299-W10-012	A4889		3	Reidel07-T5.3	Reidel	2007		0	-1	-1	60		82		82	90	113	113	135						
299-W10-012	A4889		Best Est.	Bjornstad08	Bjornstad	This Report			-1	-1	60	82	82		82	90	113	113	135						
299-W10-013	A4890		1. Best Est.	Last89	Last	1989	Changes were based Kyle Parker's		0	0			114		114	129	144	144	144						
299-W10-013	A4890		3	Thorne06	Thorne	2006			0.0	0.0			107.0	107.0	107.0	111.9	136.8	136.8	136.8						
299-W10-013	A4890		4	Bjornstad08	Bjornstad	This Report							108		108	113									
299-W10-013	A4890		5	Thorne	Thorne	UP							107	107	107	112									
299-W10-014	A4891		1	Last89	Last	1989							112		112	127	143	143	143		448				
299-W10-014	A4891		2	Lindsey95	Lindsey	1995		0	0	0			130	130			137	137	137		450				
299-W10-014	A4891		1	Williams02	Williams	2002													137		446				
299-W10-014	A4891		3	Thorne06	Thorne	2006			0.0	0.0			117.1	117.1	117.1	127.3	142.1	142.1	142.1		447.2				
299-W10-014	A4891		3	Reidel07-T4.1	Reidel	2007		0		0	115	115		115	115	135		137	137					9/11/2008	Re-evaluated Reidel07 report, which
299-W10-014	A4891		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	117	117	117		117	127	137	137	137		447				
299-W10-014	A4891		5	Thorne	Thorne	UP					117	117	117	117	117	127					447				
299-W10-015	A4892		1	Wood01	Wood	2001		0	10	10	60		73		73	93	115	115	135						
299-W10-015	A4892		3	Serne04b	Serne	2004	From PNNL-14849, Figure 2.6.	0			60	79	79		79	93	115	115	135						
299-W10-015	A4892		3	Reidel07-T5.3	Reidel	2007		0	10	10	60	73	73		73	93	115	115	135						
299-W10-015	A4892		Best Est.	Bjornstad08	Bjornstad	This Report			10	10	60	73	73		73	93	115	115	135						
299-W10-016	A4893		1	Wood01	Wood	2001		0	6	6	55		83		83	95	105	105	129						
299-W10-016	A4893		3	Serne04b	Serne	2004	From PNNL-14849, Figure 2.6.	0			55	83	83		83	95	105	105	129						
299-W10-016	A4893		3	Reidel07-T5.3	Reidel	2007		0	6	6	55	83	83		83	95	105	105	129						
299-W10-016	A4893		Best Est.	Bjornstad08	Bjornstad	This Report			6	6	55	83	83		83	95	105	105	129						
299-W10-017	A4894		1	Wood01	Wood	2001		0	0	0	42		90		90	100	112	112	128						
299-W10-017	A4894		3	Reidel07-T5.3	Reidel	2007		0	0	0	42	90	90		90	100	112	112	128						
299-W10-017	A4894		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	42	90	90		90	100	112	112	128						
299-W10-018	A4895		1	Wood01	Wood	2001		0	6	6	44		87		87	97	115	115	130						
299-W10-018	A4895		3	Reidel07-T5.3	Reidel	2007		0	6	6	44	87	87		87	97	115	115	130						
299-W10-018	A4895		Best Est.	Bjornstad08	Bjornstad	This Report			6	6	44	87	87		87	97	115	115	130						
299-W10-022	A9890		1	Wood01	Wood	2001		0	0	0	33		83		83	93	111	111	144						
299-W10-022	A9890		Best Est.	Bjornstad08	Bjornstad	This Report			1	1	34	84	84		84	94	112	112	145						
299-W10-023	B8545		1	Wood01	Wood	2001		0	8	8	43		80		80	88	110	110	131						
299-W10-023	B8545		3	Reidel07-T5.3	Reidel	2007		0	8	8	43		80		80	88	110	110	131						
299-W10-023	B8545		Best Est.	Bjornstad08	Bjornstad	This Report			8	8	43	80	80		80	88	110	110	131						
299-W10-024	B8546		1	Wood01	Wood	2001		0	3	3	42		83		83	98	108	108	128						
299-W10-024	B8546		1	Williams02	Williams	2002													126		403	418			
299-W10-024	B8546		3	Reidel07-T4.1	Reidel	2007		0		3	42	59		83	98	128		128	128					9/11/2008	Re-evaluated Reidel07 report, which
299-W10-024	B8546		3	Reidel07-T5.3	Reidel	2007		0	3	3	42	59	83		83	98	108	108	128						
299-W10-024	B8546		Best Est.	Bjornstad08	Bjornstad	This Report	Add 2 ft to Wood picks		3	3	42	83	83		83	98	108	108	126		403	418			
299-W10-026	B8548		1	Wood01	Wood	2001		0	3	3	42		88		88	97	110	110	127						
299-W10-026	B8548		3	Reidel07-T5.3	Reidel	2007		0	3	3	42		88		88	97	110	110	127						
299-W10-026	B8548		Best Est.	Bjornstad08	Bjornstad	This Report			3	3	42	88	88		88	97	110	110	127						
299-W10-027	C3125		1	Serne04a	Serne	2004		0	4.5	4.5	41.5		89.4		89.4	98	112	112	124						
299-W10-027	C3125		3. Best Est.	Reidel07-T5.3	Reidel	2007		0	4	4	44		89		89	98	113	113	125						
299-W10-029	C4988		2006																						
299-W10-030	C4989		2006																						
299-W10-031	C5194		2006																						
299-W10-051	A7141		1	Wood01	Wood	2001										92									
299-W10-051	A7141		Best Est.	Bjornstad08	Bjornstad	This Report										92									
299-W10-088	A7178		1	Wood01	Wood	2001		0	45	45	47		95		95										
299-W10-088	A7178		Best Est.	Bjornstad08	Bjornstad	This Report			45	45	47	95	95		95										
299-W10-089	A7179		1	Wood01	Wood	2001		0	45	45	50		90		90										
299-W10-089	A7179		Best Est.	Bjornstad08	Bjornstad	This Report			45	45	50	90	90		90										

200 West Area		Data Source Information						Reported and/or Calculated Contact Depths (ft)																		
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299-W10-090	A7180		1	Wood01	Wood	2001		0	45	45	53		90		90										
299-W10-090	A7180		Best Est.	Bjornstad08	Bjornstad	This Report			45	45	53	90	90		90										
299-W10-091	A7181		1	Wood01	Wood	2001		0	45	45	50		94		94										
299-W10-091	A7181		Best Est.	Bjornstad08	Bjornstad	This Report			45	45	50	94	94		94										
299-W10-092	A7182		1	Wood01	Wood	2001		0	45	45	53		95		95										
299-W10-092	A7182		Best Est.	Bjornstad08	Bjornstad	This Report			45	45	53	95	95		95										
299-W10-093	A7183		1	Wood01	Wood	2001		0	45	45	48		90		90										
299-W10-093	A7183		Best Est.	Bjornstad08	Bjornstad	This Report			45	45	48	90	90		90										
299-W10-094	A7184		1	Wood01	Wood	2001		0	45	45	65		90		90										
299-W10-094	A7184		Best Est.	Bjornstad08	Bjornstad	This Report			45	45	65	90	90		90										
299-W10-095	A7185		1	Wood01	Wood	2001		45	45	45	75		92		92										
299-W10-095	A7185		Best Est.	Bjornstad08	Bjornstad	This Report			46	46	76	93	93		93										
299-W10-096	A7186		1	Wood01	Wood	2001		0	45	45	80		92		92										
299-W10-096	A7186		3	Reidel07-T5.3	Reidel	2007		0	8	8	8		82		82	92	105	105	121						
299-W10-096	A7186		Best Est.	Bjornstad08	Bjornstad	This Report			45	45	80	92	92		92										
299-W10-097	A7187		1	Wood01	Wood	2001		0	45	45	60		92		92										
299-W10-097	A7187		Best Est.	Bjornstad08	Bjornstad	This Report			45	45	60	92	92		92										
299-W10-098	A7188		1	Wood01	Wood	2001		0	45	45	55		90		90										
299-W10-098	A7188		Best Est.	Bjornstad08	Bjornstad	This Report			45	45	55	90	90		90										
299-W10-099	A7189		1	Wood01	Wood	2001		0	45	45	47		90		90										
299-W10-099	A7189		Best Est.	Bjornstad08	Bjornstad	This Report			45	45	47	90	90		90										
299-W10-101	A7191		1	Wood01	Wood	2001		0	38	38	38		81		81	88									
299-W10-101	A7191		Best Est.	Bjornstad08	Bjornstad	This Report			38	38	38	81	81		81	88									
299-W10-105	A7195		1	Wood01	Wood	2001		0	38	38	38		80		80	88									
299-W10-105	A7195		Best Est.	Bjornstad08	Bjornstad	This Report			38	38	38	80	80		80	88									
299-W10-106			1	Wood01	Wood	2001	Wood et al. 2001 include this well																	7/20/2009	Clarify that no records are available.
299-W10-107	A7197		1	Wood01	Wood	2001		0	38	38	40		81		81	92	110	110							
299-W10-107	A7197		Best Est.	Bjornstad08	Bjornstad	This Report			38	38	40	81	81		81	92	110	110							
299-W10-108			1	Wood01	Wood	2001																			
299-W10-109	A7199	123	1	Wood01	Wood	2001	Original drill depth was 92 ft, but it	0	38	38	38		80		80	90	105	105	122					7/20/2009	Clarify drill depth
299-W10-109	A7199	123	Best Est.	Bjornstad08	Bjornstad	This Report	Original drill depth was 92 ft, but it		39	39	39	81	81		81	91	106	106	123					7/20/2009	Clarify drill depth
299-W10-110			1	Wood01	Wood	2001	Wood et al. 2001 include this well																	7/20/2009	Clarify that no records are available.
299-W10-111	A7201		1	Wood01	Wood	2001		0	38	38	38		81		81	93	107	107							
299-W10-111	A7201		Best Est.	Bjornstad08	Bjornstad	This Report			39	39	39	82	82		82	94	108	108							
299-W10-112	A7202		1	Wood01	Wood	2001		0	38	38	40		85		85	99	110	110							
299-W10-112	A7202		Best Est.	Bjornstad08	Bjornstad	This Report			38	38	40	85	85		85	99	110	110							
299-W10-113	A7203		1	Wood01	Wood	2001		0	38	38	41		81		81	92	109	109	118						
299-W10-113	A7203		3	Serne04b	Serne	2004	From PNNL-14849, Figure 2.5.	0	38	38	41	81	81		81	87	106	106	115						
299-W10-113	A7203		Best Est.	Bjornstad08	Bjornstad	This Report			38	38	41	81	81		81	92	109	109	118						
299-W10-114			1	Wood01	Wood	2001	Wood et al. 2001 include this well																	7/20/2009	Clarify that no records are available.
299-W10-115			1	Wood01	Wood	2001	Wood et al. 2001 include this well																	7/20/2009	Clarify that no records are available.
299-W10-115			3. Best Est.	Serne04b	Serne	2004	From PNNL-14849, Figure 2.6.	0	48	48	48	81.5	81.5		81.5										
299-W10-116			1	Wood01	Wood	2001	Wood et al. 2001 include this well																	7/20/2009	Clarify that no records are available.
299-W10-117	A7207		1	Wood01	Wood	2001		0	38	38	43		83		83	90	103	103	122						
299-W10-117	A7207		Best Est.	Bjornstad08	Bjornstad	This Report			38	38	43	83	83		83	90	103	103	122						
299-W10-118			1	Wood01	Wood	2001	Wood et al. 2001 include this well																	7/20/2009	Clarify that no records are available.
299-W10-120	A7210		1	Wood01	Wood	2001		0	38	38	40		81		81	91	109	109	121						
299-W10-120	A7210		3	Serne04b	Serne	2004	From PNNL-14849, Figure 2.6.	0	38	38	40	81	81		81	91	109	109	121						
299-W10-120	A7210		Best Est.	Bjornstad08	Bjornstad	This Report			38	38	40	81	81		81	91	109	109	121						
299-W10-121	A7211		1	Wood01	Wood	2001		0	40	40	40		81		81	91	103	103	123						
299-W10-121	A7211		Best Est.	Bjornstad08	Bjornstad	This Report			40	40	40	81	81		81	91	103	103	123						
299-W10-122			1. Best Est.	Wood01	Wood	2001		0	40	40	40		82		82	90									
299-W10-124			1	Wood01	Wood	2001	Wood et al. 2001 include this well																	7/20/2009	Clarify that no records are available.
299-W10-125	A7215		1	Wood01	Wood	2001		0	40	40	58		82		82	92									
299-W10-125	A7215		Best Est.	Bjornstad08	Bjornstad	This Report			41	41	59	83	83		83	83									
299-W10-126			3. Best Est.	Serne04b	Serne	2004	From PNNL-14849, Figure 2.6.	0	46	46	46	82	82		82	92									
299-W10-127			3. Best Est.	Serne04b	Serne	2004	From PNNL-14849, Figure 2.6.	0	47	47	47	78	78		78	91									
299-W10-134	A7224		1	Wood01	Wood	2001		0	40	40	40		88		88	94									
299-W10-134	A7224		Best Est.	Bjornstad08	Bjornstad	This Report			40	40	40	88	88		88	94									
299-W10-135	A7225		1	Wood01	Wood	2001		0	40	40	40		88		88	94									
299-W10-135	A7225		Best Est.	Bjornstad08	Bjornstad	This Report			40	40	40	88	88		88	94									
299-W10-140			3. Best Est.	Serne04b	Serne	2004	From PNNL-14849, Figure 2.6.	0	38	38	38	85	85		85	93									

200 West Area			Data Source Information					Reported and/or Calculated Contact Depths (ft)																		
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299-W10-141	A7231		1	Wood01	Wood	2001		0	40	40	40		82		82	94	115	115	121						
299-W10-141	A7231		3	Serne04b	Serne	2004	From PNNL-14849, Figure 2.6.	0	40	40	40	82	82		82	94	115	115	121						
299-W10-141	A7231		Best Est.	Bjornstad08	Bjornstad	This Report			40	40	40	81	81		81	94	115	115	121						
299-W10-143	A7233		1	Wood01	Wood	2001		0	40	40	40		85		85	93									
299-W10-143	A7233		Best Est.	Bjornstad08	Bjornstad	This Report			40	40	40	85	85		85	93									
299-W10-146			3. Best Est.	Serne04b	Serne	2004	From PNNL-14849, Figure 2.5.	0	38	38	38	82	82		82	92									
299-W10-147	A7237		1	Wood01	Wood	2001		0	40	40	40		82		82	93									
299-W10-147	A7237		Best Est.	Bjornstad08	Bjornstad	This Report			40	40	40	82	82		82	93									
299-W10-148	A7238		1	Wood01	Wood	2001		0	37	37	37		84		84	91									
299-W10-148	A7238		3	Serne04b	Serne	2004	From PNNL-14849, Figure 2.5.	0	37	37	37	84	84		84	91									
299-W10-148	A7238		Best Est.	Bjornstad08	Bjornstad	This Report			38	38	38	85	85		85	92									
299-W10-161	A7245		1	Wood01	Wood	2001		0	45	45	56		85		85	100									
299-W10-161	A7245		Best Est.	Bjornstad08	Bjornstad	This Report			46	46	57	86	86		86	101									
299-W10-162			1	Wood01	Wood	2001	Wood et al. 2001 include this well																	7/20/2009	Clarify that no records are available.
299-W10-164			1	Wood01	Wood	2001	Wood et al. 2001 include this well																	7/20/2009	Clarify that no records are available.
299-W10-165			1	Wood01	Wood	2001	Wood et al. 2001 include this well																	7/20/2009	Clarify that no records are available.
299-W10-166			1	Wood01	Wood	2001	Wood et al. 2001 include this well																	7/20/2009	Clarify that no records are available.
299-W10-167			1	Wood01	Wood	2001	Wood et al. 2001 include this well																	7/20/2009	Clarify that no records are available.
299-W10-168			1	Wood01	Wood	2001	Wood et al. 2001 include this well																	7/20/2009	Clarify that no records are available.
299-W10-168			3. Best Est.	Serne04b	Serne	2004	From PNNL-14849, Figure 2.5.	0	40		40	75	75		75	92	109	109	122						
299-W10-196	A7274		1	Wood01	Wood	2001		0	8	8	8		82		82	92	105	105	121						
299-W10-196	A7274		2	Serne04b	Serne	2004		0	37	37	37	82	82		82	92	105	105	121						
299-W10-196	A7274		Best Est.	Bjornstad08	Bjornstad	This Report	Top of H2 unit removed and		37	37	37	82	82		82	92	104	104	122						
299-W11-002	A7276		2	Lindsey95	Lindsey	1995		0	5	5			111	111			148	148	148		423	440	513		
299-W11-002	A7276		1	Williams02	Williams	2002													175			438	513		
299-W11-002	A7276		3	Thorne06	Thorne	2006			0.0	0.0			107.9	107.9	107.9	122.0	145.0	145.0	145.0		419.9	437.0	505.9		
299-W11-002	A7276		Best Est.	Bjornstad08	Bjornstad	This Report	Changes based on Kyle Parkers		5	5	60	111	111	111	111	118	148	148	175		423	438	513		
299-W11-002	A7276		5	Thorne	Thorne	UP							108	108	108	122					420	437	506		
299-W11-003	A5473	330	4	Jeppson07	Jeppson	2007 UP		0	2	2	37		105		105		145		145		ETD			7/2/2009	New Record
299-W11-003	A5473	330	Best Est. 4	Thorne	Thorne	This Report		0	2	2	45		105		105	115			145		ETD			8/6/2009	New Record, Based on Paul Thorne's
299-W11-006	A4909	312	4	Jeppson07	Jeppson	2007 UP		0	5	5	119		150		150		150		150		ETD			7/2/2009	New Record
299-W11-006	A4909	312	Best Est. 4	Last09	Last	This Report	Reinterpreted from borehole	0	5	5	51		120		120	140	150	150	170		ETD			7/29/2009	New Record
299-W11-009	A4911	297	4	Jeppson07	Jeppson	2007 UP			0	0	50		110		110		145		145		ETD			7/2/2009	New Record
299-W11-009	A4911	297	Best Est. 4	Last09	Last	This Report	Reinterpreted from drill log,	NP	0	0	48		113		113	133	139	139	146		ETD			8/6/2009	New Record
299-W11-010	A4901		1	Last89	Last	1989							112		112	122	130	130	130						
299-W11-010	A4901		Best Est.	Last08	Last	This Report	Changes made based on Kyle				62		112		112	122	130	130	141						
299-W11-012	A4902		1	Wood01	Wood	2001		0	0	0	28		91		91	103	127	127	127						
299-W11-012	A4902		3	Reidel07-T5.3	Reidel	2007		0	0	0	28	91	91		91	103	127	127	127						
299-W11-012	A4902		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	28	91	91		91	103	127	127	127						
299-W11-023			1	Wood01	Wood	2001																			
299-W11-024	A4906		1	Wood01	Wood	2001		0	0	0	35		94		94	102	112	112	135						
299-W11-024	A4906		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	35	94	94		94	102	112	112	135						
299-W11-025E	C4669		3	Reidel07-T4.1	Reidel	2007		0		0	35	91		91	91	100		124	124		406			9/11/2008	Re-evaluated Reidel07 report, which
299-W11-025E	C4669		Best Est.	Bjornstad08	Bjornstad	This Report		0	4	4	35	91	91		91	98	124	124	132		409				
299-W11-026	A7287		2	Bjornstad84	Bjornstad	1984			0	0						110	130	130	141		413	430	505		
299-W11-026	A7287		1	Last89	Last	1989							90		90	110	130	130	141				505		
299-W11-026	A7287		2	Lindsey95	Lindsey	1995		0	0	0			101	101			127	127	138		409	426	500		
299-W11-026	A7287		1	Wood01	Wood	2001		0	0	0	65		100		100	105	142	142	142		413	430	504		
299-W11-026	A7287		1	Williams02	Williams	2002													141		412	430	504		
299-W11-026	A7287		3	Thorne06	Thorne	2006			0.0	0.0			82.0	82.0	82.0	101.0	128.9	128.9	136.8		408.8	425.9	501.0		
299-W11-026	A7287		3	Reidel07-T4.1	Reidel	2007		0		0	65	88		88	88	111		148	148		408	430	500	9/11/2008	Re-evaluated Reidel07 report, which
299-W11-026	A7287		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	65	100	100		100	105	142	142	142		413	430	504		
299-W11-026	A7287		5	Thorne	Thorne	UP							82	82	82	101					409	426	501		
299-W11-027	A4907		1	Wood01	Wood	2001		0	10	10	35		85		85	95	120	120	127						
299-W11-027	A4907		3	Reidel07-T5.3	Reidel	2007		0	10	10	35	85	85		85	95	120	120	127						
299-W11-027	A4907		Best Est.	Bjornstad08	Bjornstad	This Report			10	10	37	85	85		85	95	120	120	127						
299-W11-028	A4908		1	Wood01	Wood	2001		0	0	0	40		97		97	105	124	124	143						
299-W11-028	A4908		3	Reidel07-T5.3	Reidel	2007		0	0	0	40	97	97		97	105	124	124	143						
299-W11-028	A4908		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	40	97	97		97	105	124	124	143						
299-W11-039	C3117		1. Best Est.	Serne04b	Serne	2004	From PNNL-14849, Text	0	5	5	34		89.9		89.9	98	120	120	130						
299-W11-039	C3117		3	Reidel07-T4.1	Reidel	2007		0		5	34			88	88	100		135	135					9/11/2008	Re-evaluated Reidel07 report, which
299-W11-039	C3117		3	Reidel07-T5.3	Reidel	2007		0	5	5	34		88		88	100	119	119	135						

200 West Area			Data Source Information					Reported and/or Calculated Contact Depths (ft)																	
Well # (from HWIS)	Hanford Well ID (from HWIS)	Drill Depth (ft) (from HWIS)	Rank / Priority	Source	Principal Investigator	Date Published	Comments / Technical Basis	Holocene (Eolian or backfill?)	Top of Hanford formation	Top HF1	Top HF2	Top HF3	Top CCU	Top CCU (undif)	Top CCUz	Top CCUc	Top of Ringold Formation	Top Rtf	Top Rwie	Top Rwic	Top Rlm	Top Rwia	TOB	Date Last Changed	Reason Last Changed
299-W11-040	C3118		3. Best Est.	Reidel07-T5.3	Reidel	2007		0	3	3	32		88		88	103	118	118	134						
299-W11-041	C3119		3. Best Est.	Reidel07-T5.3	Reidel	2007		0	3	3	37		91		91	100	120	120	131						
299-W11-042	C3242		3. Best Est.	Reidel07-T5.3	Reidel	2007		0	3	3	39	93	93		93	100	116	116	126						
299-W11-043	C4694		3	Reidel07-T4.1	Reidel	2007		0		0	27	94		94	94	103		120	120		412	412		9/11/2008	Re-evaluated Reidel07 report, which
299-W11-043	C4695		4	Williams08	Williams	In Press							94		94	115	120	120			413	416			
299-W11-043	C4694		Best Est.	Last08	Last	This Report	Combination of Reidel07 and	0	0	0	27	94	94		94	115	120	120	159		413	416			
299-W11-045	C4948		2006																						
299-W11-047	C4990		2006																						
299-W11-048	C5243		3. Best Est.	Reidel07-T4.1	Reidel	2007		0		0	27	57	85	85	85	106		128	128		402			9/11/2008	Re-evaluated Reidel07 report, which
299-W11-086	C5101		3	Reidel07-T4.1	Reidel	2007		0	0	0	65	112	112	112	112	122	146	146	146		418	418	491		
299-W11-086	C5101		4	Williams08	Williams	In Press							113		113	122	125	125			430	432	491		
299-W11-086	C5101		Best Est.	Last08	Last	This Report	Combination of Reidel07 and	0	0	0	65	113	113		113	122	125	125	146		430	432	491	8/7/2009	Changed contact for H3 to reflect that it is
299-W11-087	C5407		Best Est.	Parker08	Parker	This Report	Depths are taken from the drill log,		1	1	70				112	124		128	150						
299-W11-088	C5572		4	Williams08	Williams	In Press							70		70	120	125	125			435	437	487		
299-W11-088	C5572		2	Sexton08	Sexton	2008	New Drilling Document	0	7				75	75			163		163			487	488		
299-W11-088	C5572		Best Est.	Horner08	Horner	This Report	Contact est. from evaluation of BH	0	7	7	52		70	70	70	120	135	135	163		435	437	487		
299-W12-001	A4912	314	4	Jeppson07	Jeppson	2007 UP		0	5	5	30		90		90		115		115		ETD			7/2/2009	New Record
299-W12-001	A4912	314	Best Est. 5	Last09	Last	This Report	Based on review of drill logs,	0	5	5	NP		38			38	58	58	114		ETD			8/6/2009	New Record
299-W13-001	C4238	3. Best Est.	New in 2004	Reidel07-T4.1	Reidel	2007		0	0	0	63	149	149	149	149	165	185	185	185		427	427	526		
299-W14-001	A4913		1	Wood01	Wood	2001		0	0	0	28		80		80	98	118	118	122						
299-W14-001	A4913		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	28	80	80		80	98	118	118	122						
299-W14-002	A7328		1	Wood01	Wood	2001		0	15	15	36		85		85	92	117	117	117						
299-W14-002	A7328		Best Est.	Bjornstad08	Bjornstad	This Report			15	15	36	85	85		85	92	117	117	117						
299-W14-003	A7329		1	Wood01	Wood	2001		0	0	0	28		78		78	95	113	113	118						
299-W14-003	A7329		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	28	78	78		78	95	113	113	118						
299-W14-004	A7330		1	Wood01	Wood	2001		0	0	0	40		72		72	92	115	115	115						
299-W14-004	A7330		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	40	72	72		72	92	115	115	115						
299-W14-005	A5475		2	Rohay94	Rohay	1994		0	12	12	26	77	77	77			117	117	117						
299-W14-005	A5475		3	Reidel07-T5.3	Reidel	2007		0	2	2	29	88	88		88	101	124	124	124						
299-W14-005	A5475		Best Est.	Last08	Last	This Report	See Last's unpublished electronic	0	10	10	29	80	80		80	99	127	127	127						
299-W14-006	A7331		2	Rohay94	Rohay	1994		0	17	17	53	99	99	99			122	122	122						
299-W14-006	A7331		1	Wood01	Wood	2001		0	0	0	29		88		88	103	116	116	116						
299-W14-006	A7331		3	Reidel07-T5.3	Reidel	2007		0	0	0	42		88		88	103	116	116	116						
299-W14-006	A7331		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	29	88	88		88	103	116	116	116						
299-W14-007	A5467		2	Bjornstad84	Bjornstad	1984			0	0						128	132	132	132		424	475	519		
299-W14-007	A5467		1	Last89	Last	1989							113		113	128	135	135	135		425	475	519		
299-W14-007	A5467		2	Rohay94	Rohay	1994		0	5	5	90	119	119	119			130	130	130		424	463	518		
299-W14-007	A5467		2	Lindsey95	Lindsey	1995		0	5	5			119	119			130	130	130		424	463	518		
299-W14-007	A5467		3	Thorne06	Thorne	2006			0.0	0.0			125.0	125.0	125.0	125.0	128.9	128.9	128.9		420.9	471.8	515.7		
299-W14-007	A5467	531	4	Jeppson07	Jeppson	2007 UP		0	20	20	45		65	65			130		130		424	457	519	7/2/2009	New Record
299-W14-007	A5467		Best Est.	Bjornstad08	Bjornstad	This Report			5	5	40	125	125		125	127	132	132	132		424	433	518		
299-W14-007	A5467		5	Last	Last	UP			5	5	40		125		125	127			130		420	457	518		
299-W14-007	A5467		5	Thorne	Thorne	UP										125					421	472	516		
299-W14-008E	A7333		2	Bjornstad84	Bjornstad	1984			0	0						178	184	184	184		438	459	536		
299-W14-008E	A7333		1	Last89	Last	1989							164		164	178	185	185	185				536		
299-W14-008E	A7333		2	Lindsey95	Lindsey	1995		0	0	0			167	167			175	175	175		440	457	536		
299-W14-008E	A7333		1	Williams02	Williams	2002													178		415		536		
299-W14-008E	A7333		3	Thorne06	Thorne	2006			0.0	0.0			151.9	151.9	151.9	166.7	182.7	182.7	182.7		436.7	443.9	532.8		
299-W14-008E	A7333		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	0	0	167	167		178	184	184	184		438	459	536		
299-W14-008E	A7333		5	Thorne	Thorne	UP							152	152	152	167					437	444	533		
299-W14-009	A4915		1	Williams02	Williams	2002													134		426	470	530		
299-W14-009	A4915		Best Est.	Bjornstad08	Bjornstad	This Report			8	8	44	117	117		117	124	132	132	135		427	471	531		
299-W14-009	A4915		4	Last	Last	UP			8	8	44		117		117	124	132	132	136		426	459	531		
299-W14-011	C4668		Best Est.	Bjornstad08	Bjornstad	This Report		0	12	12	36	93	93		93	97	124	124	126						
299-W14-012	A4914		1	Wood01	Wood	2001		0	5	5	34		94		94	102	126	126	126						
299-W14-012	A4914		3	Reidel07-T5.3	Reidel	2007		0	5	5	34	94	94		94	102	126	126	126						
299-W14-012	A4914		Best Est.	Bjornstad08	Bjornstad	This Report			5	5	34	94	94		94	102	126	126	126						
299-W14-013	B8549		1	Wood01	Wood	2001		0	5	5	33		89		89	98	112	112	125						
299-W14-013	B8549		3	Reidel07-T5.3	Reidel	2007		0	5	5	33		89		89	98	112	112	125						
299-W14-013	B8549		Best Est.	Bjornstad08	Bjornstad	This Report			5	5	33	89	89		89	98	112	112	125						
299-W14-014	B8547		1	Wood01	Wood	2001		0	0	0	33		93.5		93.5	108	110	110	123		402				
299-W14-014	B8547		1	Williams02	Williams	2002													122		402	438			

200 West Area		Data Source Information						Reported and/or Calculated Contact Depths (ft)																	
Well # (from HWIS)	Hanford Well ID (from HWIS)	Drill Depth (ft) (from HWIS)	Rank / Priority	Source	Principal Investigator	Date Published	Comments / Technical Basis	Holocene (Eolian or backfill?)	Top of Hanford formation	Top HF1	Top HF2	Top HF3	Top CCU	Top CCU (undif)	Top CCUz	Top CCUc	Top of Ringold Formation	Top Rtf	Top Rwie	Top Rwic	Top Rlm	Top Rwia	TOB	Date Last Changed	Reason Last Changed
299-W14-014	B8547		3	Serne04a	Serne	2004	from PNNL-14564, Figure 2.5	0	0	0	33		94		94	108	110	110	123						
299-W14-014	B8547		3	Reidel07-T4.1	Reidel	2007		0		0	33	94		94	94	108		123	123		402	438		9/11/2008	Re-evaluated Reidel07 report, which
299-W14-014	B8547		3	Reidel07-T5.3	Reidel	2007		0	0	0	33	94	94		94	108	110	110	123		402	438			
299-W14-014	B8547		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	33	94	94		94	108	110	110	123		402	438			
299-W14-015	C3114		3. Best Est.	Reidel07-T5.3	Reidel	2007		0	2	2	38		87		87	103	116	116	123						
299-W14-018	C3396		3. Best Est.	Reidel07-T5.3	Reidel	2007		0	2	2	30	86	86		86	93	109	109	122						
299-W14-071	C5102	4. Best Est.	New in 2006	Williams08	Williams	In Press							156		156	166	169	169			431	462.5			
299-W14-072	C5103	439.5	it. New in 2006	Williams08	Williams	In Press							132		132	138	141	141			434	439.5			
299-W14-072	C5103	439.5	4	Jeppson07	Jeppson	2007 UP		0	12	12	50		112	112			145		145		434	ETD		7/2/2009	New Record
299-W15-001	A7348		2	Rohay94	Rohay	1994		0	5	5	30	73	120	120			132	132	175						
299-W15-001	A7348		1	Wood01	Wood	2001		0	0	0	30		111		111	116	116	116	135						
299-W15-001	A7348		Best Est.	Bjornstad08	Bjornstad	This Report			5	5	30	73	111		111	116	116	116	135						
299-W15-001	A7348		4	Last	Last	UP			5	5	30	73	120		120		132	132	175						
299-W15-002	A5466		1, Best Est.	Last89	Last	1989							109		109	121	139	139	139						
299-W15-003	A4928		1	Wood01	Wood	2001		0	0	0	54		98		98	108	124	124	139						
299-W15-003	A4928		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	54		98		98	108	124	124	139						
299-W15-004	A4929		2	Rohay94	Rohay	1994		0	0	0	40	120	120	120			123	123	123						
299-W15-004	A4929		1	Wood01	Wood	2001		0	0	0	40		90		90	104	121	121	121						
299-W15-004	A4929		Best Est.	Bjornstad08	Bjornstad	This Report			1	1	41	91	91		91	105	122	122	122						
299-W15-005	A4930		1	Last89	Last	1989							110		110	120	145	145	145		430	480	525		
299-W15-005	A4930		2	Rohay94	Rohay	1994		0	17	17	59	120	120	120			137	137	137		427	481	527		
299-W15-005	A4930		2	Lindsey95	Lindsey	1995		0	18	18			121	121			138	138	138		428	482	528		
299-W15-005	A4930		1	Williams02	Williams	2002													136		427	480	525		
299-W15-005	A4930		1	Last06	Last	2006			29.9	29.9	59.7	91.9	111.9	111.9	111.9	121.7			134.8		429.8	483.0	525.0		
299-W15-005	A4930		3	Thorne06	Thorne	2006			0.0	0.0			107.0	107.0	107.0	118.1	137.1	137.1	137.1		421.9	441.9	522.0		
299-W15-005	A4930		3	Reidel07-T5.5	Reidel	2007		0	0	0	60		115	115	115	127	133	133	133		428	479	527		
299-W15-005	A4930		Best Est.	Bjornstad08	Bjornstad	This Report			17	17	59	112	112		112	122	138	138	138		428	482	528		
299-W15-005	A4930		5	Last	Last	UP			17	17	59		120		120				137		427	481	527		
299-W15-005	A4930		5	Last	Last	UP			30	30	60		112		112	122			135		430	483	525		
299-W15-005	A4930		5	Thorne	Thorne	UP							107		107	118					422	442	522		
299-W15-006	A7349		1	Last89	Last	1989							90		90	98	115	115	115						
299-W15-006	A7349		2	Rohay94	Rohay	1994		0	9	9	9	108	108	108			129	129	149						
299-W15-006	A7349		1	Last06	Last	2006			12.1	12.1	46.9	66.9	97.4	97.4	97.4	105.0	118.1	118.1	118.1						
299-W15-006	A7349		Best Est.	Bjornstad08	Bjornstad	This Report			9	9	32	100	100		100	105	107	107	120						
299-W15-006	A7349		5	Last	Last	UP			12	12	47		97		97	105			118						
299-W15-006	A7349		5	Last	Last	UP			9	9	32		100		100	105	107	107	145						
299-W15-007	A5476		2	Rohay94	Rohay	1994		0	5	5	55	105	105	105			124	124	124		124				
299-W15-007	A5476		1	Wood01	Wood	2001		0	5	5	50		102		102	110	110	110	124						
299-W15-007	A5476		Best Est.	Bjornstad08	Bjornstad	This Report			5	5	50	102	102		102	110	110	110	124						
299-W15-007	A5476		4	Last	Last	UP			5	5	55		105		105				124						
299-W15-008	A5468		1	Last06	Last	2006			22.6	22.6	52.5	82.0	105.0	105.0	105.0	113.2	120.1	120.1	120.1						
299-W15-008	A5468		Best Est.	Bjornstad08	Bjornstad	This Report			23	23	53	106	106		106	114	121	121	121						
299-W15-008	A5468		5	Last	Last	UP			24	24	52		106		106	116			125						
299-W15-008	A5468		5	Last	Last	UP			22	22	52		105		105	113	120	120	120						
299-W15-009	A5477		2	Rohay94	Rohay	1994		0	20	20	42	107	107	107			125	125	125						
299-W15-009	A5477		1	Last06	Last	2006			9.8	9.8	42.0	70.9	102.0	102.0	102.0	111.9	114.8	114.8	114.8						
299-W15-009	A5477		Best Est.	Bjornstad08	Bjornstad	This Report			11	11	43	103	103		103	113	116	116	116						
299-W15-009	A5477		5	Last	Last	UP			33	33	42		107		107	112	120	120	140						
299-W15-009	A5477		5	Last	Last	UP			33	33	42		107		107	112			120						
299-W15-009	A5477		5	Last	Last	UP			10	10	42		102		102	112	115	115	115						
299-W15-010	A4916		2	Rohay94	Rohay	1994		0	0	0	25	100	130	130			150	150	150						
299-W15-010	A4916		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	25	100	130		130				150						
299-W15-010	A4916		4	Last	Last	UP			0	0	25	100	130		130				150						
299-W15-011	A5474		2. Best Est.	Rohay94	Rohay	1994		0	0	0	25	75	127	127			147	147	147						
299-W15-012	A4917		1	Wood01	Wood	2001		-4	-4	-4	41		90		90	98	118	118	118						
299-W15-012	A4917		Best Est.	Bjornstad08	Bjornstad	This Report			-4	-4	41	90	90		90	98	118	118	118						
299-W15-013	A4918		1	Wood01	Wood	2001		0	0	0	60		93		93	98	120	120	133						
299-W15-013	A4918		Best Est.	Bjornstad08	Bjornstad	This Report			1	1	61	94	94		94	99	121	121	134						
299-W15-014	A7350		2	Bjornstad84	Bjornstad	1984			0	0						156	170	170	183		459	507	564		
299-W15-014	A7350		1	Last89	Last	1989							141		141	156	170	170	175		459	507	564		
299-W15-014	A7350		2	Rohay94	Rohay	1994		0	2	2	102	155	155	155			167	167	178		455	476	501		
299-W15-014	A7350		2	Lindsey95	Lindsey	1995		0	5	5			158	158			170	170	181		458	499	564		

200 West Area			Data Source Information					Reported and/or Calculated Contact Depths (ft)																		
Well # (from HWIS)	Hanford Well ID (from HWIS)	Drill Depth (ft) (from HWIS)	Rank / Priority	Source	Principal Investigator	Date Published	Comments / Technical Basis	Holocene (Eolian or backfill?)	Top of Hanford formation	Top HF1	Top HF2	Top HF3	Top CCU	Top CCU (undif)	Top CCUz	Top CCUc	Top of Ringold Formation	Top Rtf	Top Rwie	Top Rwic	Top Rlm	Top Rwia	TOB	Date Last Changed	Reason Last Changed
299-W15-014	A7350		3	Thorne06	Thorne	2006			0.0	0.0			159.8	159.8	159.8	159.8	172.9	172.9	183.7		454.7	503.9	563.0		
299-W15-014	A7350		Best Est.	Bjornstad08	Bjornstad	This Report			5	5	90					156	170	170	183		459	507	564	8/6/2009	Changed the top of HF2 to 90 ft and
299-W15-014	A7350		5	Thorne	Thorne	UP										160					455	504	563		
299-W15-015	A4919		1	Last89	Last	1989							139		139	153	174	174	174						
299-W15-015	A4919		3	Thorne06	Thorne	2006			0.0	0.0			136.8	136.8	136.8	147.0	171.9	171.9	171.9						
299-W15-015	A4919		Best Est.	Bjornstad08	Bjornstad	This Report							138		138	148									
299-W15-015	A4919		5	Thorne	Thorne	UP							137		137	147									
299-W15-016	A4920		1	Last89	Last	1989							132		132	140	159	159	177						
299-W15-016	A4920		2	Rohay94	Rohay	1994		0	10	10	35	75	140	140			165	165	175						
299-W15-016	A4920		3	Thorne06	Thorne	2006			0.0	0.0			131.9	131.9	131.9	136.8	156.8	156.8	166.7						
299-W15-016	A4920		Best Est.	Bjornstad08	Bjornstad	This Report			11	11	36	76	133		133	141	160	160	178						
299-W15-016	A4920		5	Last	Last	UP			10	10			132		132	140	159	159	177						
299-W15-016	A4920		5	Last	Last	UP			10	10	35	75	140		140		165	165	175						
299-W15-016	A4920		5	Thorne	Thorne	UP							132		132	137									
299-W15-017	A4921		1	Last89	Last	1989							137		137	144	160	160	176		442				
299-W15-017	A4921		2	Rohay94	Rohay	1994		0	0	0	33	81	136	136			171	171	176		436				
299-W15-017	A4921		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	33	81	136		136	144	160	160	176		442				
299-W15-017	A4921		5	Last	Last	UP			0	0	33	81	136		136	144	160	160	176		442				
299-W15-017	A4921		5	Last	Last	UP			-686	-686	-653	-605	-550		-550	-542	-526	-526	-510		-244				
299-W15-018	A4922		1	Last89	Last	1989							127		127	136	150	150	172						
299-W15-018	A4922		2	Rohay94	Rohay	1994		0	0	0	36	102	131	131			149	149	171						
299-W15-018	A4922		3	Thorne06	Thorne	2006			0.0	0.0			131.6	131.6	131.6	131.6	146.3	146.3	166.3						
299-W15-018	A4922		Best Est.	Bjornstad08	Bjornstad	This Report			10	10	36	102	131		131	136	149	149	171						
299-W15-018	A4922		5	Last	Last	UP			0	0	36	102	131		131	136	149	149	171						
299-W15-018	A4922		5	Last	Last	UP			10	10	36	102	131		131	136	149	149	171						
299-W15-018	A4922		5	Thorne	Thorne	UP										132									
299-W15-020	A4924		2	Rohay94	Rohay	1994		0	10	10	77	120	137	137			176	176	176						
299-W15-020	A4924		Best Est.	Bjornstad08	Bjornstad	This Report	H3 unit not present; H2 unit all the	0	10	10	77	137	137	137			176	176	176						
299-W15-022	A4925		1	Wood01	Wood	2001		0	0	0	47		102		102	110	120	120	126						
299-W15-022	A4925		1	Wood01	Wood	2001			0	0	47		102		102	110	120	120	126						
299-W15-022	A4925		3	Reidel07-T5.3	Reidel	2007		0	0	0	47	102	102		102	110	120	120	126						
299-W15-022	A7521		3	Reidel07-T5.3	Reidel	2007		3	3	3	50	105	14		14	113	123	123	129						
299-W15-022	A4925		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	47	102	102		102	110	120	120	126						
299-W15-023	A4926		2. Best Est.	Rohay94	Rohay	1994		0	16	16	97	151	151	151			177	177	177						
299-W15-032	B2423		1	Last06	Last	2006			13.8	13.8		70.9	105.3	105.3	105.3	111.9	119.8	119.8	119.8						
299-W15-032	B2423		Best Est.	Bjornstad08	Bjornstad	This Report	Bottom of gravel @ 56.5; possibly		15	15	56.5	106	106		106	113	121	121	121						
299-W15-032	B2423		5	Last	Last	UP			14	14	71		105		105	112			120						
299-W15-036	B2752		Best Est.	Bjornstad08	Bjornstad	This Report			33	33	74	97	97		97	110	123	123	123						
299-W15-036	B2752		5	Last	Last	UP			33	33	74		97		97	110			123						
299-W15-036	B2752		4	Jeppson07	Jeppson	2007 UP		0	33	33	74		97	97			123		123	ETD				7/2/2009	New Record
299-W15-038	B2754		1	Last06	Last	2006			29.2	29.2	51.2		96.1	96.1	96.1				112.2						
299-W15-038	B2754		Best Est.	Bjornstad08	Bjornstad	This Report	Top of Hanford fm H1 at, or near,		0	0	51	96	96		96				112						
299-W15-038	B2754		5	Last	Last	UP			29	29	51		96		96				112						
299-W15-039	B2755		1	Last06	Last	2006			-0.3	-0.3	42.7	66.9	106.0	106.0	106.0	110.9			115.8						
299-W15-039	B2755		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	43	106	106		106	111	116	116	116						
299-W15-039	B2755		5	Last	Last	UP			0	0	43		106		106	111			116						
299-W15-040	B8550		1	Wood01	Wood	2001		0	0	0	67		97		97	109	125	125	132						
299-W15-040	B8550		3	Serne04a	Serne	2004	from PNNL-14564, Figure 2.5	0			67	97	97		97		109	109	116						
299-W15-040	B8550		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	67	97	97		97	109	125	125	132						
299-W15-041	B8815		1	Wood01	Wood	2001		0	0	0	52		93		93	104	112	112	121						
299-W15-041	B8815		3	Serne04a	Serne	2004	from PNNL-14564, Figure 2.6	0	0	0	52	93	93		93	104	112	112	121						
299-W15-041	B8815		3	Reidel07-T5.3	Reidel	2007		0	0	0	52		93		93	104	112	112	121						
299-W15-041	B8815		Best Est.	Bjornstad08	Bjornstad	This Report			1	1	53	94	94		94	105	113	113	122						
299-W15-042	C3803		1	Last06	Last	2006			20.0	20.0	50.5		108.6	108.6	108.6	116.5			122.7						
299-W15-042	C3803		Best Est.	Bjornstad08	Bjornstad	This Report			9	9	47	117	117		117	123	131	131	162						
299-W15-042	C3803		5	Last	Last	UP			9	9	47		117		117	123	131	131	162						
299-W15-046	C3426	525	Best Est.	Last06	Last	2006	Elevations taken from logplot in	0.0	20.0	20.0	50.5	NP	108.5		108.5	116.5	122.5		122.5		417.1	473.1	521.7	7/2/2009	New record.
299-W15-047	C4148		1	Last06	Last	2006																			
299-W15-048	C3427	1. Best. Est.	New in 2006	Last06	Last	2006	This is a slant borehole, 30		13.5	13.5	40.4		103.7	103.7	103.7	110.9								7/2/2009	Add comment on slant hole
299-W15-049	C4301		3. Best Est.	Reidel07-T4.1	Reidel	2007		0	0	0	29	64	80	80	80	80	161	161	167		435				
299-W15-067	A7368		1. Best Est.	Wood01	Wood	2001		0	49	49	49		97		97	105	125	125	125						
299-W15-069	A7370		1	Wood01	Wood	2001		0	49	49	53		103		103	110	127	127	127						

200 West Area			Data Source Information					Reported and/or Calculated Contact Depths (ft)																			
Well # (from HWIS)	Hanford Well ID (from HWIS)	Drill Depth (ft) (from HWIS)	Rank / Priority	Source	Principal Investigator	Date Published	Comments / Technical Basis	Holocene (Eolian or backfill?)	Top of Hanford formation	Top HF1	Top HF2	Top HF3	Top CCU	Top CCU (undif)	Top CCUz	Top CCUc	Top of Ringold Formation	Top Rtf	Top Rwie	Top Rwic	Top Rlm	Top Rwia	TOB	Date Last Changed	Reason Last Changed
299-W15-069	A7370		Best Est.	Bjornstad08	Bjornstad	This Report			49	49	53	103	103		103	110	127	127	127						
299-W15-070	A7371		1	Wood01	Wood	2001		0	49	49	49		104		104	108	122	122	122						
299-W15-070	A7371		Best Est.	Bjornstad08	Bjornstad	This Report			49	49	49	104	104		104	108	122	122	122						
299-W15-071	A7372		1	Wood01	Wood	2001		0	49	49	49		103		103	112	132	132	132						
299-W15-071	A7372		3	Serne04a	Serne	2004	from PNNL-14564, Figure 2.5	0	49	49	49		103		103	112	132	132	132						
299-W15-071	A7372		3	Reidel07-T5.3	Reidel	2007		0	49	49	49		103		103	112	132	132	132						
299-W15-071	A7372		Best Est.	Bjornstad08	Bjornstad	This Report			49	49	49	103	103		103	112	132	132	132						
299-W15-072	A7373		1	Wood01	Wood	2001		0	52	52	58		96		96	108	130	130	130						
299-W15-072	A7373		Best Est.	Bjornstad08	Bjornstad	This Report			52	52	58	96	96		96	108	130	130	130						
299-W15-073	A7374		1	Wood01	Wood	2001		0	49	49	53		102		102	111	126	126	126						
299-W15-073	A7374		Best Est.	Bjornstad08	Bjornstad	This Report			49	49	53	102	102		102	111	126	126	126						
299-W15-075	A7376		1	Wood01	Wood	2001		0	30	30	49		100		100	108	131	131	131						
299-W15-075	A7376		3	Serne04a	Serne	2004	from PNNL-14564, Figure 2.6	0			49		100		100	108	131	131	131						
299-W15-075	A7376		3	Reidel07-T5.3	Reidel	2007		0	30	30	49		100		100	108	131	131	131						
299-W15-075	A7376		Best Est.	Bjornstad08	Bjornstad	This Report			30	30	49	100	100		100	108	131	131	131						
299-W15-079	A7380		1	Wood01	Wood	2001		0	45	45	45		92		92	108	128	128	138						
299-W15-079	A7380		Best Est.	Bjornstad08	Bjornstad	This Report			46	46	46	93	93		93	109	129	129	139						
299-W15-082	A7383		1	Last06	Last	2006			13.8	13.8	37.1	71.2													
299-W15-082	A7383		Best Est.	Bjornstad08	Bjornstad	This Report			14	14	37														
299-W15-082	A7383		5	Last	Last	UP			14	14	37														
299-W15-082	A7383		5	Last	Last	UP			14	14	37														
299-W15-084	A7384		1	Last06	Last	2006			19.0	19.0	48.9	86.0	113.5	113.5	113.5	121.1	127.3	127.3	127.3						
299-W15-084	A7384		Best Est.	Bjornstad08	Bjornstad	This Report			19	19	49	114	114		114	121	128	128	128						
299-W15-084	A7384		5	Last	Last	UP			20	20	49		114		114	121			123						
299-W15-084	A7384		5	Last	Last	UP			19	19	49		114		114	121			128						
299-W15-085	A7385		1	Last06	Last	2006			14.1	14.1	43.0	85.0	85.0	85.0											
299-W15-085	A7385		Best Est.	Bjornstad08	Bjornstad	This Report			14	14	43														
299-W15-085	A7385		5	Last	Last	UP			14	14	43														
299-W15-086	A7386		1	Last06	Last	2006			16.4	16.4	44.9	75.1	105.0	105.0	105.0	117.1	121.1	121.1							
299-W15-086	A7386		Best Est.	Bjornstad08	Bjornstad	This Report			17	17	45	105	105		105	117	121	121	121						
299-W15-086	A7386		5	Last	Last	UP			10	10	46		102		102	117			122						
299-W15-086	A7386		5	Last	Last	UP			17	17	45		105		105	117			121						
299-W15-095	A7394		1	Last06	Last	2006			10.5	10.5	37.1	69.9	105.0	105.0	105.0	111.9	116.1	116.1	116.1						
299-W15-095	A7394		Best Est.	Bjornstad08	Bjornstad	This Report			11	11	37	105	105		105	112	116	116	116						
299-W15-095	A7394		5	Last	Last	UP			11	11	37		105		105	112			116						
299-W15-101	A7400		1	Last06	Last	2006			13.8	13.8	42.3														
299-W15-101	A7400		Best Est.	Bjornstad08	Bjornstad	This Report			17	17	44														
299-W15-101	A7400		5	Last	Last	UP			14	14	42														
299-W15-101	A7400		5	Last	Last	UP			16	16	43														
299-W15-102	A7401		1	Last06	Last	2006			14.8	14.8		79.7	119.8	119.8	119.8	129.9			131.9						
299-W15-102	A7401		Best Est.	Bjornstad08	Bjornstad	This Report			15	15	80	120	120		120	130	132	132	132						
299-W15-102	A7401		5	Last	Last	UP			15	15	80		120		120	130			132						
299-W15-126	A7425		1	Wood01	Wood	2001		0	45	45	55														
299-W15-126	A7425		3	Serne04a	Serne	2004	from PNNL-14564, Figure 2.5	0	50	50	55														
299-W15-126	A7425		3	Reidel07-T5.3	Reidel	2007		0	45	45	55														
299-W15-126	A7425		Best Est.	Bjornstad08	Bjornstad	This Report			46	46	56														
299-W15-127	A7426		1	Wood01	Wood	2001		0	49	49	55														
299-W15-127	A7426		Best Est.	Bjornstad08	Bjornstad	This Report			49	49	55														
299-W15-128	A7427		1	Wood01	Wood	2001		0	49	49	53														
299-W15-128	A7427		3	Serne04a	Serne	2004	from PNNL-14564, Figure 2.6	0	49	49	53	95	95		95										
299-W15-128	A7427		3	Reidel07-T5.3	Reidel	2007		0	49	49	53														
299-W15-128	A7427		Best Est.	Bjornstad08	Bjornstad	This Report			49	49	53														
299-W15-131	A7430		1	Wood01	Wood	2001		0	49	49	49														
299-W15-131	A7430		Best Est.	Bjornstad08	Bjornstad	This Report			49	49	49														
299-W15-133	A7432		1	Wood01	Wood	2001		0	49	49	55														
299-W15-133	A7432		Best Est.	Bjornstad08	Bjornstad	This Report			49	49	55														
299-W15-134	A7433		1	Wood01	Wood	2001		0	49	49	49														
299-W15-134	A7433		3	Serne04a	Serne	2004	from PNNL-14564, Figure 2.6	0	49	49	49														
299-W15-134	A7433		3	Reidel07-T5.3	Reidel	2007		0	49	49	49														
299-W15-134	A7433		Best Est.	Bjornstad08	Bjornstad	This Report			49	49	49														
299-W15-152	C4685		4. Best Est.	Williams08	Williams	In Press							130		130	140	148	148							
299-W15-155	A7453		1	Wood01	Wood	2001		0	49	49	49		102		102										

200 West Area			Data Source Information					Reported and/or Calculated Contact Depths (ft)																			
Well # (from HWIS)	Hanford Well ID (from HWIS)	Drill Depth (ft) (from HWIS)	Rank / Priority	Source	Principal Investigator	Date Published	Comments / Technical Basis	Holocene (Eolian or backfill?)	Top of Hanford formation	Top HF1	Top HF2	Top HF3	Top CCU	Top CCU (undif)	Top CCUz	Top CCUc	Top of Ringold Formation	Top Rtf	Top Rwie	Top Rwic	Top Rlm	Top Rwia	TOB	Date Last Changed	Reason Last Changed
299-W15-155	A7453		Best Est.	Bjornstad08	Bjornstad	This Report			50	50	50	103	103		103										
299-W15-159	A7457		1	Wood01	Wood	2001		0	49	49	49		96		96										
299-W15-159	A7457		3	Serne04a	Serne	2004	from PNNL-14564, Figure 2.6	0	50	50	50	96	96		96										
299-W15-159	A7457		Best Est.	Bjornstad08	Bjornstad	This Report			49	49	49	96	96		96										
299-W15-160	A7458		1	Wood01	Wood	2001		0	50	50	50		90		90										
299-W15-160	A7458		Best Est.	Bjornstad08	Bjornstad	This Report			50	50	50	90	90		90										
299-W15-161	A7459		1	Wood01	Wood	2001		0	49	49	49		90		90										
299-W15-161	A7459		Best Est.	Bjornstad08	Bjornstad	This Report			49	49	49	90	90		90										
299-W15-162	A7460		1	Wood01	Wood	2001		0	49	49	49		90		90										
299-W15-162	A7460		Best Est.	Bjornstad08	Bjornstad	This Report			49	49	49	90	90		90										
299-W15-163	A7461		1	Wood01	Wood	2001		0	50	50	55		90		90										
299-W15-163	A7461		Best Est.	Bjornstad08	Bjornstad	This Report			51	51	56	91	91		91										
299-W15-164	A7462		1	Wood01	Wood	2001		0	49	49	65		95		95										
299-W15-164	A7462		Best Est.	Bjornstad08	Bjornstad	This Report			50	50	66	96	96		96										
299-W15-166	A7464		1	Wood01	Wood	2001		0	49	49	53		100		100	110									
299-W15-166	A7464		3	Serne04a	Serne	2004	from PNNL-14564, Figure 2.5	0	49	49	53	100	100		100	110									
299-W15-166	A7464		3	Reidel07-T5.3	Reidel	2007		0	49	49	53		100		100	110									
299-W15-166	A7464		Best Est.	Bjornstad08	Bjornstad	This Report			50	50	54	101	101		101	111									
299-W15-167	A7465		1	Wood01	Wood	2001		0	49	49	55		100		100	110									
299-W15-167	A7465		Best Est.	Bjornstad08	Bjornstad	This Report			49	49	55	100	100		100	110									
299-W15-171	A7469		1	Wood01	Wood	2001		0	49	49	49		100		100	108									
299-W15-171	A7469		Best Est.	Bjornstad08	Bjornstad	This Report			49	49	49	100	100		100	108									
299-W15-177	A7475		1	Wood01	Wood	2001		0	49	49	65		98		98	105									
299-W15-177	A7475		Best Est.	Bjornstad08	Bjornstad	This Report			49	49	65	98	98		98	105									
299-W15-178	A7476		1	Wood01	Wood	2001		0	49	49	60		96		96	105									
299-W15-178	A7476		Best Est.	Bjornstad08	Bjornstad	This Report			50	50	61	97	97		97	106									
299-W15-180	A7478		1	Wood01	Wood	2001		0	49	49	58														
299-W15-180	A7478		Best Est.	Bjornstad08	Bjornstad	This Report			49	49	58														
299-W15-184	A7482		1	Wood01	Wood	2001		0	45	45	45		92		92										
299-W15-184	A7482		Best Est.	Bjornstad08	Bjornstad	This Report			45	45	45	92	92		92										
299-W15-202	A7500		1	Last06	Last	2006			13.8	13.8	69.9	81.0	111.9	111.9	111.9	117.5			127.0						
299-W15-202	A7500		Best Est.	Bjornstad08	Bjornstad	This Report			14	14	70	112	112		112	118	127	127	127						
299-W15-202	A7500		5	Last	Last	UP			14	14	70	112	112		112	118	127	127	127						
299-W15-203	A7501		Best Est.	Bjornstad08	Bjornstad	This Report			16	16															
299-W15-203	A7501		4	Last	Last	UP			16	16															
299-W15-208	A7506		Best Est.	Bjornstad08	Bjornstad	This Report			10	10															
299-W15-208	A7506		4	Last	Last	UP			10	10															
299-W15-216	A7514		2	Rohay94	Rohay	1994		0	14	14	46	109	109	109			120	120	120						
299-W15-216	A7514		1	Last06	Last	2006			13.8	13.8	45.9	73.8	108.3	108.3	108.3	114.5	120.1	120.1	120.1						
299-W15-216	A7514		Best Est.	Bjornstad08	Bjornstad	This Report			14	14	46	108	108		108	114	120	120	120						
299-W15-216	A7514		5	Last	Last	UP			14	14	46	108	108		108	114	120	120	120						
299-W15-217	A7515		2	Rohay94	Rohay	1994		0	18	18	53	114	114	114											
299-W15-217	A7515		1	Last06	Last	2006			17.7	17.7	52.5	76.8	112.9	112.9	112.9	120.4									
299-W15-217	A7515		Best Est.	Bjornstad08	Bjornstad	This Report			18	18	52	113	113		113	120									
299-W15-217	A7515		5	Last	Last	UP			18	18	52	113	113		113	120									
299-W15-218	A7516		2	Rohay94	Rohay	1994		0	14	14	55	107	107	107			120	120	120						
299-W15-218	A7516		1	Last06	Last	2006			17.7	17.7	52.5	80.7	107.0	107.0	107.0	114.8	119.8	119.8	119.8						
299-W15-218	A7516		Best Est.	Bjornstad08	Bjornstad	This Report			18	18	52	107	107		107	115	120	120	120						
299-W15-218	A7516		5	Last	Last	UP			14	14	55	107	107		107	115	120	120	120						
299-W15-218	A7516		5	Last	Last	UP			18	18	52	107	107		107	115	120	120	120						
299-W15-219	A7517		2	Rohay94	Rohay	1994		0	13	13	45	114	114	114			121	121	121						
299-W15-219	A7517		1	Last06	Last	2006			12.8	12.8	44.3	78.7	109.9	109.9	109.9	119.4	122.4	122.4	122.4						
299-W15-219	A7517		Best Est.	Bjornstad08	Bjornstad	This Report			13	13	44	110	110		110	118	121	121	121						
299-W15-219	A7517		5	Last	Last	UP			13	13	44	111	111		111	119	121	121	121						
299-W15-219	A7517		5	Last	Last	UP			13	13	44	110	110		110	119	122	122	122						
299-W15-220	A7518		2	Rohay94	Rohay	1994		0	10	10	44	3	3	3			114	114	114						
299-W15-220	A7518		1	Last06	Last	2006			9.8	9.8	44.0	70.9	103.0	103.0	103.0	108.9	111.6	111.6	111.6						
299-W15-220	A7518		Best Est.	Bjornstad08	Bjornstad	This Report	H3 unit not present; H2 unit all the		10	10	43	103	103		103	109	113	113	113						
299-W15-220	A7518		5	Last	Last	UP			10	10	44	103	103		103	109	113	113	113						
299-W15-223	A7521		2	Rohay94	Rohay	1994	This is a slant borehole, 45	0	20	20	52	110	110	110										7/2/2009	Add comment on slant hole
299-W15-223	A7521		1	Last06	Last	2006	This is a slant borehole, 45		19.4	19.4	51.5	77.8	109.6	109.6	109.6	118.4								7/2/2009	Add comment on slant hole
299-W15-223	A7521		Best Est.	Bjornstad08	Bjornstad	This Report	This is a slant borehole, 45		19	19	51	109	109		109	118								7/2/2009	Add comment on slant hole

200 West Area		Data Source Information						Reported and/or Calculated Contact Depths (ft)																	
Well # (from HWIS)	Hanford Well ID (from HWIS)	Drill Depth (ft) (from HWIS)	Rank / Priority	Source	Principal Investigator	Date Published	Comments / Technical Basis	Holocene (Eolian or backfill?)	Top of Hanford formation	Top HF1	Top HF2	Top HF3	Top CCU	Top CCU (undif)	Top CCUz	Top CCUc	Top of Ringold Formation	Top Rtf	Top Rwie	Top Rwic	Top Rlm	Top Rwia	TOB	Date Last Changed	Reason Last Changed
299-W15-223	A7521		5	Last	Last	UP	This is a slant borehole, 45		19	19	51	109	109		109	118								7/2/2009	Add comment on slant hole
299-W15-765	C3397		3. Best Est.	Reidel07-T5.3	Reidel	2007		0	2	2	40		89		89	95	109	109	125.4						
299-W17-001	C4237		3. Best Est.	Reidel07-T4.1	Reidel	2007		0	0	0	55	100	100	100	100	115	130	130	130						
299-W18-001	A5481		1	Last89	Last	1989							120		120	125	150	150	170						
299-W18-001	A5481		2	Rohay94	Rohay	1994		0	0	0	40	100	119	119			146	146	166						
299-W18-001	A5481		1	Williams02	Williams	2002													170						
299-W18-001	A5481		Best Est.	Last	Last	This Report	Combination of the Last89, Rohay	0	5	0	45	104	125		125	133	146	146	167						
299-W18-006	A7523		2	Rohay94	Rohay	1994	W18-6 and -7 logs switched, see	0	0	0	65	90	121	121			142	142	142						
299-W18-006	A7523		1. Best Est.	Last06	Last	2006			13.8	13.8	55.8	88.9	123.7	123.7	123.7	128.9	149.0	149.0	149.0						
299-W18-006	A7523		4	Bjornstad08	Bjornstad	This Report			15	15	50	90	133		133	146	154	154	155						
299-W18-006	A7523		5	Last	Last	UP			15	15	50	90	133		133	146	154	154	155						
299-W18-006	A7523		5	Last	Last	UP			0	0	50	90	121		121				142						
299-W18-007	A7524		2	Rohay94	Rohay	1994	W18-6 and -7 logs switched, see	0	0	0	55	87	122	122			138	138	138						
299-W18-007	A7524		1. Best Est.	Last06	Last	2006			14.1	14.1	49.2	89.2	133.2	133.2	133.2	145.0	155.2	155.2	155.2						
299-W18-007	A7524		4	Bjornstad08	Bjornstad	This Report			15	15	56	90	122		122	130	145	145	145						
299-W18-007	A7524		5	Last	Last	UP			0	0	57	90	124		124	133	138	138	138						
299-W18-007	A7524		5	Last	Last	UP			15	15	56	90	122		122	130	145	145	145						
299-W18-009	A7526		2	Rohay94	Rohay	1994		0	0	0	57	106	131	131			157	157	157						
299-W18-009	A7526		1. Best Est.	Last06	Last	2006			0.0	0.0	57.7	107.0	132.6	132.6	132.6	146.0	157.8	157.8	170.0						
299-W18-010	A4931		2	Rohay94	Rohay	1994		0	0	0	59	99	134	134			159	159	159						
299-W18-010	A4931		1. Best Est.	Last06	Last	2006			8.2	8.2	60.0	100.1	135.2	135.2	135.2	145.0	160.1	160.1	160.1						
299-W18-011	A7527		2	Rohay94	Rohay	1994		0	0	0	54	109	134	134			159	159	159						
299-W18-011	A7527		1. Best Est.	Last06	Last	2006			15.1	15.1	60.0	109.3	132.2	132.2	132.2	148.3	155.2	155.2	160.1						
299-W18-015	A4932		1	Last89	Last	1989							120		120	140	165	165	165						
299-W18-015	A4932		2. Best Est.	Rohay94	Rohay	1994		0	0	0	35	110	119	119			162	162	162						
299-W18-016	C4303	1. Best Est. New in 2004		Last06	Last	2006			18.0	18.0	54.1	83.0	124.0	124.0	124.0	139.1	149.0	149.0	149.0						
299-W18-016	C4303		3	Reidel07-T4.1	Reidel	2007		0		0	50	95		95	95	140		150	150					9/11/2008	Re-evaluated Reidel07 report, which
299-W18-017	A5479		Best Est.	Bjornstad08	Bjornstad	This Report							118		118										
299-W18-017	A5479		5	Last	Last	UP							118		118										
299-W18-018			2. Best Est.	Rohay94	Rohay	1994		0	0	0	72	130	130	130			145	145	145						
299-W18-019	A7532		2	Rohay94	Rohay	1994		0	7	7	41	92	102	102			141	141	141						
299-W18-019	A7532		3. Best Est.	Reidel07-T5.5	Reidel	2007		0	0	0	46		125	125	139	139	139	139	139						
299-W18-020			2. Best Est.	Rohay94	Rohay	1994		0	5	5	32	71	108	108			131	131	131						
299-W18-021	A4933		1	Last89	Last	1989							119		119	139	153	153	153						
299-W18-021	A4933		3	Thorne06	Thorne	2006			0.0	0.0			116.5	116.5	116.5	131.2	141.4	141.4	141.4						
299-W18-021	A4933		Best Est.	Bjornstad08	Bjornstad	This Report							117		117	132									
299-W18-021	A4933		5	Thorne	Thorne	UP							117		117	132									
299-W18-022	A4934		1	Last89	Last	1989							120		120	140	153	153	153		445				
299-W18-022	A4934		2	Rohay94	Rohay	1994		0	0	0	75	130	130	130			145	145	145		385				
299-W18-022	A4934		2	Lindsey95	Lindsey	1995		0	0	0			130	130			145	145	145		385				
299-W18-022	A4934		1	Williams02	Williams	2002													150		444				
299-W18-022	A4934		3	Thorne06	Thorne	2006			0.0	0.0			116.5	116.5	116.5	136.5	146.3	146.3	146.3		443.2				
299-W18-022	A4934		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	116	116	116		116	136	150	150	150		444				
299-W18-022	A4934		5	Thorne	Thorne	UP							116		116	136					443				
299-W18-023	A4935		1	Last89	Last	1989							144		144	159	179	179	179						
299-W18-023	A4935		2	Rohay94	Rohay	1994		0	0	0	105	145	145	145			180	180	180						
299-W18-023	A4935		3	Thorne06	Thorne	2006			0.0	0.0			157.5	157.5	157.5	166.7	177.5	177.5	177.5						
299-W18-023	A4935		Best Est.	Bjornstad08	Bjornstad	This Report							158		158	167									
299-W18-023	A4935		5	Thorne	Thorne	UP							158		158	167									
299-W18-024	A4936		1	Last89	Last	1989							130		130	139	158	158	172						
299-W18-024	A4936		2	Rohay94	Rohay	1994		0	0	0	80	111	130	130			155	155	165						
299-W18-024	A4936		1	Last06	Last	2006			16.7	16.7	69.9	111.9	131.9	131.9	131.9	149.0			129.3						
299-W18-024	A4936		3	Thorne06	Thorne	2006			0.0	0.0			132.2	132.2	132.2	137.1	157.2	157.2	172.2						
299-W18-024	A4936		Best Est.	Bjornstad08	Bjornstad	This Report							132		132	137									
299-W18-024	A4936		5	Thorne	Thorne	UP							132		132	137									
299-W18-026			2. Best Est.	Rohay94	Rohay	1994		0	0	0	106	148	148	148			176	176	186						
299-W18-027			2. Best Est.	Rohay94	Rohay	1994		0	0	0	101	141	141	141			156	156	156						
299-W18-028			2. Best Est.	Rohay94	Rohay	1994		0	0	0	72	137	137	137			155	155	155						
299-W18-029			2	Rohay94	Rohay	1994		0	8	8	101	128	128	128			148	148	148						
299-W18-029			Best Est.	Bjornstad08	Bjornstad	This Report	Top of sand (H2 unit) at 47'	0	8	8	47	128	128	128			148	148	148						
299-W18-030	A4942		2	Rohay94	Rohay	1994		0	0	0	60	123	123	123			140	140	140						
299-W18-030	A4942		3. Best Est.	Reidel07-T5.5	Reidel	2007		0	0	0	46		115	115	115	124	131	131	131						

200 West Area			Data Source Information					Reported and/or Calculated Contact Depths (ft)																		
Well # (from HWIS)	Hanford Well ID (from HWIS)	Drill Depth (ft) (from HWIS)	Rank / Priority	Source	Principal Investigator	Date Published	Comments / Technical Basis	Holocene (Eolian or backfill?)	Top of Hanford formation	Top HF1	Top HF2	Top HF3	Top CCU	Top CCU (undif)	Top CCUz	Top CCUc	Top of Ringold Formation	Top Rtf	Top Rwie	Top Rwic	Top Rlm	Top Rwia	TOB	Date Last Changed	Reason Last Changed
299-W18-031	A4943		2	Rohay94	Rohay	1994		0	0	0	25	118	118	118			140	140	140						
299-W18-031	A4943		3. Best Est.	Reidel07-T5.5	Reidel	2007		0	0	0	21		113	113	113	126	130	130	130						
299-W18-032	A5441		2. Best Est.	Rohay94	Rohay	1994		0	0	0	42	97	118	118			151	151	151						
299-W18-033	A5450		2. Best Est.	Rohay94	Rohay	1994		0	7	7	57	125	125	125			152	152	152						
299-W18-056	A7539		1. Best Est.	Last06	Last	2006			10	10.2	44.0	94.2	119.1		119.1	130.3	145.0	145.0	145.0						
299-W18-057	A7540		1. Best Est.	Last06	Last	2006			9	9.2	44.0	89.2	119.1		119.1	134.2	144.0	144.0	149.3						
299-W18-058	A7541		1. Best Est.	Last06	Last	2006			9	9.2	49.2	101.1	124.0		124.0	134.2	149.0	149.0	149.0						
299-W18-059	A7542		1. Best Est.	Last06	Last	2006			4	3.9	43.0	95.8	114.8		114.8	134.8	144.0	144.0	144.0						
299-W18-060	A7543		1. Best Est.	Last06	Last	2006			20	20.0	44.0	79.1	122.1		122.1	129.3	142.1	142.1							
299-W18-061	A7544		1	Last06	Last	2006			19.1	19.1	47.0	82.1	122.1	122.1	122.1	133.9			139.1						
299-W18-061	A7544		Best Est.	Bjornstad08	Bjornstad	This Report			15	15	50	80	118		118	130	136	136	136						
299-W18-061	A7544		5	Last	Last	UP			15	15	50	80	118		118	130	136	136	136						
299-W18-062	A7545		1. Best Est.	Last06	Last	2006			19.2	19.2	47.0	77.2	122.2	122.2	122.2	134.0	142.2	142.2							
299-W18-063	A7546		1. Best Est.	Last06	Last	2006			17.092	17.1	51.9	82.0	122.1	122.1	122.1	132.9			147.0						
299-W18-064	A7547		1. Best Est.	Last06	Last	2006			17.1	17.1	49.9	87.0	124.1	124.1	124.1	133.9	139.1	139.1							
299-W18-065	A7548		1	Last06	Last	2006			17.0612	17.1	46.9	82.0	122.1	122.1	122.1	127.0			136.8						
299-W18-065	A7548		Best Est.	Bjornstad08	Bjornstad	This Report			16	16	50	86	116		116	132	135	135	135						
299-W18-065	A7548		5	Last	Last	UP			15	15	49	85	115		115	131	134	134	134						
299-W18-066	A7549		1. Best Est.	Last06	Last	2006			6	6.0	44.0	93.9	125.1	125.1	125.1	125.1			138.2						
299-W18-076	A7559		1. Best Est.	Last06	Last	2006			10.8	10.8															
299-W18-077	A7560		1. Best Est.	Last06	Last	2006			9.2	9.2															
299-W18-078	A7561		1. Best Est.	Last06	Last	2006			11.8	11.8															
299-W18-079	A7562		1. Best Est.	Last06	Last	2006			9.7	9.7															
299-W18-080	A7563		1. Best Est.	Last06	Last	2006			9.843	9.8															
299-W18-081	A7564		1. Best Est.	Last06	Last	2006			9.843	9.8															
299-W18-082	A7565		1. Best Est.	Last06	Last	2006			1.6405	1.6	46.9	109.9	132.9	132.9	132.9										
299-W18-085	A7568		2	Rohay94	Rohay	1994		0	4	4	52	101	149	149											
299-W18-085	A7568		1. Best Est.	Last06	Last	2006			4.9215	4.9	50.9	102.4	129.9	129.9	129.9	142.4									
299-W18-086	A7569		2	Rohay94	Rohay	1994		0			58	103	138	138											
299-W18-086	A7569		1. Best Est.	Last06	Last	2006			4.9215	4.9	60.0	104.0	134.8	134.8	134.8	144.0									
299-W18-087	A7570		1. Best Est.	Last06	Last	2006			4.9215	4.9	59.1	94.2	124.0	124.0	124.0	149.0									
299-W18-088	A7571		1	Last06	Last	2006			12.8	12.8	48.9	81.7	125.7	125.7	125.7	137.8									
299-W18-088	A7571		Best Est.	Bjornstad08	Bjornstad	This Report			15	15	50	83	126		126	138									
299-W18-088	A7571		5	Last	Last	UP			0	0	49	83	126		126	138									
299-W18-088	A7571		5	Last	Last	UP			15	15	50		130		130	139									
299-W18-089	A7572		1	Last06	Last	2006			-0.3	-0.3	54.8	97.8	127.0	127.0	127.0	138.8	144.7	144.7	144.7						
299-W18-089	A7572		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	55	98	127		127	140	145	145	145						
299-W18-089	A7572		5	Last	Last	UP			0	0	55	98	127		127	140	145	145	145						
299-W18-093	A7576		1. Best Est.	Last06	Last	2006			12.5	12.5	49.9	111.9	133.9	133.9	133.9										
299-W18-094	A7577		1. Best Est.	Last06	Last	2006			5.9	5.9	59.1														
299-W18-095	A7578		1. Best Est.	Last06	Last	2006			7.9	7.9	56.1														
299-W18-096	A7579		2	Rohay94	Rohay	1994		0	12	12	53	117	131	131											
299-W18-096	A7579		1. Best Est.	Last06	Last	2006			6.9	6.9	52.8	104.0	136.8	136.8	136.8	146.7									
299-W18-097	A7580		1. Best Est.	Last06	Last	2006			8.9	8.9	55.1														
299-W18-098	A7581		1. Best Est.	Last06	Last	2006			6.2	6.2	58.1														
299-W18-099	A7582		1. Best Est.	Last06	Last	2006			9.2	9.2	51.2	105.0	132.2	132.2	132.2										
299-W18-149	A7632		1. Best Est.	Last06	Last	2006			13.1	13.1	46.9	81.0													
299-W18-150	A7633		1. Best Est.	Last06	Last	2006			13.1	13.1	46.9	96.1	121.1	121.1	121.1										
299-W18-158	A7641		1	Last06	Last	2006			12.4	12.4	46.9	95.1	117.1	117.1	117.1										
299-W18-158	A7641		Best Est.	Bjornstad08	Bjornstad	This Report			12	12	47	95	126		126										
299-W18-158	A7641		5	Last	Last	UP			12	12	47	95	126		126										
299-W18-159	A7642		1	Last06	Last	2006			9.8	9.8	40.7	86.9	118.8	118.8	118.8										
299-W18-159	A7642		Best Est.	Bjornstad08	Bjornstad	This Report			19	19	43	94	117		117										
299-W18-159	A7642		5	Last	Last	UP			18	18	42	93	116		116										
299-W18-163	A7645		1	Last06	Last	2006			14.8	14.8	44.9	86.3	117.8	117.8	117.8	128.0									
299-W18-163	A7645		Best Est.	Bjornstad08	Bjornstad	This Report			16	16	46	87	125		125	135									
299-W18-163	A7645		5	Last	Last	UP			16	16	46	87	125		125	135									
299-W18-164	A7646		1. Best Est.	Last06	Last	2006			17.1	17.1	47.9	99.1	127.0	127.0	127.0	142.1	149.0	149.0							
299-W18-165	A7647		1	Last06	Last	2006			11.8	11.8	45.9	95.8	120.7	120.7	120.7	133.9									
299-W18-165	A7647		Best Est.	Bjornstad08	Bjornstad	This Report			13	13	47	97	123		123	135									
299-W18-165	A7647		5	Last	Last	UP			13	13	47	97	123		123	135									
299-W18-166	A7648		2	Rohay94	Rohay	1994		0	14	14	44	106	124	124											

200 West Area		Data Source Information						Reported and/or Calculated Contact Depths (ft)																		
Well # (from HWIS)	Hanford Well ID (from HWIS)	Drill Depth (ft) (from HWIS)	Rank / Priority	Source	Principal Investigator	Date Published	Comments / Technical Basis	Holocene (Eolian or backfill?)	Top of Hanford formation	Top HF1	Top HF2	Top HF3	Top CCU	Top CCU (undif)	Top CCUz	Top CCUc	Top of Ringold Formation	Top Rtf	Top Rwie	Top Rwic	Top Rlm	Top Rwia	TOB	Date Last Changed	Reason Last Changed
299-W18-166	A7648		1. Best Est.	Last06	Last	2006			11.8	11.8	42.0	105.0	121.7	121.7	121.7	134.8									
299-W18-167	A7649	134	2	Rohay94	Rohay	1994		0	17	17	41	89	118	118											
299-W18-167	A7649	134	1. Best Est.	Last06	Last	2006			9.8	9.8	43.0	88.9	116.1	116.1	116.1	132.9								7/20/2009	Changed Best Est., Bjornstad08 UP had
299-W18-167	A7649	134	5	Bjornstad08	Bjornstad	This Report			25	25	54	100	128		128	144								7/20/2009	Changed Best Est., Bjornstad08 UP had
299-W18-167	A7649	134	5	Last	Last	UP			15	15	44	90	118		118	134									
299-W18-168	A7650		2	Rohay94	Rohay	1994		0	9	9	42	99	119	119											
299-W18-168	A7650		1. Best Est.	Last06	Last	2006			10.8	10.8	42.3	99.7	119.8	119.8	119.8										
299-W18-169	A7651		1. Best Est.	Last06	Last	2006			18.0	18.0	50.9	89.9	115.5	115.5	115.5										
299-W18-170	A7652		1. Best Est.	Last06	Last	2006			9.8	9.8															
299-W18-171	A7653		1. Best Est.	Last06	Last	2006			24.0	24.0	50.2	97.1	124.0	124.0	124.0										
299-W18-173	A7655		1. Best Est.	Last06	Last	2006			12.8	12.8	46.9														
299-W18-174	A7656		2	Rohay94	Rohay	1994		0	14	14	47	85	120	120											
299-W18-174	A7656		1	Last06	Last	2006			14.1	14.1	47.2	84.6	119.8	119.8	119.8	130.3									
299-W18-174	A7656		Best Est.	Bjornstad08	Bjornstad	This Report			14	14	47	85	120		120	130									
299-W18-174	A7656		5	Last	Last	UP			14	14	47	85	120		120	130									
299-W18-175	A7657		2	Rohay94	Rohay	1994		0	26	26	49	86	126	126											
299-W18-175	A7657		1. Best Est.	Last06	Last	2006			9.8	9.8	46.9		119.1	119.1	119.1										
299-W18-246	A7726		2	Rohay94	Rohay	1994		0	13	13	54	105	134	134			147	147	147						
299-W18-246	A7726		1. Best Est.	Last06	Last	2006			12.5	12.5	54.1	104.7	133.5	133.5	133.5	145.7	150.9	150.9	150.9						
299-W18-247	A7581		2	Rohay94	Rohay	1994		0	3	3	54	115	131	131			154	154	154						
299-W18-247	A7581		1. Best Est.	Last06	Last	2006			9.8	9.8	54.5	112.5	130.9	130.9	130.9	147.0									
299-W18-248	A7728		2	Rohay94	Rohay	1994		0	12	12	44	86	126	126											
299-W18-248	A7728		1	Last06	Last	2006			11.5	11.5	43.6	86.6	125.7	125.7	125.7	138.5									
299-W18-248	A7728		Best Est.	Bjornstad08	Bjornstad	This Report			11	11	43	87	126		126	138									
299-W18-248	A7728		5	Last	Last	UP			12	12	44	86	126		126										
299-W18-248	A7728		5	Last	Last	UP			10	10	40	87	126		126	138									
299-W18-249	A7729		2	Rohay94	Rohay	1994		0	6	6	58	104	131	131											
299-W18-249	A7729		1. Best Est.	Last06	Last	2006			5.9	5.9	58.1	102.4	130.9	130.9	130.9	143.1									
299-W18-252	A7732		2	Rohay94	Rohay	1994		0	1	1	51	101	125	125			140	140	140						
299-W18-252	A7732		Best Est.	Bjornstad08	Bjornstad	This Report			12	12	51	101	125		125	138	140	140	140						
299-W18-252	A7732		5	Last	Last	UP			1	1	51	101	125		125				140						
299-W18-252	A7732		4	Last	Last	UP			12	12	51	101	125		125	138	140	140	140						
299-W18-253	C4965		2006																						
299-W19-001	A4944		1	Last89	Last	1989							125		125	150	160	160	160						
299-W19-001	A4944		3. Best Est.	Reidel07-T5.5	Reidel	2007		0	0	0	42		124	124	124	141	147	147	147						
299-W19-002	A4948		1, Best Est.	Last89	Last	1989							158		158	185	203	203	240						
299-W19-003	A7733		3. Best Est.	Reidel07-T5.5	Reidel	2007		0	0	0	102		178	178	193	193	193	193	193						
299-W19-004	A4958		2	Lindsey95	Lindsey	1995		0	5	5			167	167			243	243	262		503	522	537		
299-W19-004	A4958		1	Williams02	Williams	2002													262		443	465	545		
299-W19-004	A4958		3	Thorne06	Thorne	2006			0.0	0.0			165.0	165.0	165.0	193.9	239.8	239.8	256.9		437.0	446.9	536.1		
299-W19-004	A4958		3	Reidel07-T5.5	Reidel	2007		0	5	5			167	167	243	243	243	243	262		443	520	540		
299-W19-004	A4958		Best Est.	Bjornstad08	Bjornstad	This Report			6	6			166		166	195	244	244	263		444	466	546		
299-W19-004	A4958		5	Thorne	Thorne	UP							165		165	194					437	447	536		
299-W19-008	A7736		1	Last89	Last	1989																	560		
299-W19-008	A7736		2	Lindsey95	Lindsey	1995		0	0	0			175	175			210	210	210		433	465	560		
299-W19-008	A7736		1	Williams02	Williams	2002													186		433	490	570		
299-W19-008	A7736		3	Reidel07-T5.5	Reidel	2007		0	0	0			175	175	210	210	210	210	210		433	502	560		
299-W19-008	A7736		Best Est.	Bjornstad08	Bjornstad	This Report			1	1			176	176			211	211	211		434	491	571		
299-W19-010	A7738		2	Bjornstad84	Bjornstad	1984			0	0						159	168	168	168		458	485	556		
299-W19-010	A7738		1	Last89	Last	1989							135		135	160	170	170	170		458	485	556		
299-W19-010	A7738		2	Lindsey95	Lindsey	1995		0	0	0			140	140			171	171	171		459	485	555		
299-W19-010	A7738		1	Williams02	Williams	2002													169		460	485	569		
299-W19-010	A7738		3	Thorne06	Thorne	2006			0.0	0.0			136.8	136.8	136.8	156.8	167.7	167.7	167.7		455.7	482.0	551.8		
299-W19-010	A7738		3	Reidel07-T5.5	Reidel	2007		0	0	0	63		135	135	135	152	159	159	159		450	477	562		
299-W19-010	A7738		Best Est.	Bjornstad08	Bjornstad	This Report	Incorporated HF2 contact from		0	0	63		135	135	135	159	168	168	168		458	485	556		
299-W19-010	A7738		5	Thorne	Thorne	UP							137		137	157					456	482	552		
299-W19-012	A4945		2	Rohay94	Rohay	1994		0	4	4	75	140	140	140			160	160	160						
299-W19-012	A4945		Best Est.	Horner08	Horner	This Report	Revaluated Drill Log due to contact	0	4	4	50	120	120	120	120	140	155	155	155						
299-W19-013	A7740		3. Best Est.	Reidel07-T5.5	Reidel	2007		0	0	0	110		170	170	180	180	180	180	180						
299-W19-014	A4946		3. Best Est.	Reidel07-T5.5	Reidel	2007		0	0	0	112		162	162	172	172	172	172	172						
299-W19-015	A4947		3. Best Est.	Reidel07-T5.5	Reidel	2007		0	0	0	105		147	147	147	163	166	166	176						
299-W19-016	A7741		3. Best Est.	Reidel07-T5.5	Reidel	2007		0	0	0	91		140	140	167	167	167	167	167						

200 West Area			Data Source Information					Reported and/or Calculated Contact Depths (ft)																	
Well # (from HWIS)	Hanford Well ID (from HWIS)	Drill Depth (ft) (from HWIS)	Rank / Priority	Source	Principal Investigator	Date Published	Comments / Technical Basis	Holocene (Eolian or backfill?)	Top of Hanford formation	Top HF1	Top HF2	Top HF3	Top CCU	Top CCU (undif)	Top CCUz	Top CCUc	Top of Ringold Formation	Top Rtf	Top Rwie	Top Rwic	Top Rlm	Top Rwia	TOB	Date Last Changed	Reason Last Changed
299-W19-017	A7742		3. Best Est.	Reidel07-T5.5	Reidel	2007		0	0	0	105		160	160	185	185	185	185	185						
299-W19-018	A7743		3. Best Est.	Reidel07-T5.5	Reidel	2007		0	0	0	108		160	160	183	183	183	183	183						
299-W19-022	A4951		3. Best Est.	Reidel07-T5.5	Reidel	2007		0	0	0	78		140	140											
299-W19-027	A4953		3. Best Est.	Reidel07-T5.5	Reidel	2007		0	10	10	79		154	154	154	171	174	174	184						
299-W19-031	A4956		3. Best Est.	Reidel07-T5.5	Reidel	2007		0	0	0	45		120	120	140	140	140	140	140						
299-W19-032	A4957		3. Best Est.	Reidel07-T5.5	Reidel	2007		0	0	0	45		125	125	150	150	150	150	150						
299-W19-041	B8551		3. Best Est.	Reidel07-T5.5	Reidel	2007		0	0	0	44		127	127	127	140	146	146	146						
299-W19-042	B8553		3. Best Est.	Reidel07-T5.5	Reidel	2007		0	0	0	44		116	116	116	136	142	142	142						
299-W19-44	C3393		Best Est.	Horner08	Horner	This Report	Not previously in database.	0	2.5	2.5	52	131.8	131.8	131.8	131.8	144.5	150.5	150.5	155						
299-W19-045	C3394		3. Best Est.	Reidel07-T4.1	Reidel	2007		0		0	52	133		133	133	137		154	154					9/11/2008	Re-evaluated Reidel07 report, which
299-W19-045	C3394		3	Reidel07-T5.5	Reidel	2007		0	0	0	52		133	133	133	137	225	225	225					9/11/2008	Removed as Best Pick in favor of Reidel07
299-W19-047	C4258		3	Reidel07-T4.1	Reidel	2007		0		8	47	124		124	124	138		145	145					9/11/2008	Re-evaluated Reidel07 report, which
299-W19-047	C4258		3. Best Est.	Reidel07-T5.5	Reidel	2007	Disagree with top of Rwie contact	0	8	8	47		124	124	124	138	145	145	145						
299-W19-105	C4968		2006																						
299-W19-107	C5193	4. Best Est. New in 2006		Williams08	Williams	In Press							175		175	187	195	195			428				
299-W21-001	A4963		3	Thorne06	Thorne	2006			0.0	0.0			171.3	171.3	171.3	197.2	225.1	225.1	225.1						
299-W21-001	A4963		3	Reidel07-T5.5	Reidel	2007		0	0	0			171	171	171	197									
299-W21-001	A4963		Best Est.	Bjornstad08	Bjornstad	This Report							172		172	198									
299-W21-001	A4963		5	Thorne	Thorne	UP							171		171	197									
299-W22-001	A7827		1	Lindsey00	Lindsey	2000		0	37	37	59		128		128	148			150						
299-W22-001	A7827		Best Est.	Bjornstad08	Bjornstad	This Report			-1	-1	59	128	128		128	148	150	150	150						
299-W22-002	A7828		1	Lindsey00	Lindsey	2000		0			35		130		130	140			152						
299-W22-002	A7828		Best Est.	Bjornstad08	Bjornstad	This Report	Top of sand (H2 unit) at 47'		0	0	47	130	130		130	140	152	152	152						
299-W22-010	A7835		1	Lindsey00	Lindsey	2000			0	0	57		138		138										
299-W22-010	A7835		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	57	138	138		138										
299-W22-011	A7836		1	Lindsey00	Lindsey	2000		0	5	5	56		114		114	148			152						
299-W22-011	A7836		Best Est.	Bjornstad08	Bjornstad	This Report			5	5	56	114	114		114	148	152	152	152						
299-W22-015	A7840		1	Lindsey00	Lindsey	2000			0	0	65		133		133	151	161	161	173						
299-W22-015	A7840		3	Reidel07-T5.1	Reidel	2007		0	0	0	57	115	115	115	115	138	147	147	147						
299-W22-015	A7840		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	65	133	133		133	151	161	161	173						
299-W22-017	A4964		1	Lindsey00	Lindsey	2000			0	0	60					149			155						
299-W22-017	A4964		3	Reidel07-T5.1	Reidel	2007		0	0	0	57	117	117	117	117	147	147	147	147						
299-W22-017	A4964		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	63					149	155	155	155						
299-W22-019	A4965		2	Lindsey95	Lindsey	1995		0	2	2			193	193			227	227	227						
299-W22-019	A4965		Best Est.	Bjornstad08	Bjornstad	This Report			3	3			194	194			228	228	228						
299-W22-024	A7845		2	Lindsey95	Lindsey	1995		0	0	0			190	190			217	217	240		397	428	568		
299-W22-024	A7845		1	Williams02	Williams	2002													240		465	495	567		
299-W22-024	A7845	575	3	Thorne06	Thorne	2006			0.0	0.0			136.2	136.2	136.2	179.1	219.2	219.2	229.0		389.1	434.1	560.0		
299-W22-024	A7845		3	Reidel07-T4.1	Reidel	2007		0	10	10	50	142	142	142	142	185	220	220	240		465	498	567		
299-W22-024	A7845		Best Est.	Bjornstad08	Bjornstad	This Report			0	0			136		136	179	217	217	240		465	495	567		
299-W22-024	A7845		5	Thorne	Thorne	UP							136		136	179					389	434	560		
299-W22-027	A7847		2	Lindsey95	Lindsey	1995		0	0	0			135	135			155	155	190		453	505	559		
299-W22-027	A7847		1	Lindsey00	Lindsey	2000			0	0	75		135		135	145	155	155	190						
299-W22-027	A7847		1	Williams02	Williams	2002													188		448	505	559		
299-W22-027	A7847		3	Reidel07-T5.1	Reidel	2007		0	16	16	76	127	127	127	127	137	186	186	186		445	501	557		
299-W22-027	A7847		3	Reidel07-T5.5	Reidel	2007		0	0	0	69		125	125	125	138	155	155	184		443	499	554		
299-W22-027	A7847		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	75	135	135		135	145	155	155	190		448	505	559		
299-W22-038	A7857		1	Lindsey00	Lindsey	2000			0	0	75		135		135	145	157	157	190						
299-W22-038	A7857		3	Reidel07-T5.1	Reidel	2007		0	17	17	50	118	118	118	118	145	187	187	187						
299-W22-038	A7857		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	75	135	135		135	145	157	157	190						
299-W22-039	A4970		1	Lindsey00	Lindsey	2000			0	0	60		145		145	147	148	148	155						
299-W22-039	A4970		3	Reidel07-T5.1	Reidel	2007		0	6	6	57	121	121	121	121	147	147	147	147						
299-W22-039	A4970		4	Bjornstad08	Bjornstad	This Report			0	0	60	145	145		145	147	148	148	155						
299-W22-039	A4970		Best Est.	Horner08	Horner	This Report	Contacts estimated from BH log	0	5	5	55	128	128	128	128	147	148	148	150.3						
299-W22-044	A4975		1	Lindsey00	Lindsey	2000			0	0	60		180		180	190			196						
299-W22-044	A4975		3	Reidel07-T5.1	Reidel	2007		0	13	13	60	134	134	134	134	152	152	152	152						
299-W22-044	A4975		Best Est.	Bjornstad08	Bjornstad	This Report	First mention of caliche @ 150.5'.		1	1	61		150.5		150.5	150.5	155	155	190						
299-W22-044	A4975		4	Horner08	Horner	This Report	Contacts estimated from BH log,	0	1	1	60	134	134	134	134	150.5	152	152	190						
299-W22-045	A4976		1	Lindsey00	Lindsey	2000		0	5	5	50		136		136	145.5	155	155	170						
299-W22-045	A4976		3	Reidel07-T5.1	Reidel	2007		0	4	4	38	118.4	118.4	118.4	118.4	146	173	173	173						
299-W22-045	A4976		Best Est.	Bjornstad08	Bjornstad	This Report			5	5	50	119	119		119	147	155	155	174						
299-W22-045	A4976		4	Last	Last	UP			0	0	39		119		119	147	155	155	174						

200 West Area		Data Source Information						Reported and/or Calculated Contact Depths (ft)																		
Well # (from HWIS)	Hanford Well ID (from HWIS)	Drill Depth (ft) (from HWIS)	Rank / Priority	Source	Principal Investigator	Date Published	Comments / Technical Basis	Holocene (Eolian or backfill?)	Top of Hanford formation	Top HF1	Top HF2	Top HF3	Top CCU	Top CCU (undif)	Top CCUz	Top CCUc	Top of Ringold Formation	Top Rtf	Top Rwie	Top Rwic	Top Rlm	Top Rwia	TOB	Date Last Changed	Reason Last Changed
299-W22-046	A4977		1	Lindsey00	Lindsey	2000		0	5	5	70		110		110	138			142						
299-W22-046	A4977		2	PNNL-13757-3	Serne	2002			0	0	67	121	121		121	138	150	150	170						
299-W22-046	A4977		3	Reidel07-T4.1	Reidel	2007		0		0	70	120		120	120	135		138	138					9/11/2008	Re-evaluated Reidel07 report, which
299-W22-046	A4977		3	Reidel07-T5.1	Reidel	2007		0	9	9	70	120	120	120	120	135	138	138	138						
299-W22-046	A4977		Best Est.	Bjornstad08	Bjornstad	This Report	Gamma log increases ~126', color		5	5	70	110	126		126	138	150	150	170						
299-W22-046	A4977		4	Last	Last	UP			0	0	66		121		121	138	150	150	170						
299-W22-046	A4977		4	Horner08	Horner	This Report	Contacts estimated from BH log						130	130	130	138	138	138	138						
299-W22-047	C4667	348.6	Best Est.	Horner08	Horner	This Report	No rec 0-5'. Not previously in	5	5	5	81	137	137	137	137	139	147	147	147						
299-W22-048	B8812		1. Best Est.	PNNL-13757-1	Serne	2002			0	0	61	135	135		135	146	149	149	192						
299-W22-048	B8812		2	PNNL-13757-2	Serne	2002			0	0	61	135	135		135	146	149	149	192						
299-W22-048	B8812		2	PNNL-13757-3	Serne	2002			0	0	61	135	135		135	146	149	149	192						
299-W22-049	B8813	239	Best Est.	Horner08	Horner	This Report	Not previously in database.	0	0	0	54						150	150	150						
299-W22-050	B8814		1	Lindsey00	Lindsey	2000			0	0	62		126		126	137			142						
299-W22-050	B8814		1	PNNL-13757-1	Serne	2002			0	0	62	126	126		126	138	143	143	175						
299-W22-050	B8814		2	PNNL-13757-3	Serne	2002			0	0	62	126	126		126	138	143	143	175						
299-W22-050	B8814		1	Williams02	Williams	2002													174		459				
299-W22-050	B8814		3	Reidel07-T4.1	Reidel	2007		0	14	14	63	129	129	129	129	136	142	142	142		459	496			
299-W22-050	B8814		3	Reidel07-T5.1	Reidel	2007		0	14	14	63	129	129		129	136	142	142	142		459	496			
299-W22-050	B8814		4	Williams08	Williams	In Press							125		125	138	142	142	174		459	495			
299-W22-050	B8814		Best Est.	Bjornstad08	Bjornstad	This Report			1	1	63	127	127		127	138	143	143	143		460				
299-W22-069	C4969		2006																						
299-W22-072	C4970		2006																						
299-W22-085	C3399		Best Est.	Horner08	Horner	This Report	Not previously in database.	0	5	5	54	130	130	130	130	153	162	162	174						
299-W22-086	C4971		2006																						
299-W22-087	C4977		2006																						
299-W23-001	A4979		1	Lindsey00	Lindsey	2000		0	50	50	60		116		116	135	140	140	157						
299-W23-001	A4979		3	Reidel07-T5.1	Reidel	2007		0	42	42	67	117	117	117	117	157	162	162	162						
299-W23-001	A4979		Best Est.	Bjornstad08	Bjornstad	This Report	Old log. Heavy silt (CCUz)		1	1	61		135		135	140	160		160						
299-W23-002	A4985		1	Lindsey00	Lindsey	2000			53	53	58		120		120	145			155						
299-W23-002	A4985		3	Reidel07-T5.1	Reidel	2007		0	47	47	54	128	128	128	128	155	157	157	157						
299-W23-002	A4985		Best Est.	Bjornstad08	Bjornstad	This Report			53	53	58	120	120		120	145	155	155	155						
299-W23-003	A4986		1	Lindsey00	Lindsey	2000			51	51	78		125		125	145			157						
299-W23-003	A4986		2	PNNL-13757-3	Serne	2002		0	53	53	69	125	125		125	145	157	157	172						
299-W23-003	A4986		3	Reidel07-T5.1	Reidel	2007		0	57	57	77	125	125	125	125	145	164	164	164						
299-W23-003	A4986		Best Est.	Bjornstad08	Bjornstad	This Report			50	50	77	125	125		125	145	157	157	157						
299-W23-003	A4986		4	Last	Last	UP			50	50	77	125	125		125	145	157	157	172						
299-W23-003	A4988		2	PNNL-13757-4	Serne	2002		0	15	15	68	120	120		120	147	155	155	170						
299-W23-004	A4987		1	Lindsey00	Lindsey	2000			0	0	43		143		143	163			170						
299-W23-004	A4987		3	Reidel07-T5.1	Reidel	2007		0	0	0	119	119	119	119	119	149	166	166	166						
299-W23-004	A4987		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	43	143	143		143	163	170	170	170						
299-W23-005	A4988		1	Lindsey00	Lindsey	2000			0	0	68		120		120	145	155	155	167						
299-W23-005	A4988		3	Reidel07-T5.1	Reidel	2007		0	9	9	70	123	123	123	123	141	170	170	170						
299-W23-005	A4988		Best Est.	Bjornstad08	Bjornstad	This Report			1	1	68	120	120		120	147	155	155	170						
299-W23-005	A4988		4	Last	Last	UP			1	1	68		120		120	147	155	155	170						
299-W23-006	A4989		1	Lindsey00	Lindsey	2000			0	0	52		122		122	138	152	152	163						
299-W23-006	A4989		2	PNNL-13757-3	Serne	2002			0	0	53	121	121		121	140	153	153	167						
299-W23-006	A4989		Best Est.	Bjornstad08	Bjornstad	This Report			53	53	87	125	125		125	140	153	153	170						
299-W23-006	A4989		4	Last	Last	UP			53	53	88	125	125		125	140	153	153	170						
299-W23-007	A4990		1	Lindsey00	Lindsey	2000			0	0	55		120		120	150	161	161	170						
299-W23-007	A4990		2	PNNL-13757-2	Serne	2002			0	0	60	117	117		117	152	160	160	187						
299-W23-007	A4990		2	PNNL-13757-3	Serne	2002			0	0	60	117	117		117	152	160	160	187						
299-W23-007	A4990		3	Reidel07-T5.1	Reidel	2007		0	41	41	50	121	121	121	121	160	176	176	176						
299-W23-007	A4990		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	55	120	120		120	150	161	161	170						
299-W23-008	A4991		1	Lindsey00	Lindsey	2000			0	0	37		130		130	153	165	165	165						
299-W23-008	A4991		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	36	130	130		130	153	165	165	165						
299-W23-009	A7883		1	Lindsey00	Lindsey	2000		0	10	10	38		120		120	157	160	160	169						
299-W23-009	A7883		3	Reidel07-T5.1	Reidel	2007		0	40.5	40.5	110.5	110.5	110.5	110.5	110.5	155.5	170.5	170.5	170.5						
299-W23-009	A7883		Best Est.	Bjornstad08	Bjornstad	This Report			10	10	38	120	120		120	157	160	160	169						
299-W23-010	A7884		1	Lindsey00	Lindsey	2000		0	5	5	55		123		123	135			145						
299-W23-010	A7884		3	Reidel07-T5.1	Reidel	2007		0	55.8	55.8	105.8	120.8	120.8	120.8	120.8	149.8	171.8	171.8	171.8						
299-W23-010	A7884		Best Est.	Bjornstad08	Bjornstad	This Report			6	6	56	124	124		124	136	146	146	146						
299-W23-011	A4980		1	Lindsey00	Lindsey	2000		0	3	3	43		124		124	148	157	157	162						

200 West Area			Data Source Information					Reported and/or Calculated Contact Depths (ft)																		
Well # (from HWIS)	Hanford Well ID (from HWIS)	Drill Depth (ft) (from HWIS)	Rank / Priority	Source	Principal Investigator	Date Published	Comments / Technical Basis	Holocene (Eolian or backfill?)	Top of Hanford formation	Top HF1	Top HF2	Top HF3	Top CCU	Top CCU (undif)	Top CCUz	Top CCUc	Top of Ringold Formation	Top Rtf	Top Rwie	Top Rwic	Top Rlm	Top Rwia	TOB	Date Last Changed	Reason Last Changed
299-W23-011	A4980		3	Reidel07-T5.1	Reidel	2007		0	48	48	110	110	110	110	110	150	163	163	163						
299-W23-011	A4980		Best Est.	Bjornstad08	Bjornstad	This Report			3	3	43	124	124		124	148	157	157	162						
299-W23-012	A4981		1	Lindsey00	Lindsey	2000		0	0	0	50		141		141	162			167						
299-W23-012	A4981		Best Est.	Bjornstad08	Bjornstad	This Report	I'd recommend deleting this entry.																		
299-W23-013	A4982		1	Lindsey00	Lindsey	2000		0	10	10	45		123		123	140			151						
299-W23-013	A4982		3	Reidel07-T5.1	Reidel	2007		0	40	40	95	125	125	125	125	153	155	155	155						
299-W23-013	A4982		Best Est.	Bjornstad08	Bjornstad	This Report			10	10	45	123	123		123	140	151	151	151						
299-W23-014	A4983		2	PNNL-13757-3	Serne	2002		0	0	0	97	125	125		125	155	162	162	170						
299-W23-014	A4983		2	PNNL-13757-4	Serne	2002		0	0	0	97	125	125		125	155	162	162	170						
299-W23-014	A4983		3	Reidel07-T5.1	Reidel	2007		0	35	35	100	123	123	123	123	152	153	153	153						
299-W23-014	A4983		Best Est.	Bjornstad08	Bjornstad	This Report			3	3	102	128	128		128	158	165	165	174						
299-W23-014	A4983		4	Last	Last	UP			0	0	99	125	125		125	155	162	162	171						
299-W23-015	A4984		1	Lindsey00	Lindsey	2000			0	0	79		135		135	150			155						
299-W23-015	A4984		3	Reidel07-T5.1	Reidel	2007		0	12	12	75	126	126	126	126	147	152	152	152						
299-W23-015	A4984		Best Est.	Bjornstad08	Bjornstad	This Report	No Change. Top of v. strongly		0	0	79	135	135		135	150	155	155	155						
299-W23-015	A4984		4	Last	Last	UP			0	0	76	117	117		117	147	155	155	170						
299-W23-016	A7885		1	Lindsey00	Lindsey	2000			6	6	51		145		145	154			162						
299-W23-016	A7885		3	Reidel07-T5.1	Reidel	2007		0	0	0	87	125	125	125	125	153	155	155	155						
299-W23-016	A7885		Best Est.	Bjornstad08	Bjornstad	This Report			6	6	51	145	145		145	154	162	162	162						
299-W23-017	A7886		1	Lindsey00	Lindsey	2000		0	10	10	43		129		129	145			158						
299-W23-017	A7886		3	Reidel07-T4.1	Reidel	2007		0		0	125	125		125	125			146	146					9/11/2008	Re-evaluated Reidel07 report, which
299-W23-017	A7886		3	Reidel07-T5.1	Reidel	2007		0	0	0	125	125	125	125	125		146	146	146						
299-W23-017	A7886		Best Est.	Bjornstad08	Bjornstad	This Report			10	10	43	129	129		129	145	158	158	158						
299-W23-019	B8809		1	Lindsey00	Lindsey	2000			61	61	94		125		125	156			160						
299-W23-019	B8809		1	PNNL-13757-2	Serne	2002	From PNNL-13757-2, Figure 2.2	0	61.5	61.5	94	122	122		122	156	160	160	160						
299-W23-019	B8809		2	PNNL-13757-3	Serne	2002	From PNNL-13757-2, Figure 2.2	0	53	53	94	122	122		122	156	160	160	160						
299-W23-019	B8809		Best Est.	Bjornstad08	Bjornstad	This Report			61	61	94	125	125		125	156	160	160	160						
299-W23-051	A7887		1	Lindsey00	Lindsey	2000			0	0	50		125		125										
299-W23-051	A7887		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	50	125	125		125										
299-W23-052	A7888		1	Lindsey00	Lindsey	2000			0	0	55		128		128										
299-W23-052	A7888		Best Est.	Bjornstad08	Bjornstad	This Report			1	1	56	129	129		129										
299-W23-053	A7889		1	Lindsey00	Lindsey	2000			0	0	75		128		128										
299-W23-053	A7889		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	75	128	128		128										
299-W23-054	A7890		1	Lindsey00	Lindsey	2000			0	0	69		125		125										
299-W23-054	A7890		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	69	125	125		125										
299-W23-055	A7891		1	Lindsey00	Lindsey	2000			0	0	74		125		125										
299-W23-055	A7891		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	74	125	125		125										
299-W23-056	A7892		1	Lindsey00	Lindsey	2000			0	0	75		135		135										
299-W23-056	A7892		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	75	135	135		135										
299-W23-057	A7893		1	Lindsey00	Lindsey	2000			0	0	78		130		130										
299-W23-057	A7893		3	Reidel07-T5.1	Reidel	2007		0	44	44	78	122	122	122	122										
299-W23-057	A7893		Best Est.	Bjornstad08	Bjornstad	This Report			0	0	78	130	130		130										
299-W23-058	A7894		1	Lindsey00	Lindsey	2000		0	52	52	87														
299-W23-058	A7894		2	PNNL-13757-4	Serne	2002		0	54	54	87														
299-W23-058	A7894		Best Est.	Bjornstad08	Bjornstad	This Report			52	52	87														
299-W23-062	A7898		1	Lindsey00	Lindsey	2000		0	52	52	69														
299-W23-062	A7898		3	Reidel07-T5.1	Reidel	2007		0	52	52	69														
299-W23-062	A7898		Best Est.	Bjornstad08	Bjornstad	This Report			52	52	69														
299-W23-064	A7900		1	Lindsey00	Lindsey	2000		0	50	50	89		119		119										
299-W23-064	A7900		2	PNNL-13757-3	Serne	2002		0	53	53	86														
299-W23-064	A7900		3	Reidel07-T5.1	Reidel	2007		0	68	68	95														
299-W23-064	A7900		Best Est.	Bjornstad08	Bjornstad	This Report			50	50	89	119	119		119										
299-W23-064	A7900		4	Last	Last	UP			51	51	86														
299-W23-065	A7901		1	Lindsey00	Lindsey	2000		0	51	51	99														
299-W23-065	A7901		Best Est.	Bjornstad08	Bjornstad	This Report			52	52	100														
299-W23-066	A7902		1	Lindsey00	Lindsey	2000		0	52	52	60														
299-W23-066	A7902		2. Best Est.	PNNL-13757-4	Serne	2002		0	54	54	60	123	123		123										
299-W23-066	A7902		4	Bjornstad08	Bjornstad	This Report			52	52	60														
299-W23-067	A7903		1	Lindsey00	Lindsey	2000		0	52	52	70														
299-W23-067	A7903		Best Est.	Bjornstad08	Bjornstad	This Report			52	52	70														
299-W23-068	A7904		1	Lindsey00	Lindsey	2000		0	52	52	89														
299-W23-068	A7904		3	Reidel07-T5.1	Reidel	2007		0	74	74	89														

200 West Area			Data Source Information					Reported and/or Calculated Contact Depths (ft)																				
Well # (from HWIS)	Hanford Well ID (from HWIS)	Drill Depth (ft) (from HWIS)	Rank / Priority	Source	Principal Investigator	Date Published	Comments / Technical Basis	Holocene (Eolian or backfill?)	Top of Hanford formation	Top HF1	Top HF2	Top HF3	Top CCU	Top CCU (undif)	Top CCUz	Top CCUc	Top of Ringold Formation	Top Rtf	Top Rwie	Top Rwic	Top Rlm	Top Rwia	TOB	Date Last Changed	Reason Last Changed
299-W23-068	A7904		Best Est.	Bjornstad08	Bjornstad	This Report			52	52	89														
299-W23-069	A7905		1	Lindsey00	Lindsey	2000		0	52	52	80														
299-W23-069	A7905		Best Est.	Bjornstad08	Bjornstad	This Report			52	52	80														
299-W23-070	A7906		1	Lindsey00	Lindsey	2000		0	52	52	86														
299-W23-070	A7906		Best Est.	Bjornstad08	Bjornstad	This Report			52	52	86														
299-W23-072	A7908		1	Lindsey00	Lindsey	2000		0	52	52	79														
299-W23-072	A7908		2	PNNL-13757-3	Serne	2002		0	53	53	80														
299-W23-072	A7908		Best Est.	Bjornstad08	Bjornstad	This Report			53	53	80														
299-W23-072	A7908		4	Last	Last	UP			50	50	85														
299-W23-073	A7909		1	Lindsey00	Lindsey	2000		0	50	50	74														
299-W23-073	A7909		3	Reidel07-T5.1	Reidel	2007		0	50	50	64														
299-W23-073	A7909		Best Est.	Bjornstad08	Bjornstad	This Report			51	51	75														
299-W23-074	A7910		1	Lindsey00	Lindsey	2000		0	50	50	64														
299-W23-074	A7910		3	Reidel07-T5.1	Reidel	2007		0	50	50	61														
299-W23-074	A7910		Best Est.	Bjornstad08	Bjornstad	This Report			51	51	65														
299-W23-075	A7911		1	Lindsey00	Lindsey	2000		0	52	52	64														
299-W23-075	A7911		Best Est.	Bjornstad08	Bjornstad	This Report			52	52	64														
299-W23-077	A7913		1	Lindsey00	Lindsey	2000		0	52	52	59														
299-W23-077	A7913		2	PNNL-13757-4	Serne	2002		0	53	53	62														
299-W23-077	A7913		Best Est.	Bjornstad08	Bjornstad	This Report			52	52	59														
299-W23-078	A7914		1	Lindsey00	Lindsey	2000		0	52	52	64														
299-W23-078	A7914		2	PNNL-13757-4	Serne	2002		0	53	53	70														
299-W23-078	A7914		Best Est.	Bjornstad08	Bjornstad	This Report			53	53	65														
299-W23-079	A7915		1	Lindsey00	Lindsey	2000		0	54	54	61														
299-W23-079	A7915		Best Est.	Bjornstad08	Bjornstad	This Report			54	54	61														
299-W23-080	A7916		1	Lindsey00	Lindsey	2000		0			52		126		126										
299-W23-080	A7916		2. Best Est.	PNNL-13757-4	Serne	2002		0	54	54	54	120	120		120										
299-W23-080	A7916		4	Bjornstad08	Bjornstad	This Report					52	126	126		126										
299-W23-082	A7918		1	Lindsey00	Lindsey	2000		0			52														
299-W23-082	A7918		Best Est.	Bjornstad08	Bjornstad	This Report					52														
299-W23-083	A7919		1	Lindsey00	Lindsey	2000		0	51	51	59														
299-W23-083	A7919		Best Est.	Bjornstad08	Bjornstad	This Report			52	52	60														
299-W23-086	A7922		1	Lindsey00	Lindsey	2000		0	53	53															
299-W23-086	A7922		Best Est.	Bjornstad08	Bjornstad	This Report			53	53															
299-W23-092	A7928		1	Lindsey00	Lindsey	2000		0	51	51	73		131		131										
299-W23-092	A7928		2	PNNL-13757-3	Serne	2002		0	53	53	76	125	125		125										
299-W23-092	A7928		Best Est.	Bjornstad08	Bjornstad	This Report			51	51	73	131	131		131										
299-W23-092	A7928		4	Last	Last	UP			50	50	97	127	127		127										
299-W23-093	A7929		1	Lindsey00	Lindsey	2000		0	51	51															
299-W23-093	A7929		Best Est.	Bjornstad08	Bjornstad	This Report			51	51															
299-W23-094	A7930		1	Lindsey00	Lindsey	2000		0	50	50	79														
299-W23-094	A7930		3	Reidel07-T5.1	Reidel	2007		0	72	72	89	128	128	128	128										
299-W23-094	A7930		Best Est.	Bjornstad08	Bjornstad	This Report			50	50	79														
299-W23-096	A7932		1	Lindsey00	Lindsey	2000		0	50	50	68														
299-W23-096	A7932		Best Est.	Bjornstad08	Bjornstad	This Report			50	50	68														
299-W23-099	A7935		1	Lindsey00	Lindsey	2000		0	50	50	69		127		127										
299-W23-099	A7935		Best Est.	Bjornstad08	Bjornstad	This Report			51	51	70	128	128		128										
299-W23-100	A7936		1	Lindsey00	Lindsey	2000		0	51	51															
299-W23-100	A7936		2	PNNL-13757-2	Serne	2002		0	53	53															
299-W23-100	A7936		2	PNNL-13757-3	Serne	2002		0	53	53															
299-W23-100	A7936		3	Reidel07-T5.1	Reidel	2007		0	65	65															
299-W23-100	A7936		Best Est.	Bjornstad08	Bjornstad	This Report			52	52															
299-W23-105	A7941		1	Lindsey00	Lindsey	2000		0	50	50	75														
299-W23-105	A7941		2	PNNL-13757-3	Serne	2002		0																	
299-W23-105	A7941		3	Reidel07-T5.1	Reidel	2007		0	67	67															
299-W23-105	A7941		Best Est.	Bjornstad08	Bjornstad	This Report			50	50	75														
299-W23-106	A7942		1	Lindsey00	Lindsey	2000		0	50	50															
299-W23-106	A7942		Best Est.	Bjornstad08	Bjornstad	This Report			50	50															
299-W23-108	A7944		1	Lindsey00	Lindsey	2000		0	50	50	99														
299-W23-108	A7944		2	PNNL-13757-3	Serne	2002		0			98	123	123		123										
299-W23-108	A7944		3	Reidel07-T5.1	Reidel	2007		0	69	69	94														
299-W23-108	A7944		Best Est.	Bjornstad08	Bjornstad	This Report			51	51	99	124	124		124										

200 West Area			Data Source Information					Reported and/or Calculated Contact Depths (ft)																			
Well # (from HWIS)	Hanford Well ID (from HWIS)	Drill Depth (ft) (from HWIS)	Rank / Priority	Source	Principal Investigator	Date Published	Comments / Technical Basis	Holocene (Eolian or backfill?)	Top of Hanford formation	Top HF1	Top HF2	Top HF3	Top CCU	Top CCU (undif)	Top CCUz	Top CCUc	Top of Ringold Formation	Top Rtf	Top Rwie	Top Rwic	Top Rlm	Top Rwia	TOB	Date Last Changed	Reason Last Changed
299-W23-108	A7944		4	Last	Last	UP			50	50	98	123	123		123										
299-W23-109	A7945		1	Lindsey00	Lindsey	2000		0	50	50															
299-W23-109	A7945		3	Reidel07-T5.1	Reidel	2007		0	64	64															
299-W23-109	A7945		Best Est.	Bjornstad08	Bjornstad	This Report			51	51															
299-W23-113	A7949		1	Lindsey00	Lindsey	2000		0	50	50															
299-W23-113	A7949		2	PNNL-13757-2	Serne	2002		0	53	53															
299-W23-113	A7949		2	PNNL-13757-3	Serne	2002		0	53	53															
299-W23-113	A7949		3	Reidel07-T5.1	Reidel	2007		0	72	72															
299-W23-113	A7949		Best Est.	Bjornstad08	Bjornstad	This Report			50	50															
299-W23-114	A7950		1	Lindsey00	Lindsey	2000		0	50	50															
299-W23-114	A7950		Best Est.	Bjornstad08	Bjornstad	This Report			51	51															
299-W23-115	A7951		1	Lindsey00	Lindsey	2000		0	50	50															
299-W23-115	A7951		Best Est.	Bjornstad08	Bjornstad	This Report			51	51															
299-W23-117	A7953		1	Lindsey00	Lindsey	2000		0	52	52															
299-W23-117	A7953		3	Reidel07-T5.1	Reidel	2007		0	73	73															
299-W23-117	A7953		Best Est.	Bjornstad08	Bjornstad	This Report			52	52															
299-W23-119	A7955		1	Lindsey00	Lindsey	2000		0	51	51															
299-W23-119	A7955		Best Est.	Bjornstad08	Bjornstad	This Report			51	51															
299-W23-121	A7957		1	Lindsey00	Lindsey	2000		0	53	53	91														
299-W23-121	A7957		2	PNNL-13757-2	Serne	2002		0			91		123		123										
299-W23-121	A7957		2	PNNL-13757-3	Serne	2002		0			91		123		123										
299-W23-121	A7957		3	Reidel07-T5.1	Reidel	2007		0	79	79	91	123	123	123	123										
299-W23-121	A7957		Best Est.	Bjornstad08	Bjornstad	This Report			53	53	91														
299-W23-125	A7961		1	Lindsey00	Lindsey	2000		0	53	53	75		129		129										
299-W23-125	A7961		2	PNNL-13757-2	Serne	2002		0	54	54	74	127	127		127										
299-W23-125	A7961		2	PNNL-13757-3	Serne	2002		0	54	54	74	127	127		127										
299-W23-125	A7961		3	Reidel07-T5.1	Reidel	2007		0	49	49	68	129	129	129	129										
299-W23-125	A7961		Best Est.	Bjornstad08	Bjornstad	This Report			54	54	76	130	130		130										
299-W23-132	A7968		1	Lindsey00	Lindsey	2000		0	0	0	71														
299-W23-132	A7968		2	PNNL-13757-2	Serne	2002		0	55	55	63	115	115		115										
299-W23-132	A7968		2. Best Est.	PNNL-13757-3	Serne	2002		0	55	55	63	115	115		115										
299-W23-132	A7968		4	Bjornstad08	Bjornstad	This Report			0	0	70														
299-W23-133	A7969		1	Lindsey00	Lindsey	2000		0	50	50	69														
299-W23-133	A7969		2	PNNL-13757-2	Serne	2002		0	55	55	67														
299-W23-133	A7969		2	PNNL-13757-3	Serne	2002		0	55	55	67														
299-W23-133	A7969		Best Est.	Bjornstad08	Bjornstad	This Report			50	50	69														
299-W23-135	A7971		1	Lindsey00	Lindsey	2000		0			52		130		130										
299-W23-135	A7971		Best Est.	Bjornstad08	Bjornstad	This Report					52	130	130		130										
299-W23-136	A7972		1	Lindsey00	Lindsey	2000		0	52	52	68														
299-W23-136	A7972		Best Est.	Bjornstad08	Bjornstad	This Report			52	52	68														
299-W23-137	A7973		1	Lindsey00	Lindsey	2000		0	48	48	79		127		127										
299-W23-137	A7973		Best Est.	Bjornstad08	Bjornstad	This Report			48	48	79	127	127		127										
299-W23-138	A7974		1	Lindsey00	Lindsey	2000		0	52	52	87														
299-W23-138	A7974		Best Est.	Bjornstad08	Bjornstad	This Report			52	52	87														
299-W23-139	A7975		1	Lindsey00	Lindsey	2000		0	52	52	87														
299-W23-139	A7975		2	PNNL-13757-4	Serne	2002		0	54	54	86														
299-W23-139	A7975		Best Est.	Bjornstad08	Bjornstad	This Report			52	52	87														
299-W23-140	A7976		1	Lindsey00	Lindsey	2000		0	51	51	69														
299-W23-140	A7976		Best Est.	Bjornstad08	Bjornstad	This Report			52	52	70														
299-W23-141	A7977		1	Lindsey00	Lindsey	2000		0	50	50	69														
299-W23-141	A7977		2	PNNL-13757-2	Serne	2002		0	55	55	68														
299-W23-141	A7977		2	PNNL-13757-3	Serne	2002		0	55	55	68														
299-W23-141	A7977		Best Est.	Bjornstad08	Bjornstad	This Report			50	50	69														
299-W23-142	A7978		1	Lindsey00	Lindsey	2000		0	50	50	78														
299-W23-142	A7978		Best Est.	Bjornstad08	Bjornstad	This Report			50	50	78														
299-W23-143	A7979		1	Lindsey00	Lindsey	2000		0	50	50	84														
299-W23-143	A7979		2. Best Est.	PNNL-13757-4	Serne	2002		0	52	52	81	125	125		125										
299-W23-143	A7979		3	Reidel07-T5.1	Reidel	2007		0	61	61	81	129	129	129	129										
299-W23-143	A7979		4	Bjornstad08	Bjornstad	This Report			50	50	84														
299-W23-144	A7980		1	Lindsey00	Lindsey	2000		0	53	53	84														
299-W23-144	A7980		Best Est.	Bjornstad08	Bjornstad	This Report			53	53	84														
299-W23-163	A7999		3. Best Est.	Reidel07-T5.1	Reidel	2007		0	41	41	69														

200 West Area			Data Source Information					Reported and/or Calculated Contact Depths (ft)																		
Well # (from HWIS)	Hanford Well ID (from HWIS)	Drill Depth (ft) (from HWIS)	Rank / Priority	Source	Principal Investigator	Date Published	Comments / Technical Basis	Holocene (Eolian or backfill?)	Top of Hanford formation	Top HF1	Top HF2	Top HF3	Top CCU	Top CCU (undif)	Top CCUz	Top CCUc	Top of Ringold Formation	Top Rtf	Top Rwie	Top Rwic	Top Rlm	Top Rwia	TOB	Date Last Changed	Reason Last Changed
299-W23-171	A8007		3. Best Est.	Reidel07-T5.1	Reidel	2007		0	41	41	66														
299-W23-234	B2828		2	PNNL-13757-2	Serne	2002	From cross section	0	53	53	88	125	125		125	155	160	160	167						
299-W23-234	B2823		1	PNNL-13757-3	Serne	2002	From text and borehole summary	0	51	51	85	125	125		125	155.7	160	160	160						
299-W23-234	B2828		Best Est.	Bjornstad08	Bjornstad	This Report			50	50	97	125	125		125	155	160	160	167						
299-W23-234	B2828		4	Last	Last	UP			50	50	97	125	125		125	155	160	160	167						
299-W26-012	A5409		3. Best Est.	Reidel07-T5.1	Reidel	2007		0	0	0	91	122	122	122	122									7/20/2009	Corrected depth for top of CCU.
299-W26-014	B8838	260.48	Best Est.	Horner08	Horner	This Report	Not previously in database.	0	1	1	78.5	135	135	135	135	163	168	168	192						
299-W27-002	A5410		2	Lindsey95	Lindsey	1995		0	2	2			173	173			200	200	225		424				
299-W27-002	A5410		1	Williams02	Williams	2002													220		422				
299-W27-002	A5410		Best Est.	Bjornstad08	Bjornstad	This Report	Added the contact for Top of HF2.		3	3	79		174	174			201	201	221		423				
699-31-084A	A8509	4398	1. Best Est.	Williams02	Williams	2002													74		385	488	606	7/20/2009	Added Well ID and Drill depth from Asbuilt.
699-32-072A	A5130		2	Bjornstad84	Bjornstad	1984			0	0						181	195	195	195		415	451	572		
699-32-072A	A5130		2	Lindsey95	Lindsey	1995		0	-1	-1			198	198			195	195	240		410	450	571		
699-32-072A	A5130	580	3	Thorne06	Thorne	2006			0.0	0.0			177.8		177.8	177.8	185.7	185.7	185.7		411.7	447.8	568.6		
699-32-072A	A5130		Best Est.	Last08	Last	This Report	Combination of Bjornstad84 and	0	0	0						181	195	195	240		408	455	573		
699-32-072a/b	A5130/A9525		1	Williams02	Williams	2002													240		408	455	573		
699-35-066			1	Williams02	Williams	2002													258		400				
699-35-066	A5139	450	3. Best Est.	Thorne06	Thorne	2006			0.0				?		?	NP	?	?	265.1			445.5	?		
699-35-078B	A8559		2	Bjornstad84	Bjornstad	1984			0	0						160	160	160	160		419	490	581		
699-35-078B	A8559		1	Last89	Last	1989							105		105	160	160	160	160		418	490	581		
699-35-078B	A8559		2	Lindsey95	Lindsey	1995		0	0	0			105	105			160	160	160		418	490	580		
699-35-078B	A8559		1	Williams02	Williams	2002													160		414	490	580		
699-35-078B	A8559	?	3	Thorne06	Thorne	2006			0.0				105.0		105.0	136.8	147.0	NP	147.0			487.9	577.8		
699-35-078B	A8559		Best Est.	Last08	Last	This Report	Combination based on general	0	0	0			105		105	160	160	160	160		414	490	580		
699-36-058A	A8571		3. Best Est.	Reidel07-T4.1	Reidel	2007		0	0	0	312	312	312	312	312	312	312	312	312						
699-36-061B			1	Williams02	Williams	2002													320		398	476	550		
699-36-061B	A8573	568	3	Thorne06	Thorne	2006			0.0				NP		NP	NP	300.2	NP	300.2			467.2	545.9		
699-36-061B			Best Est.	Last08	Last	This Report			0	0									320		398	476	550		
699-36-063A			1. Best Est.	Williams02	Williams	2002													265						
699-36-070A			1	Williams02	Williams	2002													255		432				
699-36-070A	A9901		3. Best Est.	Reidel07-T4.1	Reidel	2007		0		0	147	147		147	147	178		220	220		432			9/11/2008	Re-evaluated Reidel07 report, which
699-36-070B			2004																						
699-37-047A	B2822		3. Best Est.	Reidel07-T4.1	Reidel	2007		0	285	285	285	285	285	285	285	285	285	285	310		365	439	517		
699-37-082B			2	Bjornstad84	Bjornstad	1984			0	0						94	110	110	110		403	492	602		
699-37-082B			2	Lindsey95	Lindsey	1995		0	11	11			96	96			111	111	111		396	501	606		
699-37-082B	A8580	627	3	Thorne06	Thorne	2006			0.0				71.9		71.9	72.8	107.9	NP	107.9			488.8	598.8		
699-37-082B			Best Est.	Last08	Last	This Report	Combination biased towards	0.0	11.0	11.0			72.0		72.0	94.0	110.0	110.0	110.0		403.0	492.0	602.0	7/21/2009	Added contacts for Rwia and TOB from
699-37-083			1. Best Est.	Williams02	Williams	2002													150		407	495	617		
699-37-084			2	Bjornstad84	Bjornstad	1984			0	0						85	103	103	105		418	504	619		
699-37-084			2	Lindsey95	Lindsey	1995		0	0	0			69	69			103	103	108		418	505	620		
699-37-084	A8584	626	3	Thorne06	Thorne	2006			0.0				66.9		NP	66.9	98.8	98.8	102.7			510.8	614.8		
699-37-084			Best Est.	Last08	Last	This Report	Combination biased towards		0	0			85			85	103	103	105		418	504	619	7/21/2009	Changed contact values for consistency
699-37-089			1. Best Est.	Williams02	Williams	2002													149		441	525	654		
699-37-092			1	Williams02	Williams	2002													154		426	532	675		
699-37-092	A8586	688	3	Thorne06	Thorne	2006			0.0				46.6		NP	46.6	116.8	116.8	-735.2			529.9	671.6		
699-37-092			Best Est.	Last08	Last	This Report	Combination biased toward		0	0			47		47	47	117	117	154		426	532	675		
699-38-061		358	1. Best Est.	Williams02	Williams	2002													330					7/21/2009	Added drill depth
699-38-061	A5464	358	3	Thorne06	Thorne	2006			0.0				?		?	?	?	?	312.7			?	?	7/21/2009	Added drill depth
699-38-065			1	Williams02	Williams	2002													282		397	452	526		
699-38-065	A5148	536	3	Thorne06	Thorne	2006			0.0				278.9		NP	278.9	359.9	NP	359.9			444.2	526.2		
699-38-065	A5148		3	Reidel07-T4.1	Reidel	2007		0	0	0	241	241	241	241	241	282	282	282	282		397	452	526		
699-38-065			Best Est.	Last08	Last	This Report	Combination biased toward	0	0	0			241		241	282	282	282	282		397	452	526		
699-38-070			2	Lindsey95	Lindsey	1995		0	5	5			185	185			200	200	245		395				
699-38-070			1	Williams02	Williams	2002													250						
699-38-070	A5149	413	3	Thorne06	Thorne	2006			0.0				?		?	183.7	?	?	198.8			?	?		
699-38-070			Best Est.	Last08	Last	This Report	Combination biased toward	0	5	5			185	185			200	200	245		395				
699-38-070B	C4236	3. Best Est.	New in 2004	Reidel07-T4.1	Reidel	2007		0	7	7	171	171	171	171	171	192	279	279	279		449	457			
699-39-079	A5151		1	Last89	Last	1989							125		125	140									
699-39-079			2	Lindsey95	Lindsey	1995		0	20	20			140	140			150	150							
699-39-079	A5151	295.0	3	Thorne06	Thorne	2006			0.0				82.0		82.0	123.0	148.0	NP	148.0			?	?		
699-39-079	A5151		Best Est.	Last08	Last	This Report	Combination biased toward most	0	20	20			125		125	140	150	150	150						
699-40-062			1	Williams02	Williams	2002													312		372				

200 West Area		Data Source Information						Reported and/or Calculated Contact Depths (ft)																		
Well # (from HWIS)	Hanford Well ID (from HWIS)	Drill Depth (ft) (from HWIS)	Rank / Priority	Source	Principal Investigator	Date Published	Comments / Technical Basis	Holocene (Eolian or backfill?)	Top of Hanford formation	Top HF1	Top HF2	Top HF3	Top CCU	Top CCU (undif)	Top CCUz	Top CCUc	Top of Ringold Formation	Top Rtf	Top Rwie	Top Rwic	Top Rlm	Top Rwia	TOB	Date Last Changed	Reason Last Changed
699-40-062	A5158	384	3	Thorne06	Thorne	2006			0.0				NP		NP	NP	314.0	NP	314.0			?	?		
699-40-062	A5158		3	Reidel07-T4.1	Reidel	2007		0	3	3	40	313	313	313	313	313	313	313	313		374				
699-40-062	A5158		Best Est.	Last08	Last	This Report	Combination biased toward	0	3	3	40	313	313	313	313	313	313	313	313		374				
699-40-065	C4235	3. Best Est.	New in 2004	Reidel07-T4.1	Reidel	2007		0	6	6	32	272	272	272	272	272	279	279	279		365	433			
699-40-065	C4235		4	Williams08	Williams	In Press															372	434			
699-40-080	A8643		2	Bjornstad84	Bjornstad	1984			0	0						116	126	126	126		438	490	547		
699-40-080	A8643		1	Last89	Last	1989							89		89	112	150	150	150		438	490	547		
699-40-080	A8643		2	Lindsey95	Lindsey	1995		0	0	0			112	112			150	150	150		438	490	547		
699-40-080	A8643		1	Williams02	Williams	2002													150		438	490	547		
699-40-080	A8643	559.0	3	Thorne06	Thorne	2006			0.0				87.9		87.9	87.9	149.0	NP	149.0			488.8	544.9		
699-40-080	A8643		Best Est.	Last08	Last	This Report	Combination biased toward Last89	0	0	0			89		89	112	150	150	150		438	490	547		
699-43-069	C5573	501.5	2	Sexton08 (SGV	Sexton	2008	New Drilling Document	0	2				96	96			114	114	235		364	396	500		
699-43-069	C5573	501.5	Best Est.	Horner08	Horner	This Report	Contact est. from evaluation of BH	0	2	2	45	96	96	96	96	107	114	114	245		364	395	500		
699-43-084			1	Williams02	Williams	2002													114		436	486	562		
699-43-084	A8698	580	3	Thorne06	Thorne	2006			0.0				61.0		61.0	62.0	93.8	93.8	107.0			480.0	561.0		
699-43-084			Best Est.	Last08	Last	This Report	Combination biased toward		0	0			61		61	62	94	94	114		436	486	562		
699-43-091B		1805	1. Best Est.	Williams02	Williams	2002											140		140		463	562	692	8/13/2009	Changed Ringold Contact (Rwie) to 140 ft.
699-44-064	A5188	452	3	Thorne06	Thorne	2006			0.0				?		?	NP	?	?	290.0			383.5	440.3		
699-44-064	A5188		3. Best Est.	Reidel07-T4.1	Reidel	2007		0	0	0	75	260	260	260	260	260	260	260	260		315	335	442		
699-44-064P			1. Best Est.	Williams02	Williams	2002													272		317	335	442		
699-45-069A			1	Williams02	Williams	2002			0				22		22	36	56	56	160		320	338		9/15/2008	Took additional contact depths of Williams'
699-45-069A	A5196	368	4	Jeppson07	Jeppson	2007 UP		0	5	5	22		85		85		137		137		ETD			7/2/2009	New Record
699-45-069A	A5196		3	Reidel07-T4.1	Reidel	2007			0	2	2	170	170	170	170	178	178	178	178		320	360		9/15/2008	Corrected the CCUz and CCUc contacts.
699-45-069A	A5196		Best Est.	Last08	Last	This Report			0		2	22	22	22	22	22	36	102	102	209		320	337		9/15/2008	Reevaluation of Logplot, Driller's log,
699-45-069A	A5196		4	Last09	Last	This Report			0	2	2	22	NP	100		100		128	128	161		295	338		8/13/2009	New Record. Reevaluation of Logplot,
699-45-069C	C5574	455	4	Williams08	Williams	In Press															335	365	455		
699-45-069C	C5574	455	2	Sexton08	Sexton	2008	New Drilling Document	0	7				105	105	105	105	105		125		335	360	455		
699-45-069C	C5574	455	4	Horner08	Horner	This Report	Contact est. from evaluation of BH	0	7	7	36	48	105	105	105	105	105	105	220		335	360	455	8/17/2009	Delected as Best Est.
699-45-069C	C5574	455	4. Best Est.	Last08	Last	This Report		0	0	0	36	36	36	36	36	48	105	105	220		335	365	455	9/15/2008	Reevaluation of Borehole Log, in context
699-45-078	A8723		2	Bjornstad84	Bjornstad	1984			0	0						98	105	105	132		441	485	508		
699-45-078	A8723		1	Last89	Last	1989							90		90	58	120	120	135		441	485	508		
699-45-078	A8723		2	Lindsey95	Lindsey	1995		0	0	0			90	90			120	120	135		441	470	507		
699-45-078	A8723		1	Williams02	Williams	2002													175		442	482	520		
699-45-078	A8723	730	3	Thorne06	Thorne	2006			0.0				?		?	86.0	116.1	116.1	?			?	?		
699-45-078	A8723		Best Est.	Last08	Last	This Report	Combination biased toward	0	0	0			90		90	98	105	105	132		441	485	508		
699-46-085B	A8742		1	Williams02	Williams	2002													284		570	618	707		
699-46-085B	A8742	723	3	Thorne06	Thorne	2006			0.0				208.7		NP	208.7	221.8	221.8	271.7			604.7	703.7		
699-46-085B	A8742		Best Est.	Last08	Last	This Report	Combination, biased toward		0	0			209		209	209	222	222	284		570	618	707		
699-47-060			1	Williams02	Williams	2002																226	284		
699-47-060	A5202	287	3	Thorne06	Thorne	2006			0.0				NP		NP	NP	NP	NP	NP			222.8	281.8		
699-47-060	A5202		3. Best Est.	Reidel07-T4.1	Reidel	2007		0	0	0	48	67	226	226	226	226	226	226	226		226	226	284		
699-47-080B	A8754		1, Best Est.	Last89	Last	1989																	531		
699-47-080B	A8754		2	Lindsey95	Lindsey	1995																	-178		
699-47-092			1	Williams02	Williams	2002													273		552	641	740		
699-47-092	A8757	755	3	Thorne06	Thorne	2006			0.0				171.9		NP	171.9	176.8	176.8	254.9			638.8	736.9		
699-47-092			Best Est.	Last08	Last	This Report	Combination biased toward		0	0			172		172	172	177	177	273		552	641	740		
699-48-050B	C5196	3. Best Est.	New in 2006	Reidel07-T4.1	Reidel	2007		0	5	5	10	209	209	209	209	209	209	209	209		209	209	209		
699-48-077A	A8772	457.7	3	Thorne06	Thorne	2006			0.0				?		?	22.6	65.6	65.6	?			?	?		
699-48-077A	A8772		3	Reidel07-T4.1	Reidel	2007		0		0	25	25		25	25	25	87	87	87		325	325	457	9/11/2008	Re-evaluated Reidel07 report, which
699-48-077A	A8772		Best Est.	Last08	Last	This Report	Combination biased toward	0	0	0	22.5	22.5	22.5	22.5	22.5	22.5	60	60	82.5		336	336	453.5	9/11/2008	Reanalyzed the borehole logs, geophycial
699-48-077A/B	A8772/A8773		1	Williams02	Williams	2002													87			397	457		
699-48-077C	A8774	437.2	3	Thorne06	Thorne	2006			0.0				9.8		NP	9.8	62.0	62.0	80.1			287.1	447.8	9/11/2008	Removed as best pick - created new picks
699-48-077C	A8774	437.2	Best Est.	Last08	Last	This Report		0	1.6				21	21		22	62	62	82		321	321	433	9/11/2008	Reanalyzed the borehole logs, geophycial
699-49-079			2. Best Est.	Bjornstad84	Bjornstad	1984			0	0						84	90	90	117						
699-50-059	C4882		4. Best Est.	Williams08	Williams	In Press							167.2	167.2	167.2	167.2	167.2	167.2	167.2		167.2	167.2	167.2		
699-50-085			1	Williams02	Williams	2002													212		476	532	595		
699-50-085	A5229	600	3	Thorne06	Thorne	2006			0.0				88.9		NP	88.9	116.8	116.8	209.0			526.9	586.9		
699-50-085			Best Est.	Last08	Last	This Report	Combination biased toward		0	0			89		89	89	117	117	212		476	532	595		
699-50-096			1. Best Est.	Williams02	Williams	2002													246		561	630	718		
699-50-099			1. Best Est.	Williams02	Williams	2002													238		458	462	466		
699-50-099	A8818	730	3	Thorne06	Thorne	2006			0.0				?		NP	?	229.7	NP	229.7			457.7	467.8		
699-51-063			1. Best Est.	Williams02	Williams	2002																178	183		

200 West Area			Data Source Information					Reported and/or Calculated Contact Depths (ft)																		
Well # (from HWIS)	Hanford Well ID (from HWIS)	Drill Depth (ft) (from HWIS)	Rank / Priority	Source	Principal Investigator	Date Published	Comments / Technical Basis	Holocene (Eolian or backfill?)	Top of Hanford formation	Top HF1	Top HF2	Top HF3	Top CCU	Top CCU (undif)	Top CCUz	Top CCUc	Top of Ringold Formation	Top Rtf	Top Rwie	Top Rwic	Top Rlm	Top Rwia	TOB	Date Last Changed	Reason Last Changed
699-51-075			2	Lindsey95	Lindsey	1995		0	0	0			212	212			212	212	212		332	336			
699-51-075			1. Best Est.	Williams02	Williams	2002													100			265	380		
699-51-075	A5232	382	3	Thorne06	Thorne	2006			0.0				NP		NP	NP	209.3	NP	209.3			NP	371.4		
699-55-060B		288	1. Best Est.	Williams02	Williams	2002			0												NP	NP	ETD	7/21/2009	Added drill depth and contact information
699-55-063			1. Best Est.	Williams02	Williams	2002													179		179	179	179		
699-55-070			1	Williams02	Williams	2002																90	205		
699-55-070	A5260	205	3	Thorne06	Thorne	2006			0.0				?		?	NP	?	?	48.6			?	?		
699-55-070			Best Est.	Last08	Last	This Report	Combination biased toward		0	0						49			49			90	205		
699-55-076			1	Williams02	Williams	2002																147	223		
699-55-076	A5261	238	3	Thorne06	Thorne	2006			0.0				NP		NP	NP	116.8	NP	116.8			NP	219.8		
699-55-076			Best Est.	Last08	Last	This Report	Combination biased toward		0	0			117		117	117	117	117	117		117	147	223		
699-55-089			1	Williams02	Williams	2002													80						
699-55-089	A5262	235	3	Thorne06	Thorne	2006			0.0				116.8		NP	116.8	123.7	NP	123.7			?	?		
699-55-089			Best Est.	Last08	Last	This Report	Combination biased toward		0	0									80						
699-55-095			1. Best Est.	Williams02	Williams	2002													215		378	464	512		
699-57-083A			1. Best Est.	Williams02	Williams	2002													203				343		
699-57-083A	A5270	355	3	Thorne06	Thorne	2006			0.0				NP		NP	NP	37.7	NP	37.7			266.7	339.9		
699-59-080B			1. Best Est.	Williams02	Williams	2002																74	184		
699-59-080B	A5278	198	3	Thorne06	Thorne	2006			0.0				?		?	NP	75.8	NP	75.8			?	?		
699-63-090			1. Best Est.	Williams02	Williams	2002													135		141	165	240		
699-63-090	A5293	532	3	Thorne06	Thorne	2006			0.0				NP		NP	NP	113.5	NP	113.5			NP	234.6		
C3082	C3082		2	PNNL-13757-2	Serne	2002	This is a slant borehole - depths	0	53	53	75.3	126.4	126.4		126.4										
C3082	C3082		2	PNNL-13757-3	Serne	2002	This is a slant borehole - depths	0	53	53	75.3	126.4	126.4		126.4										
C3082	C3082		1. Best Est.	PNNL-13757-4	Serne	2002	This is a slant borehole - depths	0	53.1	53.1	75.3	126.4	126.4		126.4										
C3830	C3830		1. Best Est.	Serne04a	Serne	2004	From PNNL-14594, text	0	52	52	52		100.4		100.4	111									
C3831	C3831		1. Best Est.	Serne04a	Serne	2004	From PNNL-14594, text	0	52.3	52.3	52.3		102.2		102.2	106									
C3832	C3832		1. Best Est.	Serne04a	Serne	2004	From PNNL-14594, text	0	45	45	45		103		103	110.4									
C4104	C4104		1. Best Est.	Serne04b	Serne	2004	From PNNL-14849, text	0	40	40	40		80.7		80.7	92.5	108	108	120.9						
C4105	C4105		1. Best Est.	Serne04b	Serne	2004	From PNNL-14849, text	0	40.6	40.6	40.6		85.5		85.5	92	111	111	122						
C4591	C4591		New in 2006																						
C4593	C4593		New in 2006																						
C4595	C4595		New in 2006																						
C4596	C4596		New in 2006																						
C4597	C4597		New in 2006																						
C4598	C4598		New in 2006																						
C4599	C4599		New in 2006																						
C4601	C4601		New in 2006																						
C4610	C4610		New in 2006																						
C4617	C4617		New in 2006																						
C4618	C4618		New in 2006																						
C4622	C4622		New in 2006																						
C4623	C4623		New in 2006																						
C4625	C4625		New in 2006																						
C4627	C4627		New in 2006																						
C4633	C4633		New in 2006																						
C4637	C4637		New in 2006																						
C4768	C4768	89	New in 2005																					7/2/2009	New well added per V. Rohay comments
C5003	C5003		New in 2006																						
C5004	C5004		New in 2006																						
C5008	C5008		New in 2006																						
C5010	C5010		New in 2006																						
C5012	C5012		New in 2006																						
C5016	C5016		New in 2006																						
C5018	C5018		New in 2006																						
C5020	C5020		New in 2006																						
C5096	C5096		New in 2006																						
C5097	C5097		New in 2006																						
C5098	C5098		New in 2006																						
C5099	C5099		New in 2006																						
C5100	C5100		New in 2006																						
C5198	C5198		New in 2006																						
C5199	C5199		New in 2006																						

200 West Area			Data Source Information					Reported and/or Calculated Contact Depths (ft)																			
Well # (from HWIS)	Hanford Well ID (from HWIS)	Drill Depth (ft) (from HWIS)	Rank / Priority	Source	Principal Investigator	Date Published	Comments / Technical Basis	Holocene (Eolian or backfill?)	Top of Hanford formation	Top HF1	Top HF2	Top HF3	Top CCU	Top CCU (undif)	Top CCUz	Top CCUc	Top of Ringold Formation	Top Rtf	Top Rwie	Top Rwic	Top Rlm	Top Rwia	TOB	Date Last Changed	Reason Last Changed
C5200	C5200		New in 2006																						
C5201	C5201		New in 2006																						
C5202	C5202		New in 2006																						
C5203	C5203		New in 2006																						
C5229	C5229		New in 2006																						
C5230	C5230		New in 2006																						
C5231	C5231		New in 2006																						
C5232	C5232		New in 2006																						
C5233	C5233		New in 2006																						
C5234	C5234		New in 2006																						
C5235	C5235		New in 2006																						
C5236	C5236		New in 2006																						
C5237	C5237		New in 2006																						
C5238	C5238		New in 2006																						
C5239	C5239		New in 2006																						
C5240	C5240		New in 2006																						
C5241	C5241		New in 2006																						
C5242	C5242		New in 2006																						
C5306	C5306		New in 2006																						
C5307	C5307		New in 2006																						
C5309	C5309		New in 2006																						
C5310	C5310		New in 2006																						
C5311	C5311		New in 2006																						
C5312	C5312		New in 2006																						
C5314	C5314		New in 2006																						
C5315	C5315		New in 2006																						
C5328	C5328		New in 2006																						
C5329	C5329		New in 2006																						
C5330	C5330		New in 2006																						
C5331	C5331		New in 2006																						
C5332	C5332		New in 2006																						
C5333	C5333		New in 2006																						
C5334	C5334		New in 2006																						

UP = Unpublished
NP = Not Present
ETD = Exceeds Total Depth
? = Unknown or Undifferentiated.
UD = Undifferentiated

Rank/Priority

1 - Reported contacts are directly traceable to raw borehole data (e.g. through summary logs w/contacts) and first hand geologic interpretation (e.g. cross sections, structure contour maps, etc.).
2 - Reported contacts are indirectly traceable to raw borehole data (i.e. no summary logs) but are represented in first hand geologic interpretation.
3 - Reported contacts are not readily traced to raw borehole data or first hand geologic interpretation (e.g. data and/or interpretations taken from other documents).
4 - Unpublished, but no other data from this investigator(s).
5 - Unpublished, where other data are published from this investigator(s).
9 - Data questionable, do not use.

Pink Highlight - Values need to be checked.
Red Highlight - Reported value is believed to be incorrect.
Orange Highlight - Newer wells that should be considered for data analysis and interpretation
Purple Highlight - Values changed on 3/4/08 or 3/6/08.
Lt. Blue Highlight - Values changed on 3/7/08.
Gold Highlight - Values changed on 9/2/08 per email from BN Bjornstad dated 8/14/08.
Tan Highlight - Values changed on 9/2/08 per email from J. Horner dated 8/28/08.
Lavender Highlight - Changes on 9/3/08.
Lt. Blue Highlight - Values changed on 9/11/08.
Lt. Grey Highlight - Values added on 7/2/09.

Can not confirm Lindsey04.
Values in old 200W contacts spreadsheet changed on 5/5-7/08).

Appendix B

Best-Estimate Ground-Surface Elevations for Wells and Boreholes in and Around the 200 West Area

Appendix B

Best-Estimate Ground-Surface Elevations for Wells and Boreholes in and Around the 200 West Area

Best-estimate ground-surface elevations[1], in meters (presumably at the time of drilling, and presumably relative to NAVD88), were calculated using the following set of logic rules:

1. If the HWIS contained an elevation (vertical survey) value described as surveyed from ground surface (brass survey marker) or ground surface (assumed), that value was used as the ground-surface elevation in meters.
2. If the HWIS did not contain vertical survey value as describe above but did contain a DISC_Z value, that value was used as a proxy for the ground-surface elevation. When compared, those values identified as the elevation of the brass survey marker and the DISC_Z values were identical when rounded to the nearest 0.01 m.
3. If neither 1 nor 2 above were applicable, then the ground-surface elevation was calculated from the HWIS vertical survey value described as having been surveyed from the top of one of the casings or the top of the pump plate using the HWIS stickup value (converted from feet to meters using a conversion factor of 3.28084 ft/m). If multiple stickup values were found, then the stickup value associated with the earliest documented inspection date was used as most representative to yield the ground-surface elevation at the time of drilling.
4. If a stickup value was not available from HWIS, then a default stickup value of 0.914 m (3 ft) was used to calculate the ground-surface elevation.
5. If there was no vertical survey value for the top of casing, then the ground-surface elevation was left blank or estimated using professional judgment based on the ground-surface elevations for nearby wells and the surrounding topography.
6. Where the ground-surface elevation was known to have been altered after the borehole was drilled (e.g., soil cover added at BC cribs), and/or the estimated ground-surface elevation base on the HWID data is suspected as not be representative of the time of drilling, then historical ground-surface elevation data from old Hanford wells documents (e.g., McGhan 1989[2]) was be used to estimate the ground surface at the time of drilling.

HWIS vertical survey data are reported in meters using the NAVD88 datum. However, stickup values and other older elevation values (e.g., *Hanford Wells* [McGhan 1989]) often are in feet using the NGVD29. Thus, these values were first converted to meters using the NAVD88 prior to calculating the best-estimate ground-surface elevation at the time of drilling. Current and historical stickup values also are documented in feet, so these also were converted to meters for subsequent calculations.

[1] The database is included in the Excel file, *Best Est. GS Elev_2008-09-07.xls*, in this Appendix B subfolder.
[2] McGhan VL. 1989. *Hanford Wells.* PNL-6907, Pacific Northwest Laboratory, Richland, Washington.

sortOrder	Well_ID	WellName	Total Depth (ft)	Top of Casing Elevation (m)	Top of Casing Survey Point Description	Ground Surface Elevation (m)	Ground Surface Survey Point Description	DISC_Z	EASTING	NORTHING	WELL_STICKUP	DATE_INSPECTED	In Tank Farm?	Ground Surface Elevation from TOC-Stickup (m) - Priority 3	DISC Z from HWIS (m) - Priority 2	Ground Surface Elevation, from HWIS (m) - Priority 1	Best Est. Ground Surface Elevation (m)	Best Est. Rank
Formulas														=IF(ISBLANK(E3),"No TOC",IF(ISBLANK(L3),"No Stickup",E3-(L3/3.28084)))	=IF(ISBLANK(I3),"No DISC Z",I3)	=IF(ISBLANK(G3),"No GS",G3)	=IF(ISNUMBER(Q3),Q3,IF(ISNUMBER(P3),P3,IF(O3="No Stickup",IF(ISBLANK(N3),E3-(3/3.28084),E3),O3)))	
1177	A4996	299-W6-1	476	215.158	Top of casing, north edge, stamped X				567214.128	137510.135	1.5	##########		214.70	No DISC Z	No GS	214.70	
1177	A4996	299-W6-1	476	215.158	Top of casing, north edge, stamped X				567214.128	137510.135	1.5	30-Jun-04		214.70	No DISC Z	No GS	214.70	3
1178	A4997	299-W6-2	248	212.159	Top of casing, north edge, stamped X			211.468	566938.399	137351.002		06-May-97		No Stickup	211.47	No GS	211.47	
1178	A4997	299-W6-2	248	212.159	Top of casing, north edge, stamped X			211.468	566938.399	137351.002	2.35	18-Apr-01		211.44	211.47	No GS	211.47	
1178	A4997	299-W6-2	248	212.159	Top of casing, north edge, stamped X			211.468	566938.399	137351.002	2.35	01-Sep-04		211.44	211.47	No GS	211.47	2
1179	A4998	299-W6-3	441	214.373	Top of outer casing, north edge			213.355	567118.18	137299.13	3.35	##########		213.35	213.36	No GS	213.36	2
1180	A4999	299-W6-4	258.2	214.806	Top of outer casing, north edge			213.745	567132.25	137290.49	3.5	##########		213.74	213.75	No GS	213.75	
1180	A4999	299-W6-4	258.2	214.806	Top of outer casing, north edge			213.745	567132.25	137290.49		03-Feb-97		No Stickup	213.75	No GS	213.75	
1180	A4999	299-W6-4	258.2	214.806	Top of outer casing, north edge			213.745	567132.25	137290.49	3.5	18-Sep-01		213.74	213.75	No GS	213.75	2
1181	A5000	299-W6-5		218.709	Top of outer casing, north edge			217.754	567493.33	137638.63	3.15	##########		217.75	217.75	No GS	217.75	
1181	A5000	299-W6-5		218.709	Top of outer casing, north edge			217.754	567493.33	137638.63	3.15	19-Mar-03		217.75	217.75	No GS	217.75	
1181	A5000	299-W6-5		218.709	Top of outer casing, north edge			217.754	567493.33	137638.63	3.15	08-Sep-03		217.75	217.75	No GS	217.75	
1181	A5000	299-W6-5		218.709	Top of outer casing, north edge			217.754	567493.33	137638.63	3.15	03-Dec-03		217.75	217.75	No GS	217.75	2
1182	A5001	299-W6-6	472	217.469	Top of outer casing, north edge			216.504	567318.74	137638.72	3.21	##########		216.49	216.50	No GS	216.50	2
1183	A5002	299-W6-7	276.2	217.557	Top of outer casing			216.514	567311.3	137638.8	3.4	04-Apr-01		216.52	216.51	No GS	216.51	
1183	A5002	299-W6-7	276.2	217.557	Top of outer casing			216.514	567311.3	137638.8	3.43	12-Jun-06		216.51	216.51	No GS	216.51	2
1184	A5003	299-W6-8	252	212.818	Top of outer casing			211.784	567028.8	137638.8	3.4	##########		211.78	211.78	No GS	211.78	
1184	A5003	299-W6-8	252	212.818	Top of outer casing			211.784	567028.8	137638.8		03-Dec-03		No Stickup	211.78	No GS	211.78	2
1185	A5434	299-W6-9	253.2	213.235	Top of casing, north edge			212.374	567031.61	137363.12	2.82	##########		212.38	212.37	No GS	212.37	
1185	A5434	299-W6-9	253.2	213.235	Top of casing, north edge			212.374	567031.61	137363.12	2.82	12-Jun-06		212.38	212.37	No GS	212.37	2
1186	A5435	299-W6-10	278.3	218.228	Top of casing, north edge			217.374	567413.34	137453.05		06-Feb-97		No Stickup	217.37	No GS	217.37	
1186	A5435	299-W6-10	278.3	218.228	Top of casing, north edge			217.374	567413.34	137453.05	2.8	04-Apr-01		217.37	217.37	No GS	217.37	
1186	A5435	299-W6-10	278.3	218.228	Top of casing, north edge			217.374	567413.34	137453.05	2.8	01-Sep-04		217.37	217.37	No GS	217.37	
1186	A5435	299-W6-10	278.3	218.228	Top of casing, north edge			217.374	567413.34	137453.05		16-Oct-06		No Stickup	217.37	No GS	217.37	2
1187	A5436	299-W6-11	280.3	215.248	Top of casing, north edge, stamped X			214.388	567162.516	137634.825	2.83	##########		214.39	214.39	No GS	214.39	
1187	A5436	299-W6-11	280.3	215.248	Top of casing, north edge, stamped X			214.388	567162.516	137634.825		27-Feb-02		No Stickup	214.39	No GS	214.39	2
1188	A5437	299-W6-12	259.3	212.091	Top of casing, north edge, stamped X			211.219	566915.534	137635.159	2.86	##########		211.22	211.22	No GS	211.22	2
1189	A5004	299-W7-1	245	211.628	Top of casing, north edge, stamped X			210.968	565932.047	137647.125	2.16	##########		210.97	210.97	No GS	210.97	
1189	A5004	299-W7-1	245	211.628	Top of casing, north edge, stamped X			210.968	565932.047	137647.125		08-May-97		No Stickup	210.97	No GS	210.97	
1189	A5004	299-W7-1	245	211.628	Top of casing, north edge, stamped X			210.968	565932.047	137647.125	2.16	14-Apr-04		210.97	210.97	No GS	210.97	
1189	A5004	299-W7-1	245	211.628	Top of casing, north edge, stamped X			210.968	565932.047	137647.125		29-Mar-05		No Stickup	210.97	No GS	210.97	2
1190	A5008	299-W7-2	236	207.016	Top of casing, north edge, stamped X			206.29	566302.803	137638.502	2.44	##########		206.27	206.29	No GS	206.29	
1190	A5008	299-W7-2	236	207.016	Top of casing, north edge, stamped X			206.29	566302.803	137638.502	2.44	22-Oct-04		206.27	206.29	No GS	206.29	2
1191	A5009	299-W7-3	476.7	207.185	Top of casing, north edge, stamped X			206.451	566292.031	137638.641	2.47	##########		206.43	206.45	No GS	206.45	
1191	A5009	299-W7-3	476.7	207.185	Top of casing, north edge, stamped X			206.451	566292.031	137638.641		06-Jun-97		No Stickup	206.45	No GS	206.45	2
1192	A5010	299-W7-4	235	205.833	Top of casing, north edge, stamped X			205.018	566408.771	137308.243	2.67	##########		205.02	205.02	No GS	205.02	
1192	A5010	299-W7-4	235	205.833	Top of casing, north edge, stamped X			205.018	566408.771	137308.243		06-Jun-97		No Stickup	205.02	No GS	205.02	2
1193	A5011	299-W7-5	229	206.234	Top of casing, north edge, stamped X			205.437	566476.026	137635.688	2.63	##########		205.43	205.44	No GS	205.44	
1193	A5011	299-W7-5	229	206.234	Top of casing, north edge, stamped X			205.437	566476.026	137635.688		08-May-97		No Stickup	205.44	No GS	205.44	
1193	A5011	299-W7-5	229	206.234	Top of casing, north edge, stamped X			205.437	566476.026	137635.688	2.65	09-Apr-02		205.43	205.44	No GS	205.44	
1193	A5011	299-W7-5	229	206.234	Top of casing, north edge, stamped X			205.437	566476.026	137635.688	2.65	22-Sep-05		205.43	205.44	No GS	205.44	
1193	A5011	299-W7-5	229	206.234	Top of casing, north edge, stamped X			205.437	566476.026	137635.688		27-Sep-05		No Stickup	205.44	No GS	205.44	2
1194	A5012	299-W7-6	242.8	207.944	Top of casing, north edge, stamped X			207.219	566658.078	137636.314	2.42	##########		207.21	207.22	No GS	207.22	
1194	A5012	299-W7-6	242.8	207.944	Top of casing, north edge, stamped X			207.219	566658.078	137636.314		20-Mar-96		No Stickup	207.22	No GS	207.22	
1194	A5012	299-W7-6	242.8	207.944	Top of casing, north edge, stamped X			207.219	566658.078	137636.314		06-Nov-01		No Stickup	207.22	No GS	207.22	
1194	A5012	299-W7-6	242.8	207.944	Top of casing, north edge, stamped X			207.219	566658.078	137636.314	2.36	20-Jun-06		207.22	207.22	No GS	207.22	2
1195	A5013	299-W7-7	230.8	206.818	Top of casing, north edge, stamped X			205.911	566566.749	137636.075	3.02	##########		205.90	205.91	No GS	205.91	
1195	A5013	299-W7-7	230.8	206.818	Top of casing, north edge, stamped X			205.911	566566.749	137636.075		19-Jun-97		No Stickup	205.91	No GS	205.91	
1195	A5013	299-W7-7	230.8	206.818	Top of casing, north edge, stamped X			205.911	566566.749	137636.075	3	14-Apr-04		205.90	205.91	No GS	205.91	2
1196	A5014	299-W7-8	240.6	210.604	Top of casing, north edge, stamped X			209.708	566761.393	137636.665		27-Jun-97		No Stickup	209.71	No GS	209.71	
1196	A5014	299-W7-8	240.6	210.604	Top of casing, north edge, stamped X			209.708	566761.393	137636.665	2.98	11-Oct-99		209.70	209.71	No GS	209.71	
1196	A5014	299-W7-8	240.6	210.604	Top of casing, north edge, stamped X			209.708	566761.393	137636.665		16-Oct-01		No Stickup	209.71	No GS	209.71	
1196	A5014	299-W7-8	240.6	210.604	Top of casing, north edge, stamped X			209.708	566761.393	137636.665	2.9	17-Dec-01		209.72	209.71	No GS	209.71	
1196	A5014	299-W7-8	240.6	210.604	Top of casing, north edge, stamped X			209.708	566761.393	137636.665	2.9	01-Sep-04		209.72	209.71	No GS	209.71	2
1197	A5015	299-W7-9	252.2	212.048	Top of casing, north edge, stamped X			211.139	565844.438	137646.402	3.01	##########		211.13	211.14	No GS	211.14	
1197	A5015	299-W7-9	252.2	212.048	Top of casing, north edge, stamped X			211.139	565844.438	137646.402		07-Jul-97		No Stickup	211.14	No GS	211.14	
1197	A5015	299-W7-9	252.2	212.048	Top of casing, north edge, stamped X			211.139	565844.438	137646.402	2.97	18-Dec-01		211.14	211.14	No GS	211.14	
1197	A5015	299-W7-9	252.2	212.048	Top of casing, north edge, stamped X			211.139	565844.438	137646.402	2.97	20-Jun-06		211.14	211.14	No GS	211.14	2
1198	A5005	299-W7-10	244.2	211.312	Top of casing, north edge, stamped X			210.43	566858.212	137457.533	2.88	13-Dec-99		210.43	210.43	No GS	210.43	
1198	A5005	299-W7-10	244.2	211.312	Top of casing, north edge, stamped X			210.43	566858.212	137457.533	2.9	28-Nov-00		210.43	210.43	No GS	210.43	2
1199	A5006	299-W7-11	234.5	208.77	Top of outer casing, north edge			207.724	566186.2	137636	3.37	##########		207.74	207.72	No GS	207.72	
1199	A5006	299-W7-11	234.5	208.77	Top of outer casing, north edge			207.724	566186.2	137636		06-Aug-98		No Stickup	207.72	No GS	207.72	
1199	A5006	299-W7-11	234.5	208.77	Top of outer casing, north edge			207.724	566186.2	137636	3.4	05-Jul-06		207.73	207.72	No GS	207.72	2
1200	A5007	299-W7-12	245	210.745	Top of outer casing, north edge			209.744	566040.8	137636.3	3.33	##########		209.73	209.74	No GS	209.74	
1200	A5007	299-W7-12	245	210.745	Top of outer casing, north edge			209.744	566040.8	137636.3		15-Oct-02		No Stickup	209.74	No GS	209.74	
1200	A5007	299-W7-12	245	210.745	Top of outer casing, north edge			209.744	566040.8	137636.3		08-Dec-06		No Stickup	209.74	No GS	209.74	2
1201	A7133	299-W7-51							566512.36	137335.932		##########		No TOC	No DISC Z	No GS	No TOC	5
1202	A7134	299-W7-52							566474.356	137337.414		##########		No TOC	No DISC Z	No GS	No TOC	5
1203	A7135	299-W7-53							566462.205	137320.621		##########		No TOC	No DISC Z	No GS	No TOC	5
1204	A5016	299-W8-1	270.5	214.862	Top of casing, north edge, stamped X			214.29	565749.422	137646.639	2.23	##########		214.18	214.29	No GS	214.29	
1204	A5016	299-W8-1	270.5	214.862	Top of casing, north edge, stamped X			214.29	565749.422	137646.639		08-May-97		No Stickup	214.29	No GS	214.29	
1204	A5016	299-W8-1	270.5	214.862	Top of casing, north edge, stamped X			214.29	565749.422	137646.639	1.8	11-Sep-06		214.31	214.29	No GS	214.29	
1204	A5016	299-W8-1	270.5	214.862	Top of casing, north edge, stamped X			214.29	565749.422	137646.639	1.89	28-Sep-07		214.29	214.29	No GS	214.29	2
1205	A5017	299-W9-1	295	225.956	Top of casing, north edge, stamped X			225.236	565657.655	137023.769	2.37	11-Nov-99		225.23	225.24	No GS	225.24	
1205	A5017	299-W9-1	295	225.956	Top of casing, north edge, stamped X			225.236	565657.655	137023.769	2.39	29-Nov-00		225.23	225.24	No GS	225.24	
1205	A5017	299-W9-1	295	225.956	Top of casing, north edge, stamped X			225.236	565657.655	137023.769	2.39	20-Jun-06		225.23	225.24	No GS	225.24	
1205	A5017	299-W9-1	295	225.956	Top of casing, north edge, stamped X			225.236	565657.655	137023.769		21-Jun-06		No Stickup	225.24	No GS	225.24	2
2294	A7136	299-W10-1	305	207.459	Top of casing, north edge, stamped X				566663.096	136734.565	2.36	09-Aug-99		206.74	No DISC Z	No GS	206.74	3
2294	A7136	299-W10-1	305	207.459	Top of casing, north edge, stamped X				566663.096	136734.565		04-Feb-02		No Stickup	No DISC Z	No GS	206.54	
2294	A7136	299-W10-1	305	207.459	Top of casing, north edge, stamped X				566663.096	136734.565	2.45	31-Aug-04		206.71	No DISC Z	No GS	206.71	
2295	A4896	299-W10-2	230	206.579	stamped X				566672.24	136614.78	1.73	##########		206.05	No DISC Z	No GS	206.05	
2295	A4896	299-W10-2	230	206.579	stamped X				566672.24	136614.78	1.78	23-Mar-00		206.04	No DISC Z	No GS	206.04	3
2295	A4896	299-W10-2	230	206.579	stamped X				566672.24	136614.78	1.7	23-Feb-04		206.06	No DISC Z	No GS	206.06	

sortOrder	Well_ID	WellName	Total Depth (ft)	Top of Casing Elevation (m)	Top of Casing Survey Point Description	Ground Surface Elevation (m)	Ground Surface Survey Point Description	DISC_Z	EASTING	NORTHING	WELL_STICKUP	DATE_INSPECTED	In Tank Farm?	Ground Surface Elevation from TOC-Stickup (m) - Priority 3	DISC Z from HWIS (m) - Priority 2	Ground Surface Elevation, from HWIS (m) - Priority 1	Best Est. Ground Surface Elevation (m)	Best Est. Rank
2296	A4897	299-W10-3	239	205.763	Top of casing, north edge, stamped X				566731.856	136673.401	0	##########	241-T	205.76	No DISC Z	No GS	205.76	3
2297	A7137	299-W10-4	245	205.524	Top of casing, north edge, stamped X			205.255	566734.643	136578.079	0.9	03-Feb-00		205.25	205.26	No GS	205.26	
2297	A7137	299-W10-4	245	205.524	Top of casing, north edge, stamped X			205.255	566734.643	136578.079	0.9	12-Mar-01		205.25	205.26	No GS	205.26	
2297	A7137	299-W10-4	245	205.524	Top of casing, north edge, stamped X			205.255	566734.643	136578.079		03-Sep-02		No Stickup	205.26	No GS	205.26	
2297	A7137	299-W10-4	245	205.524	Top of casing, north edge, stamped X			205.255	566734.643	136578.079	0.93	12-Nov-02		205.24	205.26	No GS	205.26	
2297	A7137	299-W10-4	245	205.524	Top of casing, north edge, stamped X			205.255	566734.643	136578.079	0.93	27-Jan-04		205.24	205.26	No GS	205.26	
2297	A7137	299-W10-4	245	205.524	Top of casing, north edge, stamped X			205.255	566734.643	136578.079	0.93	02-Sep-04		205.24	205.26	No GS	205.26	
2297	A7137	299-W10-4	245	205.524	Top of casing, north edge, stamped X			205.255	566734.643	136578.079		13-Apr-06		No Stickup	205.26	No GS	205.26	
2297	A7137	299-W10-4	245	205.524	Top of casing, north edge, stamped X			205.255	566734.643	136578.079	0.93	27-Nov-07		205.24	205.26	No GS	205.26	2
2298	A4898	299-W10-5	240	205.962	Top of casing, north edge, stamped X				566578.595	136474.832	1.63	##########		205.47	No DISC Z	No GS	205.47	
2298	A4898	299-W10-5	240	205.962	Top of casing, north edge, stamped X				566578.595	136474.832	1.63	27-Jan-04		205.47	No DISC Z	No GS	205.47	3
2298	A4898	299-W10-5	240	205.962	Top of casing, north edge, stamped X				566578.595	136474.832		28-Jun-05		No Stickup	No DISC Z	No GS	205.05	
2299	A7138	299-W10-6	220	206.805	Top of casing (assumed)				566699.301	136466.464		##########		No Stickup	No DISC Z	No GS	205.89	
2299	A7138	299-W10-6	220	206.805	Top of casing (assumed)				566699.301	136466.464		03-Oct-03		No Stickup	No DISC Z	No GS	205.89	4
2300	A7139	299-W10-7	220	206.805	Top of casing (assumed)				566845.471	136466.877		##########		No Stickup	No DISC Z	No GS	205.89	
2300	A7139	299-W10-7	220	206.805	Top of casing (assumed)				566845.471	136466.877		03-Oct-03		No Stickup	No DISC Z	No GS	205.89	4
2301	A4899	299-W10-8	252	208.382	Top of casing, north edge, stamped X				566848.824	136811.222	3.18	19-Jun-01		207.41	No DISC Z	No GS	207.41	
2301	A4899	299-W10-8	252	208.382	Top of casing, north edge, stamped X				566848.824	136811.222	3.18	03-Mar-04		207.41	No DISC Z	No GS	207.41	
2301	A4899	299-W10-8	252	208.382	Top of casing, north edge, stamped X				566848.824	136811.222	3.18	02-Jun-05		207.41	No DISC Z	No GS	207.41	
2301	A4899	299-W10-8	252	208.382	Top of casing, north edge, stamped X				566848.824	136811.222	3.18	27-Nov-07		207.41	No DISC Z	No GS	207.41	3
2302	A4900	299-W10-9	225	206.746	Top of casing, north edge, stamped X				566748.183	136798.84	2.96	##########		205.84	No DISC Z	No GS	205.84	
2302	A4900	299-W10-9	225	206.746	Top of casing, north edge, stamped X				566748.183	136798.84	3	14-Oct-03		205.83	No DISC Z	No GS	205.83	3
2303	A4887	299-W10-10	250	206.873	Top of casing, north edge, stamped X				566751.345	136805.892	3.15	##########		205.91	No DISC Z	No GS	205.91	3
2304	A4888	299-W10-11	250	206.845	Top of casing, north edge, stamped X				566755.01	136802.223	3	##########		205.93	No DISC Z	No GS	205.93	3
2305	A4889	299-W10-12	250	206.768	Top of casing, north edge, stamped X				566755.557	136797.507	2.91	##########		205.88	No DISC Z	No GS	205.88	3
2306	A4890	299-W10-13	250	214.166	Top of casing, north edge, stamped X			213.416	566027.407	136606.806	2.5	11-Oct-99		213.40	213.42	No GS	213.42	2
2307	A4891	299-W10-14	462	214.287	Top of casing, north edge, stamped X			213.572	566017.194	136608.895	2.37	##########		213.56	213.57	No GS	213.57	2
2308	A4892	299-W10-15	222.3	207.039	Top of casing, north edge, stamped X			206.07	566770.382	136808.048	3.18	##########		206.07	206.07	No GS	206.07	
2308	A4892	299-W10-15	222.3	207.039	Top of casing, north edge, stamped X			206.07	566770.382	136808.048	3.17	19-Mar-03		206.07	206.07	No GS	206.07	
2308	A4892	299-W10-15	222.3	207.039	Top of casing, north edge, stamped X			206.07	566770.382	136808.048	3.23	30-Jun-04		206.05	206.07	No GS	206.07	
2308	A4892	299-W10-15	222.3	207.039	Top of casing, north edge, stamped X			206.07	566770.382	136808.048	3.18	12-Jun-06		206.07	206.07	No GS	206.07	2
2309	A4893	299-W10-16	219.8	206.162	Top of casing, north edge, stamped X			205.249	566780.89	136606.615	3.02	##########		205.24	205.25	No GS	205.25	
2309	A4893	299-W10-16	219.8	206.162	Top of casing, north edge, stamped X			205.249	566780.89	136606.615	3.02	05-Mar-03		205.24	205.25	No GS	205.25	
2309	A4893	299-W10-16	219.8	206.162	Top of casing, north edge, stamped X			205.249	566780.89	136606.615	3.01	22-Oct-04		205.24	205.25	No GS	205.25	2
2310	A4894	299-W10-17	222.9	205.497	Top of casing, north edge, stamped X			204.604	566775.439	136491.246	2.94	28-Nov-00		204.60	204.60	No GS	204.60	
2310	A4894	299-W10-17	222.9	205.497	Top of casing, north edge, stamped X			204.604	566775.439	136491.246	2.94	16-Jul-02		204.60	204.60	No GS	204.60	
2310	A4894	299-W10-17	222.9	205.497	Top of casing, north edge, stamped X			204.604	566775.439	136491.246	2.95	12-Jun-06		204.60	204.60	No GS	204.60	
2310	A4894	299-W10-17	222.9	205.497	Top of casing, north edge, stamped X			204.604	566775.439	136491.246	2.94	13-Jul-06		204.60	204.60	No GS	204.60	2
2311	A4895	299-W10-18	222.6	205.524	Top of casing, north edge, stamped X			204.657	566846.866	136396.286	2.85	##########		204.66	204.66	No GS	204.66	
2311	A4895	299-W10-18	222.6	205.524	Top of casing, north edge, stamped X			204.657	566846.866	136396.286	2.85	03-Dec-03		204.66	204.66	No GS	204.66	2
2312	A5438	299-W10-19	238.3	209.24	Top of casing, north edge			208.345	566346.19	137037.14	2.93	12-Oct-99		208.35	208.35	No GS	208.35	
2312	A5438	299-W10-19	238.3	209.24	Top of casing, north edge			208.345	566346.19	137037.14		16-Oct-01		No Stickup	208.35	No GS	208.35	2
2313	A5439	299-W10-20	251	210.602	Top of casing, north edge, stamped X			209.75	566249.695	136866.607	2.82	##########		209.74	209.75	No GS	209.75	
2313	A5439	299-W10-20	251	210.602	Top of casing, north edge, stamped X			209.75	566249.695	136866.607	2.82	15-Oct-02		209.74	209.75	No GS	209.75	
2313	A5439	299-W10-20	251	210.602	Top of casing, north edge, stamped X			209.75	566249.695	136866.607		24-Oct-06		No Stickup	209.75	No GS	209.75	2
2314	A5440	299-W10-21		206.49	Top of casing, north edge, stamped X			205.882	566583.991	137154.721		##########		No Stickup	205.88	No GS	205.88	
2314	A5440	299-W10-21		206.49	Top of casing, north edge, stamped X			205.882	566583.991	137154.721		21-Mar-02		No Stickup	205.88	No GS	205.88	
2314	A5440	299-W10-21		206.49	Top of casing, north edge, stamped X			205.882	566583.991	137154.721	1.97	22-Sep-03		205.89	205.88	No GS	205.88	
2314	A5440	299-W10-21		206.49	Top of casing, north edge, stamped X			205.882	566583.991	137154.721	1.97	17-Oct-05		205.89	205.88	No GS	205.88	
2314	A5440	299-W10-21		206.49	Top of casing, north edge, stamped X			205.882	566583.991	137154.721	1.95	21-Jun-06		205.90	205.88	No GS	205.88	2
2315	A9890	299-W10-22	300	208.954	Top of casing			208.024	566832.612	136883.052		##########		No Stickup	208.02	No GS	208.02	
2315	A9890	299-W10-22	300	208.954	Top of casing			208.024	566832.612	136883.052		27-Nov-01		No Stickup	208.02	No GS	208.02	
2315	A9890	299-W10-22	300	208.954	Top of casing			208.024	566832.612	136883.052		10-Dec-02		No Stickup	208.02	No GS	208.02	
2315	A9890	299-W10-22	300	208.954	Top of casing			208.024	566832.612	136883.052		29-Jan-03		No Stickup	208.02	No GS	208.02	2
2316	B8545	299-W10-23	272	207.491	Top of casing, stamped X			206.69	566823.729	136815.339		##########		No Stickup	206.69	No GS	206.69	
2316	B8545	299-W10-23	272	207.491	Top of casing, stamped X			206.69	566823.729	136815.339		10-Nov-05		No Stickup	206.69	No GS	206.69	
2316	B8545	299-W10-23	272	207.491	Top of casing, stamped X			206.69	566823.729	136815.339		30-Aug-06		No Stickup	206.69	No GS	206.69	
2316	B8545	299-W10-23	272	207.491	Top of casing, stamped X			206.69	566823.729	136815.339	2.65	13-Feb-07		206.68	206.69	No GS	206.69	2
2317	B8546	299-W10-24	432.5	209.725	Top of casing, stamped X			208.978	566885.426	136798.78		##########		No Stickup	208.98	No GS	208.98	2
2318	C4987	299-W10-25	138						566266.01	136966.54				No TOC	No DISC Z	No GS	209.40	5
2319	B8548	299-W10-26	262	205.452	Top of casing, stamped X			204.673	566843.396	136400.594		##########		No Stickup	204.67	No GS	204.67	2
2320	C3125	299-W10-27	268.7	205.624	Top of casing			204.899	566843.969	136441.778	2.36	05-Apr-01		204.90	204.90	No GS	204.90	
2320	C3125	299-W10-27	268.7	205.624	Top of casing			204.899	566843.969	136441.778	2.36	10-Mar-03		204.90	204.90	No GS	204.90	
2320	C3125	299-W10-27	268.7	205.624	Top of casing			204.899	566843.969	136441.778	2.35	26-Aug-03		204.91	204.90	No GS	204.90	
2320	C3125	299-W10-27	268.7	205.624	Top of casing			204.899	566843.969	136441.778	2.35	22-Sep-03		204.91	204.90	No GS	204.90	2
2321	C3400	299-W10-28		206.826	Top of casing, stamped X			206.1	566701.55	136709.93		##########		No Stickup	206.10	No GS	206.10	
2321	C3400	299-W10-28		206.826	Top of casing, stamped X			206.1	566701.55	136709.93		12-Nov-01		No Stickup	206.10	No GS	206.10	
2321	C3400	299-W10-28		206.826	Top of casing, stamped X			206.1	566701.55	136709.93		04-Feb-02		No Stickup	206.10	No GS	206.10	
2321	C3400	299-W10-28		206.826	Top of casing, stamped X			206.1	566701.55	136709.93		19-Aug-02		No Stickup	206.10	No GS	206.10	
2321	C3400	299-W10-28		206.826	Top of casing, stamped X			206.1	566701.55	136709.93	2.37	19-Aug-02		206.10	206.10	No GS	206.10	
2321	C3400	299-W10-28		206.826	Top of casing, stamped X			206.1	566701.55	136709.93	2.5	29-Nov-06		206.06	206.10	No GS	206.10	
2321	C3400	299-W10-28		206.826	Top of casing, stamped X			206.1	566701.55	136709.93		04-Sep-07		No Stickup	206.10	No GS	206.10	
2321	C3400	299-W10-28		206.826	Top of casing, stamped X			206.1	566701.55	136709.93		26-Nov-07		No Stickup	206.10	No GS	206.10	2
2322	C4988	299-W10-29	287.2						566082.98	136828.74	2.45	11-May-06		No TOC	No DISC Z	No GS	No TOC	
2322	C4988	299-W10-29	287.2						566082.98	136828.74	2.45	09-Jun-06		No TOC	No DISC Z	No GS	211.62	5
2323	C4989	299-W10-30	283	211.647	Top of casing (assumed)			210.864	566082.78	136739.33	2.57	11-May-06		210.86	210.86	No GS	210.86	
2323	C4989	299-W10-30	283	211.647	Top of casing (assumed)			210.864	566082.78	136739.33	2.57	09-Jun-06		210.86	210.86	No GS	210.86	2
2324	C5194	299-W10-31	278.9	210.384	Top of casing (assumed)			209.666	566266.44	136968.34	2.33	11-May-06		209.67	209.67	No GS	209.67	
2324	C5194	299-W10-31	278.9	210.384	Top of casing (assumed)			209.666	566266.44	136968.34		09-Jun-06		No Stickup	209.67	No GS	209.67	2
2325	C5244	299-W10-32	192			205.118	Brass survey marker	205.118	566775.56	136609.92				No TOC	205.12	205.12	205.12	1
2326	C5855	299-W10-33	427	205.986	Top of casing, north edge			205.176	566772.75	136610.19				No Stickup	205.18	No GS	205.18	2
2327	A7141	299-W10-51	148	205.726	Top of casing, north edge, stamped X			205.735	566795.823	136714.981	0	##########	241-T	205.73	205.74	No GS	205.74	2
2328	A7142	299-W10-52	148	205.887	Top of casing, north edge, stamped X			205.875	566755.351	136684.51	0	##########	241-T	205.89	205.88	No GS	205.88	2
2329	A7143	299-W10-53	151	205.844	Top of casing, north edge, stamped X				566795.807	136784.155		##########	241-T	No Stickup	No DISC Z	No GS	205.84	4
2330	A7144	299-W10-54	150	205.721	Top of casing, north edge, stamped X				566755.312	136745.44	0	##########	241-T	205.72	No DISC Z	No GS	205.72	3
2331	A7145	299-W10-55	150	206.02	Top of casing, north edge, stamped X			206.002	566818.826	136650.19	0	##########	241-T	206.02	206.00	No GS	206.00	2
2332	A7146	299-W10-56	150	205.843	Top of casing, north edge, stamped X				566718.395	136699.805	0	##########	241-T	205.84	No DISC Z	No GS	205.84	3
2333	A7147	299-W10-57	150	205.874	Top of casing, north edge, stamped X				566727.008	136704.184	0	##########	241-T	205.87	No DISC Z	No GS	205.87	3
2334	A7148	299-W10-58	150	205.908	Top of casing, north edge, stamped X				566726.838	136694.374	0	##########	241-T	205.91	No DISC Z	No GS	205.91	3

sortOrder	Well_ID	WellName	Total Depth (ft)	Top of Casing Elevation (m)	Top of Casing Survey Point Description	Ground Surface Elevation (m)	Ground Surface Survey Point Description	DISC_Z	EASTING	NORTHING	WELL_STICKUP	DATE_INSPECTED	In Tank Farm?	Ground Surface Elevation from TOC-Stickup (m) - Priority 3	DISC Z from HWIS (m) - Priority 2	Ground Surface Elevation, from HWIS (m) - Priority 1	Best Est. Ground Surface Elevation (m)	Best Est. Rank
2335	A7149	299-W10-59	150	205.547	Top of casing, north edge, stamped X				566723.311	136658.058	0	################	241-T	205.55	No DISC Z	No GS	205.55	3
2336	A7150	299-W10-60	150	205.561	Top of casing, north edge, stamped X				566730.823	136658.088		################	241-T	No Stickup	No DISC Z	No GS	205.56	4
2337	A7151	299-W10-61	150	205.427	Top of casing, north edge, stamped X				566723.076	136650.325	0	################	241-T	205.43	No DISC Z	No GS	205.43	3
2338	A7152	299-W10-62	150	205.635	Top of casing, north edge, stamped X				566721.16	136660.138	0	################	241-T	205.64	No DISC Z	No GS	205.64	3
2339	A7153	299-W10-63	150	205.42	Top of casing, north edge, stamped X				566733.37	136648.128	0	################	241-T	205.42	No DISC Z	No GS	205.42	3
2340	A7154	299-W10-64	75	205.932	Top of casing, north edge, stamped X				566728.225	136691.765	0	################	241-T	205.93	No DISC Z	No GS	205.93	3
2341	A7155	299-W10-65	75	205.87	Top of casing, north edge, stamped X				566731.068	136686.347		################	241-T	No Stickup	No DISC Z	No GS	205.87	4
2342	A7156	299-W10-66	125	205.434	Top of casing, north edge, stamped X				566731.111	136650.438	0	################	241-T	205.43	No DISC Z	No GS	205.43	3
2343	A7157	299-W10-67	150	205.628	Top of casing, north edge, stamped X				566732.856	136660.309	0	################	241-T	205.63	No DISC Z	No GS	205.63	3
2344	A7158	299-W10-68	150	205.51	Top of casing, north edge, stamped X				566721.035	136648.128	0	################	241-T	205.51	No DISC Z	No GS	205.51	3
2345	A7159	299-W10-69	150	205.911	Top of casing, north edge, stamped X				566694.125	136664.646		################		No Stickup	No DISC Z	No GS	205.00	4
2346	A7160	299-W10-70	150	206.023	Top of casing, north edge, stamped X				566642.805	136671.833		################		No Stickup	No DISC Z	No GS	205.11	4
2347	A7161	299-W10-71	150	206.15	Top of casing, north edge, stamped X				566628.796	136654.665		################		No Stickup	No DISC Z	No GS	205.24	4
2347	A7161	299-W10-71	150	206.15	Top of casing, north edge, stamped X				566628.796	136654.665		19-Dec-01		No Stickup	No DISC Z	No GS	205.24	4
2348	A7162	299-W10-72	150	205.929	Top of casing, north edge, stamped X				566676.597	136649.769		################		No Stickup	No DISC Z	No GS	205.01	4
2349	A7163	299-W10-73	75	205.874	Top of casing, north edge, stamped X				566702.941	136678.811		################		No Stickup	No DISC Z	No GS	204.96	4
2351	A7165	299-W10-75	75	205.908	Top of casing, north edge, stamped X				566732.146	136698.326		################	241-T	No Stickup	No DISC Z	No GS	205.91	4
2352	A7166	299-W10-76	75	206.059	Top of casing, north edge, stamped X				566690.478	136691.277		################		No Stickup	No DISC Z	No GS	205.14	4
2356	A7170	299-W10-80	115	205.781	Top of casing, north edge, stamped X				566702.44	136636.284		################		No Stickup	No DISC Z	No GS	204.87	4
2358	A7172	299-W10-82	150	205.209	Top of casing, north edge, stamped X				566729.197	136427.891		################	241-TY	No Stickup	No DISC Z	No GS	205.21	4
2359	A7173	299-W10-83	150	205.409	Top of casing, north edge, stamped X				566754.528	136428.136	0	################	241-TY	205.41	No DISC Z	No GS	205.41	3
2364	A7178	299-W10-88	100	205.645	Top of casing, north edge, stamped X				566777.799	136460.036	0	################	241-TY	205.65	No DISC Z	No GS	205.65	3
2365	A7179	299-W10-89	100	205.515	Top of casing, north edge, stamped X				566783.398	136436.032	0	################	241-TY	205.52	No DISC Z	No GS	205.52	3
2366	A7180	299-W10-90	100	205.454	Top of casing, north edge, stamped X				566758.247	136445.185	0	################	241-TY	205.45	No DISC Z	No GS	205.45	3
2367	A7181	299-W10-91	100	205.375	Top of casing, north edge, stamped X				566746.603	136460.034	0	################	241-TY	205.38	No DISC Z	No GS	205.38	3
2368	A7182	299-W10-92	100	205.381	Top of casing, north edge, stamped X				566752.143	136435.936	0	################	241-TY	205.38	No DISC Z	No GS	205.38	3
2369	A7183	299-W10-93	100	205.072	Top of casing, north edge, stamped X				566727.282	136445.102	0	################	241-TY	205.07	No DISC Z	No GS	205.07	3
2370	A7184	299-W10-94	100	205.671	Top of casing, north edge, stamped X			205.668	566772.905	136429.994	0	################	241-TY	205.67	205.67	No GS	205.67	2
2371	A7185	299-W10-95	100	205.587	Top of casing, north edge, stamped X				566787.668	136414.242	0	################	241-TY	205.59	No DISC Z	No GS	205.59	3
2372	A7186	299-W10-96	100	205.56	Top of casing, north edge, stamped X				566772.947	136399.881	0	################	241-TY	205.56	No DISC Z	No GS	205.56	3
2373	A7187	299-W10-97	100	205.449	Top of casing, north edge, stamped X				566752.275	136425.587	0	################	241-TY	205.45	No DISC Z	No GS	205.45	3
2374	A7188	299-W10-98	100	205.344	Top of casing, north edge, stamped X				566741.505	136401.518	0	################	241-TY	205.34	No DISC Z	No GS	205.34	3
2375	A7189	299-W10-99	100	205.067	Top of casing, north edge, stamped X				566727.208	136416.131		################	241-TY	No Stickup	No DISC Z	No GS	205.07	4
2376	A7190	299-W10-100		205.452	Top of casing, north edge, stamped X				566749.554	136397.387	0	################	241-TY	205.45	No DISC Z	No GS	205.45	3
2377	A7191	299-W10-101	94	206.567	Top of casing, north edge, stamped X				566849.65	136772.12	0	################	241-T	206.57	No DISC Z	No GS	206.57	3
2378	A7192	299-W10-102	87	206.558	Top of casing, north edge, stamped X			206.536	566850.321	136760.11	0	################	241-T	206.56	206.54	No GS	206.54	2
2379	A7193	299-W10-103	94	206.272	Top of casing, north edge, stamped X			206.25	566837.585	136748.131	0	################	241-T	206.27	206.25	No GS	206.25	2
2380	A7194	299-W10-104	96	206.214	Top of casing, north edge, stamped X				566824.522	136765.224	0	################	241-T	206.21	No DISC Z	No GS	206.21	3
2381	A7195	299-W10-105	92	206.374	Top of casing, north edge, stamped X				566837.515	136778.539	0	################	241-T	206.37	No DISC Z	No GS	206.37	3
2382	A7196	299-W10-106	100	205.664	Top of casing, north edge, stamped X			205.639	566776.735	136720.279	0	################	241-T	205.66	205.64	No GS	205.64	2
2383	A7197	299-W10-107	100	205.688	Top of casing, north edge, stamped X			205.672	566790.489	136733.45	0	################	241-T	205.69	205.67	No GS	205.67	2
2384	A7198	299-W10-108	92	205.817	Top of casing, north edge, stamped X			205.795	566786.503	136744.068	0	################	241-T	205.82	205.80	No GS	205.80	2
2385	A7199	299-W10-109	92	205.613	Top of casing, north edge, stamped X			205.591	566766.88	136723.962	0	################	241-T	205.61	205.59	No GS	205.59	2
2386	A7200	299-W10-110	93	205.693	Top of casing, north edge, stamped X			205.666	566789.356	136729.175	0	################	241-T	205.69	205.67	No GS	205.67	2
2387	A7201	299-W10-111	94	205.628	Top of casing, north edge, stamped X			205.6	566785.246	136723.159	0	################	241-T	205.63	205.60	No GS	205.60	2
2388	A7202	299-W10-112	87	205.727	Top of casing, north edge, stamped X			205.702	566792.083	136705.159	0	################	241-T	205.73	205.70	No GS	205.70	2
2389	A7203	299-W10-113	87	205.749	Top of casing, north edge, stamped X			205.727	566805.697	136720.466	0	################	241-T	205.75	205.73	No GS	205.73	2
2390	A7204	299-W10-114	93	205.661	Top of casing, north edge, stamped X			205.645	566766.728	136713.617	0	################	241-T	205.66	205.65	No GS	205.65	2
2391	A7205	299-W10-115	87	205.72	Top of casing, north edge, stamped X				566766.59	136744.037	0	################	241-T	205.72	No DISC Z	No GS	205.72	3
2392	A7206	299-W10-116	87	205.841	Top of casing, north edge, stamped X				566791.859	136758.382	0	################	241-T	205.84	No DISC Z	No GS	205.84	3
2393	A7207	299-W10-117	91	205.862	Top of casing, north edge, stamped X			205.838	566789.169	136751.428	0	################	241-T	205.86	205.84	No GS	205.84	2
2394	A7208	299-W10-118	87	205.804	Top of casing, north edge, stamped X			205.779	566789.145	136759.546	0	################	241-T	205.80	205.78	No GS	205.78	2
2395	A7209	299-W10-119	91	205.818	Top of casing, north edge, stamped X				566794.121	136759.56	0	################	241-T	205.82	No DISC Z	No GS	205.82	3
2396	A7210	299-W10-120	92	205.717	Top of casing, north edge, stamped X			205.688	566763.081	136703.61	0	################	241-T	205.72	205.69	No GS	205.69	2
2397	A7211	299-W10-121	92	205.974	Top of casing, north edge, stamped X			205.95	566799.826	136747.781	0	################	241-T	205.97	205.95	No GS	205.95	2
2398	A7212	299-W10-122	91	206.017	Top of casing, north edge, stamped X				566817.634	136774.791	0	################	241-T	206.02	No DISC Z	No GS	206.02	3
2399	A7213	299-W10-123	91	205.963	Top of casing, north edge, stamped X				566811.727	136749.494	0	################	241-T	205.96	No DISC Z	No GS	205.96	3
2400	A7214	299-W10-124	91	205.768	Top of casing, north edge, stamped X				566792.191	136770.954	0	################	241-T	205.77	No DISC Z	No GS	205.77	3
2401	A7215	299-W10-125	92	205.903	Top of casing, north edge, stamped X				566804.976	136778.627	0	################	241-T	205.90	No DISC Z	No GS	205.90	3
2402	A7216	299-W10-126	92	205.828	Top of casing, north edge, stamped X				566782.312	136778.674	0	################	241-T	205.83	No DISC Z	No GS	205.83	3
2403	A7217	299-W10-127	91	205.629	Top of casing, north edge, stamped X				566763.54	136760.665	0	################	241-T	205.63	No DISC Z	No GS	205.63	3
2404	A7218	299-W10-128	93	205.869	Top of casing, north edge, stamped X				566766.678	136774.102	0	################	241-T	205.87	No DISC Z	No GS	205.87	3
2405	A7219	299-W10-129	94	206.393	Top of casing, north edge, stamped X				566842.832	136720.03	0	################	241-T	206.39	No DISC Z	No GS	206.39	3
2406	A7220	299-W10-130	93	206.143	Top of casing, north edge, stamped X				566822.447	136740.411	0	################	241-T	206.14	No DISC Z	No GS	206.14	3
2409	A7223	299-W10-133	94	205.924	Top of casing, north edge, stamped X			205.899	566799.862	136688.785	0	################	241-T	205.92	205.90	No GS	205.90	2
2410	A7224	299-W10-134	94	205.76	Top of casing, north edge, stamped X				566784.573	136688.297	0	################	241-T	205.76	No DISC Z	No GS	205.76	3
2411	A7225	299-W10-135	94	206.421	Top of casing, north edge, stamped X				566843.826	136660.528	0	################	241-T	206.42	No DISC Z	No GS	206.42	3
2412	A7226	299-W10-136	94	206.35	Top of casing, north edge, stamped X			206.314	566831.644	136660.552	0	################	241-T	206.35	206.31	No GS	206.31	2
2413	A7227	299-W10-137	94	206.119	Top of casing, north edge, stamped X				566823.513	136679.496	0	################	241-T	206.12	No DISC Z	No GS	206.12	3
2414	A7228	299-W10-138	93	205.998	Top of casing, north edge, stamped X				566813.535	136660.385	0	################	241-T	206.00	No DISC Z	No GS	206.00	3
2415	A7229	299-W10-139	94	205.736	Top of casing, north edge, stamped X				566791.315	136667.111	0	################	241-T	205.74	No DISC Z	No GS	205.74	3
2416	A7230	299-W10-140	94	205.805	Top of casing, north edge, stamped X				566771.452	136660.376	0	################	241-T	205.81	No DISC Z	No GS	205.81	3
2417	A7231	299-W10-141	94	205.799	Top of casing, north edge, stamped X			205.782	566761.262	136676.987	0	################	241-T	205.80	205.78	No GS	205.78	2
2418	A7232	299-W10-142	94	206.151	Top of casing, north edge, stamped X				566831.885	136688.603	0	################	241-T	206.15	No DISC Z	No GS	206.15	3
2419	A7233	299-W10-143	93	206.072	Top of casing, north edge, stamped X				566813.629	136689.492	0	################	241-T	206.07	No DISC Z	No GS	206.07	3
2420	A7234	299-W10-144	94	205.746	Top of casing, north edge, stamped X			205.719	566770.802	136688.345	0	################	241-T	205.75	205.72	No GS	205.72	2
2421	A7235	299-W10-145	99	205.666	Top of casing, north edge, stamped X				566773.605	136751.094	0	################	241-T	205.67	No DISC Z	No GS	205.67	3
2422	A7236	299-W10-146	90	206.796	Top of casing, north edge, stamped X			206.768	566851.357	136735.841	0	################	241-T	206.80	206.77	No GS	206.77	2
2423	A7237	299-W10-147	100	206.144	Top of casing, north edge, stamped X				566831.687	136720.324	0	################	241-T	206.14	No DISC Z	No GS	206.14	3
2424	A7238	299-W10-148	100	206.237	Top of casing, north edge, stamped X				566822.884	136728.034	0	################	241-T	206.24	No DISC Z	No GS	206.24	3
2425	A7239	299-W10-149	92	206.633	Top of casing, north edge, stamped X				566850.867	136703.888	0	################	241-T	206.63	No DISC Z	No GS	206.63	3
2426	A7240	299-W10-150	94	206.214	Top of casing, north edge, stamped X			206.194	566823.359	136697.563	0	################	241-T	206.21	206.19	No GS	206.19	2
2427	A7241	299-W10-151	93	206.223	Top of casing, north edge, stamped X			206.206	566823.598	136667.012	0	################	241-T	206.22	206.21	No GS	206.21	2
2428	A7242	299-W10-152	94	205.796	Top of casing, north edge, stamped X				566801.074	136660.311	0	################	241-T	205.80	No DISC Z	No GS	205.80	3
2429	A7243	299-W10-153	100	205.784	Top of casing, north edge, stamped X				566791.589	136679.745	0	################	241-T	205.78	No DISC Z	No GS	205.78	3
2430	A7244	299-W10-154	100	205.698	Top of casing, north edge, stamped X				566782.952	136660.363	0	################	241-T	205.70	No DISC Z	No GS	205.70	3
2431	A7245	299-W10-161	105	205.281	Top of casing (assumed)				566734.258	136456.847	0	################	241-TY	205.28	No DISC Z	No GS	205.28	3
2432	A7246	299-W10-162	122	205.755	Top of casing, north edge, stamped X			205.737	566781.9	136720.794	0	################	241-T	205.76	205.74	No GS	205.74	2
2433	A7247	299-W10-164	150	205.685	Top of casing, north edge, stamped X				566792.553	136717.574	0	################	241-T	205.69	No DISC Z	No GS	205.69	3

sortOrder	Well_ID	WellName	Total Depth (ft)	Top of Casing Elevation (m)	Top of Casing Survey Point Description	Ground Surface Elevation (m)	Ground Surface Survey Point Description	DISC_Z	EASTING	NORTHING	WELL_STICKUP	DATE_INSPECTED	In Tank Farm?	Ground Surface Elevation from TOC-Stickup (m) - Priority 3	DISC Z from HWIS (m) - Priority 2	Ground Surface Elevation, from HWIS (m) - Priority 1	Best Est. Ground Surface Elevation (m)	Best Est. Rank
2434	A7248	299-W10-165	120	205.813	Top of casing, north edge, stamped X				566801.095	136721.494	0	##########	241-T	205.81	No DISC Z	No GS	205.81	3
2435	A7249	299-W10-166	122	205.719	Top of casing, north edge, stamped X				566791.376	136707.979	0	##########	241-T	205.72	No DISC Z	No GS	205.72	3
2436	A7250	299-W10-167	126	205.709	Top of casing, north edge, stamped X			205.688	566788.475	136725.935	0	##########	241-T	205.71	205.69	No GS	205.69	2
2437	A7251	299-W10-168	122	205.653	Top of casing, north edge, stamped X			205.63	566755.441	136726.082	0	##########	241-T	205.65	205.63	No GS	205.63	2
2440	A7254	299-W10-171							566742	136430.4	0	##########	241-TY	No TOC	No DISC Z	No GS	No TOC	5
2442	A7255	299-W10-176	100	205.829	Top of casing, north edge, stamped X				566795.198	136698.696	0	##########	241-T	205.83	No DISC Z	No GS	205.83	3
2443	A7256	299-W10-177	95	205.956	Top of casing, north edge, stamped X			205.938	566800.787	136685.614	0	##########	241-T	205.96	205.94	No GS	205.94	2
2444	A7257	299-W10-178	95	205.904	Top of casing, north edge, stamped X			205.882	566800.665	136691.763	0	##########	241-T	205.90	205.88	No GS	205.88	2
2461	A7274	299-W10-196		206.351	Top of casing, north edge			205.855	566787.83	136724.78		##########	241-T	No Stickup	205.86	No GS	205.86	2
2463	A7275	299-W11-1	314.5	216.544	Top of casing, north edge, stamped X				567220.383	136652.128	0.68	##########		216.34	No DISC Z	No GS	216.34	
2463	A7275	299-W11-1	314.5	216.544	Top of casing, north edge, stamped X				567220.383	136652.128	0.79	16-Sep-03		216.30	No DISC Z	No GS	216.30	3
2464	A7276	299-W11-2	530	218.8	Top of casing, east edge, stamped X				567406.278	136671.046	1.41	##########		218.37	No DISC Z	No GS	218.37	
2464	A7276	299-W11-2	530	218.8	Top of casing, east edge, stamped X				567406.278	136671.046	1.41	06-Aug-03		218.37	No DISC Z	No GS	218.37	3
2465	A9462	299-W11-2O	530						567406.278	136671.046		##########		No TOC	No DISC Z	No GS	218.37	5
2466	A9463	299-W11-2P	530						567406.278	136671.046		##########		No TOC	No DISC Z	No GS	218.37	
2466	A9463	299-W11-2P	530						567406.278	136671.046		06-Aug-03		No TOC	No DISC Z	No GS	218.37	5
2467	A9464	299-W11-2Q	530						567406.278	136671.046		##########		No TOC	No DISC Z	No GS	218.37	
2467	A9464	299-W11-2Q	530						567406.278	136671.046		06-Aug-03		No TOC	No DISC Z	No GS	218.37	5
2468	A9465	299-W11-2R	530						567406.278	136671.046		##########		No TOC	No DISC Z	No GS	218.37	
2468	A9465	299-W11-2R	530						567406.278	136671.046		06-Aug-03		No TOC	No DISC Z	No GS	218.37	5
2469	A9466	299-W11-2S	530						567406.278	136671.046		##########		No TOC	No DISC Z	No GS	218.37	
2469	A9466	299-W11-2S	530						567406.278	136671.046		06-Aug-03		No TOC	No DISC Z	No GS	218.37	5
2470	A9467	299-W11-2T	530						567406.278	136671.046		##########		No TOC	No DISC Z	No GS	218.37	
2470	A9467	299-W11-2T	530						567406.278	136671.046		06-Aug-03		No TOC	No DISC Z	No GS	218.37	5
2471	A5473	299-W11-3	330	220.019	Top of casing, north edge, stamped X				567641.717	136663.897		20-Feb-96		No Stickup	No DISC Z	No GS	219.10	
2471	A5473	299-W11-3	330	220.019	Top of casing, north edge, stamped X				567641.717	136663.897	1.3	02-Jun-00		219.62	No DISC Z	No GS	219.62	3
2471	A5473	299-W11-3	330	220.019	Top of casing, north edge, stamped X				567641.717	136663.897	1.23	03-Jan-01		219.64	No DISC Z	No GS	219.64	
2471	A5473	299-W11-3	330	220.019	Top of casing, north edge, stamped X				567641.717	136663.897	1.28	21-Mar-01		219.63	No DISC Z	No GS	219.63	
2471	A5473	299-W11-3	330	220.019	Top of casing, north edge, stamped X				567641.717	136663.897	1.24	28-Jan-04		219.64	No DISC Z	No GS	219.64	
2471	A5473	299-W11-3	330	220.019	Top of casing, north edge, stamped X				567641.717	136663.897	1.24	21-Sep-04		219.64	No DISC Z	No GS	219.64	
2471	A5473	299-W11-3	330	220.019	Top of casing, north edge, stamped X				567641.717	136663.897	1.24	02-Nov-04		219.64	No DISC Z	No GS	219.64	
2471	A5473	299-W11-3	330	220.019	Top of casing, north edge, stamped X				567641.717	136663.897	1.25	20-Mar-06		219.64	No DISC Z	No GS	219.64	
2472	A7277	299-W11-4	310	218.439	Top of casing, north edge, stamped X				567363.686	136587.26	1.43	##########		218.00	No DISC Z	No GS	218.00	
2472	A7277	299-W11-4	310	218.439	Top of casing, north edge, stamped X				567363.686	136587.26	1.59	16-Sep-03		217.95	No DISC Z	No GS	217.95	3
2473	A7278	299-W11-5	316	219.33	Top of casing, north edge, stamped X				567443.397	136592.404	1.2	##########		218.96	No DISC Z	No GS	218.96	
2473	A7278	299-W11-5	316	219.33	Top of casing, north edge, stamped X				567443.397	136592.404	1.21	16-Sep-03		218.96	No DISC Z	No GS	218.96	3
2474	A4909	299-W11-6	312	219.772	Top of casing, north edge, stamped X				567481.62	136492.844	1.55	24-Feb-00		219.30	No DISC Z	No GS	219.30	
2474	A4909	299-W11-6	312	219.772	Top of casing, north edge, stamped X				567481.62	136492.844	1.5	03-May-02		219.31	No DISC Z	No GS	219.31	3
2475	A4910	299-W11-7	315	217.108	Top of casing, north edge, stamped X				567260.884	136675.334	1.05	22-Feb-00		216.79	No DISC Z	No GS	216.79	3
2475	A4910	299-W11-7	315	217.108	Top of casing, north edge, stamped X				567260.884	136675.334	1	28-Nov-00		216.80	No DISC Z	No GS	216.80	
2475	A4910	299-W11-7	315	217.108	Top of casing, north edge, stamped X				567260.884	136675.334		27-Nov-01		No Stickup	No DISC Z	No GS	216.19	
2475	A4910	299-W11-7	315	217.108	Top of casing, north edge, stamped X				567260.884	136675.334	1.24	28-Jan-04		216.73	No DISC Z	No GS	216.73	
2475	A4910	299-W11-7	315	217.108	Top of casing, north edge, stamped X				567260.884	136675.334	1.24	01-Dec-05		216.73	No DISC Z	No GS	216.73	
2475	A4910	299-W11-7	315	217.108	Top of casing, north edge, stamped X				567260.884	136675.334	1.27	05-Dec-07		216.72	No DISC Z	No GS	216.72	
2476	A7279	299-W11-8	315	220.224	Top of casing, north edge, stamped X				567644.387	136495.683	0.93	##########		219.94	No DISC Z	No GS	219.94	
2476	A7279	299-W11-8	315	220.224	Top of casing, north edge, stamped X				567644.387	136495.683	0.92	16-Sep-03		219.94	No DISC Z	No GS	219.94	3
2477	A4911	299-W11-9	297	221.377	Top of casing, north edge, stamped X				567781.016	136667.337	1.85	##########		220.81	No DISC Z	No GS	220.81	
2477	A4911	299-W11-9	297	221.377	Top of casing, north edge, stamped X				567781.016	136667.337	1.92	16-Sep-03		220.79	No DISC Z	No GS	220.79	
2477	A4911	299-W11-9	297	221.377	Top of casing, north edge, stamped X				567781.016	136667.337	1.92	10-Mar-04		220.79	No DISC Z	No GS	220.79	
2477	A4911	299-W11-9	297	221.377	Top of casing, north edge, stamped X				567781.016	136667.337	1.923	06-May-04		220.79	No DISC Z	No GS	220.79	
2478	A4901	299-W11-10	307	223.187	Top of casing, north edge, stamped X				568147.511	136610.037		20-Feb-96		No Stickup	No DISC Z	No GS	222.27	
2478	A4901	299-W11-10	307	223.187	Top of casing, north edge, stamped X				568147.511	136610.037	2.03	08-Nov-00		222.57	No DISC Z	No GS	222.57	3
2479	A7280	299-W11-11	248	206.071	Top of casing, north edge, stamped X				566948.622	136457.075	2.6	##########		205.28	No DISC Z	No GS	205.28	3
2479	A7280	299-W11-11	248	206.071	Top of casing, north edge, stamped X				566948.622	136457.075	2.05	07-Oct-03		205.45	No DISC Z	No GS	205.45	
2479	A7280	299-W11-11	248	206.071	Top of casing, north edge, stamped X				566948.622	136457.075	2.12	30-Jun-04		205.42	No DISC Z	No GS	205.42	
2480	A4902	299-W11-12	250	208.186	stamped X				566927.14	136604.01		08-Jun-98		No Stickup	No DISC Z	No GS	207.27	
2480	A4902	299-W11-12	250	208.186	stamped X				566927.14	136604.01	1.13	31-Aug-99		207.84	No DISC Z	No GS	207.84	3
2480	A4902	299-W11-12	250	208.186	stamped X				566927.14	136604.01	1	03-Feb-00		207.88	No DISC Z	No GS	207.88	
2480	A4902	299-W11-12	250	208.186	stamped X				566927.14	136604.01	1	29-Jan-03		207.88	No DISC Z	No GS	207.88	
2480	A4902	299-W11-12	250	208.186	stamped X				566927.14	136604.01	1	21-Feb-06		207.88	No DISC Z	No GS	207.88	
2480	A4902	299-W11-12	250	208.186	stamped X				566927.14	136604.01	1	26-Nov-07		207.88	No DISC Z	No GS	207.88	
2481	A5465	299-W11-13	498	211.935	Top of casing, north edge, stamped X				567099.363	136424.033	1.88	##########		211.36	No DISC Z	No GS	211.36	
2481	A5465	299-W11-13	498	211.935	Top of casing, north edge, stamped X				567099.363	136424.033	1.88	21-Jun-01		211.36	No DISC Z	No GS	211.36	3
2481	A5465	299-W11-13	498	211.935	Top of casing, north edge, stamped X				567099.363	136424.033	1.95	02-Dec-02		211.34	No DISC Z	No GS	211.34	
2481	A5465	299-W11-13	498	211.935	Top of casing, north edge, stamped X				567099.363	136424.033	1.95	20-Feb-03		211.34	No DISC Z	No GS	211.34	
2481	A5465	299-W11-13	498	211.935	Top of casing, north edge, stamped X				567099.363	136424.033	2	22-Jul-03		211.33	No DISC Z	No GS	211.33	
2481	A5465	299-W11-13	498	211.935	Top of casing, north edge, stamped X				567099.363	136424.033	2.2	05-Aug-03		211.26	No DISC Z	No GS	211.26	
2481	A5465	299-W11-13	498	211.935	Top of casing, north edge, stamped X				567099.363	136424.033	2	10-Sep-03		211.33	No DISC Z	No GS	211.33	
2483	A9468	299-W11-13O	498						567099.363	136424.033		##########		No TOC	No DISC Z	No GS	211.36	
2483	A9468	299-W11-13O	498						567099.363	136424.033	2.2	22-Jul-03		No TOC	No DISC Z	No GS	211.36	
2483	A9468	299-W11-13O	498						567099.363	136424.033	2.2	05-Aug-03		No TOC	No DISC Z	No GS	211.36	5
2484	A9469	299-W11-13P	498						567099.363	136424.033		##########		No TOC	No DISC Z	No GS	211.36	
2484	A9469	299-W11-13P	498						567099.363	136424.033		19-Aug-03		No TOC	No DISC Z	No GS	211.36	5
2485	A9470	299-W11-13Q	498						567099.363	136424.033		##########		No TOC	No DISC Z	No GS	211.36	
2485	A9470	299-W11-13Q	498						567099.363	136424.033	2.2	22-Jul-03		No TOC	No DISC Z	No GS	211.36	
2485	A9470	299-W11-13Q	498						567099.363	136424.033	2.2	05-Aug-03		No TOC	No DISC Z	No GS	211.36	5
2486	A4903	299-W11-14	315	219.002	Top of casing, north edge, stamped X				567457.917	136913.962	1.63	27-Jun-01		218.51	No DISC Z	No GS	218.51	3
2486	A4903	299-W11-14	315	219.002	Top of casing, north edge, stamped X				567457.917	136913.962	1.63	20-Aug-02		218.51	No DISC Z	No GS	218.51	
2486	A4903	299-W11-14	315	219.002	Top of casing, north edge, stamped X				567457.917	136913.962	1.55	28-Apr-05		218.53	No DISC Z	No GS	218.53	
2486	A4903	299-W11-14	315	219.002	Top of casing, north edge, stamped X				567457.917	136913.962	1.56	12-Jun-06		218.53	No DISC Z	No GS	218.53	
2487	A7281	299-W11-15	265	218.368	Top of casing, north edge, stamped X				567272.108	137133.933	2	##########		217.76	No DISC Z	No GS	217.76	
2487	A7281	299-W11-15	265	218.368	Top of casing, north edge, stamped X				567272.108	137133.933	2.05	07-Oct-03		217.74	No DISC Z	No GS	217.74	3
2488	A7282	299-W11-16	365	217.819	Top of casing, north edge, stamped X				567236.239	137093.175	3.15	##########		216.86	No DISC Z	No GS	216.86	
2488	A7282	299-W11-16	365	217.819	Top of casing, north edge, stamped X				567236.239	137093.175	3.6	16-Sep-03		216.72	No DISC Z	No GS	216.72	3
2489	A7283	299-W11-17	300	216.373	Top of casing, north edge, stamped X				567172.572	137073.225	4.8	##########		214.91	No DISC Z	No GS	214.91	
2489	A7283	299-W11-17	300	216.373	Top of casing, north edge, stamped X				567172.572	137073.225	2.41	18-Oct-01		215.64	No DISC Z	No GS	215.64	3
2489	A7283	299-W11-17	300	216.373	Top of casing, north edge, stamped X				567172.572	137073.225	2.5	16-Sep-03		215.61	No DISC Z	No GS	215.61	
2490	A7284	299-W11-18	300	216.537	Top of casing, north edge, stamped X				567181.916	137161.484	2.7	01-Apr-48		215.71	No DISC Z	No GS	215.71	
2490	A7284	299-W11-18	300	216.537	Top of casing, north edge, stamped X				567181.916	137161.484	4.7	27-Jun-01		215.10	No DISC Z	No GS	215.10	3

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2490	A7284	299-W11-18	300	216.537	Top of casing, north edge, stamped X				567181.916	137161.484	2.7	18-Oct-01		215.71	No DISC Z	No GS	215.71	
2490	A7284	299-W11-18	300	216.537	Top of casing, north edge, stamped X				567181.916	137161.484	2.7	26-Nov-07		215.71	No DISC Z	No GS	215.71	
2491	A4904	299-W11-19	384	216.864	Top of casing, north edge, stamped X				567213.954	137117.1	3.18	##################		215.89	No DISC Z	No GS	215.89	
2491	A4904	299-W11-19	384	216.864	Top of casing, north edge, stamped X				567213.954	137117.1	3.15	16-Sep-03		215.90	No DISC Z	No GS	215.90	3
2492	A7285	299-W11-20	266	216.417	Top of casing, north edge, stamped X				567181.431	137131.818	4.82	##################		214.95	No DISC Z	No GS	214.95	
2492	A7285	299-W11-20	266	216.417	Top of casing, north edge, stamped X				567181.431	137131.818	2.61	18-Oct-01		215.62	No DISC Z	No GS	215.62	3
2492	A7285	299-W11-20	266	216.417	Top of casing, north edge, stamped X				567181.431	137131.818	2.54	06-Feb-03		215.64	No DISC Z	No GS	215.64	
2493	A7286	299-W11-21	270	216.32	Top of casing, north edge, stamped X				567175.456	137102.884	4.75	##################		214.87	No DISC Z	No GS	214.87	
2493	A7286	299-W11-21	270	216.32	Top of casing, north edge, stamped X				567175.456	137102.884	2.41	18-Oct-01		215.59	No DISC Z	No GS	215.59	3
2493	A7286	299-W11-21	270	216.32	Top of casing, north edge, stamped X				567175.456	137102.884	2.46	16-Sep-03		215.57	No DISC Z	No GS	215.57	
2494	A9794	299-W11-22	325						567268.68	136673.4		##################		No TOC	No DISC Z	No GS	No TOC	5
2494	A9794	299-W11-22	325						567268.68	136673.4	1	10-Aug-94		No TOC	No DISC Z	No GS	No TOC	
2495	A4905	299-W11-23	252	210.778	Top of casing, north edge, stamped X				566904.966	136801.085		17-Mar-90		No Stickup	No DISC Z	No GS	209.86	
2495	A4905	299-W11-23	252	210.778	Top of casing, north edge, stamped X				566904.966	136801.085	2.64	24-Jan-00		209.97	No DISC Z	No GS	209.97	3
2495	A4905	299-W11-23	252	210.778	Top of casing, north edge, stamped X				566904.966	136801.085	2.71	05-Jul-00		209.95	No DISC Z	No GS	209.95	
2495	A4905	299-W11-23	252	210.778	Top of casing, north edge, stamped X				566904.966	136801.085	2.65	30-Sep-03		209.97	No DISC Z	No GS	209.97	
2496	A4906	299-W11-24	250	210.553	Top of casing, north edge, stamped X				566912.963	136744.529		26-Feb-98		No Stickup	No DISC Z	No GS	209.64	
2496	A4906	299-W11-24	250	210.553	Top of casing, north edge, stamped X				566912.963	136744.529	3.2	19-Jun-01		209.58	No DISC Z	No GS	209.58	3
2496	A4906	299-W11-24	250	210.553	Top of casing, north edge, stamped X				566912.963	136744.529	3.2	27-Nov-01		209.58	No DISC Z	No GS	209.58	
2496	A4906	299-W11-24	250	210.553	Top of casing, north edge, stamped X				566912.963	136744.529		30-Sep-03		No Stickup	No DISC Z	No GS	209.64	
2496	A4906	299-W11-24	250	210.553	Top of casing, north edge, stamped X				566912.963	136744.529	2.65	03-Dec-03		209.75	No DISC Z	No GS	209.75	
2497	C4669	299-W11-25B	409.5			209.746	Brass survey marker	209.746	566912.34	136774.76				No TOC	209.75	209.75	209.75	1
2498	A7287	299-W11-26	515	213.078	Top of casing (assumed)				567045.135	136563.735		01-Jan-01		No Stickup	No DISC Z	No GS	212.16	
2498	A7287	299-W11-26	515	213.078	Top of casing (assumed)				567045.135	136563.735	2	01-Sep-04		212.47	No DISC Z	No GS	212.47	3
2499	A4907	299-W11-27	235	209.935	Top of outer casing, north edge			208.885	566884.97	136796.56	3.5	##################		208.87	208.89	No GS	208.89	
2499	A4907	299-W11-27	235	209.935	Top of outer casing, north edge			208.885	566884.97	136796.56		06-Jun-97		No Stickup	208.89	No GS	208.89	
2499	A4907	299-W11-27	235	209.935	Top of outer casing, north edge			208.885	566884.97	136796.56	3.5	08-Sep-03		208.87	208.89	No GS	208.89	2
2500	A4908	299-W11-28	247.4	212.438	Top of outer casing, north edge			211.355	566934.89	136743.74	3.54	##################		211.36	211.36	No GS	211.36	
2500	A4908	299-W11-28	247.4	212.438	Top of outer casing, north edge			211.355	566934.89	136743.74	3.55	19-Mar-03		211.36	211.36	No GS	211.36	
2500	A4908	299-W11-28	247.4	212.438	Top of outer casing, north edge			211.355	566934.89	136743.74	3.65	30-Jun-04		211.33	211.36	No GS	211.36	2
2501	A7288	299-W11-29	279.3	217.18	Top of casing, north edge			216.265	567189.4	136851.95	3.02	##################		216.26	216.27	No GS	216.27	
2501	A7288	299-W11-29	279.3	217.18	Top of casing, north edge			216.265	567189.4	136851.95	3.02	17-Oct-03		216.26	216.27	No GS	216.27	
2501	A7288	299-W11-29	279.3	217.18	Top of casing, north edge			216.265	567189.4	136851.95	3	30-Jun-04		216.27	216.27	No GS	216.27	2
2502	A7289	299-W11-30	285.7	217.202	Top of casing, north edge			216.305	567193.37	136858.86	2.46	##################		216.45	216.31	No GS	216.31	
2502	A7289	299-W11-30	285.7	217.202	Top of casing, north edge			216.305	567193.37	136858.86		##################		No Stickup	216.31	No GS	216.31	
2502	A7289	299-W11-30	285.7	217.202	Top of casing, north edge			216.305	567193.37	136858.86	2.95	10-Aug-99		216.30	216.31	No GS	216.31	
2502	A7289	299-W11-30	285.7	217.202	Top of casing, north edge			216.305	567193.37	136858.86	2.94	16-Jul-02		216.31	216.31	No GS	216.31	2
2503	A5472	299-W11-31	267.3	216.516	Top of casing, north edge			215.565	567221.58	137235.28		31-Jul-98		No Stickup	215.57	No GS	215.57	
2503	A5472	299-W11-31	267.3	216.516	Top of casing, north edge			215.565	567221.58	137235.28	3.14	31-Aug-99		215.56	215.57	No GS	215.57	
2503	A5472	299-W11-31	267.3	216.516	Top of casing, north edge			215.565	567221.58	137235.28		12-Jun-06		No Stickup	215.57	No GS	215.57	
2503	A5472	299-W11-31	267.3	216.516	Top of casing, north edge			215.565	567221.58	137235.28	3.14	20-Jun-06		215.56	215.57	No GS	215.57	2
2504	A7290	299-W11-32	310	217.056	Top of casing			216.141	567190.725	136854.787	3	##################		216.14	216.14	No GS	216.14	
2504	A7290	299-W11-32	310	217.056	Top of casing			216.141	567190.725	136854.787	3	19-Aug-03		216.14	216.14	No GS	216.14	
2504	A7290	299-W11-32	310	217.056	Top of casing			216.141	567190.725	136854.787	3	30-Jun-04		216.14	216.14	No GS	216.14	2
2505	A9827	299-W11-33	310.7	217.237	Top of casing			216.346	567184.869	136844.366		##################		No Stickup	216.35	No GS	216.35	
2505	A9827	299-W11-33	310.7	217.237	Top of casing			216.346	567184.869	136844.366	2.92	19-Aug-03		216.35	216.35	No GS	216.35	
2505	A9827	299-W11-33	310.7	217.237	Top of casing			216.346	567184.869	136844.366	2.92	22-Oct-04		216.35	216.35	No GS	216.35	
2505	A9827	299-W11-33	310.7	217.237	Top of casing			216.346	567184.869	136844.366	2.92	20-Jun-06		216.35	216.35	No GS	216.35	2
2506	B2401	299-W11-33P	310.7						567184.869	136844.366		##################		No TOC	No DISC Z	No GS	216.35	5
2507	B2402	299-W11-33Q	310.7						567184.869	136844.366		##################		No TOC	No DISC Z	No GS	216.35	5
2508	A9826	299-W11-34	310.7	217.139	Top of casing			216.27	567187.692	136849.199		##################		No Stickup	216.27	No GS	216.27	
2508	A9826	299-W11-34	310.7	217.139	Top of casing			216.27	567187.692	136849.199	2.85	19-Aug-03		216.27	216.27	No GS	216.27	
2508	A9826	299-W11-34	310.7	217.139	Top of casing			216.27	567187.692	136849.199	2.85	22-Oct-04		216.27	216.27	No GS	216.27	2
2509	B2403	299-W11-34P	312						567187.692	136849.199		##################		No TOC	No DISC Z	No GS	216.27	5
2510	B2404	299-W11-34Q	310.7						567187.692	136849.199		##################		No TOC	No DISC Z	No GS	216.27	5
2511	A9924	299-W11-35	306	217.27	Top of casing			216.36	567186.318	136846.795		##################		No Stickup	216.36	No GS	216.36	
2511	A9924	299-W11-35	306	217.27	Top of casing			216.36	567186.318	136846.795	2.95	22-Jul-03		216.37	216.36	No GS	216.36	
2511	A9924	299-W11-35	306	217.27	Top of casing			216.36	567186.318	136846.795	2.95	04-Aug-03		216.37	216.36	No GS	216.36	2
2512	B2406	299-W11-35P	306						567186.318	136846.795		##################		No TOC	No DISC Z	No GS	216.36	
2512	B2406	299-W11-35P	306						567186.318	136846.795	2.95	22-Jul-03		No TOC	No DISC Z	No GS	216.36	
2512	B2406	299-W11-35P	306						567186.318	136846.795		04-Aug-03		No TOC	No DISC Z	No GS	216.36	5
2513	B2405	299-W11-35Q	306						567186.318	136846.795		##################		No TOC	No DISC Z	No GS	216.36	
2513	B2405	299-W11-35Q	306						567186.318	136846.795	2.95	22-Jul-03		No TOC	No DISC Z	No GS	216.36	
2513	B2405	299-W11-35Q	306						567186.318	136846.795	2.95	04-Aug-03		No TOC	No DISC Z	No GS	216.36	5
2515	A9889	299-W11-37		221.609	Top of casing			220.686	567635.184	137017.997	3.02	12-Jul-01			220.69	No GS	220.69	
2515	A9889	299-W11-37		221.609	Top of casing			220.686	567635.184	137017.997	3.01	28-Sep-05			220.69	No GS	220.69	
2515	A9889	299-W11-37		221.609	Top of casing			220.686	567635.184	137017.997		20-Jan-06		No Stickup	220.69	No GS	220.69	2
2517	C3117	299-W11-39	282.31	210.55	Top of casing, stamped X			209.885	566908.383	136779.917		16-Jan-01		No Stickup	209.89	No GS	209.89	
2517	C3117	299-W11-39	282.31	210.55	Top of casing, stamped X			209.885	566908.383	136779.917		09-Sep-03		No Stickup	209.89	No GS	209.89	
2517	C3117	299-W11-39	282.31	210.55	Top of casing, stamped X			209.885	566908.383	136779.917	2.2	13-Apr-05		209.88	209.89	No GS	209.89	2
2518	C3118	299-W11-40	280	210.428	Top of casing, stamped X			209.696	566926.838	136709.666		16-Jan-01		No Stickup	209.70	No GS	209.70	
2518	C3118	299-W11-40	280	210.428	Top of casing, stamped X			209.696	566926.838	136709.666		04-Feb-02		No Stickup	209.70	No GS	209.70	
2518	C3118	299-W11-40	280	210.428	Top of casing, stamped X			209.696	566926.838	136709.666	2.4	13-Jan-04		209.70	209.70	No GS	209.70	
2518	C3118	299-W11-40	280	210.428	Top of casing, stamped X			209.696	566926.838	136709.666	2.4	13-Jul-04		209.70	209.70	No GS	209.70	2
2519	C3119	299-W11-41	280	210.641	Top of casing, stamped X			209.667	566935.51	136677.781	3.17	19-Sep-00		209.67	209.67	No GS	209.67	
2519	C3119	299-W11-41	280	210.641	Top of casing, stamped X			209.667	566935.51	136677.781		17-Jan-02		No Stickup	209.67	No GS	209.67	
2519	C3119	299-W11-41	280	210.641	Top of casing, stamped X			209.667	566935.51	136677.781		10-Dec-02		No Stickup	209.67	No GS	209.67	
2519	C3119	299-W11-41	280	210.641	Top of casing, stamped X			209.667	566935.51	136677.781		11-Nov-03		No Stickup	209.67	No GS	209.67	
2519	C3119	299-W11-41	280	210.641	Top of casing, stamped X			209.667	566935.51	136677.781		13-Jul-04		No Stickup	209.67	No GS	209.67	
2519	C3119	299-W11-41	280	210.641	Top of casing, stamped X			209.667	566935.51	136677.781	3.17	13-Feb-07		209.67	209.67	No GS	209.67	2
2520	C3242	299-W11-42	280	211.066	Top of casing, stamped X			210.179	566920.435	136745.665	2.87	19-Sep-00		210.19	210.18	No GS	210.18	
2520	C3242	299-W11-42	280	211.066	Top of casing, stamped X			210.179	566920.435	136745.665		04-Feb-02		No Stickup	210.18	No GS	210.18	2
2521	C4694	299-W11-43	448	217.528	Top of pump plate, north edge			216.733	567269.74	136971.04	2.6	23-Sep-05		216.74	216.73	No GS	216.73	
2521	C4694	299-W11-43	448	217.528	Top of pump plate, north edge			216.733	567269.74	136971.04	2.52	06-Oct-05		216.76	216.73	No GS	216.73	
2521	C4694	299-W11-43	448	217.528	Top of pump plate, north edge			216.733	567269.74	136971.04		20-Jul-06		No Stickup	216.73	No GS	216.73	
2521	C4694	299-W11-43	448	217.528	Top of pump plate, north edge			216.733	567269.74	136971.04		02-Jan-07		No Stickup	216.73	No GS	216.73	2
2522	C4896	299-W11-44	199.1						567429.39	136751.61	1.27	06-Oct-05		No TOC	No DISC Z	No GS	No TOC	
2522	C4896	299-W11-44	199.1						567429.39	136751.61	1.2	13-Jul-06		No TOC	No DISC Z	No GS	No TOC	5
2523	C4948	299-W11-45	438	213.614	Top of pump plate, north edge			212.884	566992.84	136775.64	2.37	10-Mar-06		212.89	212.88	No GS	212.88	

sortOrder	Well_ID	WellName	Total Depth (ft)	Top of Casing Elevation (m)	Top of Casing Survey Point Description	Ground Surface Elevation (m)	Ground Surface Survey Point Description	DISC_Z	EASTING	NORTHING	WELL_STICKUP	DATE_INSPECTED	In Tank Farm?	Ground Surface Elevation from TOC-Stickup (m) - Priority 3	DISC Z from HWIS (m) - Priority 2	Ground Surface Elevation, from HWIS (m) - Priority 1	Best Est. Ground Surface Elevation (m)	Best Est. Rank
2523	C4948	299-W11-45	438	213.614	Top of pump plate, north edge			212.884	566992.84	136775.64		30-Mar-06		No Stickup	212.88	No GS	212.88	
2523	C4948	299-W11-45	438	213.614	Top of pump plate, north edge			212.884	566992.84	136775.64	2.35	29-Aug-07		212.90	212.88	No GS	212.88	2
2524	C4950	299-W11-46	285.75	210.941	Top of casing			210.116	566914.86	136773.27	2.72	10-Aug-05		210.11	210.12	No GS	210.12	
2524	C4950	299-W11-46	285.75	210.941	Top of casing			210.116	566914.86	136773.27		17-Jan-06		No Stickup	210.12	No GS	210.12	
2524	C4950	299-W11-46	285.75	210.941	Top of casing			210.116	566914.86	136773.27	2.7	29-Aug-07		210.12	210.12	No GS	210.12	2
2525	C4990	299-W11-47	407	210.403	Top of casing (assumed)			209.655	566933.82	136680.7	2.5	24-Apr-06		209.64	209.66	No GS	209.66	
2525	C4990	299-W11-47	407	210.403	Top of casing (assumed)			209.655	566933.82	136680.7		23-May-06		No Stickup	209.66	No GS	209.66	
2525	C4990	299-W11-47	407	210.403	Top of casing (assumed)			209.655	566933.82	136680.7		09-Jun-06		No Stickup	209.66	No GS	209.66	
2525	C4990	299-W11-47	407	210.403	Top of casing (assumed)			209.655	566933.82	136680.7		13-Dec-06		No Stickup	209.66	No GS	209.66	2
2526	C5243	299-W11-48	409	209.7	Top of casing, north edge			208.897	566881.97	136846.18		13-Dec-07		No Stickup	208.90	No GS	208.90	2
2527	A7291	299-W11-51	148	206.961	Top of casing, north edge, stamped X			206.937	566856.177	136764.615	0	##################	241-T	206.96	206.94	No GS	206.94	2
2528	A7293	299-W11-52	75	219.911	Top of casing (assumed)				567589.253	136621.635		##################		No Stickup	No DISC Z	No GS	219.00	4
2529	A7294	299-W11-53	150	207.075	Top of casing, north edge, stamped X				566856.202	136673.485	0	##################	241-T	207.08	No DISC Z	No GS	207.08	3
2530	A7296	299-W11-54	150	218.151	Top of casing, north edge, stamped X				567193.579	136661.791		##################		No Stickup	No DISC Z	No GS	217.24	4
2531	A7297	299-W11-55	150	218.066	Top of casing, north edge, stamped X				567198.313	136670.035		##################		No Stickup	No DISC Z	No GS	217.15	4
2532	A7298	299-W11-56	150	218.065	Top of casing, north edge, stamped X				567202.767	136661.687		##################		No Stickup	No DISC Z	No GS	217.15	4
2533	A7299	299-W11-57	163	218.1	Top of casing, north edge, stamped X				567198.316	136673.018		##################		No Stickup	No DISC Z	No GS	217.19	4
2534	A7300	299-W11-58	75	218.029	Top of casing, north edge, stamped X				567191.243	136659.727		##################		No Stickup	No DISC Z	No GS	217.11	4
2535	A7301	299-W11-59	90	216.514	Top of casing, north edge, stamped X				567211.014	136657.42		##################		No Stickup	No DISC Z	No GS	215.60	4
2536	A7302	299-W11-60	150	217.68	Top of casing, north edge, stamped X				567171.276	136664.449		##################		No Stickup	No DISC Z	No GS	216.77	4
2537	A7303	299-W11-61	85	217.906	Top of casing, north edge, stamped X				567188.917	136657.806		##################		No Stickup	No DISC Z	No GS	216.99	4
2538	A7304	299-W11-62	102	218.058	Top of casing, north edge, stamped X				567205.313	136660.515	6.22	##################		216.16	No DISC Z	No GS	216.16	3
2539	A7305	299-W11-63	160	216.374	Top of casing, north edge, stamped X				567197.971	136652.773		##################		No Stickup	No DISC Z	No GS	215.46	4
2540	A7306	299-W11-64	75	218.135	Top of casing, north edge, stamped X				567205.649	136668.688		##################		No Stickup	No DISC Z	No GS	217.22	4
2541	A7307	299-W11-65	160	216.301	Top of casing, north edge, stamped X				567197.808	136642.56		##################		No Stickup	No DISC Z	No GS	215.39	4
2542	A7308	299-W11-66	75	216.317	Top of casing, north edge, stamped X				567182.635	136652.488		##################		No Stickup	No DISC Z	No GS	215.40	4
2543	A7309	299-W11-67	76	216.69	Top of casing, north edge, stamped X				567220.723	136643.12		##################		No Stickup	No DISC Z	No GS	215.78	4
2544	A7310	299-W11-68	100	213.711	Top of casing, north edge, stamped X				566970.884	136782.453	1.5	##################		213.25	No DISC Z	No GS	213.25	3
2545	A7311	299-W11-69	105	213.188	Top of casing, north edge, stamped X				566929.293	136834.817	2.3	##################		212.49	No DISC Z	No GS	212.49	3
2546	A7312	299-W11-70	150	206.321	Top of casing, north edge, stamped X				566932.165	136392.107	5.11	##################		204.76	No DISC Z	No GS	204.76	3
2555	A7321	299-W11-79	150	217.573	Top of casing, north edge, stamped X				567267.678	136666.452		##################		No Stickup	No DISC Z	No GS	216.66	4
2556	A7322	299-W11-80	50	214.587	Top of casing, north edge, stamped X				566996.371	136873.284	3.55	##################		213.50	No DISC Z	No GS	213.50	3
2557	A7323	299-W11-81	50	215.194	Top of casing, north edge				567024.2	136801.847	4.5	##################		213.82	No DISC Z	No GS	213.82	3
2558	A7324	299-W11-82	70	206.558	Top of casing, north edge, stamped X				566933.853	136407.518	6.5	##################		204.58	No DISC Z	No GS	204.58	3
2562	C5101	299-W11-86	491			222.68	Brass survey marker	222.68	568143.53	136610.04				No TOC	222.68	222.68	222.68	1
2563	C5407	299-W11-87	405.38	223.642	Top of casing, north edge			222.816	568141.08	136608.7	2.7	06-Apr-07		222.82	222.82	No GS	222.82	
2563	C5407	299-W11-87	405.38	223.642	Top of casing, north edge			222.816	568141.08	136608.7		10-Sep-07		No Stickup	222.82	No GS	222.82	2
2564	C5572	299-W11-88	490.2	221.9	Top of casing, north edge			221.115	567874.67	137113.09				No Stickup	221.12	No GS	221.12	5
2565	A4912	299-W12-1	314	222.444	Top of casing, north edge, stamped X				568331.248	137206.116	2.2	23-Mar-00		221.77	No DISC Z	No GS	221.77	3
2565	A4912	299-W12-1	314	222.444	Top of casing, north edge, stamped X				568331.248	137206.116	2.23	10-Sep-04		221.76	No DISC Z	No GS	221.76	
2565	A4912	299-W12-1	314	222.444	Top of casing, north edge, stamped X				568331.248	137206.116	2.25	15-Oct-04		221.76	No DISC Z	No GS	221.76	
2565	A4912	299-W12-1	314	222.444	Top of casing, north edge, stamped X				568331.248	137206.116	2.25	13-Sep-05		221.76	No DISC Z	No GS	221.76	
2566	C4238	299-W13-1	527.3	223.54	Top of casing, north edge			222.811	568148.74	136048.6	2.38	04-Feb-04		222.81	222.81	No GS	222.81	
2566	C4238	299-W13-1	527.3	223.54	Top of casing, north edge			222.811	568148.74	136048.6	2.38	10-Feb-04		222.81	222.81	No GS	222.81	
2566	C4238	299-W13-1	527.3	223.54	Top of casing, north edge			222.811	568148.74	136048.6	2.42	15-Mar-04		222.80	222.81	No GS	222.81	
2566	C4238	299-W13-1	527.3	223.54	Top of casing, north edge			222.811	568148.74	136048.6		06-Mar-06		No Stickup	222.81	No GS	222.81	2
2567	A4913	299-W14-1	240	204.883	Top of casing, north edge, stamped X				566953.318	136311.178	6.45	##################		202.92	No DISC Z	No GS	202.92	
2567	A4913	299-W14-1	240	204.883	Top of casing, north edge, stamped X				566953.318	136311.178	2.98	23-Feb-04		203.97	No DISC Z	No GS	203.97	3
2568	A7328	299-W14-2	223	205.789	Top of casing, north edge, stamped X				566932.32	136340.409	3.47	03-May-00		204.73	No DISC Z	No GS	204.73	3
2568	A7328	299-W14-2	223	205.789	Top of casing, north edge, stamped X				566932.32	136340.409	2.5	05-Feb-03		205.03	No DISC Z	No GS	205.03	
2568	A7328	299-W14-2	223	205.789	Top of casing, north edge, stamped X				566932.32	136340.409	3.5	10-Mar-04		204.72	No DISC Z	No GS	204.72	
2569	A7329	299-W14-3	269	205.792	Top of casing, north edge, stamped X				566940.409	136342.965	3.65	##################		204.68	No DISC Z	No GS	204.68	
2569	A7329	299-W14-3	269	205.792	Top of casing, north edge, stamped X				566940.409	136342.965	3.65	10-Mar-04		204.68	No DISC Z	No GS	204.68	3
2570	A9471	299-W14-3O	269	203.074	Top of casing (assumed)				566940.409	136342.965		##################		No Stickup	No DISC Z	No GS	202.16	4
2571	A9472	299-W14-3P	269	202.925	Top of casing (assumed)				566940.409	136342.965		##################		No Stickup	No DISC Z	No GS	202.01	4
2572	A7330	299-W14-4	205	205.814	Top of casing, north edge, stamped X				566920.623	136348.792	3.05	##################		204.88	No DISC Z	No GS	204.88	
2572	A7330	299-W14-4	205	205.814	Top of casing, north edge, stamped X				566920.623	136348.792	3.08	10-Mar-04		204.88	No DISC Z	No GS	204.88	3
2573	A5475	299-W14-5	240	204.199	Top of casing, north edge, stamped X				566899.245	136039.869		01-Sep-98		No Stickup	No DISC Z	No GS	203.28	
2573	A5475	299-W14-5	240	204.199	Top of casing, north edge, stamped X				566899.245	136039.869	2.6	28-Nov-00		203.41	No DISC Z	No GS	203.41	3
2573	A5475	299-W14-5	240	204.199	Top of casing, north edge, stamped X				566899.245	136039.869	2.68	23-Aug-02		203.38	No DISC Z	No GS	203.38	
2573	A5475	299-W14-5	240	204.199	Top of casing, north edge, stamped X				566899.245	136039.869	2.7	15-Apr-04		203.38	No DISC Z	No GS	203.38	
2573	A5475	299-W14-5	240	204.199	Top of casing, north edge, stamped X				566899.245	136039.869	2.3	13-May-04		203.50	No DISC Z	No GS	203.50	
2574	A7331	299-W14-6	240	203.556	Top of casing, north edge, stamped X				566899.194	136100.835	1.52	18-Jun-01		203.09	No DISC Z	No GS	203.09	3
2574	A7331	299-W14-6	240	203.556	Top of casing, north edge, stamped X				566899.194	136100.835		17-Jan-02		No Stickup	No DISC Z	No GS	202.64	
2574	A7331	299-W14-6	240	203.556	Top of casing, north edge, stamped X				566899.194	136100.835	1.45	08-Apr-03		203.11	No DISC Z	No GS	203.11	
2574	A7331	299-W14-6	240	203.556	Top of casing, north edge, stamped X				566899.194	136100.835	1.5	27-Apr-04		203.10	No DISC Z	No GS	203.10	
2574	A7331	299-W14-6	240	203.556	Top of casing, north edge, stamped X				566899.194	136100.835		12-May-05		No Stickup	No DISC Z	No GS	202.64	
2575	A5467	299-W14-7	531	207.626	Top of casing (assumed)				567034.426	135654.455	1	##################		207.32	No DISC Z	No GS	207.32	
2575	A5467	299-W14-7	531	207.626	Top of casing (assumed)				567034.426	135654.455	1	04-Feb-03		207.32	No DISC Z	No GS	207.32	3
2575	A5467	299-W14-7	531	207.626	Top of casing (assumed)				567034.426	135654.455	0.97	15-Apr-04		207.33	No DISC Z	No GS	207.33	
2576	A7332	299-W14-8A	563	221.471	Top of casing, north edge, stamped X				568013.166	135687.76	1	##################		221.17	No DISC Z	No GS	221.17	
2576	A7332	299-W14-8A	563	221.471	Top of casing, north edge, stamped X				568013.166	135687.76	1.03	17-Nov-03		221.16	No DISC Z	No GS	221.16	3
2576	A7332	299-W14-8A	563	221.471	Top of casing, north edge, stamped X				568013.166	135687.76	1.41	04-May-04		221.04	No DISC Z	No GS	221.04	
2576	A7332	299-W14-8A	563	221.471	Top of casing, north edge, stamped X				568013.166	135687.76	1.03	13-Jul-04		221.16	No DISC Z	No GS	221.16	
2577	A7333	299-W14-8B	244	221.539	Top of casing, north edge, stamped X				568011.141	135685.695	1.4	##################		221.11	No DISC Z	No GS	221.11	
2577	A7333	299-W14-8B	244	221.539	Top of casing, north edge, stamped X				568011.141	135685.695	2.3	10-Mar-04		220.84	No DISC Z	No GS	220.84	3
2578	A4915	299-W14-9	545	207.946	Top of casing, stamped X			207.478	567031.755	135650.695		11-May-98		No Stickup	207.48	No GS	207.48	
2578	A4915	299-W14-9	545	207.946	Top of casing, stamped X			207.478	567031.755	135650.695	1.64	30-Nov-99		207.45	207.48	No GS	207.48	
2578	A4915	299-W14-9	545	207.946	Top of casing, stamped X			207.478	567031.755	135650.695		21-Jun-00		No Stickup	207.48	No GS	207.48	
2578	A4915	299-W14-9	545	207.946	Top of casing, stamped X			207.478	567031.755	135650.695	1.64	19-Sep-00		207.45	207.48	No GS	207.48	
2578	A4915	299-W14-9	545	207.946	Top of casing, stamped X			207.478	567031.755	135650.695	1.62	01-Sep-04		207.45	207.48	No GS	207.48	2
2579	A7334	299-W14-10	330	222.426	Top of casing, north edge, stamped X			221.781	567981.066	135898.313	2.1	28-Feb-00		221.79	221.78	No GS	221.78	
2579	A7334	299-W14-10	330	222.426	Top of casing, north edge, stamped X			221.781	567981.066	135898.313	2.15	21-Mar-01		221.77	221.78	No GS	221.78	
2579	A7334	299-W14-10	330	222.426	Top of casing, north edge, stamped X			221.781	567981.066	135898.313	2.15	19-Mar-03		221.77	221.78	No GS	221.78	
2579	A7334	299-W14-10	330	222.426	Top of casing, north edge, stamped X			221.781	567981.066	135898.313	2.15	25-Sep-03		221.77	221.78	No GS	221.78	
2579	A7334	299-W14-10	330	222.426	Top of casing, north edge, stamped X			221.781	567981.066	135898.313	2.11	10-Mar-04		221.78	221.78	No GS	221.78	2
2580	C4668	299-W14-11	348	205.092	Top of casing			204.383	566901.69	136287.62	2.35	11-May-05		204.38	204.38	No GS	204.38	
2580	C4668	299-W14-11	348	205.092	Top of casing			204.383	566901.69	136287.62	2.35	17-May-05		204.38	204.38	No GS	204.38	
2580	C4668	299-W14-11	348	205.092	Top of casing			204.383	566901.69	136287.62		17-Jan-06		No Stickup	204.38	No GS	204.38	2

sortOrder	Well_ID	WellName	Total Depth (ft)	Top of Casing Elevation (m)	Top of Casing Survey Point Description	Ground Surface Elevation (m)	Ground Surface Survey Point Description	DISC_Z	EASTING	NORTHING	WELL_STICKUP	DATE_INSPECTED	In Tank Farm?	Ground Surface Elevation from TOC-Stickup (m) - Priority 3	DISC Z from HWIS (m) - Priority 2	Ground Surface Elevation, from HWIS (m) - Priority 1	Best Est. Ground Surface Elevation (m)	Best Est. Rank
2581	A4914	299-W14-12	222.5	205.441	Top of outer casing, north edge			204.396	566905.69	136284.17	3.45	##########		204.39	204.40	No GS	204.40	
2581	A4914	299-W14-12	222.5	205.441	Top of outer casing, north edge			204.396	566905.69	136284.17		02-Jan-96		No Stickup	204.40	No GS	204.40	
2581	A4914	299-W14-12	222.5	205.441	Top of outer casing, north edge			204.396	566905.69	136284.17	3.42	09-Sep-03		204.40	204.40	No GS	204.40	2
2582	B8549	299-W14-13	262	205.105	Top of casing, stamped X			204.346	566901.718	136282.375		##########		No Stickup	204.35	No GS	204.35	2
2583	B8547	299-W14-14	443	205.432	Top of casing, stamped X			204.621	566898.386	136181.048		##########		No Stickup	204.62	No GS	204.62	
2583	B8547	299-W14-14	443	205.432	Top of casing, stamped X			204.621	566898.386	136181.048		03-Dec-02		No Stickup	204.62	No GS	204.62	2
2584	C3114	299-W14-15	260	205.354	Top of casing, stamped X			204.584	566899.685	136230.654	2.44	19-Sep-00		204.61	204.58	No GS	204.58	
2584	C3114	299-W14-15	260	205.354	Top of casing, stamped X			204.584	566899.685	136230.654	2.45	01-Jun-05		204.61	204.58	No GS	204.58	2
2585	C3120	299-W14-16	265	206.123	Top of casing, stamped X			205.368	567001.334	136318.482		16-Jan-01		No Stickup	205.37	No GS	205.37	
2585	C3120	299-W14-16	265	206.123	Top of casing, stamped X			205.368	567001.334	136318.482	2.48	18-Jun-01		205.37	205.37	No GS	205.37	
2585	C3120	299-W14-16	265	206.123	Top of casing, stamped X			205.368	567001.334	136318.482		17-Jan-02		No Stickup	205.37	No GS	205.37	2
2586	C3121	299-W14-17	265.5	205.853	Top of casing, stamped X			205.079	567006.773	136218.349		16-Jan-01		No Stickup	205.08	No GS	205.08	
2586	C3121	299-W14-17	265.5	205.853	Top of casing, stamped X			205.079	567006.773	136218.349		17-Jan-02		No Stickup	205.08	No GS	205.08	2
2587	C3396	299-W14-18	261.5	205.019	Top of casing, stamped X			204.263	566897.47	136344.15		##########		No Stickup	204.26	No GS	204.26	
2587	C3396	299-W14-18	261.5	205.019	Top of casing, stamped X			204.263	566897.47	136344.15	3	01-Nov-01		204.10	204.26	No GS	204.26	
2587	C3396	299-W14-18	261.5	205.019	Top of casing, stamped X			204.263	566897.47	136344.15		12-Nov-01		No Stickup	204.26	No GS	204.26	
2587	C3396	299-W14-18	261.5	205.019	Top of casing, stamped X			204.263	566897.47	136344.15		17-Jan-02		No Stickup	204.26	No GS	204.26	
2587	C3396	299-W14-18	261.5	205.019	Top of casing, stamped X			204.263	566897.47	136344.15	2.43	31-Jan-02		204.28	204.26	No GS	204.26	2
2588	C3957	299-W14-19	344	205.612	Top of casing, stamped X			204.899	566898.6	136135.06	2.38	06-Dec-02		204.89	204.90	No GS	204.90	
2588	C3957	299-W14-19	344	205.612	Top of casing, stamped X			204.899	566898.6	136135.06		09-Dec-02		No Stickup	204.90	No GS	204.90	
2588	C3957	299-W14-19	344	205.612	Top of casing, stamped X			204.899	566898.6	136135.06		06-Sep-05		No Stickup	204.90	No GS	204.90	2
2589	A7335	299-W14-51	77	203.458	Top of casing, north edge, stamped X				566855.83	136001.553		##########		No Stickup	No DISC Z	No GS	202.54	
2589	A7335	299-W14-51	77	203.458	Top of casing, north edge, stamped X				566855.83	136001.553	2.5	04-Feb-06		202.70	No DISC Z	No GS	202.70	3
2591	A7337	299-W14-53	100	206.089	Top of casing, north edge, stamped X				566932.368	136366.242	6.2	##########		204.20	No DISC Z	No GS	204.20	
2591	A7337	299-W14-53	100	206.089	Top of casing, north edge, stamped X				566932.368	136366.242	3.51	12-Jun-06		205.02	No DISC Z	No GS	205.02	3
2592	A7338	299-W14-54	97	222.02	Top of casing, north edge, stamped X				567853.792	135885.737		##########		No Stickup	No DISC Z	No GS	221.11	
2592	A7338	299-W14-54	97	222.02	Top of casing, north edge, stamped X				567853.792	135885.737	3.42	13-Jun-06		220.98	No DISC Z	No GS	220.98	3
2593	A7339	299-W14-55	95	222.17	Top of casing, north edge, stamped X				567917.823	135881.8		##########		No Stickup	No DISC Z	No GS	221.26	
2593	A7339	299-W14-55	95	222.17	Top of casing, north edge, stamped X				567917.823	135881.8	2.77	13-Jun-06		221.33	No DISC Z	No GS	221.33	3
2600	A7346	299-W14-62	68	206.024	Top of casing, north edge, stamped X				566941.342	136373.993		##########		No Stickup	No DISC Z	No GS	205.11	
2600	A7346	299-W14-62	68	206.024	Top of casing, north edge, stamped X				566941.342	136373.993	2.86	13-Jun-06		205.15	No DISC Z	No GS	205.15	3
2609	C5102	299-W14-71	467.9	219.41	Top of casing, north edge			218.639	567733.43	135567.81	2.55	22-Dec-06		218.63	218.64	No GS	218.64	2
2610	C5103	299-W14-72	439.5	216.387	Top of casing, north edge			215.667	567328.44	135941.28	2.38	16-Nov-06		215.66	215.67	No GS	215.67	2
2611	A7348	299-W15-1	300	206.993	Top of casing, stamped X				566554.305	135942.939	2.27	28-Oct-99		206.30	No DISC Z	No GS	206.30	3
2611	A7348	299-W15-1	300	206.993	Top of casing, stamped X				566554.305	135942.939	2.27	20-Jun-00		206.30	No DISC Z	No GS	206.30	
2611	A7348	299-W15-1	300	206.993	Top of casing, stamped X				566554.305	135942.939	2.3	18-Jun-01		206.29	No DISC Z	No GS	206.29	
2611	A7348	299-W15-1	300	206.993	Top of casing, stamped X				566554.305	135942.939	2.31	03-Sep-02		206.29	No DISC Z	No GS	206.29	
2611	A7348	299-W15-1	300	206.993	Top of casing, stamped X				566554.305	135942.939		23-Jan-03		No Stickup	No DISC Z	No GS	206.08	
2611	A7348	299-W15-1	300	206.993	Top of casing, stamped X				566554.305	135942.939	2.22	28-Jan-04		206.32	No DISC Z	No GS	206.32	
2611	A7348	299-W15-1	300	206.993	Top of casing, stamped X				566554.305	135942.939	2.22	21-Jun-05		206.32	No DISC Z	No GS	206.32	
2611	A7348	299-W15-1	300	206.993	Top of casing, stamped X				566554.305	135942.939	2.22	01-Nov-07		206.32	No DISC Z	No GS	206.32	
2612	A5466	299-W15-2	261	212.411	Top of casing, north edge, stamped X				566093.762	136336.237	3.48	12-Jun-01		211.35	No DISC Z	No GS	211.35	3
2612	A5466	299-W15-2	261	212.411	Top of casing, north edge, stamped X				566093.762	136336.237	3.48	31-Jul-01		211.35	No DISC Z	No GS	211.35	
2612	A5466	299-W15-2	261	212.411	Top of casing, north edge, stamped X				566093.762	136336.237		11-Jan-02		No Stickup	No DISC Z	No GS	211.50	
2612	A5466	299-W15-2	261	212.411	Top of casing, north edge, stamped X				566093.762	136336.237	3	09-Sep-03		211.50	No DISC Z	No GS	211.50	
2612	A5466	299-W15-2	261	212.411	Top of casing, north edge, stamped X				566093.762	136336.237	3.5	10-Sep-07		211.34	No DISC Z	No GS	211.34	
2613	A4928	299-W15-3	245	205.385	Top of casing, north edge, stamped X			205.244	566729.196	136371.476	4	##########	241-TY	204.17	205.24	No GS	205.24	2
2614	A4929	299-W15-4	217	203.168	Top of casing, stamped X			202.548	566826.281	136027.672	2.07	21-Oct-99		202.54	202.55	No GS	202.55	
2614	A4929	299-W15-4	217	203.168	Top of casing, stamped X			202.548	566826.281	136027.672	2.05	19-Mar-03		202.54	202.55	No GS	202.55	
2614	A4929	299-W15-4	217	203.168	Top of casing, stamped X			202.548	566826.281	136027.672	2.08	10-Mar-04		202.53	202.55	No GS	202.55	2
2615	A4930	299-W15-5	599	205.448	Top of casing, north edge, stamped X				566734.978	135511.737	1.82	##########		204.89	No DISC Z	No GS	204.89	3
2616	A9473	299-W15-5O	599			204.448	Ground surface		566734.978	135511.737		##########		No TOC	No DISC Z	204.45	204.45	1
2617	A9474	299-W15-5P	599			205.448	Ground surface		566734.978	135511.737		##########		No TOC	No DISC Z	205.45	205.45	1
2618	A9475	299-W15-5Q	599			205.448	Ground surface		566734.978	135511.737		##########		No TOC	No DISC Z	205.45	205.45	1
2619	A9476	299-W15-5R	599			205.448	Ground surface		566734.978	135511.737		##########		No TOC	No DISC Z	205.45	205.45	1
2620	A9477	299-W15-5S	599			205.448	Ground surface		566734.978	135511.737		##########		No TOC	No DISC Z	205.45	205.45	1
2621	A7349	299-W15-6	410	202.666	Top of casing, north edge, stamped X			202.079	566801.511	135654.395	2.93	##########		201.77	202.08	No GS	202.08	
2621	A7349	299-W15-6	410	202.666	Top of casing, north edge, stamped X			202.079	566801.511	135654.395		26-Mar-03		No Stickup	202.08	No GS	202.08	
2621	A7349	299-W15-6	410	202.666	Top of casing, north edge, stamped X			202.079	566801.511	135654.395	1.93	31-Jul-06		202.08	202.08	No GS	202.08	2
2622	A5476	299-W15-7	350	204.249	Top of casing, stamped X				566675.883	135920.204	2.4	10-Nov-99		203.52	No DISC Z	No GS	203.52	3
2622	A5476	299-W15-7	350	204.249	Top of casing, stamped X				566675.883	135920.204	2.35	20-Jun-00		203.53	No DISC Z	No GS	203.53	
2622	A5476	299-W15-7	350	204.249	Top of casing, stamped X				566675.883	135920.204		22-Jan-02		No Stickup	No DISC Z	No GS	203.33	
2622	A5476	299-W15-7	350	204.249	Top of casing, stamped X				566675.883	135920.204	2.73	16-Apr-04		203.42	No DISC Z	No GS	203.42	
2622	A5476	299-W15-7	350	204.249	Top of casing, stamped X				566675.883	135920.204	2.73	04-May-05		203.42	No DISC Z	No GS	203.42	
2622	A5476	299-W15-7	350	204.249	Top of casing, stamped X				566675.883	135920.204	2.73	15-Sep-05		203.42	No DISC Z	No GS	203.42	
2622	A5476	299-W15-7	350	204.249	Top of casing, stamped X				566675.883	135920.204	2.73	15-Mar-06		203.42	No DISC Z	No GS	203.42	
2622	A5476	299-W15-7	350	204.249	Top of casing, stamped X				566675.883	135920.204	2.37	01-Nov-07		203.53	No DISC Z	No GS	203.53	
2623	A5468	299-W15-8	206	204.713	Top of casing, north edge, stamped X				566757.688	135576.697	2.1	##########		204.07	No DISC Z	No GS	204.07	3
2624	A5477	299-W15-9	195	202.577	Top of casing, north edge, stamped X				566763.335	135631.369	1.72	##########		202.05	No DISC Z	No GS	202.05	
2624	A5477	299-W15-9	195	202.577	Top of casing, north edge, stamped X				566763.335	135631.369	1.63	26-Aug-02		202.08	No DISC Z	No GS	202.08	3
2625	A4916	299-W15-10	300	207.598	Top of casing, stamped X				566448.629	135981.14	2.98	20-Jun-00		206.69	No DISC Z	No GS	206.69	3
2625	A4916	299-W15-10	300	207.598	Top of casing, stamped X				566448.629	135981.14	3	11-Mar-03		206.68	No DISC Z	No GS	206.68	
2625	A4916	299-W15-10	300	207.598	Top of casing, stamped X				566448.629	135981.14	3	10-Jul-03		206.68	No DISC Z	No GS	206.68	
2626	A5474	299-W15-11	300	208.261	Top of casing, stamped X				566412.296	136000.716	2.93	19-Oct-99		207.37	No DISC Z	No GS	207.37	3
2626	A5474	299-W15-11	300	208.261	Top of casing, stamped X				566412.296	136000.716	2.9	21-Jun-00		207.38	No DISC Z	No GS	207.38	
2626	A5474	299-W15-11	300	208.261	Top of casing, stamped X				566412.296	136000.716	2.9	20-Oct-00		207.38	No DISC Z	No GS	207.38	
2626	A5474	299-W15-11	300	208.261	Top of casing, stamped X				566412.296	136000.716		03-Jan-02		No Stickup	No DISC Z	No GS	207.35	
2626	A5474	299-W15-11	300	208.261	Top of casing, stamped X				566412.296	136000.716	2.96	17-Jul-03		207.36	No DISC Z	No GS	207.36	
2626	A5474	299-W15-11	300	208.261	Top of casing, stamped X				566412.296	136000.716	2.96	26-Jul-06		207.36	No DISC Z	No GS	207.36	
2626	A5474	299-W15-11	300	208.261	Top of casing, stamped X				566412.296	136000.716	2.96	01-Nov-07		207.36	No DISC Z	No GS	207.36	
2627	A4917	299-W15-12	225	205.265	Top of casing, north edge, stamped X				566699.207	136368.771		19-Mar-96		No Stickup	No DISC Z	No GS	204.35	
2627	A4917	299-W15-12	225	205.265	Top of casing, north edge, stamped X				566699.207	136368.771	2.65	13-Aug-01		204.46	No DISC Z	No GS	204.46	3
2627	A4917	299-W15-12	225	205.265	Top of casing, north edge, stamped X				566699.207	136368.771	2.65	25-Mar-03		204.46	No DISC Z	No GS	204.46	
2627	A4917	299-W15-12	225	205.265	Top of casing, north edge, stamped X				566699.207	136368.771	2.65	25-Sep-03		204.46	No DISC Z	No GS	204.46	
2628	A4918	299-W15-13	225	205.318	Top of outer casing, north edge				566845.45	136369.5	2.9	##########		204.43	No DISC Z	No GS	204.43	3
2629	A7350	299-W15-14	581	213.868	Top of casing (assumed)				566093.439	135648.274		##########		No Stickup	No DISC Z	No GS	212.95	
2629	A7350	299-W15-14	581	213.868	Top of casing (assumed)				566093.439	135648.274	2.8	20-Mar-03		213.01	No DISC Z	No GS	213.01	3
2629	A7350	299-W15-14	581	213.868	Top of casing (assumed)				566093.439	135648.274	2.81	04-May-04		213.01	No DISC Z	No GS	213.01	
2629	A7350	299-W15-14	581	213.868	Top of casing (assumed)				566093.439	135648.274	2.8	13-Jul-04		213.01	No DISC Z	No GS	213.01	

sortOrder	Well_ID	WellName	Total Depth (ft)	Top of Casing Elevation (m)	Top of Casing Survey Point Description	Ground Surface Elevation (m)	Ground Surface Survey Point Description	DISC_Z	EASTING	NORTHING	WELL_STICKUP	DATE_INSPECTED	In Tank Farm?	Ground Surface Elevation from TOC-Stickup (m) - Priority 3	DISC Z from HWIS (m) - Priority 2	Ground Surface Elevation, from HWIS (m) - Priority 1	Best Est. Ground Surface Elevation (m)	Best Est. Rank
2630	A4919	299-W15-15	255	213.838	Top of casing, stamped X			213.162	566088.805	135751.493		25-Aug-97		No Stickup	213.16	No GS	213.16	
2630	A4919	299-W15-15	255	213.838	Top of casing, stamped X			213.162	566088.805	135751.493	2.22	25-Jul-00		213.16	213.16	No GS	213.16	
2630	A4919	299-W15-15	255	213.838	Top of casing, stamped X			213.162	566088.805	135751.493	2.23	21-Jul-03		213.16	213.16	No GS	213.16	
2630	A4919	299-W15-15	255	213.838	Top of casing, stamped X			213.162	566088.805	135751.493	2.23	09-Aug-06		213.16	213.16	No GS	213.16	2
2631	A4920	299-W15-16	243.5	209.853	Top of casing, stamped X			209.164	566307.006	135733.625		21-Aug-97		No Stickup	209.16	No GS	209.16	
2631	A4920	299-W15-16	243.5	209.853	Top of casing, stamped X			209.164	566307.006	135733.625	2.25	19-Jun-00		209.17	209.16	No GS	209.16	
2631	A4920	299-W15-16	243.5	209.853	Top of casing, stamped X			209.164	566307.006	135733.625	2.2	27-Jul-00		209.18	209.16	No GS	209.16	
2631	A4920	299-W15-16	243.5	209.853	Top of casing, stamped X			209.164	566307.006	135733.625		22-Jan-02		No Stickup	209.16	No GS	209.16	
2631	A4920	299-W15-16	243.5	209.853	Top of casing, stamped X			209.164	566307.006	135733.625	2.25	16-Sep-02		209.17	209.16	No GS	209.16	
2631	A4920	299-W15-16	243.5	209.853	Top of casing, stamped X			209.164	566307.006	135733.625		02-Aug-04		No Stickup	209.16	No GS	209.16	2
2632	A4921	299-W15-17	450	209.783	Top of casing, north edge, stamped X			209.236	566306.891	135718.958	1.83	##################		209.23	209.24	No GS	209.24	
2632	A4921	299-W15-17	450	209.783	Top of casing, north edge, stamped X			209.236	566306.891	135718.958		21-Aug-97		No Stickup	209.24	No GS	209.24	
2632	A4921	299-W15-17	450	209.783	Top of casing, north edge, stamped X			209.236	566306.891	135718.958	1.5	02-Feb-05		209.33	209.24	No GS	209.24	
2632	A4921	299-W15-17	450	209.783	Top of casing, north edge, stamped X			209.236	566306.891	135718.958		22-Jun-06		No Stickup	209.24	No GS	209.24	2
2633	A4922	299-W15-18	242.5	210.101	Top of casing, stamped X			209.446	566308.661	135561.762	2.14	27-Mar-00		209.45	209.45	No GS	209.45	
2633	A4922	299-W15-18	242.5	210.101	Top of casing, stamped X			209.446	566308.661	135561.762	2.2	04-Apr-01		209.43	209.45	No GS	209.45	
2633	A4922	299-W15-18	242.5	210.101	Top of casing, stamped X			209.446	566308.661	135561.762	2.15	03-Dec-03		209.45	209.45	No GS	209.45	2
2634	A4923	299-W15-19	245.7	211.904	Top of casing, north edge, stamped X			210.957	566189.082	135968.695	3.12	##################		210.95	210.96	No GS	210.96	
2634	A4923	299-W15-19	245.7	211.904	Top of casing, north edge, stamped X			210.957	566189.082	135968.695		10-Apr-98		No Stickup	210.96	No GS	210.96	
2634	A4923	299-W15-19	245.7	211.904	Top of casing, north edge, stamped X			210.957	566189.082	135968.695	3.1	25-Mar-03		210.96	210.96	No GS	210.96	2
2635	A4924	299-W15-20	245	213.96	Top of casing, stamped X			213.068	566082.884	135964.193	2.92	##################		213.07	213.07	No GS	213.07	
2635	A4924	299-W15-20	245	213.96	Top of casing, stamped X			213.068	566082.884	135964.193		27-Jan-98		No Stickup	213.07	No GS	213.07	
2635	A4924	299-W15-20	245	213.96	Top of casing, stamped X			213.068	566082.884	135964.193		22-Jan-02		No Stickup	213.07	No GS	213.07	
2635	A4924	299-W15-20	245	213.96	Top of casing, stamped X			213.068	566082.884	135964.193	2.9	05-Mar-03		213.08	213.07	No GS	213.07	
2635	A4924	299-W15-20	245	213.96	Top of casing, stamped X			213.068	566082.884	135964.193	2.92	25-Mar-03		213.07	213.07	No GS	213.07	2
2637	A4925	299-W15-22	221.9	205.477	Top of casing, north edge, stamped X			204.546	566683.041	136110.928	3.08	##################		204.54	204.55	No GS	204.55	
2637	A4925	299-W15-22	221.9	205.477	Top of casing, north edge, stamped X			204.546	566683.041	136110.928	3.06	04-Feb-03		204.54	204.55	No GS	204.55	
2637	A4925	299-W15-22	221.9	205.477	Top of casing, north edge, stamped X			204.546	566683.041	136110.928	3.08	09-Sep-03		204.54	204.55	No GS	204.55	2
2638	A4926	299-W15-23	240	214.311	Top of casing, north edge, stamped X			213.325	566083.652	135858.13	3.2	##################		213.34	213.33	No GS	213.33	
2638	A4926	299-W15-23	240	214.311	Top of casing, north edge, stamped X			213.325	566083.652	135858.13		22-Jan-02		No Stickup	213.33	No GS	213.33	
2638	A4926	299-W15-23	240	214.311	Top of casing, north edge, stamped X			213.325	566083.652	135858.13	3.2	05-Mar-03		213.34	213.33	No GS	213.33	
2638	A4926	299-W15-23	240	214.311	Top of casing, north edge, stamped X			213.325	566083.652	135858.13	3.1	25-Mar-03		213.37	213.33	No GS	213.33	2
2639	A4927	299-W15-24	241.8	214.262	Top of casing, stamped X			213.313	566091.133	135605.736	3.09	##################		213.32	213.31	No GS	213.31	
2639	A4927	299-W15-24	241.8	214.262	Top of casing, stamped X			213.313	566091.133	135605.736		22-Jan-02		No Stickup	213.31	No GS	213.31	
2639	A4927	299-W15-24	241.8	214.262	Top of casing, stamped X			213.313	566091.133	135605.736	3.1	05-Mar-03		213.32	213.31	No GS	213.31	
2639	A4927	299-W15-24	241.8	214.262	Top of casing, stamped X			213.313	566091.133	135605.736	3.12	25-Mar-03		213.31	213.31	No GS	213.31	2
2640	A9831	299-W15-25	272	207.354	Top of casing, stamped X			206.485	566448.528	135966.022	2.85	20-Jun-00		206.49	206.49	No GS	206.49	
2640	A9831	299-W15-25	272	207.354	Top of casing, stamped X			206.485	566448.528	135966.022	2.85	25-Mar-03		206.49	206.49	No GS	206.49	
2640	A9831	299-W15-25	272	207.354	Top of casing, stamped X			206.485	566448.528	135966.022	2.85	21-Apr-03		206.49	206.49	No GS	206.49	2
2644	B2409	299-W15-29	292	213.099	Top of casing, stamped X			212.153	565921.17	135506.003		##################		No Stickup	212.15	No GS	212.15	
2644	B2409	299-W15-29	292	213.099	Top of casing, stamped X			212.153	565921.17	135506.003		01-Sep-04		No Stickup	212.15	No GS	212.15	2
2645	B2410	299-W15-30	268.3	210.126	Top of casing, stamped X			209.277	566304.617	135748.936	2.85	19-Jun-00		209.26	209.28	No GS	209.28	
2645	B2410	299-W15-30	268.3	210.126	Top of casing, stamped X			209.277	566304.617	135748.936		15-Jul-04		No Stickup	209.28	No GS	209.28	
2645	B2410	299-W15-30	268.3	210.126	Top of casing, stamped X			209.277	566304.617	135748.936		24-Oct-05		No Stickup	209.28	No GS	209.28	
2645	B2410	299-W15-30	268.3	210.126	Top of casing, stamped X			209.277	566304.617	135748.936		03-Feb-06		No Stickup	209.28	No GS	209.28	
2645	B2410	299-W15-30	268.3	210.126	Top of casing, stamped X			209.277	566304.617	135748.936		22-Jun-06		No Stickup	209.28	No GS	209.28	
2645	B2410	299-W15-30	268.3	210.126	Top of casing, stamped X			209.277	566304.617	135748.936	2.83	02-Feb-07		209.26	209.28	No GS	209.28	2
2647	B2471	299-W15-31A	259	208.48	Top of casing, stamped X			207.663	566377.105	135856.102	2.7	20-Jun-00		207.66	207.66	No GS	207.66	
2647	B2471	299-W15-31A	259	208.48	Top of casing, stamped X			207.663	566377.105	135856.102	2.7	08-Nov-00		207.66	207.66	No GS	207.66	
2647	B2471	299-W15-31A	259	208.48	Top of casing, stamped X			207.663	566377.105	135856.102	2.71	13-Feb-02		207.65	207.66	No GS	207.66	
2647	B2471	299-W15-31A	259	208.48	Top of casing, stamped X			207.663	566377.105	135856.102	2.71	21-Oct-02		207.65	207.66	No GS	207.66	
2647	B2471	299-W15-31A	259	208.48	Top of casing, stamped X			207.663	566377.105	135856.102	2.71	28-Jul-03		207.65	207.66	No GS	207.66	
2647	B2471	299-W15-31A	259	208.48	Top of casing, stamped X			207.663	566377.105	135856.102	2.71	04-Oct-04		207.65	207.66	No GS	207.66	2
2648	B2423	299-W15-32	239.5	203.487	Top of casing, stamped X			202.625	566773.428	135634.998		##################		No Stickup	202.63	No GS	202.63	
2648	B2423	299-W15-32	239.5	203.487	Top of casing, stamped X			202.625	566773.428	135634.998	2.86	01-Apr-04		202.62	202.63	No GS	202.63	2
2649	B2643	299-W15-33	268			206.834	Brass survey marker	206.834	566433.297	135966.703	3.15	06-Jun-00		No TOC	206.83	206.83	206.83	
2649	B2643	299-W15-33	268			206.834	Brass survey marker	206.834	566433.297	135966.703	3.1	25-Jun-02		No TOC	206.83	206.83	206.83	
2649	B2643	299-W15-33	268			206.834	Brass survey marker	206.834	566433.297	135966.703	3.1	26-Nov-02		No TOC	206.83	206.83	206.83	
2649	B2643	299-W15-33	268			206.834	Brass survey marker	206.834	566433.297	135966.703	3.1	10-Jul-03		No TOC	206.83	206.83	206.83	
2649	B2643	299-W15-33	268			206.834	Brass survey marker	206.834	566433.297	135966.703	3.1	31-Mar-04		No TOC	206.83	206.83	206.83	1
2650	B2748	299-W15-34	263	206.131	Top of casing			204.912	566613.409	135960.441	2.85	08-Mar-01		205.26	204.91	No GS	204.91	
2650	B2748	299-W15-34	263	206.131	Top of casing			204.912	566613.409	135960.441	2.85	28-Feb-02		205.26	204.91	No GS	204.91	
2650	B2748	299-W15-34	263	206.131	Top of casing			204.912	566613.409	135960.441	2.85	20-May-02		205.26	204.91	No GS	204.91	
2650	B2748	299-W15-34	263	206.131	Top of casing			204.912	566613.409	135960.441		28-May-02		No Stickup	204.91	No GS	204.91	
2650	B2748	299-W15-34	263	206.131	Top of casing			204.912	566613.409	135960.441	2.85	07-Jan-03		205.26	204.91	No GS	204.91	
2650	B2748	299-W15-34	263	206.131	Top of casing			204.912	566613.409	135960.441	2.87	20-Jan-05		205.26	204.91	No GS	204.91	
2650	B2748	299-W15-34	263	206.131	Top of casing			204.912	566613.409	135960.441		09-Nov-05		No Stickup	204.91	No GS	204.91	
2650	B2748	299-W15-34	263	206.131	Top of casing			204.912	566613.409	135960.441	2.87	10-Nov-05		205.26	204.91	No GS	204.91	
2651	B2749	299-W15-35	260	204.096	Top of casing			202.884	566739.261	135853.068		##################		No Stickup	202.88	No GS	202.88	
2651	B2749	299-W15-35	260	204.096	Top of casing			202.884	566739.261	135853.068		24-Mar-05		No Stickup	202.88	No GS	202.88	
2651	B2749	299-W15-35	260	204.096	Top of casing			202.884	566739.261	135853.068		22-Nov-05		No Stickup	202.88	No GS	202.88	
2651	B2749	299-W15-35	260	204.096	Top of casing			202.884	566739.261	135853.068		23-Nov-05		No Stickup	202.88	No GS	202.88	2
2652	B2752	299-W15-36	263			203.861	Brass survey marker	203.861	566773.903	135429.589	2.93	08-Jun-00		No TOC	203.86	203.86	203.86	
2652	B2752	299-W15-36	263			203.861	Brass survey marker	203.861	566773.903	135429.589	2.9	13-Feb-01		No TOC	203.86	203.86	203.86	
2652	B2752	299-W15-36	263			203.861	Brass survey marker	203.861	566773.903	135429.589	2.9	11-Jul-03		No TOC	203.86	203.86	203.86	
2652	B2752	299-W15-36	263			203.861	Brass survey marker	203.861	566773.903	135429.589	2.9	21-Jun-04		No TOC	203.86	203.86	203.86	
2652	B2752	299-W15-36	263			203.861	Brass survey marker	203.861	566773.903	135429.589		23-Mar-05		No TOC	203.86	203.86	203.86	
2652	B2752	299-W15-36	263			203.861	Brass survey marker	203.861	566773.903	135429.589		21-Nov-05		No TOC	203.86	203.86	203.86	
2652	B2752	299-W15-36	263			203.861	Brass survey marker	203.861	566773.903	135429.589	3	30-Mar-06		No TOC	203.86	203.86	203.86	
2652	B2752	299-W15-36	263			203.861	Brass survey marker	203.861	566773.903	135429.589	3	26-Oct-06		No TOC	203.86	203.86	203.86	
2652	B2752	299-W15-36	263			203.861	Brass survey marker	203.861	566773.903	135429.589	2.9	18-Apr-07		No TOC	203.86	203.86	203.86	1
2653	B2753	299-W15-37	258			203.028	Brass survey marker	203.028	566716.468	135248.316		##################		No TOC	203.03	203.03	203.03	
2653	B2753	299-W15-37	258			203.028	Brass survey marker	203.028	566716.468	135248.316	3	17-Jun-02		No TOC	203.03	203.03	203.03	
2653	B2753	299-W15-37	258			203.028	Brass survey marker	203.028	566716.468	135248.316	2.97	20-Feb-03		No TOC	203.03	203.03	203.03	
2653	B2753	299-W15-37	258			203.028	Brass survey marker	203.028	566716.468	135248.316		16-Nov-05		No TOC	203.03	203.03	203.03	1
2654	B2754	299-W15-38	229.5	203.691	Top of casing, stamped X			202.871	566812.919	135672.902	2.7	01-Feb-00		202.87	202.87	No GS	202.87	
2654	B2754	299-W15-38	229.5	203.691	Top of casing, stamped X			202.871	566812.919	135672.902	2.7	19-Jun-00		202.87	202.87	No GS	202.87	
2654	B2754	299-W15-38	229.5	203.691	Top of casing, stamped X			202.871	566812.919	135672.902	2.7	26-Oct-00		202.87	202.87	No GS	202.87	2
2655	B2755	299-W15-39	223	202.129	Top of casing, stamped X			201.248	566819.177	135552.967	2.9	19-Jun-00		201.25	201.25	No GS	201.25	

sortOrder	Well_ID	WellName	Total Depth (ft)	Top of Casing Elevation (m)	Top of Casing Survey Point Description	Ground Surface Elevation (m)	Ground Surface Survey Point Description	DISC_Z	EASTING	NORTHING	WELL_STICKUP	DATE_INSPECTED	In Tank Farm?	Ground Surface Elevation from TOC-Stickup (m) - Priority 3	DISC Z from HWIS (m) - Priority 2	Ground Surface Elevation, from HWIS (m) - Priority 1	Best Est. Ground Surface Elevation (m)	Best Est. Rank
2655	B2755	299-W15-39	223	202.129	Top of casing, stamped X			201.248	566819.177	135552.967	2.9	26-Oct-00		201.25	201.25	No GS	201.25	
2655	B2755	299-W15-39	223	202.129	Top of casing, stamped X			201.248	566819.177	135552.967	2.9	06-Sep-06		201.25	201.25	No GS	201.25	2
2656	B8550	299-W15-40	262.4	205.824	Top of casing, stamped X			205.06	566652.502	136204.971	2.49	31-Aug-99		205.07	205.06	No GS	205.06	
2656	B8550	299-W15-40	262.4	205.824	Top of casing, stamped X			205.06	566652.502	136204.971		17-Jan-02		No Stickup	205.06	No GS	205.06	
2656	B8550	299-W15-40	262.4	205.824	Top of casing, stamped X			205.06	566652.502	136204.971		25-May-05		No Stickup	205.06	No GS	205.06	
2656	B8550	299-W15-40	262.4	205.824	Top of casing, stamped X			205.06	566652.502	136204.971		22-Nov-05		No Stickup	205.06	No GS	205.06	2
2657	B8815	299-W15-41	239	203.484	Top of casing, stamped X			202.788	566757.587	136031.682	2.27	31-Jan-00		202.79	202.79	No GS	202.79	
2657	B8815	299-W15-41	239	203.484	Top of casing, stamped X			202.788	566757.587	136031.682	2.27	31-Jan-00		202.79	202.79	No GS	202.79	
2657	B8815	299-W15-41	239	203.484	Top of casing, stamped X			202.788	566757.587	136031.682	2.27	15-Sep-05		202.79	202.79	No GS	202.79	2
2658	C3803	299-W15-42	280.73	207.391	Top of casing, stamped X			206.531	566581.825	135627.018		04-Mar-02		No Stickup	206.53	No GS	206.53	
2658	C3803	299-W15-42	280.73	207.391	Top of casing, stamped X			206.531	566581.825	135627.018		04-Mar-02		No Stickup	206.53	No GS	206.53	
2658	C3803	299-W15-42	280.73	207.391	Top of casing, stamped X			206.531	566581.825	135627.018		01-Apr-02		No Stickup	206.53	No GS	206.53	
2658	C3803	299-W15-42	280.73	207.391	Top of casing, stamped X			206.531	566581.825	135627.018		04-Sep-02		No Stickup	206.53	No GS	206.53	
2658	C3803	299-W15-42	280.73	207.391	Top of casing, stamped X			206.531	566581.825	135627.018	2.8	05-Dec-02		206.54	206.53	No GS	206.53	
2658	C3803	299-W15-42	280.73	207.391	Top of casing, stamped X			206.531	566581.825	135627.018	2.8	25-Aug-04		206.54	206.53	No GS	206.53	2
2659	C3955	299-W15-43	347	207.49	Top of casing, stamped X			206.777	566490.13	136210.03	2.38	05-Nov-02		206.76	206.78	No GS	206.78	
2659	C3955	299-W15-43	347	207.49	Top of casing, stamped X			206.777	566490.13	136210.03		09-Dec-02		No Stickup	206.78	No GS	206.78	
2659	C3955	299-W15-43	347	207.49	Top of casing, stamped X			206.777	566490.13	136210.03		05-Jun-03		No Stickup	206.78	No GS	206.78	
2659	C3955	299-W15-43	347	207.49	Top of casing, stamped X			206.777	566490.13	136210.03		15-Jul-04		No Stickup	206.78	No GS	206.78	
2659	C3955	299-W15-43	347	207.49	Top of casing, stamped X			206.777	566490.13	136210.03		25-May-05		No Stickup	206.78	No GS	206.78	
2659	C3955	299-W15-43	347	207.49	Top of casing, stamped X			206.777	566490.13	136210.03		29-Nov-05		No Stickup	206.78	No GS	206.78	2
2660	C3956	299-W15-44	342	204.89	Top of casing, stamped X			204.168	566685.02	136066.47	2.4	10-Oct-02		204.16	204.17	No GS	204.17	
2660	C3956	299-W15-44	342	204.89	Top of casing, stamped X			204.168	566685.02	136066.47		09-Dec-02		No Stickup	204.17	No GS	204.17	
2660	C3956	299-W15-44	342	204.89	Top of casing, stamped X			204.168	566685.02	136066.47		25-May-05		No Stickup	204.17	No GS	204.17	
2660	C3956	299-W15-44	342	204.89	Top of casing, stamped X			204.168	566685.02	136066.47		28-Nov-05		No Stickup	204.17	No GS	204.17	2
2661	C4119	299-W15-45	292.1	207.83	Top of casing, north edge, stamped X			206.785	566432.94	135961.16	3.4	05-May-03		206.79	206.79	No GS	206.79	
2661	C4119	299-W15-45	292.1	207.83	Top of casing, north edge, stamped X			206.785	566432.94	135961.16	3.4	31-Mar-04		206.79	206.79	No GS	206.79	
2661	C4119	299-W15-45	292.1	207.83	Top of casing, north edge, stamped X			206.785	566432.94	135961.16	3.4	03-Apr-04		206.79	206.79	No GS	206.79	
2661	C4119	299-W15-45	292.1	207.83	Top of casing, north edge, stamped X			206.785	566432.94	135961.16		29-Nov-05		No Stickup	206.79	No GS	206.79	2
2662	C3426	299-W15-46	525	204.222	Top of casing			203.472	566752.23	135586.67	2.48	05-May-05		203.47	203.47	No GS	203.47	
2662	C3426	299-W15-46	525	204.222	Top of casing			203.472	566752.23	135586.67		31-May-05		No Stickup	203.47	No GS	203.47	2
2663	C4184	299-W15-47	289	203.705	Top of casing, north edge, stamped X			202.679	566776.45	135642.37	3.36	15-Mar-04		202.68	202.68	No GS	202.68	
2663	C4184	299-W15-47	289	203.705	Top of casing, north edge, stamped X			202.679	566776.45	135642.37	3.36	01-Apr-04		202.68	202.68	No GS	202.68	
2663	C4184	299-W15-47	289	203.705	Top of casing, north edge, stamped X			202.679	566776.45	135642.37	3.36	23-Jul-04		202.68	202.68	No GS	202.68	
2663	C4184	299-W15-47	289	203.705	Top of casing, north edge, stamped X			202.679	566776.45	135642.37		29-Nov-05		No Stickup	202.68	No GS	202.68	
2663	C4184	299-W15-47	289	203.705	Top of casing, north edge, stamped X			202.679	566776.45	135642.37		09-Jun-06		No Stickup	202.68	No GS	202.68	
2663	C4184	299-W15-47	289	203.705	Top of casing, north edge, stamped X			202.679	566776.45	135642.37	3.36	14-Mar-07		202.68	202.68	No GS	202.68	2
2664	C3427	299-W15-48	145.5			202.585	(assumed)	202.245	566777.04	135604.82				No TOC	202.25	202.59	202.59	1
2665	C4301	299-W15-49	435	209.127	Top of casing			208.383	566307.2	135972.91		02-Feb-05		No Stickup	208.38	No GS	208.38	2
2666	C4302	299-W15-50	337	203.236	Top of casing			202.499	566793.47	135790.72		15-Apr-05		No Stickup	202.50	No GS	202.50	2
2667	A7352	299-W15-51	151	206.668	Top of casing, north edge, stamped X				566566.156	135897.098		##################		No Stickup	No DISC Z	No GS	205.75	
2667	A7352	299-W15-51	151	206.668	Top of casing, north edge, stamped X				566566.156	135897.098	1	20-Jan-04		206.36	No DISC Z	No GS	206.36	3
2667	A7352	299-W15-51	151	206.668	Top of casing, north edge, stamped X				566566.156	135897.098	0.95	23-Aug-07		206.38	No DISC Z	No GS	206.38	
2668	A7353	299-W15-52	194	206.004	Top of casing (assumed)				566532.046	135932.835		##################		No Stickup	No DISC Z	No GS	205.09	
2668	A7353	299-W15-52	194	206.004	Top of casing (assumed)				566532.046	135932.835		26-Jan-04		No Stickup	No DISC Z	No GS	205.09	4
2669	A7354	299-W15-53	80	206.789	Top of casing, north edge, stamped X				566553.843	135917.663		##################		No Stickup	No DISC Z	No GS	205.87	
2669	A7354	299-W15-53	80	206.789	Top of casing, north edge, stamped X				566553.843	135917.663	1.2	01-Nov-04		206.42	No DISC Z	No GS	206.42	3
2670	A7355	299-W15-54	138	206.998	Top of casing, north edge, stamped X				566538.501	135930.796		##################		No Stickup	No DISC Z	No GS	206.08	
2670	A7355	299-W15-54	138	206.998	Top of casing, north edge, stamped X				566538.501	135930.796	2.8	01-Nov-04		206.14	No DISC Z	No GS	206.14	3
2671	A7356	299-W15-55	150	206.663	Top of casing, north edge, stamped X				566549.617	135925.813		##################		No Stickup	No DISC Z	No GS	205.75	
2671	A7356	299-W15-55	150	206.663	Top of casing, north edge, stamped X				566549.617	135925.813	0.7	01-Nov-04		206.45	No DISC Z	No GS	206.45	3
2672	A7357	299-W15-56	150	206.833	Top of casing, north edge, stamped X				566541.626	135930.601		##################		No Stickup	No DISC Z	No GS	205.92	
2672	A7357	299-W15-56	150	206.833	Top of casing, north edge, stamped X				566541.626	135930.601	1.8	01-Nov-04		206.28	No DISC Z	No GS	206.28	3
2673	A7358	299-W15-57	155	206.938	Top of casing, north edge, stamped X				566549.791	135935.364		##################		No Stickup	No DISC Z	No GS	206.02	
2673	A7358	299-W15-57	155	206.938	Top of casing, north edge, stamped X				566549.791	135935.364	1.9	01-Nov-04		206.36	No DISC Z	No GS	206.36	3
2674	A7359	299-W15-58	124	206.221	Top of casing (assumed)				566522.905	135932.812		##################		No Stickup	No DISC Z	No GS	205.31	
2674	A7359	299-W15-58	124	206.221	Top of casing (assumed)				566522.905	135932.812		26-Jan-04		No Stickup	No DISC Z	No GS	205.31	4
2675	A7360	299-W15-59	175	206.878	Top of casing, north edge, stamped X				566570.256	135899.358		##################		No Stickup	No DISC Z	No GS	205.96	
2675	A7360	299-W15-59	175	206.878	Top of casing, north edge, stamped X				566570.256	135899.358	1.88	13-Jan-04		206.30	No DISC Z	No GS	206.30	3
2675	A7360	299-W15-59	175	206.878	Top of casing, north edge, stamped X				566570.256	135899.358	1.9	20-Jan-04		206.30	No DISC Z	No GS	206.30	
2676	A7361	299-W15-60	175	206.986	Top of casing, north edge, stamped X				566566.206	135892.684	1.9	##################		206.41	No DISC Z	No GS	206.41	
2676	A7361	299-W15-60	175	206.986	Top of casing, north edge, stamped X				566566.206	135892.684	1.9	13-Jan-04		206.41	No DISC Z	No GS	206.41	3
2676	A7361	299-W15-60	175	206.986	Top of casing, north edge, stamped X				566566.206	135892.684	1.9	14-Jan-04		206.41	No DISC Z	No GS	206.41	
2676	A7361	299-W15-60	175	206.986	Top of casing, north edge, stamped X				566566.206	135892.684	2.1	20-Jan-04		206.35	No DISC Z	No GS	206.35	
2677	A7362	299-W15-61	175	206.941	Top of casing, north edge, stamped X				566562.156	135899.361		##################		No Stickup	No DISC Z	No GS	206.03	
2677	A7362	299-W15-61	175	206.941	Top of casing, north edge, stamped X				566562.156	135899.361	1.37	13-Jan-04		206.52	No DISC Z	No GS	206.52	3
2677	A7362	299-W15-61	175	206.941	Top of casing, north edge, stamped X				566562.156	135899.361	1.3	20-Jan-04		206.54	No DISC Z	No GS	206.54	
2677	A7362	299-W15-61	175	206.941	Top of casing, north edge, stamped X				566562.156	135899.361	1.37	06-Jul-04		206.52	No DISC Z	No GS	206.52	
2678	A7363	299-W15-62	200	204.656	Top of casing, north edge, stamped X				566688.703	135949.766		##################		No Stickup	No DISC Z	No GS	203.74	
2678	A7363	299-W15-62	200	204.656	Top of casing, north edge, stamped X				566688.703	135949.766	3.94	15-Apr-04		203.46	No DISC Z	No GS	203.46	3
2679	A7364	299-W15-63	200	203.658	Top of casing, north edge, stamped X				566703.896	135949.782	1.6	##################		203.17	No DISC Z	No GS	203.17	
2679	A7364	299-W15-63	200	203.658	Top of casing, north edge, stamped X				566703.896	135949.782		02-May-03		No Stickup	No DISC Z	No GS	202.74	
2679	A7364	299-W15-63	200	203.658	Top of casing, north edge, stamped X				566703.896	135949.782	1.54	10-Mar-04		203.19	No DISC Z	No GS	203.19	3
2679	A7364	299-W15-63	200	203.658	Top of casing, north edge, stamped X				566703.896	135949.782	1.51	30-Jun-04		203.20	No DISC Z	No GS	203.20	
2680	A7365	299-W15-64	200	203.817	Top of casing, north edge, stamped X				566739.895	135925.733		##################		No Stickup	No DISC Z	No GS	202.90	
2680	A7365	299-W15-64	200	203.817	Top of casing, north edge, stamped X				566739.895	135925.733	4.6	01-Sep-04		202.41	No DISC Z	No GS	202.41	3
2682	A7367	299-W15-66	77	203.439	Top of casing, north edge, stamped X				566841.947	135936.609		##################		No Stickup	No DISC Z	No GS	202.52	
2682	A7367	299-W15-66	77	203.439	Top of casing, north edge, stamped X				566841.947	135936.609	2.5	01-Nov-04		202.68	No DISC Z	No GS	202.68	3
2682	A7367	299-W15-66	77	203.439	Top of casing, north edge, stamped X				566841.947	135936.609	2.6	24-Feb-06		202.65	No DISC Z	No GS	202.65	
2683	A7368	299-W15-67	150	207.614	Top of casing, north edge, stamped X				566822.619	136203.066	0	##################	241-TX	207.61	No DISC Z	No GS	207.61	3
2684	A7369	299-W15-68	150	205.521	Top of casing, north edge, stamped X				566788.226	136292.228	0	##################	241-TX	205.52	No DISC Z	No GS	205.52	3
2685	A7370	299-W15-69	150	205.565	Top of casing, north edge, stamped X				566758.553	136137.184		##################	241-TX	No Stickup	No DISC Z	No GS	205.57	4
2686	A7371	299-W15-70	150	205.255	Top of casing (assumed)				566820.386	136137.724		##################	241-TX	No Stickup	No DISC Z	No GS	205.26	4
2687	A7372	299-W15-71	150	205.715	Top of casing, north edge, stamped X			205.669	566758.235	136167.755		##################	241-TX	No Stickup	205.67	No GS	205.67	2
2688	A7373	299-W15-72	150	205.237	Top of casing, north edge, stamped X				566757.524	136230.296	0	##################	241-TX	205.24	No DISC Z	No GS	205.24	3
2689	A7374	299-W15-73	150	204.846	Top of casing, north edge, stamped X				566694.351	136137.116		##################	241-TX	No Stickup	No DISC Z	No GS	204.85	4
2690	A7375	299-W15-74	150	204.454	Top of casing, north edge, stamped X				566688.245	136202.693		##################	241-TX	No Stickup	No DISC Z	No GS	204.45	4
2691	A7376	299-W15-75	150	204.831	Top of casing, north edge, stamped X				566710.416	136265.056	0	##################	241-TX	204.83	No DISC Z	No GS	204.83	3
2692	A7377	299-W15-76	102	205.108	Top of casing, north edge, stamped X				566659.22	135919.433	4.98	##################		203.59	No DISC Z	No GS	203.59	

sortOrder	Well_ID	WellName	Total Depth (ft)	Top of Casing Elevation (m)	Top of Casing Survey Point Description	Ground Surface Elevation (m)	Ground Surface Survey Point Description	DISC_Z	EASTING	NORTHING	WELL_STICKUP	DATE_INSPECTED	In Tank Farm?	Ground Surface Elevation from TOC-Stickup (m) - Priority 3	DISC Z from HWIS (m) - Priority 2	Ground Surface Elevation, from HWIS (m) - Priority 1	Best Est. Ground Surface Elevation (m)	Best Est. Rank
2692	A7377	299-W15-76	102	205.108	Top of casing, north edge, stamped X				566659.22	135919.433	4.98	13-Jan-04		203.59	No DISC Z	No GS	203.59	3
2692	A7377	299-W15-76	102	205.108	Top of casing, north edge, stamped X				566659.22	135919.433	4.85	20-Jan-04		203.63	No DISC Z	No GS	203.63	
2692	A7377	299-W15-76	102	205.108	Top of casing, north edge, stamped X				566659.22	135919.433	4.2	30-Jun-04		203.83	No DISC Z	No GS	203.83	
2693	A7378	299-W15-77	72	203.679	Top of casing, north edge, stamped X				566677.073	135903.414		################		No Stickup	No DISC Z	No GS	202.76	
2693	A7378	299-W15-77	72	203.679	Top of casing, north edge, stamped X				566677.073	135903.414	1.9	01-Nov-04		203.10	No DISC Z	No GS	203.10	3
2694	A7379	299-W15-78	73	203.1	Top of casing, north edge, stamped X				566697.893	135903.317	1.65	29-Sep-99		202.60	No DISC Z	No GS	202.60	3
2694	A7379	299-W15-78	73	203.1	Top of casing, north edge, stamped X				566697.893	135903.317	1.76	13-Jan-04		202.56	No DISC Z	No GS	202.56	
2694	A7379	299-W15-78	73	203.1	Top of casing, north edge, stamped X				566697.893	135903.317	1.68	20-Jan-04		202.59	No DISC Z	No GS	202.59	
2695	A7380	299-W15-79	150	205.625	Top of casing, north edge, stamped X				566754.794	136371.464	0	################	241-TY	205.63	No DISC Z	No GS	205.63	3
2696	A7381	299-W15-80	120	207.934	Top of casing, north edge, stamped X				566548.968	136108.065		################		No Stickup	No DISC Z	No GS	207.02	
2696	A7381	299-W15-80	120	207.934	Top of casing, north edge, stamped X				566548.968	136108.065	3.8	01-Nov-04		206.78	No DISC Z	No GS	206.78	3
2697	A7382	299-W15-81	115	207.978	Top of casing, north edge, stamped X				566501.604	136152.464		################		No Stickup	No DISC Z	No GS	207.06	
2697	A7382	299-W15-81	115	207.978	Top of casing, north edge, stamped X				566501.604	136152.464	3.8	01-Nov-04		206.82	No DISC Z	No GS	206.82	3
2698	A7383	299-W15-82	101	202.821	Top of casing, north edge, stamped X				566786.415	135610.371	2.3	31-Oct-00		202.12	No DISC Z	No GS	202.12	3
2698	A7383	299-W15-82	101	202.821	Top of casing, north edge, stamped X				566786.415	135610.371	2.2	20-Mar-03		202.15	No DISC Z	No GS	202.15	
2699	C4683	299-W15-83	278	209.323	Top of casing			208.953	566304.52	135826.24		21-Sep-05		No Stickup	208.95	No GS	208.95	
2699	C4683	299-W15-83	278	209.323	Top of casing			208.953	566304.52	135826.24	2.22	06-Oct-05		208.65	208.95	No GS	208.95	2
2700	A7384	299-W15-84	110	205.51	Top of casing			205.117	566728.614	135609.797	1.2	31-Oct-00		205.14	205.12	No GS	205.12	2
2701	A7385	299-W15-85	106	203.438	Top of casing, north edge, stamped X				566757.45	135643.711	1.44	################		203.00	No DISC Z	No GS	203.00	
2701	A7385	299-W15-85	106	203.438	Top of casing, north edge, stamped X				566757.45	135643.711	1.6	20-Mar-03		202.95	No DISC Z	No GS	202.95	3
2702	A7386	299-W15-86	144	203.307	Top of casing, north edge, stamped X				566742.842	135592.158	3.06	################		202.37	No DISC Z	No GS	202.37	3
2710	C4684	299-W15-94	278	209.858	Top of casing			209.41	566307.58	135640.34	2.43	19-Sep-05		209.12	209.41	No GS	209.41	
2710	C4684	299-W15-94	278	209.858	Top of casing			209.41	566307.58	135640.34		29-Sep-05		No Stickup	209.41	No GS	209.41	
2710	C4684	299-W15-94	278	209.858	Top of casing			209.41	566307.58	135640.34	2.45	06-Oct-05		209.11	209.41	No GS	209.41	2
2711	A7394	299-W15-95	101.91	203.197	Top of casing			202.693	566752.76	135631.369	2.65	31-Oct-00		202.39	202.69	No GS	202.69	2
2712	A7395	299-W15-96	70	205.891	Top of casing (assumed)				566748.727	136398.369		################	241-TY	No Stickup	No DISC Z	No GS	205.89	4
2713	A7396	299-W15-97	70	206.056	Top of casing				566748.291	136370.551		################	241-TY	No Stickup	No DISC Z	No GS	206.06	4
2714	A7397	299-W15-98	70	206.25	Top of casing, north edge, stamped X				566756.678	136381.246		################	241-TY	No Stickup	No DISC Z	No GS	206.25	4
2715	A7398	299-W15-99	70	205.649	Top of casing, north edge, stamped X				566752.892	136373.642		################	241-TY	No Stickup	No DISC Z	No GS	205.65	4
2716	A7399	299-W15-100	70	205.616	Top of casing, north edge, stamped X				566756.053	136378.078		################	241-TY	No Stickup	No DISC Z	No GS	205.62	4
2717	A7400	299-W15-101	50	202.234	Top of casing (assumed)				566772.951	135619.526		################		No Stickup	No DISC Z	No GS	201.32	4
2717	A7400	299-W15-101	50	202.234	Top of casing (assumed)				566772.951	135619.526		12-Jun-06		No Stickup	No DISC Z	No GS	201.32	4
2718	A7401	299-W15-102	150	206.933	Top of casing, north edge, stamped X				566675.176	135561.54		################		No Stickup	No DISC Z	No GS	206.02	4
2718	A7401	299-W15-102	150	206.933	Top of casing, north edge, stamped X				566675.176	135561.54	3.6	28-Jul-04		205.84	No DISC Z	No GS	205.84	3
2719	A7402	299-W15-103	100	205.913	Top of casing, north edge, stamped X			205.899	566786.566	136214.577	0	################	241-TX	205.91	205.90	No GS	205.90	2
2720	A7403	299-W15-104	100	205.627	Top of casing, north edge, stamped X				566762.575	136207.931		################	241-TX	No Stickup	No DISC Z	No GS	205.63	4
2721	A7404	299-W15-105	100	205.453	Top of casing, north edge, stamped X				566770.134	136230.97	0	################	241-TX	205.45	No DISC Z	No GS	205.45	3
2722	A7405	299-W15-106	100	205.333	Top of casing, north edge, stamped X			205.314	566756.403	136221.373	0	################	241-TX	205.33	205.31	No GS	205.31	2
2723	A7406	299-W15-107	100	205.341	Top of casing, north edge, stamped X				566735.107	136205.239	0	################	241-TX	205.34	No DISC Z	No GS	205.34	3
2724	A7407	299-W15-108	100	204.863	Top of casing, north edge, stamped X				566731.74	136228.356	0	################	241-TX	204.86	No DISC Z	No GS	204.86	3
2725	A7408	299-W15-109	100	205.106	Top of casing, north edge, stamped X				566725.528	136214.364	0	################	241-TX	205.11	No DISC Z	No GS	205.11	3
2726	A7409	299-W15-110	100	204.852	Top of casing, north edge, stamped X				566704.005	136205.159	0	################	241-TX	204.85	No DISC Z	No GS	204.85	3
2727	A7410	299-W15-111	100	204.651	Top of casing, north edge, stamped X				566707.485	136232.051		################	241-TX	No Stickup	No DISC Z	No GS	204.65	4
2728	A7411	299-W15-112	100	205.322	Top of casing, north edge, stamped X				566814.738	136238.652	0	################	241-TX	205.32	No DISC Z	No GS	205.32	3
2729	A7412	299-W15-113	100	205.598	Top of casing, north edge, stamped X				566795.026	136239.484	0	################	241-TX	205.60	No DISC Z	No GS	205.60	3
2730	A7413	299-W15-114	100	205.629	Top of casing, north edge, stamped X				566804.403	136263.445	0	################	241-TX	205.63	No DISC Z	No GS	205.63	3
2731	A7414	299-W15-115	100	205.771	Top of casing, north edge, stamped X			205.758	566786.502	136247.126	0	################	241-TX	205.77	205.76	No GS	205.76	2
2732	A7415	299-W15-116	100	205.242	Top of casing, north edge, stamped X				566763.719	136239.188	0	################	241-TX	205.24	No DISC Z	No GS	205.24	3
2733	A7416	299-W15-117	100	205.274	Top of casing, north edge, stamped X				566770.006	136262.024	0	################	241-TX	205.27	No DISC Z	No GS	205.27	3
2734	A7417	299-W15-118	100	205.152	Top of casing, north edge, stamped X				566755.221	136246.595		################	241-TX	No Stickup	No DISC Z	No GS	205.15	4
2735	A7418	299-W15-119	100	205.088	Top of casing, north edge, stamped X			205.089	566733.927	136238.786	0	################	241-TX	205.09	205.09	No GS	205.09	2
2736	A7419	299-W15-120		205.039	Top of casing, north edge, stamped X				566737.86	136261.18	0	################	241-TX	205.04	No DISC Z	No GS	205.04	3
2737	A7420	299-W15-121	100	205.646	Top of casing, north edge, stamped X				566783.512	136291.13	0	################	241-TX	205.65	No DISC Z	No GS	205.65	3
2738	A7421	299-W15-122	100	205.252	Top of casing, north edge, stamped X			205.187	566760.491	136287.305	0	################	241-TX	205.25	205.19	No GS	205.19	2
2739	A7422	299-W15-123	100	205.238	Top of casing, north edge, stamped X				566756.225	136283.618	0	################	241-TX	205.24	No DISC Z	No GS	205.24	3
2740	A7423	299-W15-124	100	204.901	Top of casing, north edge, stamped X				566735.642	136268.349	0	################	241-TX	204.90	No DISC Z	No GS	204.90	3
2741	A7424	299-W15-125	100	204.89	Top of casing, north edge, stamped X				566731.534	136290.515	0	################	241-TX	204.89	No DISC Z	No GS	204.89	3
2742	A7425	299-W15-126	100	205.591	Top of casing, north edge, stamped X				566742.589	136170.117		################	241-TX	No Stickup	No DISC Z	No GS	205.59	4
2743	A7426	299-W15-127	100	205.53	Top of casing, north edge, stamped X				566742.504	136141.014		################	241-TX	No Stickup	No DISC Z	No GS	205.53	4
2744	A7427	299-W15-128	100	205.552	Top of casing, north edge, stamped X			205.549	566728.032	136156.899		################	241-TX	No Stickup	205.55	No GS	205.55	2
2745	A7428	299-W15-129	100	205.183	Top of casing, north edge, stamped X				566711.165	136170.067		################	241-TX	No Stickup	No DISC Z	No GS	205.18	4
2746	A7429	299-W15-130	100	205.314	Top of casing, north edge, stamped X				566721.833	136145.18		################	241-TX	No Stickup	No DISC Z	No GS	205.31	4
2747	A7430	299-W15-131	100	204.844	Top of casing, north edge, stamped X				566699.392	136148.246		################	241-TX	No Stickup	No DISC Z	No GS	204.84	4
2748	A7431	299-W15-132	100	205.303	Top of casing, north edge, stamped X				566734.976	136199.446	0	################	241-TX	205.30	No DISC Z	No GS	205.30	3
2749	A7432	299-W15-133	100	205.468	Top of casing, north edge, stamped X				566753.73	136177.247		################	241-TX	No Stickup	No DISC Z	No GS	205.47	4
2750	A7433	299-W15-134	100	205.354	Top of casing, north edge, stamped X			205.344	566728.124	136185.692		################	241-TX	No Stickup	205.34	No GS	205.34	2
2751	A7434	299-W15-135	100	204.995	Top of casing, north edge, stamped X			204.983	566704.096	136199.376		################	241-TX	No Stickup	204.98	No GS	204.98	2
2752	A7435	299-W15-136	100	205.627	Top of casing, north edge, stamped X			205.63	566721.775	136176.326		################	241-TX	No Stickup	205.63	No GS	205.63	2
2753	A7436	299-W15-137	100	204.796	Top of casing, north edge, stamped X			204.79	566696.808	136185.305		################	241-TX	No Stickup	204.79	No GS	204.79	2
2754	A7437	299-W15-138	100	205.516	Top of casing, north edge, stamped X				566804.583	136232.615	0	################	241-TX	205.52	No DISC Z	No GS	205.52	3
2755	A7438	299-W15-139	100	205.209	Top of casing, north edge, stamped X				566818.486	136222.742	0	################	241-TX	205.21	No DISC Z	No GS	205.21	3
2756	A7439	299-W15-140	100	205.84	Top of casing, north edge, stamped X				566794.198	136207.489	0	################	241-TX	205.84	No DISC Z	No GS	205.84	3
2757	A7440	299-W15-141	100	205.949	Top of casing, north edge, stamped X				566773.603	136169.796		################	241-TX	No Stickup	No DISC Z	No GS	205.95	4
2758	A7441	299-W15-142	100	205.686	Top of casing, north edge, stamped X				566760.216	136154.476		################	241-TX	No Stickup	No DISC Z	No GS	205.69	4
2759	A7442	299-W15-143	100	205.956	Top of casing, north edge, stamped X				566783.645	136145.624		################	241-TX	No Stickup	No DISC Z	No GS	205.96	4
2760	A7443	299-W15-144	100	206.215	Top of casing, north edge, stamped X				566795.557	136197.088	0	################	241-TX	206.22	No DISC Z	No GS	206.22	3
2761	A7444	299-W15-145	100	206.514	Top of casing, north edge, stamped X				566814.747	136176.896	0	################	241-TX	206.51	No DISC Z	No GS	206.51	3
2762	A7445	299-W15-146	100	206.016	Top of casing, north edge, stamped X				566792.448	136179.86	0	################	241-TX	206.02	No DISC Z	No GS	206.02	3
2763	A7446	299-W15-147	100	205.856	Top of casing, north edge, stamped X				566763.493	136196.754		################	241-TX	No Stickup	No DISC Z	No GS	205.86	4
2764	A7447	299-W15-148	100	206.067	Top of casing, north edge, stamped X				566783.622	136196.937		################	241-TX	No Stickup	No DISC Z	No GS	206.07	4
2765	A7448	299-W15-149	100	205.996	Top of casing, north edge, stamped X				566785.143	136178.919		################	241-TX	No Stickup	No DISC Z	No GS	206.00	4
2768	C4685	299-W15-152	358.3	209.869	Top of casing			209.414	566309.4	135550	2.45	28-Sep-05		209.12	209.41	No GS	209.41	
2768	C4685	299-W15-152	358.3	209.869	Top of casing			209.414	566309.4	135550	2.5	06-Oct-05		209.11	209.41	No GS	209.41	2
2769	A7451	299-W15-153	105	205.395	Top of casing, north edge, stamped X				566721.796	136165.305		################	241-TX	No Stickup	No DISC Z	No GS	205.40	4
2770	A7452	299-W15-154	105	205.192	Top of casing, north edge, stamped X				566710.667	136142.801		################	241-TX	No Stickup	No DISC Z	No GS	205.19	4
2771	A7453	299-W15-155	115	205.896	Top of casing, north edge, stamped X				566789.357	136157.095		################	241-TX	No Stickup	No DISC Z	No GS	205.90	4
2772	A7454	299-W15-156	105	204.832	Top of casing, north edge, stamped X				566700.351	136165.316		################	241-TX	No Stickup	No DISC Z	No GS	204.83	4
2774	A7456	299-W15-158	105	205.763	Top of casing, north edge, stamped X				566774.124	136202.535		################	241-TX	No Stickup	No DISC Z	No GS	205.76	4
2775	A7457	299-W15-159	100	204.799	Top of casing, north edge, stamped X				566719.158	136231.847		################	241-TX	No Stickup	No DISC Z	No GS	204.80	4

sortOrder	Well_ID	WellName	Total Depth (ft)	Top of Casing Elevation (m)	Top of Casing Survey Point Description	Ground Surface Elevation (m)	Ground Surface Survey Point Description	DISC_Z	EASTING	NORTHING	WELL_STICKUP	DATE_INSPECTED	In Tank Farm?	Ground Surface Elevation from TOC-Stickup (m) - Priority 3	DISC Z from HWIS (m) - Priority 2	Ground Surface Elevation, from HWIS (m) - Priority 1	Best Est. Ground Surface Elevation (m)	Best Est. Rank
2776	A7458	299-W15-160	100	204.911	Top of casing, north edge, stamped X				566728.721	136250.098		##########	241-TX	No Stickup	No DISC Z	No GS	204.91	4
2777	A7459	299-W15-161	100	205.094	Top of casing, north edge, stamped X				566818.684	136277.265	0	##########	241-TX	205.09	No DISC Z	No GS	205.09	3
2778	A7460	299-W15-162	100	205.375	Top of casing, north edge, stamped X				566799.898	136294.693	0	##########	241-TX	205.38	No DISC Z	No GS	205.38	3
2779	A7461	299-W15-163	100	205.606	Top of casing, north edge, stamped X				566792.928	136268.823	0	##########	241-TX	205.61	No DISC Z	No GS	205.61	3
2780	A7462	299-W15-164	100	205.883	Top of casing, north edge, stamped X			205.873	566772.063	136294.628	0	##########	241-TX	205.88	205.87	No GS	205.87	2
2781	A7463	299-W15-165	100	205.362	Top of casing, north edge, stamped X			205.353	566740.43	136294.217	0	##########	241-TX	205.36	205.35	No GS	205.35	2
2782	A7464	299-W15-166	112	206.204	Top of casing, north edge, stamped X				566816.725	136164.888		##########	241-TX	No Stickup	No DISC Z	No GS	206.20	4
2783	A7465	299-W15-167	115	205.985	Top of casing, north edge, stamped X				566817.52	136149.621		##########	241-TX	No Stickup	No DISC Z	No GS	205.99	4
2784	A7466	299-W15-168	100	206.023	Top of casing, north edge, stamped X				566804.794	136141.506		##########	241-TX	No Stickup	No DISC Z	No GS	206.02	4
2785	A7467	299-W15-169	100	205.925	Top of casing, north edge, stamped X				566795.588	136145.148		##########	241-TX	No Stickup	No DISC Z	No GS	205.93	4
2786	A7468	299-W15-170	100	205.858	Top of casing, north edge, stamped X				566783.342	136167.156		##########	241-TX	No Stickup	No DISC Z	No GS	205.86	4
2787	A7469	299-W15-171	111	206.005	Top of casing, north edge, stamped X				566800.617	136173.301	0	##########	241-TX	206.01	No DISC Z	No GS	206.01	3
2788	A7470	299-W15-172	100	205.737	Top of casing, north edge, stamped X				566770.4	136141.275		##########	241-TX	No Stickup	No DISC Z	No GS	205.74	4
2789	A7471	299-W15-173	100	206.427	Top of casing, north edge, stamped X				566812.417	136197.574	0	##########	241-TX	206.43	No DISC Z	No GS	206.43	3
2790	A7472	299-W15-174	115	208.022	Top of casing, north edge, stamped X				566819.207	136188.613	0	##########	241-TX	208.02	No DISC Z	No GS	208.02	3
2791	A7473	299-W15-175	100	205.504	Top of casing, north edge, stamped X				566761.382	136180.106		##########	241-TX	No Stickup	No DISC Z	No GS	205.50	4
2792	A7474	299-W15-176	100	205.59	Top of casing, north edge, stamped X				566783.478	136228.729	0	##########	241-TX	205.59	No DISC Z	No GS	205.59	3
2793	A7475	299-W15-177	113	205.173	Top of casing, north edge, stamped X				566748.532	136231.18	0	##########	241-TX	205.17	No DISC Z	No GS	205.17	3
2794	A7476	299-W15-178	110	205.577	Top of casing, north edge, stamped X				566749.093	136200.785		##########	241-TX	No Stickup	No DISC Z	No GS	205.58	4
2795	A7477	299-W15-179	100	205.21	Top of casing, north edge, stamped X				566717.536	136201.26	0	##########	241-TX	205.21	No DISC Z	No GS	205.21	3
2796	A7478	299-W15-180	100	204.542	Top of casing, north edge, stamped X				566698.475	136221.412		##########	241-TX	No Stickup	No DISC Z	No GS	204.54	4
2797	A7479	299-W15-181	100	205.013	Top of casing, north edge, stamped X				566748.28	136293.597	0	##########	241-TX	205.01	No DISC Z	No GS	205.01	3
2798	A7480	299-W15-182	100	205.227	Top of casing, north edge, stamped X				566751.833	136269.462	0	##########	241-TX	205.23	No DISC Z	No GS	205.23	3
2799	A7481	299-W15-183		204.741	Top of casing, north edge, stamped X				566727.906	136278.637	0	##########	241-TX	204.74	No DISC Z	No GS	204.74	3
2800	A7482	299-W15-184	100	205.529	Top of casing, north edge, stamped X			205.509	566746.902	136371.069	0	##########	241-TY	205.53	205.51	No GS	205.51	2
2801	A7483	299-W15-185	100	205.479	Top of casing, north edge, stamped X			205.464	566755.351	136379.648	0	##########	241-TY	205.48	205.46	No GS	205.46	2
2802	A7484	299-W15-186	100	205.6	Top of casing, north edge, stamped X			205.575	566767.055	136371.179	0	##########	241-TY	205.60	205.58	No GS	205.58	2
2803	A7485	299-W15-187		205.725	Top of casing, north edge, stamped X				566758.13	136191.667		##########	241-TX	No Stickup	No DISC Z	No GS	205.73	4
2804	A7486	299-W15-188	105	206.593	Top of casing, north edge, stamped X				566817.011	136210.201	0	##########	241-TX	206.59	No DISC Z	No GS	206.59	3
2805	A7487	299-W15-189	105	205.618	Top of casing, north edge, stamped X				566791.552	136222.902	0	##########	241-TX	205.62	No DISC Z	No GS	205.62	3
2806	A7488	299-W15-190	105	205.574	Top of casing, north edge, stamped X			205.55	566735.944	136175.184		##########	241-TX	No Stickup		205.55 No GS	205.55	2
2807	A7489	299-W15-191	105	205.528	Top of casing, north edge, stamped X			205.519	566739.151	136168.418		##########	241-TX	No Stickup		205.52 No GS	205.52	2
2808	A7490	299-W15-192	105	205.655	Top of casing, north edge, stamped X			205.63	566745.238	136168.515		##########	241-TX	No Stickup		205.63 No GS	205.63	2
2809	A7491	299-W15-193	55	205.586	Top of casing, north edge, stamped X				566742.341	136173.368		##########	241-TX	No Stickup	No DISC Z	No GS	205.59	4
2811	A7493	299-W15-195	105	205.497	Top of casing, north edge, stamped X			205.507	566741.572	136173.129		##########	241-TX	No Stickup		205.51 No GS	205.51	2
2812	A7494	299-W15-196	105	205.599	Top of casing, north edge, stamped X			205.57	566784.184	136231.632	0	##########	241-TX	205.60	205.57	No GS	205.57	2
2813	A7495	299-W15-197	100	205.646	Top of casing, north edge, stamped X			205.622	566780.005	136230.228	0	##########	241-TX	205.65	205.62	No GS	205.62	2
2818	A7500	299-W15-202	176	205.871	Top of casing, north edge, stamped X				566653.542	135650.954		##########		No Stickup	No DISC Z	No GS	204.96	
2818	A7500	299-W15-202	176	205.871	Top of casing, north edge, stamped X				566653.542	135650.954	2.77	14-Jan-04		205.03	No DISC Z	No GS	205.03	3
2818	A7500	299-W15-202	176	205.871	Top of casing, north edge, stamped X				566653.542	135650.954	2.75	20-Jan-04		205.03	No DISC Z	No GS	205.03	
2819	A7501	299-W15-203		205.867	Top of casing, north edge, stamped X						0	28-Jun-04		205.87	No DISC Z	No GS	205.87	1
2824	A7506	299-W15-208												No TOC	No DISC Z	No GS	201.30	5
2825	A7507	299-W15-209	50	207.432	Top of casing, north edge, stamped X				566545.409	136140.101		##########		No Stickup	No DISC Z	No GS	206.52	4
2826	A7508	299-W15-210	100	207.173	Top of casing, north edge, stamped X				566548.742	136179.249		##########		No Stickup	No DISC Z	No GS	206.26	4
2827	A7509	299-W15-211	100	206.931	Top of casing, north edge, stamped X				566583.802	136207.117		##########		No Stickup	No DISC Z	No GS	206.02	4
2828	A7510	299-W15-212	100	207.3	Top of casing, north edge, stamped X				566545.765	136234.195		##########		No Stickup	No DISC Z	No GS	206.39	4
2832	A7514	299-W15-216	210	203.323	Top of casing, north edge, stamped X			202.714	566793.339	135560.833		13-Jun-01		No Stickup	202.71	No GS	202.71	
2832	A7514	299-W15-216	210	203.323	Top of casing, north edge, stamped X			202.714	566793.339	135560.833		14-Mar-02		No Stickup	202.71	No GS	202.71	
2832	A7514	299-W15-216	210	203.323	Top of casing, north edge, stamped X			202.714	566793.339	135560.833	3.4	17-May-02		202.29	202.71	No GS	202.71	
2832	A7514	299-W15-216	210	203.323	Top of casing, north edge, stamped X			202.714	566793.339	135560.833	3.4	10-Mar-03		202.29	202.71	No GS	202.71	
2832	A7514	299-W15-216	210	203.323	Top of casing, north edge, stamped X			202.714	566793.339	135560.833	3.4	19-Mar-04		202.29	202.71	No GS	202.71	
2832	A7514	299-W15-216	210	203.323	Top of casing, north edge, stamped X			202.714	566793.339	135560.833		12-Jul-05		No Stickup	202.71	No GS	202.71	
2832	A7514	299-W15-216	210	203.323	Top of casing, north edge, stamped X			202.714	566793.339	135560.833		20-Apr-06		No Stickup	202.71	No GS	202.71	
2832	A7514	299-W15-216	210	203.323	Top of casing, north edge, stamped X			202.714	566793.339	135560.833		01-Oct-07		No Stickup	202.71	No GS	202.71	2
2833	A7515	299-W15-217	123.4	205.826	Top of casing, north edge, stamped X			204.935	566730.471	135594.894		##########		No Stickup	204.94	No GS	204.94	2
2834	A7516	299-W15-218	206.1	204.744	Top of casing			203.833	566771.023	135661.168		13-Jun-01		No Stickup	203.83	No GS	203.83	
2834	A7516	299-W15-218	206.1	204.744	Top of casing			203.833	566771.023	135661.168		14-Mar-02		No Stickup	203.83	No GS	203.83	
2834	A7516	299-W15-218	206.1	204.744	Top of casing			203.833	566771.023	135661.168		10-Mar-03		No Stickup	203.83	No GS	203.83	
2834	A7516	299-W15-218	206.1	204.744	Top of casing			203.833	566771.023	135661.168		19-Mar-04		No Stickup	203.83	No GS	203.83	
2834	A7516	299-W15-218	206.1	204.744	Top of casing			203.833	566771.023	135661.168		27-Apr-05		No Stickup	203.83	No GS	203.83	
2834	A7516	299-W15-218	206.1	204.744	Top of casing			203.833	566771.023	135661.168		01-Oct-07		No Stickup	203.83	No GS	203.83	2
2835	A7517	299-W15-219		205.119	Top of outer casing			204.643	566728.897	135654.033		13-Jun-01		No Stickup	204.64	No GS	204.64	
2835	A7517	299-W15-219		205.119	Top of outer casing			204.643	566728.897	135654.033		14-Mar-02		No Stickup	204.64	No GS	204.64	
2835	A7517	299-W15-219		205.119	Top of outer casing			204.643	566728.897	135654.033		10-Mar-03		No Stickup	204.64	No GS	204.64	
2835	A7517	299-W15-219		205.119	Top of outer casing			204.643	566728.897	135654.033		12-Jul-05		No Stickup	204.64	No GS	204.64	
2835	A7517	299-W15-219		205.119	Top of outer casing			204.643	566728.897	135654.033		01-Oct-07		No Stickup	204.64	No GS	204.64	2
2836	A7518	299-W15-220		202.286	Top of outer casing			201.508	566834.927	135618.444		13-Jun-01		No Stickup	201.51	No GS	201.51	
2836	A7518	299-W15-220		202.286	Top of outer casing			201.508	566834.927	135618.444		19-Mar-02		No Stickup	201.51	No GS	201.51	
2836	A7518	299-W15-220		202.286	Top of outer casing			201.508	566834.927	135618.444		10-Mar-03		No Stickup	201.51	No GS	201.51	
2836	A7518	299-W15-220		202.286	Top of outer casing			201.508	566834.927	135618.444		19-Mar-04		No Stickup	201.51	No GS	201.51	
2836	A7518	299-W15-220		202.286	Top of outer casing			201.508	566834.927	135618.444		27-Apr-05		No Stickup	201.51	No GS	201.51	
2836	A7518	299-W15-220		202.286	Top of outer casing			201.508	566834.927	135618.444		18-Jul-05		No Stickup	201.51	No GS	201.51	
2836	A7518	299-W15-220		202.286	Top of outer casing			201.508	566834.927	135618.444		20-Apr-06		No Stickup	201.51	No GS	201.51	
2836	A7518	299-W15-220		202.286	Top of outer casing			201.508	566834.927	135618.444		01-Oct-07		No Stickup	201.51	No GS	201.51	2
2839	A7521	299-W15-223		204.736	Top of outer casing, north edge			204.085	566755.386	135677.748		##########		No Stickup	204.09	No GS	204.09	2
2840	C4986	299-W15-224	274.1	209.19	Top of casing (assumed)			208.314	566307.89	135926.08		23-May-06		No Stickup	208.31	No GS	208.31	
2844	C3122	299-W15-762				202.314	Brass survey marker	202.314	566824.16	136030.72		##########		No TOC	202.31	202.31	202.31	1
2845	C3339	299-W15-763	257.6	202.947	Top of casing			202.175	566809.207	136028.763	2.51	05-Apr-01		202.18	202.18	No GS	202.18	
2845	C3339	299-W15-763	257.6	202.947	Top of casing			202.175	566809.207	136028.763	2.51	16-Dec-02		202.18	202.18	No GS	202.18	
2845	C3339	299-W15-763	257.6	202.947	Top of casing			202.175	566809.207	136028.763	2.51	17-Dec-03		202.18	202.18	No GS	202.18	2
2846	C3494	299-W15-764	129			206.28	(assumed)		566580.743	135655.764				No TOC	No DISC Z	206.28	206.28	1
2847	C3397	299-W15-765		205.299	Top of casing, stamped X			204.505	566697.02	136373.06		##########		No Stickup	204.51	No GS	204.51	
2847	C3397	299-W15-765		205.299	Top of casing, stamped X			204.505	566697.02	136373.06		12-Nov-01		No Stickup	204.51	No GS	204.51	
2847	C3397	299-W15-765		205.299	Top of casing, stamped X			204.505	566697.02	136373.06		17-Jan-02		No Stickup	204.51	No GS	204.51	
2847	C3397	299-W15-765		205.299	Top of casing, stamped X			204.505	566697.02	136373.06		22-May-02		No Stickup	204.51	No GS	204.51	
2847	C3397	299-W15-765		205.299	Top of casing, stamped X			204.505	566697.02	136373.06		16-Dec-02		No Stickup	204.51	No GS	204.51	
2847	C3397	299-W15-765		205.299	Top of casing, stamped X			204.505	566697.02	136373.06		21-Feb-03		No Stickup	204.51	No GS	204.51	
2847	C3397	299-W15-765		205.299	Top of casing, stamped X			204.505	566697.02	136373.06	2.6	03-Jun-03		204.51	204.51	No GS	204.51	
2847	C3397	299-W15-765		205.299	Top of casing, stamped X			204.505	566697.02	136373.06	2.5	25-May-05		204.54	204.51	No GS	204.51	

sortOrder	Well_ID	WellName	Total Depth (ft)	Top of Casing Elevation (m)	Top of Casing Survey Point Description	Ground Surface Elevation (m)	Ground Surface Survey Point Description	DISC_Z	EASTING	NORTHING	WELL_STICKUP	DATE_INSPECTED	In Tank Farm?	Ground Surface Elevation from TOC-Stickup (m) - Priority 3	DISC Z from HWIS (m) - Priority 2	Ground Surface Elevation, from HWIS (m) - Priority 1	Best Est. Ground Surface Elevation (m)	Best Est. Rank
2847	C3397	299-W15-765		205.299	Top of casing, stamped X			204.505	566697.02	136373.06		29-Nov-05		No Stickup	204.51	No GS	204.51	2
2848	C4237	299-W17-1	230.62	199.174	Top of casing, north edge			198.406	565310.68	135038.74	2.5	23-Dec-03		198.41	198.41	No GS	198.41	
2848	C4237	299-W17-1	230.62	199.174	Top of casing, north edge			198.406	565310.68	135038.74	2.5	15-Mar-04		198.41	198.41	No GS	198.41	
2848	C4237	299-W17-1	230.62	199.174	Top of casing, north edge			198.406	565310.68	135038.74		17-May-05		No Stickup	198.41	No GS	198.41	
2848	C4237	299-W17-1	230.62	199.174	Top of casing, north edge			198.406	565310.68	135038.74	3.05	21-Jul-05		198.24	198.41	No GS	198.41	2
2849	A5481	299-W18-1	427	209.058	Top of casing, north edge, stamped X			208.252	566421.515	135465.21	2.58	22-Oct-99		208.27	208.25	No GS	208.25	
2849	A5481	299-W18-1	427	209.058	Top of casing, north edge, stamped X			208.252	566421.515	135465.21		09-Jan-02		No Stickup	208.25	No GS	208.25	
2849	A5481	299-W18-1	427	209.058	Top of casing, north edge, stamped X			208.252	566421.515	135465.21		19-Apr-05		No Stickup	208.25	No GS	208.25	2
2850	A5478	299-W18-2	280	209.347	Top of casing, north edge, stamped X				566380.16	135383.588	2.06	##########		208.72	No DISC Z	No GS	208.72	
2850	A5478	299-W18-2	280	209.347	Top of casing, north edge, stamped X				566380.16	135383.588	2.2	11-Mar-03		208.68	No DISC Z	No GS	208.68	3
2850	A5478	299-W18-2	280	209.347	Top of casing, north edge, stamped X				566380.16	135383.588	2.21	29-Jul-03		208.67	No DISC Z	No GS	208.67	
2851	A5469	299-W18-3	450	212.293	Top of casing, north edge, stamped X				566212.102	135529.497	2.9	##########		211.41	No DISC Z	No GS	211.41	
2851	A5469	299-W18-3	450	212.293	Top of casing, north edge, stamped X				566212.102	135529.497	2.96	18-May-04		211.39	No DISC Z	No GS	211.39	3
2851	A5469	299-W18-3	450	212.293	Top of casing, north edge, stamped X				566212.102	135529.497		04-Aug-04		No Stickup	No DISC Z	No GS	211.38	
2851	A5469	299-W18-3	450	212.293	Top of casing, north edge, stamped X				566212.102	135529.497	2.96	04-Aug-04		211.39	No DISC Z	No GS	211.39	
2852	A7522	299-W18-4	280	210.104	Top of casing, north edge, stamped X				566305.564	135415.786	2.8	20-Oct-99		209.25	No DISC Z	No GS	209.25	3
2852	A7522	299-W18-4	280	210.104	Top of casing, north edge, stamped X				566305.564	135415.786	2.7	30-Sep-03		209.28	No DISC Z	No GS	209.28	
2852	A7522	299-W18-4	280	210.104	Top of casing, north edge, stamped X				566305.564	135415.786	2.93	11-Dec-03		209.21	No DISC Z	No GS	209.21	
2853	A5470	299-W18-5	280	209.615	Top of casing, north edge, stamped X				566349.234	135453.55	1.87	##########		209.05	No DISC Z	No GS	209.05	
2853	A5470	299-W18-5	280	209.615	Top of casing, north edge, stamped X				566349.234	135453.55		23-Jan-03		No Stickup	No DISC Z	No GS	208.70	
2853	A5470	299-W18-5	280	209.615	Top of casing, north edge, stamped X				566349.234	135453.55	1.9	11-Mar-03		209.04	No DISC Z	No GS	209.04	3
2853	A5470	299-W18-5	280	209.615	Top of casing, north edge, stamped X				566349.234	135453.55	1.8	10-Jul-03		209.07	No DISC Z	No GS	209.07	
2854	A7523	299-W18-6	300	208.123	Top of casing, north edge, stamped X				566513.075	135412.825	2.5	##########		207.36	No DISC Z	No GS	207.36	3
2855	A7524	299-W18-7	300	207.816	Top of casing, north edge, stamped X			207.057	566580.971	135409.803	2.5	##########		207.05	207.06	No GS	207.06	2
2856	A7525	299-W18-8	212	208.931	Top of casing, north edge, stamped X				566359.31	135447.01	0.02	##########		208.92	No DISC Z	No GS	208.92	
2856	A7525	299-W18-8	212	208.931	Top of casing, north edge, stamped X				566359.31	135447.01	0.15	07-Oct-03		208.89	No DISC Z	No GS	208.89	3
2856	A7525	299-W18-8	212	208.931	Top of casing, north edge, stamped X				566359.31	135447.01	0.15	30-Jun-04		208.89	No DISC Z	No GS	208.89	
2857	A7526	299-W18-9	220	209.111	Top of casing, north edge, stamped X				566472.961	135302.121	2.92	##########		208.22	No DISC Z	No GS	208.22	3
2858	A4931	299-W18-10	220	208.87	Top of casing, north edge, stamped X				566485.91	135300.687	3	##########		207.96	No DISC Z	No GS	207.96	3
2859	A7527	299-W18-11	220	209.468	Top of casing, north edge, stamped X				566439.603	135265.616	3.34	##########		208.45	No DISC Z	No GS	208.45	3
2860	A7528	299-W18-12	220	209.326	Top of casing, north edge, stamped X				566439.772	135308.001	2.48	##########		208.57	No DISC Z	No GS	208.57	3
2861	A7529	299-W18-13	118	209.244	Top of casing (assumed)				566349.73	135459.962		##########		No Stickup	No DISC Z	No GS	208.33	4
2862	A7530	299-W18-14	110	209.244	Top of casing (assumed)				566361.92	135459.992		##########		No Stickup	No DISC Z	No GS	208.33	4
2863	A4932	299-W18-15	248	202.219	Top of casing, north edge, stamped X				566380.033	134733.478		27-Jul-93		No Stickup	No DISC Z	No GS	201.30	
2863	A4932	299-W18-15	248	202.219	Top of casing, north edge, stamped X				566380.033	134733.478	1.31	10-Apr-01		201.82	No DISC Z	No GS	201.82	3
2863	A4932	299-W18-15	248	202.219	Top of casing, north edge, stamped X				566380.033	134733.478	1.28	05-Nov-02		201.83	No DISC Z	No GS	201.83	
2863	A4932	299-W18-15	248	202.219	Top of casing, north edge, stamped X				566380.033	134733.478	1.28	11-Feb-03		201.83	No DISC Z	No GS	201.83	
2863	A4932	299-W18-15	248	202.219	Top of casing, north edge, stamped X				566380.033	134733.478	1.33	08-Apr-04		201.81	No DISC Z	No GS	201.81	
2864	C4303	299-W18-16	348	208.58	Top of casing			207.887	566605.05	135425.69		15-Apr-05		No Stickup	207.89	No GS	207.89	2
2865	A5479	299-W18-17	265	206.119	Top of casing, north edge, stamped X				566702.758	135425.24	2.58	##########		205.33	No DISC Z	No GS	205.33	
2865	A5479	299-W18-17	265	206.119	Top of casing, north edge, stamped X				566702.758	135425.24	3.1	20-Mar-03		205.17	No DISC Z	No GS	205.17	3
2866	A7531	299-W18-18	265	205.479	Top of casing, north edge, stamped X				566650.141	135317.377	3.05	##########		204.55	No DISC Z	No GS	204.55	
2866	A7531	299-W18-18	265	205.479	Top of casing, north edge, stamped X				566650.141	135317.377	3.3	20-Mar-03		204.47	No DISC Z	No GS	204.47	3
2867	A7532	299-W18-19	250	205.561	Top of casing			204.807	566610.485	135202.53	2.53	##########		204.79	204.81	No GS	204.81	
2867	A7532	299-W18-19	250	205.561	Top of casing			204.807	566610.485	135202.53	2.45	04-Apr-03		204.81	204.81	No GS	204.81	
2867	A7532	299-W18-19	250	205.561	Top of casing			204.807	566610.485	135202.53	2.47	10-Mar-04		204.81	204.81	No GS	204.81	2
2868	A5471	299-W18-20	250	205.338	Top of casing, north edge, stamped X			204.673	566590.085	135081.76	2.5	##########		204.58	204.67	No GS	204.67	
2868	A5471	299-W18-20	250	205.338	Top of casing, north edge, stamped X			204.673	566590.085	135081.76	2.5	11-Mar-03		204.58	204.67	No GS	204.67	2
2869	A4933	299-W18-21	227	204.9	Top of casing, stamped X			204.253	566097.7	134978.692		20-Mar-98		No Stickup	204.25	No GS	204.25	
2869	A4933	299-W18-21	227	204.9	Top of casing, stamped X			204.253	566097.7	134978.692	2.15	25-Jul-00		204.24	204.25	No GS	204.25	
2869	A4933	299-W18-21	227	204.9	Top of casing, stamped X			204.253	566097.7	134978.692		22-Jan-02		No Stickup	204.25	No GS	204.25	2
2870	A4934	299-W18-22	455	204.857	Top of casing, stamped X			204.249	566088.632	134990.157	2.01	##########		204.24	204.25	No GS	204.25	
2870	A4934	299-W18-22	455	204.857	Top of casing, stamped X			204.249	566088.632	134990.157		22-Jan-02		No Stickup	204.25	No GS	204.25	2
2871	A4935	299-W18-23	255	213.481	Top of casing, stamped X			212.854	566084.533	135342.438	2.1	##########		212.84	212.85	No GS	212.85	
2871	A4935	299-W18-23	255	213.481	Top of casing, stamped X			212.854	566084.533	135342.438		09-Apr-98		No Stickup	212.85	No GS	212.85	
2871	A4935	299-W18-23	255	213.481	Top of casing, stamped X			212.854	566084.533	135342.438		22-Jan-02		No Stickup	212.85	No GS	212.85	
2871	A4935	299-W18-23	255	213.481	Top of casing, stamped X			212.854	566084.533	135342.438	2	07-Feb-07		212.87	212.85	No GS	212.85	2
2872	A4936	299-W18-24	240	209.697	Top of casing, north edge, stamped X			209.038	566370.843	135346.316		21-May-98		No Stickup	209.04	No GS	209.04	
2872	A4936	299-W18-24	240	209.697	Top of casing, north edge, stamped X			209.038	566370.843	135346.316	2.21	19-Jun-00		209.02	209.04	No GS	209.04	
2872	A4936	299-W18-24	240	209.697	Top of casing, north edge, stamped X			209.038	566370.843	135346.316	2.18	24-Jul-00		209.03	209.04	No GS	209.04	
2872	A4936	299-W18-24	240	209.697	Top of casing, north edge, stamped X			209.038	566370.843	135346.316	2.18	29-Nov-01		209.03	209.04	No GS	209.04	
2872	A4936	299-W18-24	240	209.697	Top of casing, north edge, stamped X			209.038	566370.843	135346.316		03-Sep-02		No Stickup	209.04	No GS	209.04	
2872	A4936	299-W18-24	240	209.697	Top of casing, north edge, stamped X			209.038	566370.843	135346.316	2.19	27-Jan-03		209.03	209.04	No GS	209.04	2
2873	A4937	299-W18-25	215.4	204.075	stamped X			203.156	566721.48	134978.22	3.05	28-Nov-00		203.15	203.16	No GS	203.16	2
2874	A4938	299-W18-26	249.9	214.12	Top of casing, stamped X			213.243	566091.276	135491.707		05-Mar-98		No Stickup	213.24	No GS	213.24	
2874	A4938	299-W18-26	249.9	214.12	Top of casing, stamped X			213.243	566091.276	135491.707	3.04	19-Jul-00		213.19	213.24	No GS	213.24	
2874	A4938	299-W18-26	249.9	214.12	Top of casing, stamped X			213.243	566091.276	135491.707		22-Jan-02		No Stickup	213.24	No GS	213.24	
2874	A4938	299-W18-26	249.9	214.12	Top of casing, stamped X			213.243	566091.276	135491.707	3.05	11-Mar-03		213.19	213.24	No GS	213.24	2
2875	A4939	299-W18-27	238.5	211.352	Top of casing, stamped X			210.339	566090.189	135226.541	3.48	26-Sep-00		210.29	210.34	No GS	210.34	
2875	A4939	299-W18-27	238.5	211.352	Top of casing, stamped X			210.339	566090.189	135226.541	3.48	30-Nov-01		210.29	210.34	No GS	210.34	
2875	A4939	299-W18-27	238.5	211.352	Top of casing, stamped X			210.339	566090.189	135226.541		03-May-02		No Stickup	210.34	No GS	210.34	
2875	A4939	299-W18-27	238.5	211.352	Top of casing, stamped X			210.339	566090.189	135226.541		11-Aug-04		No Stickup	210.34	No GS	210.34	
2875	A4939	299-W18-27	238.5	211.352	Top of casing, stamped X			210.339	566090.189	135226.541	3.1	01-Sep-04		210.41	210.34	No GS	210.34	2
2876	A4940	299-W18-28	230.1	208.222	Top of casing, stamped X			207.212	566092.569	135106.788	3.48	##########		207.16	207.21	No GS	207.21	
2876	A4940	299-W18-28	230.1	208.222	Top of casing, stamped X			207.212	566092.569	135106.788		22-Jan-02		No Stickup	207.21	No GS	207.21	2
2877	A4941	299-W18-29	150	206.544	Top of outer casing, north edge			205.476	566561.2	135028.4	3.48	##########		205.48	205.48	No GS	205.48	
2877	A4941	299-W18-29	150	206.544	Top of outer casing, north edge			205.476	566561.2	135028.4		11-Mar-03		No Stickup	205.48	No GS	205.48	
2877	A4941	299-W18-29	150	206.544	Top of outer casing, north edge			205.476	566561.2	135028.4	3.49	26-Mar-03		205.48	205.48	No GS	205.48	
2877	A4941	299-W18-29	150	206.544	Top of outer casing, north edge			205.476	566561.2	135028.4	3.5	02-May-03		205.48	205.48	No GS	205.48	2
2878	A4942	299-W18-30	235.5	206.117	Top of casing, stamped X			205.082	566870.755	135193.619	3.4	21-Jun-00		205.08	205.08	No GS	205.08	
2878	A4942	299-W18-30	235.5	206.117	Top of casing, stamped X			205.082	566870.755	135193.619	3.4	19-Jul-00		205.08	205.08	No GS	205.08	
2878	A4942	299-W18-30	235.5	206.117	Top of casing, stamped X			205.082	566870.755	135193.619	3.4	14-Nov-01		205.08	205.08	No GS	205.08	
2878	A4942	299-W18-30	235.5	206.117	Top of casing, stamped X			205.082	566870.755	135193.619	3.4	12-Feb-02		205.08	205.08	No GS	205.08	2
2879	A4943	299-W18-31	227.6	203.474	Top of casing, stamped X			202.427	566721.541	135075.178	3.44	##########		202.43	202.43	No GS	202.43	
2879	A4943	299-W18-31	227.6	203.474	Top of casing, stamped X			202.427	566721.541	135075.178		04-Aug-98		No Stickup	202.43	No GS	202.43	
2879	A4943	299-W18-31	227.6	203.474	Top of casing, stamped X			202.427	566721.541	135075.178	3.5	04-Nov-01		202.41	202.43	No GS	202.43	
2879	A4943	299-W18-31	227.6	203.474	Top of casing, stamped X			202.427	566721.541	135075.178	3.45	13-Dec-02		202.42	202.43	No GS	202.43	
2879	A4943	299-W18-31	227.6	203.474	Top of casing, stamped X			202.427	566721.541	135075.178	3.46	13-Nov-03		202.42	202.43	No GS	202.43	
2879	A4943	299-W18-31	227.6	203.474	Top of casing, stamped X			202.427	566721.541	135075.178	3.46	30-Nov-06		202.42	202.43	No GS	202.43	

sortOrder	Well_ID	WellName	Total Depth (ft)	Top of Casing Elevation (m)	Top of Casing Survey Point Description	Ground Surface Elevation (m)	Ground Surface Survey Point Description	DISC_Z	EASTING	NORTHING	WELL_STICKUP	DATE_INSPECTED	In Tank Farm?	Ground Surface Elevation from TOC-Stickup (m) - Priority 3	DISC Z from HWIS (m) - Priority 2	Ground Surface Elevation, from HWIS (m) - Priority 1	Best Est. Ground Surface Elevation (m)	Best Est. Rank
2879	A4943	299-W18-31	227.6	203.474	Top of casing, stamped X			202.427	566721.541	135075.178	3.46	11-Sep-07		202.42	202.43	No GS	202.43	2
2880	A5441	299-W18-32	225	207.281	Top of casing, stamped X			206.396	566515.584	134975.641		##########		No Stickup	206.40	No GS	206.40	
2880	A5441	299-W18-32	225	207.281	Top of casing, stamped X			206.396	566515.584	134975.641		04-Aug-97		No Stickup	206.40	No GS	206.40	2
2881	A5450	299-W18-33	231.46	204.914	Top of casing			204.036	566723.315	134811.123		##########		No Stickup	204.04	No GS	204.04	
2881	A5450	299-W18-33	231.46	204.914	Top of casing			204.036	566723.315	134811.123	2.88	17-Jul-03		204.04	204.04	No GS	204.04	
2881	A5450	299-W18-33	231.46	204.914	Top of casing			204.036	566723.315	134811.123	2.88	09-Jan-07		204.04	204.04	No GS	204.04	2
2883	B2644	299-W18-35							565921.17	135414.563		##########		No TOC	No DISC Z	No GS	No TOC	5
2884	B2747	299-W18-36		208.013	Top of casing			207.439	565908.606	135419.398		##########		No Stickup	207.44	No GS	207.44	2
2885	B2756	299-W18-37		208.773	Top of casing			207.862	565904.374	135323.433		##########		No Stickup	207.86	No GS	207.86	
2885	B2756	299-W18-37		208.773	Top of casing			207.862	565904.374	135323.433		06-Nov-02		No Stickup	207.86	No GS	207.86	2
2886	B2757	299-W18-38		207.746	Top of casing			206.831	565892.132	135232.922		##########		No Stickup	206.83	No GS	206.83	2
2887	B2758	299-W18-39		204.381	Top of casing			203.475	565885.563	135141.112		##########		No Stickup	203.48	No GS	203.48	2
2888	C3395	299-W18-40		203.413	Top of casing, stamped X			202.735	566723.29	134996.41		##########		No Stickup	202.74	No GS	202.74	
2888	C3395	299-W18-40		203.413	Top of casing, stamped X			202.735	566723.29	134996.41	2.24	09-Oct-01		202.73	202.74	No GS	202.74	
2888	C3395	299-W18-40		203.413	Top of casing, stamped X			202.735	566723.29	134996.41		17-Jan-02		No Stickup	202.74	No GS	202.74	
2888	C3395	299-W18-40		203.413	Top of casing, stamped X			202.735	566723.29	134996.41	2.22	04-Apr-03		202.74	202.74	No GS	202.74	
2888	C3395	299-W18-40		203.413	Top of casing, stamped X			202.735	566723.29	134996.41	2.22	14-Mar-06		202.74	202.74	No GS	202.74	2
2890	A7534	299-W18-51	151	204.198	Top of casing, north edge, stamped X				566822.976	134989.104	0	##########	241-U	204.20	No DISC Z	No GS	204.20	3
2891	A7535	299-W18-52	150	203.846	Top of casing, north edge, stamped X				566799.854	135123.287	0	##########	241-U	203.85	No DISC Z	No GS	203.85	3
2892	A7536	299-W18-53	150	203.637	Top of casing, north edge, stamped X				566759.322	135084.512	0	##########	241-U	203.64	No DISC Z	No GS	203.64	3
2893	A7537	299-W18-54	150	203.753	Top of casing, north edge, stamped X				566799.975	135054.063	0	##########	241-U	203.75	No DISC Z	No GS	203.75	3
2894	A7538	299-W18-55	150	203.601	Top of casing, north edge, stamped X				566759.418	135023.328	0	##########	241-U	203.60	No DISC Z	No GS	203.60	3
2895	A7539	299-W18-56	150	205.468	Top of casing (assumed)				566543.288	135439.422		##########		No Stickup	No DISC Z	No GS	204.55	4
2896	A7540	299-W18-57	150	205.569	Top of casing (assumed)				566551.814	135441.881		##########		No Stickup	No DISC Z	No GS	204.65	4
2897	A7541	299-W18-58	150	204.874	Top of casing (assumed)				566532.425	135396.732		##########		No Stickup	No DISC Z	No GS	203.96	4
2898	A7542	299-W18-59	150	205.242	Top of casing (assumed)				566562.593	135396.808		##########		No Stickup	No DISC Z	No GS	204.33	4
2899	A7543	299-W18-60	150	207.373	Top of casing (assumed)				566543.498	135476.905		##########		No Stickup	No DISC Z	No GS	206.46	4
2900	A7544	299-W18-61	150	207.318	Top of casing (assumed)				566551.116	135476.924		##########		No Stickup	No DISC Z	No GS	206.40	4
2901	A7545	299-W18-62	151	207.214	Top of casing (assumed)				566543.518	135468.982		##########		No Stickup	No DISC Z	No GS	206.30	4
2902	A7546	299-W18-63	150	207.221	Top of casing (assumed)				566551.136	135469.001		##########		No Stickup	No DISC Z	No GS	206.31	4
2903	A7547	299-W18-64	150	207.211	Top of casing (assumed)				566543.537	135461.363		##########		No Stickup	No DISC Z	No GS	206.30	4
2904	A7548	299-W18-65	150	207.72	Top of casing, north edge, stamped X				566550.687	135461.157		##########		No Stickup	No DISC Z	No GS	206.81	4
2905	A7549	299-W18-66	150	205.011	Top of casing (assumed)				566547.736	135366.906		##########		No Stickup	No DISC Z	No GS	204.10	4
2908	A7552	299-W18-69	50	209.194	Top of casing, north edge, stamped X				566352.299	135453.431		##########		No Stickup	No DISC Z	No GS	208.28	4
2915	A7559	299-W18-76	19.5	205.655	Top of pump plate, stamped X	204.7406			566544.323	135441.91	0.84	01-Feb-91		205.40	No DISC Z	204.74	204.74	3
2916	A7560	299-W18-77	25	205.369	Top of pump plate, stamped X	204.4546					0.32	01-Feb-91		205.27	No DISC Z	204.45	204.45	3
2917	A7561	299-W18-78	17	205.605	Top of pump plate, stamped X	204.6906					0.52	01-Feb-91		205.45	No DISC Z	204.69	204.69	3
2918	A7562	299-W18-79	23	205.37	Top of pump plate, stamped X	204.4556					0.24	01-Feb-91		205.30	No DISC Z	204.46	204.46	3
2919	A7563	299-W18-80	21.5	205.265	Top of pump plate, stamped X	204.3506					0.38	01-Feb-91		205.15	No DISC Z	204.35	204.35	3
2920	A7564	299-W18-81	41	206.199	Top of pump plate, stamped X	205.2846					3.2	01-Feb-91		205.22	No DISC Z	205.28	205.28	3
2921	A7565	299-W18-82		209.579	Top of casing, north edge, stamped X				566395.551	135216.029	2.4	##########		208.85	No DISC Z	No GS	208.85	3
2921	A7565	299-W18-82		209.579	Top of casing, north edge, stamped X				566395.551	135216.029		20-Mar-03		No Stickup	No DISC Z	No GS	208.66	
2922	A7566	299-W18-83		209.673	Top of casing, north edge, stamped X				566353.348	135166.635		##########		No Stickup	No DISC Z	No GS	208.76	4
2923	A7567	299-W18-84	150	210.919	Top of casing, north edge, stamped X				566308.995	135117.804		##########		No Stickup	No DISC Z	No GS	210.00	4
2924	A7568	299-W18-85	150	208.284	Top of casing, north edge, stamped X				566512.133	135343.986	2.92	##########		207.39	No DISC Z	No GS	207.39	3
2925	A7569	299-W18-86	150	209.42	Top of casing, north edge, stamped X				566504.409	135379.643	2.01	##########		208.81	No DISC Z	No GS	208.81	3
2925	A7569	299-W18-86	150	209.42	Top of casing, north edge, stamped X				566504.409	135379.643	2.3	20-Mar-03		208.72	No DISC Z	No GS	208.72	3
2926	A7570	299-W18-87	150	207.52	Top of casing, north edge, stamped X				566546.827	135341.157	2.33	##########		206.81	No DISC Z	No GS	206.81	3
2926	A7570	299-W18-87	150	207.52	Top of casing, north edge, stamped X				566546.827	135341.157		24-Apr-03		No Stickup	No DISC Z	No GS	206.61	
2927	A7571	299-W18-88	150	208.289	Top of casing, north edge, stamped X				566598.682	135438.239	2.75	##########		207.45	No DISC Z	No GS	207.45	
2927	A7571	299-W18-88	150	208.289	Top of casing, north edge, stamped X				566598.682	135438.239	2.5	20-Mar-03		207.53	No DISC Z	No GS	207.53	3
2928	A7572	299-W18-89	150	208.762	Top of casing, north edge, stamped X				566501.077	135456.982	2.82	##########		207.90	No DISC Z	No GS	207.90	
2928	A7572	299-W18-89	150	208.762	Top of casing, north edge, stamped X				566501.077	135456.982	2.8	20-Mar-03		207.91	No DISC Z	No GS	207.91	3
2929	A7573	299-W18-90	100	203.59	Top of casing, north edge, stamped X				566774.039	134999.43	0	##########	241-U	203.59	No DISC Z	No GS	203.59	3
2930	A7574	299-W18-91	100	203.511	Top of casing, north edge, stamped X				566769.19	135018.776	0	##########	241-U	203.51	No DISC Z	No GS	203.51	3
2931	A7575	299-W18-92	100	203.794	Top of casing, north edge, stamped X				566786.265	134998.984	0	##########	241-U	203.79	No DISC Z	No GS	203.79	3
2932	A7576	299-W18-93	140	209.349	Top of casing, north edge, stamped X				566454.95	135269.393		##########		No Stickup	No DISC Z	No GS	208.43	
2932	A7576	299-W18-93	140	209.349	Top of casing, north edge, stamped X				566454.95	135269.393	3.3	02-May-03		208.34	No DISC Z	No GS	208.34	3
2933	A7577	299-W18-94	80	209.088	Top of casing, north edge, stamped X				566462.69	135244.013	3.23	##########		208.10	No DISC Z	No GS	208.10	
2933	A7577	299-W18-94	80	209.088	Top of casing, north edge, stamped X				566462.69	135244.013	3.3	25-Mar-03		208.08	No DISC Z	No GS	208.08	3
2934	A7578	299-W18-95	80	209.429	Top of casing, north edge, stamped X				566435.266	135244.988	3.12	##########		208.48	No DISC Z	No GS	208.48	
2934	A7578	299-W18-95	80	209.429	Top of casing, north edge, stamped X				566435.266	135244.988	3.4	25-Mar-03		208.39	No DISC Z	No GS	208.39	3
2934	A7578	299-W18-95	80	209.429	Top of casing, north edge, stamped X				566435.266	135244.988	3.35	05-Aug-03		208.41	No DISC Z	No GS	208.41	
2935	A7579	299-W18-96	80	209.06	Top of casing, north edge, stamped X				566435.228	135293.826	2.98	##########		208.15	No DISC Z	No GS	208.15	3
2936	A7580	299-W18-97	85	208.857	Top of casing, north edge, stamped X				566490.243	135269.49	3	##########		207.94	No DISC Z	No GS	207.94	
2936	A7580	299-W18-97	85	208.857	Top of casing, north edge, stamped X				566490.243	135269.49	2.5	25-Mar-03		208.10	No DISC Z	No GS	208.10	3
2937	A7581	299-W18-98	80	209.118	Top of casing, north edge, stamped X				566462.509	135328.927	2.97	##########		208.21	No DISC Z	No GS	208.21	
2937	A7581	299-W18-98	80	209.118	Top of casing, north edge, stamped X				566462.509	135328.927	2.8	25-Mar-03		208.26	No DISC Z	No GS	208.26	3
2938	A7582	299-W18-99	135	208.908	Top of casing, north edge, stamped X				566496.307	135331.723	2.87	##########		208.03	No DISC Z	No GS	208.03	
2938	A7582	299-W18-99	135	208.908	Top of casing, north edge, stamped X				566496.307	135331.723	3.1	25-Mar-03		207.96	No DISC Z	No GS	207.96	3
2939	A7583	299-W18-100	125	205.024	Top of casing, north edge, stamped X				566848.382	135025.82	0	##########	241-U	205.02	No DISC Z	No GS	205.02	3
2940	A7584	299-W18-101	125	204.082	Top of casing, north edge, stamped X				566811.52	134997.551	0	##########	241-U	204.08	No DISC Z	No GS	204.08	3
2941	A7585	299-W18-102	125	204.95	Top of casing, north edge, stamped X				566827.318	135013.09		##########	241-U	No Stickup	No DISC Z	No GS	204.95	4
2942	A7586	299-W18-103	125	203.769	Top of casing, north edge, stamped X				566796.675	135012.7	0	##########	241-U	203.77	No DISC Z	No GS	203.77	3
2943	A7587	299-W18-104	125	204.523	Top of casing, north edge, stamped X				566849.748	134999.819	0	##########	241-U	204.52	No DISC Z	No GS	204.52	3
2944	A7588	299-W18-105	125	204.406	Top of casing, north edge, stamped X				566811.68	135028.367	0	##########	241-U	204.41	No DISC Z	No GS	204.41	3
2946	A7590	299-W18-107	105	204.848	Top of casing, north edge, stamped X				566835.614	135026.158	0	##########	241-U	204.85	No DISC Z	No GS	204.85	3
2948	A7592	299-W18-109	125	204.106	Top of casing, north edge, stamped X				566817.594	134999.831	0	##########	241-U	204.11	No DISC Z	No GS	204.11	3
2949	A7593	299-W18-110	125	203.984	Top of casing, north edge, stamped X				566803.718	134999.691	0	##########	241-U	203.98	No DISC Z	No GS	203.98	3
2952	A7596	299-W18-113	125	203.675	Top of casing, north edge, stamped X				566787.143	135024.728	0	##########	241-U	203.68	No DISC Z	No GS	203.68	3
2953	A7597	299-W18-114	105	204.32	Top of casing, north edge, stamped X				566848.149	135056.201	0	##########	241-U	204.32	No DISC Z	No GS	204.32	3
2954	A7598	299-W18-115	125	204.776	Top of casing, north edge, stamped X				566825.456	135036.36	0.83	##########	241-U	204.52	No DISC Z	No GS	204.52	3
2955	A7599	299-W18-116	105	204.365	Top of casing, north edge, stamped X				566829.357	135048.157	0	##########	241-U	204.37	No DISC Z	No GS	204.37	3
2956	A7600	299-W18-117	125	204.454	Top of casing, north edge, stamped X			204.447	566835.967	135056.429	0	##########	241-U	204.45	204.45	No GS	204.45	2
2957	A7601	299-W18-118	105	203.855	Top of casing, north edge, stamped X				566796.533	135036.544	0	##########	241-U	203.86	No DISC Z	No GS	203.86	3
2958	A7602	299-W18-119	125	203.682	Top of casing, north edge, stamped X				566796.307	135048.657	0	##########	241-U	203.68	No DISC Z	No GS	203.68	3
2959	A7603	299-W18-120	105	203.621	Top of casing, north edge, stamped X				566787.078	135055.58	0	##########	241-U	203.62	No DISC Z	No GS	203.62	3
2960	A7604	299-W18-121	105	203.584	Top of casing, north edge, stamped X				566773.416	135029.504	0	##########	241-U	203.58	No DISC Z	No GS	203.58	3
2961	A7605	299-W18-122	120	203.555	Top of casing, north edge, stamped X				566765.881	135036.213	0	##########	241-U	203.56	No DISC Z	No GS	203.56	3

sortOrder	Well_ID	WellName	Total Depth (ft)	Top of Casing Elevation (m)	Top of Casing Survey Point Description	Ground Surface Elevation (m)	Ground Surface Survey Point Description	DISC_Z	EASTING	NORTHING	WELL_STICKUP	DATE_INSPECTED	In Tank Farm?	Ground Surface Elevation from TOC-Stickup (m) - Priority 3	DISC Z from HWIS (m) - Priority 2	Ground Surface Elevation, from HWIS (m) - Priority 1	Best Est. Ground Surface Elevation (m)	Best Est. Rank
2962	A7606	299-W18-123	125	203.433	Top of casing, north edge, stamped X				566765.76	135048.417	0	##########	241-U	203.43	No DISC Z	No GS	203.43	3
2963	A7607	299-W18-124	120	204.559	Top of casing, north edge, stamped X				566827.929	135067.043	0	##########	241-U	204.56	No DISC Z	No GS	204.56	3
2964	A7608	299-W18-125	120	204.822	Top of casing, north edge, stamped X				566827.824	135078.451	0	##########	241-U	204.82	No DISC Z	No GS	204.82	3
2965	A7609	299-W18-126	125	204.376	Top of casing, north edge, stamped X				566842.051	135087	0	##########	241-U	204.38	No DISC Z	No GS	204.38	3
2966	A7610	299-W18-127	125	204.14	Top of casing, north edge, stamped X			204.142	566815.881	135057.649	0	##########	241-U	204.14	204.14	No GS	204.14	2
2967	A7611	299-W18-128	125	203.788	Top of casing, north edge, stamped X				566805.546	135057.577	0	##########	241-U	203.79	No DISC Z	No GS	203.79	3
2968	A7612	299-W18-129	125	203.707	Top of casing, north edge, stamped X				566796.211	135066.644	0	##########	241-U	203.71	No DISC Z	No GS	203.71	3
2969	A7613	299-W18-130	100	203.696	Top of casing, north edge, stamped X				566798.194	135078.965	0	##########	241-U	203.70	No DISC Z	No GS	203.70	3
2970	A7614	299-W18-131	125	203.531	Top of casing, north edge, stamped X				566775.025	135058.757	0	##########	241-U	203.53	No DISC Z	No GS	203.53	3
2971	A7615	299-W18-132	100	203.628	Top of casing, north edge, stamped X				566766.321	135066.712	0	##########	241-U	203.63	No DISC Z	No GS	203.63	3
2972	A7616	299-W18-133	125	203.602	Top of casing, north edge, stamped X				566766.451	135078.598	0	##########	241-U	203.60	No DISC Z	No GS	203.60	3
2973	A7617	299-W18-134	105	203.703	Top of casing, north edge, stamped X				566774.809	135086.19	0	##########	241-U	203.70	No DISC Z	No GS	203.70	3
2974	A7618	299-W18-135	125	204.218	Top of casing, north edge, stamped X				566825.957	135097.535	0	##########	241-U	204.22	No DISC Z	No GS	204.22	3
2975	A7619	299-W18-136	100	204.07	Top of casing, north edge, stamped X				566826.44	135109.398	0	##########	241-U	204.07	No DISC Z	No GS	204.07	3
2976	A7620	299-W18-137	125	203.968	Top of casing, north edge, stamped X				566817.468	135117.588	0	##########	241-U	203.97	No DISC Z	No GS	203.97	3
2977	A7621	299-W18-138	100	204.095	Top of casing, north edge, stamped X			204.095	566820.977	135092.854	0	##########	241-U	204.10	204.10	No GS	204.10	2
2978	A7622	299-W18-139	125	204.082	Top of casing, north edge, stamped X				566805.274	135089.275	0	##########	241-U	204.08	No DISC Z	No GS	204.08	3
2979	A7623	299-W18-140	105	203.863	Top of casing, north edge, stamped X				566798.859	135100.144	0	##########	241-U	203.86	No DISC Z	No GS	203.86	3
2980	A7624	299-W18-141	125	203.77	Top of casing, north edge, stamped X				566796.034	135109.364	0	##########	241-U	203.77	No DISC Z	No GS	203.77	3
2981	A7625	299-W18-142	100	203.84	Top of casing, north edge, stamped X				566805.078	135117.668	0	##########	241-U	203.84	No DISC Z	No GS	203.84	3
2982	A7626	299-W18-143	100	203.676	Top of casing, north edge, stamped X				566786.585	135117.62	0	##########	241-U	203.68	No DISC Z	No GS	203.68	3
2983	A7627	299-W18-144	125	203.83	Top of casing, north edge, stamped X			203.831	566784.257	135089.653	0	##########	241-U	203.83	203.83	No GS	203.83	2
2984	A7628	299-W18-145	125	203.601	Top of casing, north edge, stamped X				566766.278	135097.015	0	##########	241-U	203.60	No DISC Z	No GS	203.60	3
2985	A7629	299-W18-146	100	203.489	Top of casing, north edge, stamped X				566766.2	135109.38	0	##########	241-U	203.49	No DISC Z	No GS	203.49	3
2986	A7630	299-W18-147	125	203.525	Top of casing, north edge, stamped X				566774.873	135117.497	0	##########	241-U	203.53	No DISC Z	No GS	203.53	3
2987	A7631	299-W18-148	120	204.348	Top of casing, north edge, stamped X				566836.045	134999.816	0	##########	241-U	204.35	No DISC Z	No GS	204.35	3
2988	A7632	299-W18-149	92	206.099	Top of casing, north edge, stamped X				566547.007	135447.523	2	##########		205.49	No DISC Z	No GS	205.49	3
2988	A7632	299-W18-149	92	206.099	Top of casing, north edge, stamped X				566547.007	135447.523	2	06-Jul-04		205.49	No DISC Z	No GS	205.49	3
2989	A7633	299-W18-150	128	205.275	Top of casing, north edge, stamped X			204.979	566547.472	135370.302	2.96	##########		204.37	204.98	No GS	204.98	2
2991	A7635	299-W18-152	118	209.724	Top of casing, north edge, stamped X				566350.378	135458.88		##########		No Stickup	No DISC Z	No GS	208.81	4
2992	A7636	299-W18-153	110	209.514	Top of casing, north edge, stamped X				566378.616	135458.205	1.85	##########		208.95	No DISC Z	No GS	208.95	3
2996	A7640	299-W18-157	110	209.653	Top of casing, north edge, stamped X				566357.809	135368.18	2.13	##########		209.00	No DISC Z	No GS	209.00	3
2997	A7641	299-W18-158	131	206.113	Top of casing, north edge, stamped X				566532.337	135428.187	2.64	##########		205.31	No DISC Z	No GS	205.31	3
2998	A7642	299-W18-159	130	205.574	Top of casing, stamped X				566547.038	135416.93	1.14	##########		205.23	No DISC Z	No GS	205.23	3
3001	A7645	299-W18-163	163	206.097	Top of casing, stamped X				566562.21	135433.972	2.5	##########		205.34	No DISC Z	No GS	205.34	3
3002	A7646	299-W18-164	153	207.826	Top of outer casing, stamped X				566547.207	135359.471	3.07	##########		206.89	No DISC Z	No GS	206.89	
3002	A7646	299-W18-164	153	207.826	Top of outer casing, stamped X				566547.207	135359.471	3	04-May-04		206.91	No DISC Z	No GS	206.91	3
3002	A7646	299-W18-164	153	207.826	Top of outer casing, stamped X				566547.207	135359.471	3	13-Jul-04		206.91	No DISC Z	No GS	206.91	
3003	A7647	299-W18-165	135	205.97	Top of casing, stamped X				566532.425	135402.403	3.1	##########		205.03	No DISC Z	No GS	205.03	3
3004	A7648	299-W18-166	137	205.673	Top of casing, stamped X				566532.323	135380.206	2.75	##########		204.83	No DISC Z	No GS	204.83	3
3005	A7649	299-W18-167	134	206.197	Top of casing, stamped X				566562.19	135412.556	3.32	##########		205.19	No DISC Z	No GS	205.19	3
3006	A7650	299-W18-168	131	205.84	Top of casing, stamped X				566562.572	135391.142	3.3	##########		204.83	No DISC Z	No GS	204.83	3
3007	A7651	299-W18-169	132	205.83	Top of casing, north edge, stamped X				566562.41	135369.787	3.06	##########		204.90	No DISC Z	No GS	204.90	3
3008	A7652	299-W18-170	30	206.028	Top of casing, north edge, stamped X	205.1136			566547.122	135394.261	3.73	01-Feb-91		204.89	No DISC Z	205.11	205.11	3
3009	A7653	299-W18-171	136	207.644	Top of casing, north edge, stamped X				566546.525	135350.503	2.51	##########		206.88	No DISC Z	No GS	206.88	3
3010	A7654	299-W18-172	134	207.763	Top of casing, north edge, stamped X				566548.926	135479.824		##########		No Stickup	No DISC Z	No GS	206.85	4
3011	A7655	299-W18-173	51	206.327	Top of casing, north edge, stamped X				566554.641	135440.7	3.29	##########		205.32	No DISC Z	No GS	205.32	3
3012	A7656	299-W18-174	131.56	205.946	Top of casing, north edge, stamped X				566558.208	135437.384		##########		No Stickup	No DISC Z	No GS	205.03	4
3013	A7657	299-W18-175	130	205.774	Top of casing, stamped X				566547.078	135392.144	2.93	##########		204.88	No DISC Z	No GS	204.88	3
3014	A7658	299-W18-176	75	204.015	Top of casing, north edge, stamped X				566823.039	135066.031	0	##########	241-U	204.02	No DISC Z	No GS	204.02	3
3015	A7659	299-W18-177	89	205.301	Top of casing, north edge, stamped X				566548.86	134876.65		##########		No Stickup	No DISC Z	No GS	204.39	
3015	A7659	299-W18-177	89	205.301	Top of casing, north edge, stamped X				566548.86	134876.65	1.15	25-Sep-03		204.95	No DISC Z	No GS	204.95	3
3015	A7659	299-W18-177	89	205.301	Top of casing, north edge, stamped X				566548.86	134876.65	1.22	11-Mar-04		204.93	No DISC Z	No GS	204.93	
3016	A7660	299-W18-178	77	205.834	Top of casing, north edge, stamped X				566644.756	135204.425		##########		No Stickup	No DISC Z	No GS	204.92	4
3019	A7663	299-W18-181	135	209.585	Top of casing, north edge, stamped X				566363.844	135458.616		##########		No Stickup	No DISC Z	No GS	208.67	4
3082	A7726	299-W18-246	230	209.327	Top of casing, west edge, stamped X			208.774	566492.988	135392.613	1.14	13-Jun-01		208.98	208.77	No GS	208.77	
3082	A7726	299-W18-246	230	209.327	Top of casing, west edge, stamped X			208.774	566492.988	135392.613		14-Mar-02		No Stickup	208.77	No GS	208.77	
3082	A7726	299-W18-246	230	209.327	Top of casing, west edge, stamped X			208.774	566492.988	135392.613		10-Mar-03		No Stickup	208.77	No GS	208.77	
3082	A7726	299-W18-246	230	209.327	Top of casing, west edge, stamped X			208.774	566492.988	135392.613		19-Mar-04		No Stickup	208.77	No GS	208.77	
3082	A7726	299-W18-246	230	209.327	Top of casing, west edge, stamped X			208.774	566492.988	135392.613		03-May-05		No Stickup	208.77	No GS	208.77	
3082	A7726	299-W18-246	230	209.327	Top of casing, west edge, stamped X			208.774	566492.988	135392.613		01-Oct-07		No Stickup	208.77	No GS	208.77	2
3083	A7727	299-W18-247	227	208.679	Top of casing, west edge, stamped X			207.789	566503.137	135231.658		15-Jun-01		No Stickup	207.79	No GS	207.79	
3083	A7727	299-W18-247	227	208.679	Top of casing, west edge, stamped X			207.789	566503.137	135231.658		14-Mar-02		No Stickup	207.79	No GS	207.79	
3083	A7727	299-W18-247	227	208.679	Top of casing, west edge, stamped X			207.789	566503.137	135231.658		10-Mar-03		No Stickup	207.79	No GS	207.79	
3083	A7727	299-W18-247	227	208.679	Top of casing, west edge, stamped X			207.789	566503.137	135231.658		19-Mar-04		No Stickup	207.79	No GS	207.79	
3083	A7727	299-W18-247	227	208.679	Top of casing, west edge, stamped X			207.789	566503.137	135231.658		27-Apr-05		No Stickup	207.79	No GS	207.79	
3083	A7727	299-W18-247	227	208.679	Top of casing, west edge, stamped X			207.789	566503.137	135231.658		20-Apr-06		No Stickup	207.79	No GS	207.79	
3083	A7727	299-W18-247	227	208.679	Top of casing, west edge, stamped X			207.789	566503.137	135231.658		01-Oct-07		No Stickup	207.79	No GS	207.79	2
3084	A7728	299-W18-248		207.97	Top of casing, east edge, stamped X			207.189	566583.704	135408.957		##########		No Stickup	207.19	No GS	207.19	2
3085	A7729	299-W18-249		208.843	Top of casing, north edge, stamped X			208.292	566474.5	135329.008		##########		No Stickup	208.29	No GS	208.29	2
3086	A7730	299-W18-250	67.7	204.875	Top of outer casing			203.968	566661.12	134695.573		##########		No Stickup	203.97	No GS	203.97	
3086	A7730	299-W18-250	67.7	204.875	Top of outer casing			203.968	566661.12	134695.573	3	25-Mar-03		203.96	203.97	No GS	203.97	2
3087	A7731	299-W18-251	151	204.646	Top of casing			203.733	566603.269	134682.822		##########		No Stickup	203.73	No GS	203.73	
3087	A7731	299-W18-251	151	204.646	Top of casing			203.733	566603.269	134682.822	3	24-Apr-03		203.73	203.73	No GS	203.73	
3087	A7731	299-W18-251	151	204.646	Top of casing			203.733	566603.269	134682.822	3	15-Dec-03		203.73	203.73	No GS	203.73	2
3088	A7732	299-W18-252		208.898	Top of outer casing			208.474	566447.02	135429.477		11-Jul-01		No Stickup	208.47	No GS	208.47	
3088	A7732	299-W18-252		208.898	Top of outer casing			208.474	566447.02	135429.477		14-Mar-02		No Stickup	208.47	No GS	208.47	
3088	A7732	299-W18-252		208.898	Top of outer casing			208.474	566447.02	135429.477		10-Mar-03		No Stickup	208.47	No GS	208.47	
3088	A7732	299-W18-252		208.898	Top of outer casing			208.474	566447.02	135429.477		19-Mar-04		No Stickup	208.47	No GS	208.47	
3088	A7732	299-W18-252		208.898	Top of outer casing			208.474	566447.02	135429.477		03-May-05		No Stickup	208.47	No GS	208.47	
3088	A7732	299-W18-252		208.898	Top of outer casing			208.474	566447.02	135429.477		20-Apr-06		No Stickup	208.47	No GS	208.47	
3088	A7732	299-W18-252		208.898	Top of outer casing			208.474	566447.02	135429.477		01-Oct-07		No Stickup	208.47	No GS	208.47	2
3090	A4944	299-W19-1	301	206.392	Top of casing, north edge, stamped X			205.908	566886.932	134925.623	160	##########		157.62	205.91	No GS	205.91	
3090	A4944	299-W19-1	301	206.392	Top of casing, north edge, stamped X			205.908	566886.932	134925.623	1.55	29-Jan-03		205.92	205.91	No GS	205.91	
3090	A4944	299-W19-1	301	206.392	Top of casing, north edge, stamped X			205.908	566886.932	134925.623	1.55	25-Aug-03		205.92	205.91	No GS	205.91	2
3091	A9556	299-W19-1O	301	206.513	Top of casing (assumed)				566886.932	134925.623		##########		No Stickup	No DISC Z	No GS	205.60	4
3092	A9557	299-W19-1P	301	206.519	Top of casing (assumed)				566886.932	134925.623		##########		No Stickup	No DISC Z	No GS	205.60	4
3093	A4948	299-W19-2	300	212.543	Top of casing, north edge, stamped X			212.233	567646.642	134694.649	1.4	##########		212.12	212.23	No GS	212.23	2
3094	A7733	299-W19-3	301	213.667	Top of casing, north edge, stamped X				567311.104	134989.178		03-Feb-97		No Stickup	No DISC Z	No GS	212.75	

sortOrder	Well_ID	WellName	Total Depth (ft)	Top of Casing Elevation (m)	Top of Casing Survey Point Description	Ground Surface Elevation (m)	Ground Surface Survey Point Description	DISC_Z	EASTING	NORTHING	WELL_STICKUP	DATE_INSPECTED	In Tank Farm?	Ground Surface Elevation from TOC-Stickup (m) - Priority 3	DISC Z from HWIS (m) - Priority 2	Ground Surface Elevation, from HWIS (m) - Priority 1	Best Est. Ground Surface Elevation (m)	Best Est. Rank
3094	A7733	299-W19-3	301	213.667	Top of casing, north edge, stamped X				567311.104	134989.178	2.93	29-Dec-00		212.77	No DISC Z	No GS	212.77	3
3094	A7733	299-W19-3	301	213.667	Top of casing, north edge, stamped X				567311.104	134989.178	2.88	10-Mar-04		212.79	No DISC Z	No GS	212.79	
3094	A7733	299-W19-3	301	213.667	Top of casing, north edge, stamped X				567311.104	134989.178	2.9	06-May-04		212.78	No DISC Z	No GS	212.78	
3095	A4958	299-W19-4	550	219.023	Top of casing, north edge, stamped X			218.686	567949.931	135350.792	1.18	05-Apr-00		218.66	218.69	No GS	218.69	
3095	A4958	299-W19-4	550	219.023	Top of casing, north edge, stamped X			218.686	567949.931	135350.792	1.2	28-Dec-00		218.66	218.69	No GS	218.69	
3095	A4958	299-W19-4	550	219.023	Top of casing, north edge, stamped X			218.686	567949.931	135350.792		13-Sep-05		No Stickup	218.69	No GS	218.69	2
3096	A9558	299-W19-4O	550						567949.931	135350.792		##################		No TOC	No DISC Z	No GS	218.69	5
3097	A9559	299-W19-4P	550						567949.931	135350.792		##################		No TOC	No DISC Z	No GS	218.69	5
3098	A9560	299-W19-4Q	550						567949.931	135350.792		##################		No TOC	No DISC Z	No GS	218.69	5
3099	A9561	299-W19-4R	550						567949.931	135350.792		##################		No TOC	No DISC Z	No GS	218.69	5
3100	A9562	299-W19-4S	550						567949.931	135350.792		##################		No TOC	No DISC Z	No GS	218.69	5
3101	A7734	299-W19-5	235	210.528	Top of casing, north edge, stamped X				567125.41	134693.478	2.65	##################		209.72	No DISC Z	No GS	209.72	
3101	A7734	299-W19-5	235	210.528	Top of casing, north edge, stamped X				567125.41	134693.478	2.1	04-Feb-03		209.89	No DISC Z	No GS	209.89	3
3102	A4959	299-W19-6	422	210.341	Top of casing, north edge, stamped X				567133.33	134693.76	2.42	22-Jun-00		209.60	No DISC Z	No GS	209.60	3
3102	A4959	299-W19-6	422	210.341	Top of casing, north edge, stamped X				567133.33	134693.76		24-May-01		No Stickup	No DISC Z	No GS	209.43	
3102	A4959	299-W19-6	422	210.341	Top of casing, north edge, stamped X				567133.33	134693.76	2.48	02-Jul-01		209.59	No DISC Z	No GS	209.59	
3102	A4959	299-W19-6	422	210.341	Top of casing, north edge, stamped X				567133.33	134693.76	2.48	13-Aug-01		209.59	No DISC Z	No GS	209.59	
3103	A7735	299-W19-7	235	211.068	Top of casing, north edge, stamped X				567120.847	134739.238	2.7	##################		210.25	No DISC Z	No GS	210.25	
3103	A7735	299-W19-7	235	211.068	Top of casing, north edge, stamped X				567120.847	134739.238	2.6	04-Feb-03		210.28	No DISC Z	No GS	210.28	3
3104	A7736	299-W19-8	585			216.894	Brass survey marker	216.894	567563.693	135220.291	1	##################		No TOC	216.89	216.89	216.89	
3104	A7736	299-W19-8	585			216.894	Brass survey marker	216.894	567563.693	135220.291	1	06-Feb-03		No TOC	216.89	216.89	216.89	
3104	A7736	299-W19-8	585			216.894	Brass survey marker	216.894	567563.693	135220.291	1	14-Oct-03		No TOC	216.89	216.89	216.89	1
3108	A7737	299-W19-9	304	213.767	Top of casing, north edge, stamped X				567272.361	135012.07	3.1	##################		212.82	No DISC Z	No GS	212.82	
3108	A7737	299-W19-9	304	213.767	Top of casing, north edge, stamped X				567272.361	135012.07	3.1	13-Sep-04		212.82	No DISC Z	No GS	212.82	3
3109	A7738	299-W19-10	573	209.351	Top of casing (assumed)				567036.972	134800.753	2.14	##################		208.70	No DISC Z	No GS	208.70	
3109	A7738	299-W19-10	573	209.351	Top of casing (assumed)				567036.972	134800.753	2	04-Feb-03		208.74	No DISC Z	No GS	208.74	3
3109	A7738	299-W19-10	573	209.351	Top of casing (assumed)				567036.972	134800.753	2.1	15-Apr-04		208.71	No DISC Z	No GS	208.71	
3110	A7739	299-W19-11	251	213.151	Top of casing, north edge, stamped X				567276.81	135001.502	2.04	##################		212.53	No DISC Z	No GS	212.53	
3110	A7739	299-W19-11	251	213.151	Top of casing, north edge, stamped X				567276.81	135001.502	2.04	23-Feb-04		212.53	No DISC Z	No GS	212.53	3
3110	A7739	299-W19-11	251	213.151	Top of casing, north edge, stamped X				567276.81	135001.502		19-May-04		No Stickup	No DISC Z	No GS	212.24	
3110	A7739	299-W19-11	251	213.151	Top of casing, north edge, stamped X				567276.81	135001.502	0.92	19-May-04		212.87	No DISC Z	No GS	212.87	
3111	A4945	299-W19-12	250	206.232	Top of casing, north edge, stamped X			205.691	566897.131	135059.446	2.62	##################		205.43	205.69	No GS	205.69	
3111	A4945	299-W19-12	250	206.232	Top of casing, north edge, stamped X			205.691	566897.131	135059.446		11-Sep-95		No Stickup	205.69	No GS	205.69	
3111	A4945	299-W19-12	250	206.232	Top of casing, north edge, stamped X			205.691	566897.131	135059.446		29-Jan-03		No Stickup	205.69	No GS	205.69	
3111	A4945	299-W19-12	250	206.232	Top of casing, north edge, stamped X			205.691	566897.131	135059.446		17-May-05		No Stickup	205.69	No GS	205.69	
3111	A4945	299-W19-12	250	206.232	Top of casing, north edge, stamped X			205.691	566897.131	135059.446		14-Nov-07		No Stickup	205.69	No GS	205.69	2
3112	A7740	299-W19-13	250	212.966	Top of casing, north edge, stamped X			212.312	567288.87	134897.262	2.2	##################		212.30	212.31	No GS	212.31	
3112	A7740	299-W19-13	250	212.966	Top of casing, north edge, stamped X			212.312	567288.87	134897.262	2.2	23-Feb-04		212.30	212.31	No GS	212.31	
3112	A7740	299-W19-13	250	212.966	Top of casing, north edge, stamped X			212.312	567288.87	134897.262	2.2	06-May-04		212.30	212.31	No GS	212.31	
3112	A7740	299-W19-13	250	212.966	Top of casing, north edge, stamped X			212.312	567288.87	134897.262		06-May-04		No Stickup	212.31	No GS	212.31	2
3113	A4946	299-W19-14	250	212.394	Top of casing, north edge, stamped X			211.832	567267.985	134831.142	1.87	29-Nov-00		211.82	211.83	No GS	211.83	
3113	A4946	299-W19-14	250	212.394	Top of casing, north edge, stamped X			211.832	567267.985	134831.142	1.85	13-Nov-01		211.83	211.83	No GS	211.83	
3113	A4946	299-W19-14	250	212.394	Top of casing, north edge, stamped X			211.832	567267.985	134831.142	1.87	15-Apr-04		211.82	211.83	No GS	211.83	2
3114	A4947	299-W19-15	285	212.41	Top of casing, north edge, stamped X			211.978	567254.252	134975.778	1.42	##################		211.98	211.98	No GS	211.98	
3114	A4947	299-W19-15	285	212.41	Top of casing, north edge, stamped X			211.978	567254.252	134975.778	1.42	24-May-04		211.98	211.98	No GS	211.98	
3114	A4947	299-W19-15	285	212.41	Top of casing, north edge, stamped X			211.978	567254.252	134975.778	1.42	13-Sep-04		211.98	211.98	No GS	211.98	2
3115	A7741	299-W19-16	285	212.915	Top of casing, north edge, stamped X			212.422	567270.681	135029.208	1.56	##################		212.44	212.42	No GS	212.42	
3115	A7741	299-W19-16	285	212.915	Top of casing, north edge, stamped X			212.422	567270.681	135029.208		##################		No Stickup	212.42	No GS	212.42	
3115	A7741	299-W19-16	285	212.915	Top of casing, north edge, stamped X			212.422	567270.681	135029.208		28-Nov-00		No Stickup	212.42	No GS	212.42	
3115	A7741	299-W19-16	285	212.915	Top of casing, north edge, stamped X			212.422	567270.681	135029.208		14-Apr-04		No Stickup	212.42	No GS	212.42	
3115	A7741	299-W19-16	285	212.915	Top of casing, north edge, stamped X			212.422	567270.681	135029.208		06-May-04		No Stickup	212.42	No GS	212.42	2
3116	A7742	299-W19-17	358	214.038	Top of casing, north edge, stamped X				567287.534	135012.4	3.32	##################		213.03	No DISC Z	No GS	213.03	3
3116	A7742	299-W19-17	358	214.038	Top of casing, north edge, stamped X				567287.534	135012.4		06-May-04		No Stickup	No DISC Z	No GS	213.12	
3117	A7743	299-W19-18	362	213.983	Top of casing, north edge, stamped X				567360.647	135012.357		31-Mar-97		No Stickup	No DISC Z	No GS	213.07	
3117	A7743	299-W19-18	362	213.983	Top of casing, north edge, stamped X				567360.647	135012.357	1.6	22-Jun-00		213.50	No DISC Z	No GS	213.50	3
3117	A7743	299-W19-18	362	213.983	Top of casing, north edge, stamped X				567360.647	135012.357	1.8	21-Mar-01		213.43	No DISC Z	No GS	213.43	
3117	A7743	299-W19-18	362	213.983	Top of casing, north edge, stamped X				567360.647	135012.357	1.8	10-Mar-04		213.43	No DISC Z	No GS	213.43	
3117	A7743	299-W19-18	362	213.983	Top of casing, north edge, stamped X				567360.647	135012.357	1.83	21-Apr-04		213.43	No DISC Z	No GS	213.43	
3117	A7743	299-W19-18	362	213.983	Top of casing, north edge, stamped X				567360.647	135012.357	1.8	06-May-04		213.43	No DISC Z	No GS	213.43	
3117	A7743	299-W19-18	362	213.983	Top of casing, north edge, stamped X				567360.647	135012.357		06-May-04		No Stickup	No DISC Z	No GS	213.07	
3117	A7743	299-W19-18	362	213.983	Top of casing, north edge, stamped X				567360.647	135012.357	1.5	15-Mar-06		213.53	No DISC Z	No GS	213.53	
3117	A7743	299-W19-18	362	213.983	Top of casing, north edge, stamped X				567360.647	135012.357	1.5	06-Sep-06		213.53	No DISC Z	No GS	213.53	
3118	A7744	299-W19-19	257	212.901	Top of casing, north edge, stamped X			212.253	567826.905	134914.447	2.125	##################		212.25	212.25	No GS	212.25	
3118	A7744	299-W19-19	257	212.901	Top of casing, north edge, stamped X			212.253	567826.905	134914.447	2.2	04-Feb-03		212.23	212.25	No GS	212.25	
3118	A7744	299-W19-19	257	212.901	Top of casing, north edge, stamped X			212.253	567826.905	134914.447		06-Feb-03		No Stickup	212.25	No GS	212.25	
3118	A7744	299-W19-19	257	212.901	Top of casing, north edge, stamped X			212.253	567826.905	134914.447	2.1	12-Feb-03		212.26	212.25	No GS	212.25	2
3119	A4949	299-W19-20	252	211.717	Top of casing, north edge, stamped X				567873.965	134901.071	2.5	20-Oct-99		210.96	No DISC Z	No GS	210.96	3
3119	A4949	299-W19-20	252	211.717	Top of casing, north edge, stamped X				567873.965	134901.071	2.51	12-Dec-00		210.95	No DISC Z	No GS	210.95	
3119	A4949	299-W19-20	252	211.717	Top of casing, north edge, stamped X				567873.965	134901.071	2.51	20-Jun-06		210.95	No DISC Z	No GS	210.95	
3120	A4950	299-W19-21	226	207.919	Top of casing, north edge, stamped X			207.437	566953.376	134879.771	1.6	27-Jun-00		207.43	207.44	No GS	207.44	
3120	A4950	299-W19-21	226	207.919	Top of casing, north edge, stamped X			207.437	566953.376	134879.771	1.6	06-Feb-03		207.43	207.44	No GS	207.44	
3120	A4950	299-W19-21	226	207.919	Top of casing, north edge, stamped X			207.437	566953.376	134879.771	1.6	23-Feb-04		207.43	207.44	No GS	207.44	2
3121	A4951	299-W19-22	142	210.773	Top of casing, north edge, stamped X			210.239	567098.56	134930.71	1.76	##################		210.24	210.24	No GS	210.24	
3121	A4951	299-W19-22	142	210.773	Top of casing, north edge, stamped X			210.239	567098.56	134930.71	1.78	23-Feb-04		210.23	210.24	No GS	210.24	2
3122	A7745	299-W19-23	255	213.98	Top of casing, north edge, stamped X			213.316	567771.6	134893.051	2.125	24-Mar-87		213.33	213.32	No GS	213.32	
3122	A7745	299-W19-23	255	213.98	Top of casing, north edge, stamped X			213.316	567771.6	134893.051		23-Jul-97		No Stickup	213.32	No GS	213.32	
3122	A7745	299-W19-23	255	213.98	Top of casing, north edge, stamped X			213.316	567771.6	134893.051	2.1	13-Feb-03		213.34	213.32	No GS	213.32	
3122	A7745	299-W19-23	255	213.98	Top of casing, north edge, stamped X			213.316	567771.6	134893.051	2.17	18-Apr-03		213.32	213.32	No GS	213.32	2
3123	A4952	299-W19-24	255	213.496	Top of casing (assumed)				567771.555	134927.743	2.5	##################		212.73	No DISC Z	No GS	212.73	
3123	A4952	299-W19-24	255	213.496	Top of casing (assumed)				567771.555	134927.743		11-Feb-03		No Stickup	No DISC Z	No GS	212.58	
3123	A4952	299-W19-24	255	213.496	Top of casing (assumed)				567771.555	134927.743	1.9	12-Feb-03		212.92	No DISC Z	No GS	212.92	3
3123	A4952	299-W19-24	255	213.496	Top of casing (assumed)				567771.555	134927.743	1.9	18-Apr-03		212.92	No DISC Z	No GS	212.92	
3124	A7746	299-W19-25	248	211.878	Top of casing (assumed)				567874.66	134916.359	2.125	##################		211.23	No DISC Z	No GS	211.23	
3124	A7746	299-W19-25	248	211.878	Top of casing (assumed)				567874.66	134916.359	2.1	12-Feb-03		211.24	No DISC Z	No GS	211.24	3
3124	A7746	299-W19-25	248	211.878	Top of casing (assumed)				567874.66	134916.359	2.12	18-Apr-03		211.23	No DISC Z	No GS	211.23	
3125	A7747	299-W19-26	250	212.5	Top of casing, north edge, stamped X			211.741	567845.484	134894.72	2.47	##################		211.75	211.74	No GS	211.74	
3125	A7747	299-W19-26	250	212.5	Top of casing, north edge, stamped X			211.741	567845.484	134894.72	2.4	13-Feb-03		211.77	211.74	No GS	211.74	2
3126	A4953	299-W19-27	230	209.481	Top of casing, north edge, stamped X			208.534	567014.387	134930.575	2.65	##################		208.67	208.53	No GS	208.53	
3126	A4953	299-W19-27	230	209.481	Top of casing, north edge, stamped X			208.534	567014.387	134930.575	3.1	29-Jan-03		208.54	208.53	No GS	208.53	

sortOrder	Well_ID	WellName	Total Depth (ft)	Top of Casing Elevation (m)	Top of Casing Survey Point Description	Ground Surface Elevation (m)	Ground Surface Survey Point Description	DISC_Z	EASTING	NORTHING	WELL_STICKUP	DATE_INSPECTED	In Tank Farm?	Ground Surface Elevation from TOC-Stickup (m) - Priority 3	DISC Z from HWIS (m) - Priority 2	Ground Surface Elevation, from HWIS (m) - Priority 1	Best Est. Ground Surface Elevation (m)	Best Est. Rank
3126	A4953	299-W19-27	230	209.481	Top of casing, north edge, stamped X			208.534	567014.387	134930.575	3.1	29-Jul-03		208.54	208.53	No GS	208.53	2
3127	A4954	299-W19-28	255	215.388	Top of casing, north edge, stamped X			214.495	567589.789	134991.193	2.96	##################		214.49	214.50	No GS	214.50	
3127	A4954	299-W19-28	255	215.388	Top of casing, north edge, stamped X			214.495	567589.789	134991.193	2.95	29-Jan-03		214.49	214.50	No GS	214.50	
3127	A4954	299-W19-28	255	215.388	Top of casing, north edge, stamped X			214.495	567589.789	134991.193	2.95	26-Mar-03		214.49	214.50	No GS	214.50	2
3128	A4955	299-W19-29	256	215.023	Top of casing, north edge, stamped X				567664.106	134999.512	3.33	##################		214.01	No DISC Z	No GS	214.01	
3128	A4955	299-W19-29	256	215.023	Top of casing, north edge, stamped X				567664.106	134999.512	3.35	04-Feb-03		214.00	No DISC Z	No GS	214.00	3
3128	A4955	299-W19-29	256	215.023	Top of casing, north edge, stamped X				567664.106	134999.512	3.33	05-Feb-03		214.01	No DISC Z	No GS	214.01	
3129	A7748	299-W19-30	256	214.279	Top of casing, north edge, stamped X			213.299	567665.887	134924.475	3.2	08-Feb-00		213.30	213.30	No GS	213.30	
3129	A7748	299-W19-30	256	214.279	Top of casing, north edge, stamped X			213.299	567665.887	134924.475	3.2	27-Sep-00		213.30	213.30	No GS	213.30	
3129	A7748	299-W19-30	256	214.279	Top of casing, north edge, stamped X			213.299	567665.887	134924.475	3.2	10-Feb-03		213.30	213.30	No GS	213.30	
3129	A7748	299-W19-30	256	214.279	Top of casing, north edge, stamped X			213.299	567665.887	134924.475	3.22	26-Mar-03		213.30	213.30	No GS	213.30	2
3130	A4956	299-W19-31	225.3	206.559	stamped X			205.636	566897	135127.48	3.05	##################		205.63	205.64	No GS	205.64	
3130	A4956	299-W19-31	225.3	206.559	stamped X			205.636	566897	135127.48	3.05	04-Feb-03		205.63	205.64	No GS	205.64	
3130	A4956	299-W19-31	225.3	206.559	stamped X			205.636	566897	135127.48	3.05	29-Jul-03		205.63	205.64	No GS	205.64	2
3131	A4957	299-W19-32	223.1	206.776	stamped X			205.866	566896.55	135009.29	3	##################		205.86	205.87	No GS	205.87	
3131	A4957	299-W19-32	223.1	206.776	stamped X			205.866	566896.55	135009.29	3	04-Feb-03		205.86	205.87	No GS	205.87	
3131	A4957	299-W19-32	223.1	206.776	stamped X			205.866	566896.55	135009.29	3	04-Feb-03		205.86	205.87	No GS	205.87	2
3133	A9517	299-W19-34A	345	215.331	Top of casing, north edge, stamped X			214.508	567673.637	135012.246	2.7	25-Jan-01		214.51	214.51	No GS	214.51	
3133	A9517	299-W19-34A	345	215.331	Top of casing, north edge, stamped X			214.508	567673.637	135012.246	2.7	30-Jan-01		214.51	214.51	No GS	214.51	
3133	A9517	299-W19-34A	345	215.331	Top of casing, north edge, stamped X			214.508	567673.637	135012.246		08-Jan-02		No Stickup	214.51	No GS	214.51	2
3134	A9513	299-W19-34B		215.475	Top of casing			214.51	567662.876	135010.654	3.21	##################		214.50	214.51	No GS	214.51	
3134	A9513	299-W19-34B		215.475	Top of casing			214.51	567662.876	135010.654	3.18	17-Oct-01		214.51	214.51	No GS	214.51	
3134	A9513	299-W19-34B		215.475	Top of casing			214.51	567662.876	135010.654		08-Jan-02		No Stickup	214.51	No GS	214.51	
3134	A9513	299-W19-34B		215.475	Top of casing			214.51	567662.876	135010.654	3.17	21-Jan-02		214.51	214.51	No GS	214.51	
3134	A9513	299-W19-34B		215.475	Top of casing			214.51	567662.876	135010.654	3.15	30-Aug-06		214.51	214.51	No GS	214.51	
3134	A9513	299-W19-34B		215.475	Top of casing			214.51	567662.876	135010.654	3.15	11-Oct-06		214.51	214.51	No GS	214.51	
3134	A9513	299-W19-34B		215.475	Top of casing			214.51	567662.876	135010.654	3.15	13-Dec-06		214.51	214.51	No GS	214.51	
3134	A9513	299-W19-34B		215.475	Top of casing			214.51	567662.876	135010.654	3.15	03-Jan-07		214.51	214.51	No GS	214.51	2
3136	A9515	299-W19-35	273.8	213.63	Top of casing, north edge, stamped X			212.898	567992.099	135015.156	2.38	11-Oct-00		212.90	212.90	No GS	212.90	
3136	A9515	299-W19-35	273.8	213.63	Top of casing, north edge, stamped X			212.898	567992.099	135015.156	2.38	19-Sep-02		212.90	212.90	No GS	212.90	2
3137	B2461	299-W19-36	295	215.408	Top of casing			214.901	567634.738	135017.052	1.68	09-Nov-00		214.90	214.90	No GS	214.90	
3137	B2461	299-W19-36	295	215.408	Top of casing			214.901	567634.738	135017.052	1.67	29-Oct-01		214.90	214.90	No GS	214.90	
3137	B2461	299-W19-36	295	215.408	Top of casing			214.901	567634.738	135017.052	1.68	19-Nov-01		214.90	214.90	No GS	214.90	
3137	B2461	299-W19-36	295	215.408	Top of casing			214.901	567634.738	135017.052		13-Dec-01		No Stickup	214.90	No GS	214.90	
3137	B2461	299-W19-36	295	215.408	Top of casing			214.901	567634.738	135017.052	1.62	09-Oct-03		214.91	214.90	No GS	214.90	
3137	B2461	299-W19-36	295	215.408	Top of casing			214.901	567634.738	135017.052	1.62	29-Mar-04		214.91	214.90	No GS	214.90	
3137	B2461	299-W19-36	295	215.408	Top of casing			214.901	567634.738	135017.052		02-Feb-05		No Stickup	214.90	No GS	214.90	
3137	B2461	299-W19-36	295	215.408	Top of casing			214.901	567634.738	135017.052		09-Nov-05		No Stickup	214.90	No GS	214.90	2
3138	B2465	299-W19-37	267	214.581	Top of casing			213.616	567723.846	134950.349	3.16	02-Nov-00		213.62	213.62	No GS	213.62	
3138	B2465	299-W19-37	267	214.581	Top of casing			213.616	567723.846	134950.349		08-Jan-02		No Stickup	213.62	No GS	213.62	
3138	B2465	299-W19-37	267	214.581	Top of casing			213.616	567723.846	134950.349		16-Sep-02		No Stickup	213.62	No GS	213.62	
3138	B2465	299-W19-37	267	214.581	Top of casing			213.616	567723.846	134950.349		16-Sep-02		No Stickup	213.62	No GS	213.62	
3138	B2465	299-W19-37	267	214.581	Top of casing			213.616	567723.846	134950.349		03-Feb-03		No Stickup	213.62	No GS	213.62	
3138	B2465	299-W19-37	267	214.581	Top of casing			213.616	567723.846	134950.349	2.19	17-Mar-03		213.91	213.62	No GS	213.62	
3138	B2465	299-W19-37	267	214.581	Top of casing			213.616	567723.846	134950.349	2.19	17-Mar-03		213.91	213.62	No GS	213.62	
3138	B2465	299-W19-37	267	214.581	Top of casing			213.616	567723.846	134950.349	2.19	08-Jul-05		213.91	213.62	No GS	213.62	
3138	B2465	299-W19-37	267	214.581	Top of casing			213.616	567723.846	134950.349	2.19	27-Jul-05		213.91	213.62	No GS	213.62	2
3139	B2463	299-W19-38	259.3	214.362	Top of casing			213.421	567780.979	134849.143		##################		No Stickup	213.42	No GS	213.42	
3139	B2463	299-W19-38	259.3	214.362	Top of casing			213.421	567780.979	134849.143	3.1	04-Feb-03		213.42	213.42	No GS	213.42	
3139	B2463	299-W19-38	259.3	214.362	Top of casing			213.421	567780.979	134849.143	3.1	10-Feb-03		213.42	213.42	No GS	213.42	2
3140	B2460	299-W19-39	287.5	211.39	Top of casing			210.463	567901.739	134886.74	3.01	21-Aug-01		210.47	210.46	No GS	210.46	
3140	B2460	299-W19-39	287.5	211.39	Top of casing			210.463	567901.739	134886.74	3.03	10-Jun-02		210.47	210.46	No GS	210.46	
3140	B2460	299-W19-39	287.5	211.39	Top of casing			210.463	567901.739	134886.74	3.03	21-Jan-04		210.47	210.46	No GS	210.46	
3140	B2460	299-W19-39	287.5	211.39	Top of casing			210.463	567901.739	134886.74		01-Feb-05		No Stickup	210.46	No GS	210.46	
3140	B2460	299-W19-39	287.5	211.39	Top of casing			210.463	567901.739	134886.74		09-Nov-05		No Stickup	210.46	No GS	210.46	2
3141	B2464	299-W19-40	258.5	210.849	Top of casing			209.94	567973.864	134847.384	3	11-Oct-00		209.93	209.94	No GS	209.94	
3141	B2464	299-W19-40	258.5	210.849	Top of casing			209.94	567973.864	134847.384		08-Jan-02		No Stickup	209.94	No GS	209.94	
3141	B2464	299-W19-40	258.5	210.849	Top of casing			209.94	567973.864	134847.384	2.45	03-May-02		210.10	209.94	No GS	209.94	
3141	B2464	299-W19-40	258.5	210.849	Top of casing			209.94	567973.864	134847.384	2.45	08-May-03		210.10	209.94	No GS	209.94	
3141	B2464	299-W19-40	258.5	210.849	Top of casing			209.94	567973.864	134847.384	3	15-Jun-04		209.93	209.94	No GS	209.94	
3141	B2464	299-W19-40	258.5	210.849	Top of casing			209.94	567973.864	134847.384	3	02-Feb-05		209.93	209.94	No GS	209.94	2
3142	B8551	299-W19-41	264.5	206.531	Top of casing, stamped X			205.781	566896.532	135004.51		##################		No Stickup	205.78	No GS	205.78	
3142	B8551	299-W19-41	264.5	206.531	Top of casing, stamped X			205.781	566896.532	135004.51	2.46	16-Feb-07		205.78	205.78	No GS	205.78	2
3143	B8553	299-W19-42	265.2	206.242	Top of casing, stamped X			205.506	566896.812	135122.901		09-May-01		No Stickup	205.51	No GS	205.51	
3143	B8553	299-W19-42	265.2	206.242	Top of casing, stamped X			205.506	566896.812	135122.901	2.4	24-Feb-03		205.51	205.51	No GS	205.51	2
3144	C3381	299-W19-43		215.293	Top of casing, stamped X			214.441	567699.15	135004.02		12-Sep-01		No Stickup	214.44	No GS	214.44	
3144	C3381	299-W19-43		215.293	Top of casing, stamped X			214.441	567699.15	135004.02	2.8	20-Sep-01		214.44	214.44	No GS	214.44	
3144	C3381	299-W19-43		215.293	Top of casing, stamped X			214.441	567699.15	135004.02		25-Oct-01		No Stickup	214.44	No GS	214.44	
3144	C3381	299-W19-43		215.293	Top of casing, stamped X			214.441	567699.15	135004.02	2.8	07-Nov-01		214.44	214.44	No GS	214.44	
3144	C3381	299-W19-43		215.293	Top of casing, stamped X			214.441	567699.15	135004.02		03-Sep-02		No Stickup	214.44	No GS	214.44	
3144	C3381	299-W19-43		215.293	Top of casing, stamped X			214.441	567699.15	135004.02	2.8	17-Apr-03		214.44	214.44	No GS	214.44	
3144	C3381	299-W19-43		215.293	Top of casing, stamped X			214.441	567699.15	135004.02	2.8	30-Jun-03		214.44	214.44	No GS	214.44	
3144	C3381	299-W19-43		215.293	Top of casing, stamped X			214.441	567699.15	135004.02	2.8	31-Dec-03		214.44	214.44	No GS	214.44	
3144	C3381	299-W19-43		215.293	Top of casing, stamped X			214.441	567699.15	135004.02		01-Feb-05		No Stickup	214.44	No GS	214.44	
3144	C3381	299-W19-43		215.293	Top of casing, stamped X			214.441	567699.15	135004.02		22-Nov-05		No Stickup	214.44	No GS	214.44	
3144	C3381	299-W19-43		215.293	Top of casing, stamped X			214.441	567699.15	135004.02		30-Mar-06		No Stickup	214.44	No GS	214.44	2
3145	C3393	299-W19-44	272	207.277	Top of casing, stamped X			206.52	566896.95	135041.97		##################		No Stickup	206.52	No GS	206.52	
3145	C3393	299-W19-44	272	207.277	Top of casing, stamped X			206.52	566896.95	135041.97	2.47	09-Oct-01		206.52	206.52	No GS	206.52	
3145	C3393	299-W19-44	272	207.277	Top of casing, stamped X			206.52	566896.95	135041.97		17-Jan-02		No Stickup	206.52	No GS	206.52	
3145	C3393	299-W19-44	272	207.277	Top of casing, stamped X			206.52	566896.95	135041.97	2.45	11-Dec-02		206.53	206.52	No GS	206.52	
3145	C3393	299-W19-44	272	207.277	Top of casing, stamped X			206.52	566896.95	135041.97	2.45	03-Mar-04		206.53	206.52	No GS	206.52	2
3146	C3394	299-W19-45	266.1	206.413	Top of casing, stamped X			205.661	566897.65	135087.65		##################		No Stickup	205.66	No GS	205.66	
3146	C3394	299-W19-45	266.1	206.413	Top of casing, stamped X			205.661	566897.65	135087.65	1.89	09-Oct-01		205.84	205.66	No GS	205.66	
3146	C3394	299-W19-45	266.1	206.413	Top of casing, stamped X			205.661	566897.65	135087.65		17-Jan-02		No Stickup	205.66	No GS	205.66	2
3147	C3958	299-W19-46	380	214.101	Top of casing, stamped X			213.388	567782.67	134842.46	2.39	06-Dec-02		213.37	213.39	No GS	213.39	
3147	C3958	299-W19-46	380	214.101	Top of casing, stamped X			213.388	567782.67	134842.46		09-Dec-02		No Stickup	213.39	No GS	213.39	
3147	C3958	299-W19-46	380	214.101	Top of casing, stamped X			213.388	567782.67	134842.46		05-Jun-03		No Stickup	213.39	No GS	213.39	
3147	C3958	299-W19-46	380	214.101	Top of casing, stamped X			213.388	567782.67	134842.46		19-Aug-04		No Stickup	213.39	No GS	213.39	
3147	C3958	299-W19-46	380	214.101	Top of casing, stamped X			213.388	567782.67	134842.46		01-Feb-05		No Stickup	213.39	No GS	213.39	2

sortOrder	Well_ID	WellName	Total Depth (ft)	Top of Casing Elevation (m)	Top of Casing Survey Point Description	Ground Surface Elevation (m)	Ground Surface Survey Point Description	DISC_Z	EASTING	NORTHING	WELL_STICKUP	DATE_INSPECTED	In Tank Farm?	Ground Surface Elevation from TOC-Stickup (m) - Priority 3	DISC Z from HWIS (m) - Priority 2	Ground Surface Elevation, from HWIS (m) - Priority 1	Best Est. Ground Surface Elevation (m)	Best Est. Rank
3148	C4258	299-W19-47	269	206.276	Top of casing			205.551	566895.31	135161.86	2.36	17-Sep-04		205.56	205.55	No GS	205.55	
3148	C4258	299-W19-47	269	206.276	Top of casing			205.551	566895.31	135161.86		04-Oct-04		No Stickup	205.55	No GS	205.55	
3148	C4258	299-W19-47	269	206.276	Top of casing			205.551	566895.31	135161.86		17-May-05		No Stickup	205.55	No GS	205.55	2
3149	C4300	299-W19-48	424	212.865	Top of casing			212.132	567822.93	134925.99		02-Feb-05		No Stickup	212.13	No GS	212.13	2
3150	C4695	299-W19-49	380	214.203	Top of casing, north edge			213.427	567568.04	134894.38	2	14-Sep-05		213.59	213.43	No GS	213.43	
3150	C4695	299-W19-49	380	214.203	Top of casing, north edge			213.427	567568.04	134894.38		06-Oct-05		No Stickup	213.43	No GS	213.43	2
3151	C4696	299-W19-50	326			213.13	Brass survey marker	213.13	567939.26	135011.84				No TOC	213.13	213.13	213.13	1
3152	A7749	299-W19-51	90	214.719	Top of casing (assumed)				567493.134	135094.23		##################		No Stickup	No DISC Z	No GS	213.80	4
3153	A7750	299-W19-52	90	215.542	Top of casing (assumed)				567558.637	135170.103		##################		No Stickup	No DISC Z	No GS	214.63	4
3154	A7751	299-W19-53	148	205.215	Top of casing, north edge, stamped X				566860.359	135012.289	0	##################		205.22	No DISC Z	No GS	205.22	3
3155	A7753	299-W19-54	153	206.271	Top of casing, north edge, stamped X				566860.221	135103.621	2	##################		205.66	No DISC Z	No GS	205.66	3
3156	A7755	299-W19-55	75	216.369	Top of casing, north edge, stamped X				567578.929	135109.02		##################		No Stickup	No DISC Z	No GS	215.45	
3156	A7755	299-W19-55	75	216.369	Top of casing, north edge, stamped X				567578.929	135109.02	2.4	13-Feb-03		215.64	No DISC Z	No GS	215.64	3
3156	A7755	299-W19-55	75	216.369	Top of casing, north edge, stamped X				567578.929	135109.02	2.4	27-Oct-05		215.64	No DISC Z	No GS	215.64	
3171	A7770	299-W19-70	105	214.469	Top of casing, north edge, stamped X				567615.853	134697.757		##################		No Stickup	No DISC Z	No GS	213.55	
3171	A7770	299-W19-70	105	214.469	Top of casing, north edge, stamped X				567615.853	134697.757	2.21	17-Nov-03		213.80	No DISC Z	No GS	213.80	3
3171	A7770	299-W19-70	105	214.469	Top of casing, north edge, stamped X				567615.853	134697.757	1.95	06-Jul-04		213.87	No DISC Z	No GS	213.87	
3172	A7771	299-W19-71	117	214.516	Top of casing, north edge, stamped X				567616.007	134679.761		##################		No Stickup	No DISC Z	No GS	213.60	
3172	A7771	299-W19-71	117	214.516	Top of casing, north edge, stamped X				567616.007	134679.761	2.8	06-Jul-04		213.66	No DISC Z	No GS	213.66	3
3173	A7772	299-W19-72	50	215.95	Top of casing (assumed)				567265.766	135001.895		##################		No Stickup	No DISC Z	No GS	215.04	4
3174	A7773	299-W19-73	50	215.95	Top of casing (assumed)				567242.919	135001.833		##################		No Stickup	No DISC Z	No GS	215.04	4
3175	A7774	299-W19-74	125	204.836	Top of casing, north edge, stamped X				566855.248	135048.71	0	##################		204.84	No DISC Z	No GS	204.84	3
3176	A7775	299-W19-75	105	205.018	Top of casing, north edge, stamped X				566853.458	135018.454	0	##################		205.02	No DISC Z	No GS	205.02	3
3177	A7776	299-W19-76	125	204.967	Top of casing, north edge, stamped X				566855.403	135072.321	0	##################		204.97	No DISC Z	No GS	204.97	3
3178	A7777	299-W19-77	244						568011.131	135685.717		##################		No TOC	No DISC Z	No GS	221.16	
3178	A7777	299-W19-77	244						568011.131	135685.717	0.7	13-Feb-03		No TOC	No DISC Z	No GS	221.16	5
3178	A7777	299-W19-77	244						568011.131	135685.717		28-Oct-04		No TOC	No DISC Z	No GS	221.16	
3190	A7789	299-W19-89	160	212.582	Top of casing, north edge, stamped X				567831.861	134899.587		##################		No Stickup	No DISC Z	No GS	211.67	
3190	A7789	299-W19-89	160	212.582	Top of casing, north edge, stamped X				567831.861	134899.587	1.7	13-Feb-03		212.06	No DISC Z	No GS	212.06	3
3190	A7789	299-W19-89	160	212.582	Top of casing, north edge, stamped X				567831.861	134899.587	1.67	23-Feb-04		212.07	No DISC Z	No GS	212.07	
3191	A7790	299-W19-90	159	212.383	Top of casing, north edge, stamped X				567846.919	134909.542		##################		No Stickup	No DISC Z	No GS	211.47	
3191	A7790	299-W19-90	159	212.383	Top of casing, north edge, stamped X				567846.919	134909.542	1.65	13-Feb-03		211.88	No DISC Z	No GS	211.88	3
3192	A4960	299-W19-91	150	207.73	Top of casing, north edge, stamped X			206.979	566954.503	134926.743	2.43	##################		206.99	206.98	No GS	206.98	
3192	A4960	299-W19-91	150	207.73	Top of casing, north edge, stamped X			206.979	566954.503	134926.743	2.5	29-Jan-03		206.97	206.98	No GS	206.98	
3192	A4960	299-W19-91	150	207.73	Top of casing, north edge, stamped X			206.979	566954.503	134926.743	2.5	26-Mar-03		206.97	206.98	No GS	206.98	2
3193	A4961	299-W19-92	150	207.729	Top of casing, north edge, stamped X				566939.398	134888.787	1.89	##################		207.15	No DISC Z	No GS	207.15	
3193	A4961	299-W19-92	150	207.729	Top of casing, north edge, stamped X				566939.398	134888.787	1.9	29-Jan-03		207.15	No DISC Z	No GS	207.15	3
3193	A4961	299-W19-92	150	207.729	Top of casing, north edge, stamped X				566939.398	134888.787	1.91	29-Jul-03		207.15	No DISC Z	No GS	207.15	
3194	A4962	299-W19-93	120	207.583	Top of casing, north edge, stamped X				566905.322	134826.916	2.42	##################		206.85	No DISC Z	No GS	206.85	
3194	A4962	299-W19-93	120	207.583	Top of casing, north edge, stamped X				566905.322	134826.916	2.6	29-Jan-03		206.79	No DISC Z	No GS	206.79	3
3195	A9796	299-W19-94				212.313	Brass survey marker	212.313	567614.16	134706.8		##################		No TOC	212.31	212.31	212.31	1
3196	A7791	299-W19-95	182			212.17	Brass survey marker	212.17	567275.32	134937.83	0	##################		No TOC	212.17	212.17	212.17	1
3197	A9797	299-W19-96				212.789	Brass survey marker	212.789	567263.16	135003.79		##################		No TOC	212.79	212.79	212.79	1
3198	A7792	299-W19-97	177			212.81	Brass survey marker	212.81	567283.78	135044.06	0	##################		No TOC	212.81	212.81	212.81	1
3199	A9798	299-W19-98	194			215.66	Brass survey marker	215.66	567578.43	135109.57	0	##################		No TOC	215.66	215.66	215.66	1
3202	C4966	299-W19-101	380						567939.14	135014.07	2.7	08-Sep-05		No TOC	No DISC Z	No GS	No TOC	
3202	C4966	299-W19-101	380						567939.14	135014.07		06-Oct-05		No TOC	No DISC Z	No GS	No TOC	
3202	C4966	299-W19-101	380						567939.14	135014.07		17-Jan-06		No TOC	No DISC Z	No GS	No TOC	
3202	C4966	299-W19-101	380						567939.14	135014.07		28-Feb-06		No TOC	No DISC Z	No GS	No TOC	
3202	C4966	299-W19-101	380						567939.14	135014.07		29-Aug-06		No TOC	No DISC Z	No GS	213.38	5
3205	C4967	299-W19-104	315						568007.74	135206.88				No TOC	No DISC Z	No GS	216.50	5
3206	C4968	299-W19-105	378.99			212.955	Brass survey marker	212.955	567565.15	134745.44	2.56	06-Apr-06		No TOC	212.96	212.96	212.96	
3206	C4968	299-W19-105	378.99			212.955	Brass survey marker	212.955	567565.15	134745.44	2.56	25-Jun-07		No TOC	212.96	212.96	212.96	1
3208	C5193	299-W19-107	429	217.419	Top of pump plate, north edge			216.669	567997.87	135205.66	2.44	01-May-06		216.68	216.67	No GS	216.67	
3208	C5193	299-W19-107	429	217.419	Top of pump plate, north edge			216.669	567997.87	135205.66		23-May-06		No Stickup	216.67	No GS	216.67	2
3210	A4963	299-W21-1	352	214.144	Top of casing, north edge, stamped X				568143.367	134396.339	1.3	##################		213.75	No DISC Z	No GS	213.75	
3210	A4963	299-W21-1	352	214.144	Top of casing, north edge, stamped X				568143.367	134396.339	1.4	04-Feb-03		213.72	No DISC Z	No GS	213.72	3
3210	A4963	299-W21-1	352	214.144	Top of casing, north edge, stamped X				568143.367	134396.339	1.3	18-Apr-03		213.75	No DISC Z	No GS	213.75	
3210	A4963	299-W21-1	352	214.144	Top of casing, north edge, stamped X				568143.367	134396.339	1.3	31-Jul-03		213.75	No DISC Z	No GS	213.75	
3211	C4639	299-W21-2	381	214.85	Top of casing, north edge			214.136	568124.39	134573.79	2.81	02-Feb-05		213.99	214.14	No GS	214.14	2
3230	A7811	299-W21-69	51	214.121	Top of casing (assumed)				568088.356	134589.669	2.93	##################		213.23	No DISC Z	No GS	213.23	3
3233	A7814	299-W21-72	50	214.12	Top of casing (assumed)				568095.083	134580.239	3.2	##################		213.14	No DISC Z	No GS	213.14	3
3234	A7815	299-W21-73	50	214.121	Top of casing (assumed)				568089.574	134589.672	2.8	##################		213.27	No DISC Z	No GS	213.27	3
3236	A7817	299-W21-75	50	214.121	Top of casing (assumed)				568104.17	134602.813	2.35	##################		213.40	No DISC Z	No GS	213.40	3
3246	A7827	299-W22-1	306	205.245	Top of casing, north edge, stamped X			204.407	566974.564	134268.11	2.72	##################		204.42	204.41	No GS	204.41	
3246	A7827	299-W22-1	306	205.245	Top of casing, north edge, stamped X			204.407	566974.564	134268.11	2.72	17-Mar-04		204.42	204.41	No GS	204.41	
3246	A7827	299-W22-1	306	205.245	Top of casing, north edge, stamped X			204.407	566974.564	134268.11	2.72	13-May-04		204.42	204.41	No GS	204.41	
3246	A7827	299-W22-1	306	205.245	Top of casing, north edge, stamped X			204.407	566974.564	134268.11	2.7	13-May-04		204.42	204.41	No GS	204.41	
3246	A7827	299-W22-1	306	205.245	Top of casing, north edge, stamped X			204.407	566974.564	134268.11	2.77	13-May-04		204.40	204.41	No GS	204.41	2
3247	A7828	299-W22-2	307	204.731	Top of casing, north edge, stamped X			204.299	566970.66	134260.126		20-Jul-95		No Stickup	204.30	No GS	204.30	
3247	A7828	299-W22-2	307	204.731	Top of casing, north edge, stamped X			204.299	566970.66	134260.126	1.4	17-Jan-00		204.30	204.30	No GS	204.30	
3247	A7828	299-W22-2	307	204.731	Top of casing, north edge, stamped X			204.299	566970.66	134260.126	1.4	17-Mar-04		204.30	204.30	No GS	204.30	
3247	A7828	299-W22-2	307	204.731	Top of casing, north edge, stamped X			204.299	566970.66	134260.126	1.61	13-May-04		204.24	204.30	No GS	204.30	
3247	A7828	299-W22-2	307	204.731	Top of casing, north edge, stamped X			204.299	566970.66	134260.126	1.4	09-Jul-04		204.30	204.30	No GS	204.30	2
3248	A7829	299-W22-3	309	204.914	Top of casing, north edge, stamped X				566989.978	134255.026	1.8	##################		204.37	No DISC Z	No GS	204.37	3
3248	A7829	299-W22-3	309	204.914	Top of casing, north edge, stamped X				566989.978	134255.026		06-Feb-03		No Stickup	No DISC Z	No GS	204.00	
3248	A7829	299-W22-3	309	204.914	Top of casing, north edge, stamped X				566989.978	134255.026		13-Feb-03		No Stickup	No DISC Z	No GS	204.00	
3248	A7829	299-W22-3	309	204.914	Top of casing, north edge, stamped X				566989.978	134255.026		17-Nov-03		No Stickup	No DISC Z	No GS	204.00	
3248	A7829	299-W22-3	309	204.914	Top of casing, north edge, stamped X				566989.978	134255.026		25-Mar-04		No Stickup	No DISC Z	No GS	204.00	
3249	A7830	299-W22-4	316	206.468	Top of casing, north edge, stamped X				567082.801	134254.217	1.75	##################		205.93	No DISC Z	No GS	205.93	
3249	A7830	299-W22-4	316	206.468	Top of casing, north edge, stamped X				567082.801	134254.217	1.7	06-Feb-03		205.95	No DISC Z	No GS	205.95	3
3249	A7830	299-W22-4	316	206.468	Top of casing, north edge, stamped X				567082.801	134254.217	1.67	22-Aug-03		205.96	No DISC Z	No GS	205.96	
3250	A7831	299-W22-5	317	205.674	Top of casing, north edge, stamped X				567027.872	134254.607	1.59	##################		205.19	No DISC Z	No GS	205.19	
3250	A7831	299-W22-5	317	205.674	Top of casing, north edge, stamped X				567027.872	134254.607	1.5	14-Apr-04		205.22	No DISC Z	No GS	205.22	3
3251	A7832	299-W22-6	274	204.17	Top of casing, north edge, stamped X			203.705	566919.68	134264.217	1.56	##################		203.69	203.71	No GS	203.71	
3251	A7832	299-W22-6	274	204.17	Top of casing, north edge, stamped X			203.705	566919.68	134264.217	1.55	17-Mar-04		203.70	203.71	No GS	203.71	2
3252	A4978	299-W22-7	310	210.54	Top of casing, north edge, stamped X				567499.465	134248.07	1.04	01-Feb-00		210.22	No DISC Z	No GS	210.22	3
3252	A4978	299-W22-7	310	210.54	Top of casing, north edge, stamped X				567499.465	134248.07		01-Sep-04		No Stickup	No DISC Z	No GS	209.63	
3253	A7833	299-W22-8	286	209.346	Top of casing, north edge, stamped X				567741.785	134217.996	1.65	##################		208.84	No DISC Z	No GS	208.84	

sortOrder	Well_ID	WellName	Total Depth (ft)	Top of Casing Elevation (m)	Top of Casing Survey Point Description	Ground Surface Elevation (m)	Ground Surface Survey Point Description	DISC_Z	EASTING	NORTHING	WELL_STICKUP	DATE_INSPECTED	In Tank Farm?	Ground Surface Elevation from TOC-Stickup (m) - Priority 3	DISC Z from HWIS (m) - Priority 2	Ground Surface Elevation, from HWIS (m) - Priority 1	Best Est. Ground Surface Elevation (m)	Best Est. Rank
3253	A7833	299-W22-8	286	209.346	Top of casing, north edge, stamped X				567741.785	134217.996	1.6	06-Feb-03		208.86	No DISC Z	No GS	208.86	3
3254	A7834	299-W22-9	301	207.515	Top of casing, north edge, stamped X				567739.688	134042.732	1.1	28-Mar-00		207.18	No DISC Z	No GS	207.18	3
3254	A7834	299-W22-9	301	207.515	Top of casing, north edge, stamped X				567739.688	134042.732	1.2	10-Apr-02		207.15	No DISC Z	No GS	207.15	
3254	A7834	299-W22-9	301	207.515	Top of casing, north edge, stamped X				567739.688	134042.732	1.2	13-Sep-05		207.15	No DISC Z	No GS	207.15	
3255	A7835	299-W22-10	312	205.864	Top of casing, north edge, stamped X				567012.978	134215.144		17-Jul-95		No Stickup	No DISC Z	No GS	204.95	
3255	A7835	299-W22-10	312	205.864	Top of casing, north edge, stamped X				567012.978	134215.144	1.97	27-Feb-01		205.26	No DISC Z	No GS	205.26	3
3255	A7835	299-W22-10	312	205.864	Top of casing, north edge, stamped X				567012.978	134215.144	1.95	27-Jan-03		205.27	No DISC Z	No GS	205.27	
3256	A7836	299-W22-11	308	204.503	Top of casing, north edge, stamped X			204.159	566953.717	134262.593	1.15	##################		204.15	204.16	No GS	204.16	
3256	A7836	299-W22-11	308	204.503	Top of casing, north edge, stamped X			204.159	566953.717	134262.593	1.13	17-Mar-04		204.16	204.16	No GS	204.16	2
3257	A9563	299-W22-11O	308						566953.717	134262.593		##################		No TOC	No DISC Z	No GS	204.16	5
3258	A9564	299-W22-11P	308						566953.717	134262.593		##################		No TOC	No DISC Z	No GS	204.16	5
3259	A7837	299-W22-12	321	208.117	Top of casing, north edge, stamped X				567191.077	134184.891	2.91	##################		207.23	No DISC Z	No GS	207.23	
3259	A7837	299-W22-12	321	208.117	Top of casing, north edge, stamped X				567191.077	134184.891	2.85	18-Apr-03		207.25	No DISC Z	No GS	207.25	3
3259	A7837	299-W22-12	321	208.117	Top of casing, north edge, stamped X				567191.077	134184.891	3	17-Mar-04		207.20	No DISC Z	No GS	207.20	
3260	A7838	299-W22-13	345	207.776	Top of casing, north edge, stamped X				567142.834	134172.135	2.35	##################		207.06	No DISC Z	No GS	207.06	
3260	A7838	299-W22-13	345	207.776	Top of casing, north edge, stamped X				567142.834	134172.135	2.48	17-Mar-04		207.02	No DISC Z	No GS	207.02	3
3261	A7839	299-W22-14	342	207.799	Top of casing, north edge, stamped X				567186.931	134166.146	1.95	##################		207.20	No DISC Z	No GS	207.20	
3261	A7839	299-W22-14	342	207.799	Top of casing, north edge, stamped X				567186.931	134166.146	2.5	04-Apr-03		207.04	No DISC Z	No GS	207.04	3
3261	A7839	299-W22-14	342	207.799	Top of casing, north edge, stamped X				567186.931	134166.146	2.55	17-Mar-04		207.02	No DISC Z	No GS	207.02	
3262	A9565	299-W22-14O	342						567186.931	134166.146		##################		No TOC	No DISC Z	No GS	207.04	5
3263	A9566	299-W22-14P	342						567186.931	134166.146		##################		No TOC	No DISC Z	No GS	207.04	5
3264	A7840	299-W22-15	268	205.413	Top of casing, north edge, stamped X				566982.492	134283.931		##################		No Stickup	No DISC Z	No GS	204.50	
3264	A7840	299-W22-15	268	205.413	Top of casing, north edge, stamped X				566982.492	134283.931	2.25	23-Feb-04		204.73	No DISC Z	No GS	204.73	3
3265	A7841	299-W22-16	248	205.151	Top of casing, north edge, stamped X				566974.294	134231.429	1.55	##################		204.68	No DISC Z	No GS	204.68	
3265	A7841	299-W22-16	248	205.151	Top of casing, north edge, stamped X				566974.294	134231.429	1.87	23-Feb-04		204.58	No DISC Z	No GS	204.58	3
3266	A4964	299-W22-17	261	205.702	Top of casing, north edge, stamped X				567012.953	134292.277	1.78	##################		205.16	No DISC Z	No GS	205.16	
3266	A4964	299-W22-17	261	205.702	Top of casing, north edge, stamped X				567012.953	134292.277	1.95	23-Feb-04		205.11	No DISC Z	No GS	205.11	3
3267	A7842	299-W22-18	302	205.303	Top of casing, north edge, stamped X				567009.566	134254.341	2.17	##################		204.64	No DISC Z	No GS	204.64	
3267	A7842	299-W22-18	302	205.303	Top of casing, north edge, stamped X				567009.566	134254.341	1.7	17-Mar-04		204.78	No DISC Z	No GS	204.78	3
3268	A4965	299-W22-19	450	208.649	Top of casing, north edge, stamped X				567623.227	133975.284	1.61	##################		208.16	No DISC Z	No GS	208.16	
3268	A4965	299-W22-19	450	208.649	Top of casing, north edge, stamped X				567623.227	133975.284	1.5	04-Apr-03		208.19	No DISC Z	No GS	208.19	3
3269	A7843	299-W22-20	301	207.091	Top of casing, north edge, stamped X				567593.094	133879.246	0.8	23-Mar-00		206.85	No DISC Z	No GS	206.85	3
3269	A7843	299-W22-20	301	207.091	Top of casing, north edge, stamped X				567593.094	133879.246		10-Jan-02		No Stickup	No DISC Z	No GS	206.18	
3269	A7843	299-W22-20	301	207.091	Top of casing, north edge, stamped X				567593.094	133879.246		22-Jan-02		No Stickup	No DISC Z	No GS	206.18	
3269	A7843	299-W22-20	301	207.091	Top of casing, north edge, stamped X				567593.094	133879.246	0.88	02-Feb-04		206.82	No DISC Z	No GS	206.82	
3270	A4966	299-W22-21	300	205.649	Top of casing, north edge, stamped X				567167.704	134004.303	2.62	##################		204.85	No DISC Z	No GS	204.85	
3270	A4966	299-W22-21	300	205.649	Top of casing, north edge, stamped X				567167.704	134004.303	2.6	04-Apr-03		204.86	No DISC Z	No GS	204.86	3
3270	A4966	299-W22-21	300	205.649	Top of casing, north edge, stamped X				567167.704	134004.303	2.6	17-Mar-04		204.86	No DISC Z	No GS	204.86	
3271	A4967	299-W22-22	301	211.431	Top of casing, north edge, stamped X			210.935	567617.274	134464.315	1.625	##################		210.94	210.94	No GS	210.94	
3271	A4967	299-W22-22	301	211.431	Top of casing, north edge, stamped X			210.935	567617.274	134464.315	1.6	05-Feb-03		210.94	210.94	No GS	210.94	
3271	A4967	299-W22-22	301	211.431	Top of casing, north edge, stamped X			210.935	567617.274	134464.315		11-Feb-03		No Stickup	210.94	No GS	210.94	2
3272	A7844	299-W22-23	307	211.633	Top of casing, north edge, stamped X				567586.716	134444.974	2.1	##################		210.99	No DISC Z	No GS	210.99	
3272	A7844	299-W22-23	307	211.633	Top of casing, north edge, stamped X				567586.716	134444.974	2.1	06-Feb-03		210.99	No DISC Z	No GS	210.99	3
3273	A7845	299-W22-24	575	212.16	Top of casing, stamped X				567648.17	134410.86	2.4	##################		211.43	No DISC Z	No GS	211.43	3
3273	A7845	299-W22-24	575	212.16	Top of casing, stamped X				567648.17	134410.86		06-Feb-03		No Stickup	No DISC Z	No GS	211.25	
3273	A7845	299-W22-24	575	212.16	Top of casing, stamped X				567648.17	134410.86		04-Aug-03		No Stickup	No DISC Z	No GS	211.25	
3274	A9567	299-W22-24O	575	212.23	Top of casing, north edge				567648.17	134410.86		##################		No Stickup	No DISC Z	No GS	211.32	
3274	A9567	299-W22-24O	575	212.23	Top of casing, north edge				567648.17	134410.86	3.35	04-Aug-03		211.21	No DISC Z	No GS	211.21	3
3275	A9568	299-W22-24P	575	212.224	Top of casing, north edge				567648.17	134410.86		##################		No Stickup	No DISC Z	No GS	211.31	
3275	A9568	299-W22-24P	575	212.224	Top of casing, north edge				567648.17	134410.86	2.35	04-Aug-03		211.51	No DISC Z	No GS	211.51	3
3276	A9569	299-W22-24Q	575	212.218	Top of casing, north edge				567648.17	134410.86		##################		No Stickup	No DISC Z	No GS	211.30	4
3277	A9570	299-W22-24R	575	212.224	Top of casing, north edge				567648.17	134410.86		##################		No Stickup	No DISC Z	No GS	211.31	
3277	A9570	299-W22-24R	575	212.224	Top of casing, north edge				567648.17	134410.86	2.35	04-Aug-03		211.51	No DISC Z	No GS	211.51	3
3278	A9571	299-W22-24S	575	212.218	Top of casing, north edge				567648.17	134410.86		##################		No Stickup	No DISC Z	No GS	211.30	
3278	A9571	299-W22-24S	575	212.218	Top of casing, north edge				567648.17	134410.86	2.35	04-Aug-03		211.50	No DISC Z	No GS	211.50	3
3279	A9572	299-W22-24T	575	212.218	Top of casing, north edge				567648.17	134410.86		##################		No Stickup	No DISC Z	No GS	211.30	
3279	A9572	299-W22-24T	575	212.218	Top of casing, north edge				567648.17	134410.86	2.35	04-Aug-03		211.50	No DISC Z	No GS	211.50	3
3280	A7846	299-W22-25	335	208.568	Top of casing, north edge, stamped X				567180.784	134404.621	2.76	##################		207.73	No DISC Z	No GS	207.73	
3280	A7846	299-W22-25	335	208.568	Top of casing, north edge, stamped X				567180.784	134404.621	2.75	11-Mar-04		207.73	No DISC Z	No GS	207.73	3
3281	A4968	299-W22-26	300	208.379	Top of casing, north edge, stamped X				567205.187	134465.229	3.6	##################		207.28	No DISC Z	No GS	207.28	
3281	A4968	299-W22-26	300	208.379	Top of casing, north edge, stamped X				567205.187	134465.229	3.28	23-May-01		207.38	No DISC Z	No GS	207.38	3
3281	A4968	299-W22-26	300	208.379	Top of casing, north edge, stamped X				567205.187	134465.229		21-Mar-02		No Stickup	No DISC Z	No GS	207.46	
3281	A4968	299-W22-26	300	208.379	Top of casing, north edge, stamped X				567205.187	134465.229	3.51	27-Mar-06		207.31	No DISC Z	No GS	207.31	
3281	A4968	299-W22-26	300	208.379	Top of casing, north edge, stamped X				567205.187	134465.229	3.17	11-Sep-07		207.41	No DISC Z	No GS	207.41	
3281	A4968	299-W22-26	300	208.379	Top of casing, north edge, stamped X				567205.187	134465.229	3.35	17-Sep-07		207.36	No DISC Z	No GS	207.36	
3282	A7847	299-W22-27	572	208.53	Top of casing (assumed)				567151.707	134496.761	2.8	##################		207.68	No DISC Z	No GS	207.68	
3282	A7847	299-W22-27	572	208.53	Top of casing (assumed)				567151.707	134496.761	2.91	19-Jan-04		207.64	No DISC Z	No GS	207.64	3
3283	A9573	299-W22-27O	572	208.329	Top of casing (assumed)				567151.707	134496.761		##################		No Stickup	No DISC Z	No GS	207.41	
3283	A9573	299-W22-27O	572	208.329	Top of casing (assumed)				567151.707	134496.761	2.94	19-Jan-04		207.43	No DISC Z	No GS	207.43	3
3284	A9574	299-W22-27P	572	208.329	Top of casing (assumed)				567151.707	134496.761		##################		No Stickup	No DISC Z	No GS	207.41	
3284	A9574	299-W22-27P	572	208.329	Top of casing (assumed)				567151.707	134496.761		19-Jan-04		No Stickup	No DISC Z	No GS	207.41	4
3285	A9575	299-W22-27Q	572	208.329	Top of casing (assumed)				567151.707	134496.761		##################		No Stickup	No DISC Z	No GS	207.41	
3285	A9575	299-W22-27Q	572	208.329	Top of casing (assumed)				567151.707	134496.761	2.94	19-Jan-04		207.43	No DISC Z	No GS	207.43	3
3286	A9576	299-W22-27R	572	208.329	Top of casing (assumed)				567151.707	134496.761		##################		No Stickup	No DISC Z	No GS	207.41	
3286	A9576	299-W22-27R	572	208.329	Top of casing (assumed)				567151.707	134496.761	2.94	19-Jan-04		207.43	No DISC Z	No GS	207.43	3
3287	A9577	299-W22-27S	572	208.329	Top of casing (assumed)				567151.707	134496.761		##################		No Stickup	No DISC Z	No GS	207.41	
3287	A9577	299-W22-27S	572	208.329	Top of casing (assumed)				567151.707	134496.761	2.94	19-Jan-04		207.43	No DISC Z	No GS	207.43	3
3288	A4969	299-W22-28	300	211.233	Top of casing, north edge, stamped X				567433.699	134465.777	2.93	##################		210.34	No DISC Z	No GS	210.34	
3288	A4969	299-W22-28	300	211.233	Top of casing, north edge, stamped X				567433.699	134465.777	2.8	04-Feb-03		210.38	No DISC Z	No GS	210.38	3
3289	A7848	299-W22-29	202	204.778	Top of casing, north edge, stamped X			204.492	566978.471	134259.79	0.97	##################		204.48	204.49	No GS	204.49	
3289	A7848	299-W22-29	202	204.778	Top of casing, north edge, stamped X			204.492	566978.471	134259.79	0.75	14-Apr-04		204.55	204.49	No GS	204.49	2
3290	A7849	299-W22-30	207	205.374	Top of casing, north edge, stamped X				566987.945	134254.64	2.58	##################		204.59	No DISC Z	No GS	204.59	
3290	A7849	299-W22-30	207	205.374	Top of casing, north edge, stamped X				566987.945	134254.64		06-Feb-03		No Stickup	No DISC Z	No GS	204.46	
3290	A7849	299-W22-30	207	205.374	Top of casing, north edge, stamped X				566987.945	134254.64		13-Feb-03		No Stickup	No DISC Z	No GS	204.46	
3290	A7849	299-W22-30	207	205.374	Top of casing, north edge, stamped X				566987.945	134254.64		17-Mar-04		No Stickup	No DISC Z	No GS	204.46	
3290	A7849	299-W22-30	207	205.374	Top of casing, north edge, stamped X				566987.945	134254.64	1.85	13-May-04		204.81	No DISC Z	No GS	204.81	3
3291	A7850	299-W22-31	206	204.896	Top of casing, north edge, stamped X			204.513	566979.522	134265.256		##################		No Stickup	204.51	No GS	204.51	
3291	A7850	299-W22-31	206	204.896	Top of casing, north edge, stamped X			204.513	566979.522	134265.256	1.25	17-Mar-04		204.52	204.51	No GS	204.51	2
3292	A7851	299-W22-32	212	208.196	Top of casing, north edge, stamped X				567178.833	134173.538	1.03	##################		207.88	No DISC Z	No GS	207.88	

sortOrder	Well_ID	WellName	Total Depth (ft)	Top of Casing Elevation (m)	Top of Casing Survey Point Description	Ground Surface Elevation (m)	Ground Surface Survey Point Description	DISC_Z	EASTING	NORTHING	WELL_STICKUP	DATE_INSPECTED	In Tank Farm?	Ground Surface Elevation from TOC-Stickup (m) - Priority 3	DISC Z from HWIS (m) - Priority 2	Ground Surface Elevation, from HWIS (m) - Priority 1	Best Est. Ground Surface Elevation (m)	Best Est. Rank
3292	A7851	299-W22-32	212	208.196	Top of casing, north edge, stamped X				567178.833	134173.538	2.95	17-Mar-04		207.30	No DISC Z	No GS	207.30	3
3293	A7852	299-W22-33	213	208.18	Top of casing, north edge, stamped X				567154.625	134168.017	0.83	##################		207.93	No DISC Z	No GS	207.93	
3293	A7852	299-W22-33	213	208.18	Top of casing, north edge, stamped X				567154.625	134168.017	3.6	17-Mar-04		207.08	No DISC Z	No GS	207.08	3
3294	A7853	299-W22-34	216	207.845	Top of casing, north edge, stamped X				567199.074	134465.42	1.31	##################		207.45	No DISC Z	No GS	207.45	
3294	A7853	299-W22-34	216	207.845	Top of casing, north edge, stamped X				567199.074	134465.42	1.35	11-Mar-04		207.43	No DISC Z	No GS	207.43	3
3295	A7854	299-W22-35	215	209.521	Top of casing, north edge, stamped X				567156.38	134496.471	1.35	##################		209.11	No DISC Z	No GS	209.11	
3295	A7854	299-W22-35	215	209.521	Top of casing, north edge, stamped X				567156.38	134496.471	4.01	11-Mar-04		208.30	No DISC Z	No GS	208.30	3
3296	A7855	299-W22-36	206	204.813	Top of casing, north edge, stamped X				566970.787	134268.264	1.4	##################		204.39	No DISC Z	No GS	204.39	
3296	A7855	299-W22-36	206	204.813	Top of casing, north edge, stamped X				566970.787	134268.264	1.4	17-Mar-04		204.39	No DISC Z	No GS	204.39	3
3297	A7856	299-W22-37	335	210.538	Top of casing, north edge, stamped X				567084.513	134678.204	3.68	##################		209.42	No DISC Z	No GS	209.42	
3297	A7856	299-W22-37	335	210.538	Top of casing, north edge, stamped X				567084.513	134678.204	3.6	11-Feb-03		209.44	No DISC Z	No GS	209.44	3
3297	A7856	299-W22-37	335	210.538	Top of casing, north edge, stamped X				567084.513	134678.204	3.6	31-Jul-03		209.44	No DISC Z	No GS	209.44	
3298	A7857	299-W22-38	233	210.279	Top of casing, north edge, stamped X				567137.831	134647.796	3.27	##################		209.28	No DISC Z	No GS	209.28	
3298	A7857	299-W22-38	233	210.279	Top of casing, north edge, stamped X				567137.831	134647.796	1.5	11-Feb-03		209.82	No DISC Z	No GS	209.82	3
3299	A4970	299-W22-39	223.3	204.751	stamped X			203.835	566903.88	134213.67	3.03	##################		203.83	203.84	No GS	203.84	
3299	A4970	299-W22-39	223.3	204.751	stamped X			203.835	566903.88	134213.67	3.03	15-Dec-03		203.83	203.84	No GS	203.84	2
3300	A4971	299-W22-40	245	212.136	Top of casing, north edge, stamped X			211.135	567634.57	134509.99	3	##################		211.22	211.14	No GS	211.14	
3300	A4971	299-W22-40	245	212.136	Top of casing, north edge, stamped X			211.135	567634.57	134509.99	3.03	04-Feb-03		211.21	211.14	No GS	211.14	
3300	A4971	299-W22-40	245	212.136	Top of casing, north edge, stamped X			211.135	567634.57	134509.99	3	18-Apr-03		211.22	211.14	No GS	211.14	2
3301	A4972	299-W22-41	245.3	211.987	Top of casing, north edge, stamped X			211.005	567637.04	134479.46	3	##################		211.07	211.01	No GS	211.01	
3301	A4972	299-W22-41	245.3	211.987	Top of casing, north edge, stamped X			211.005	567637.04	134479.46	3.02	03-Dec-03		211.07	211.01	No GS	211.01	2
3302	A4973	299-W22-42	243.4	211.81	Top of casing, north edge, stamped X			210.825	567623.16	134452.2	3.01	##################		210.89	210.83	No GS	210.83	
3302	A4973	299-W22-42	243.4	211.81	Top of casing, north edge, stamped X			210.825	567623.16	134452.2	3.01	16-Dec-03		210.89	210.83	No GS	210.83	2
3303	A4974	299-W22-43	244	211.868	Top of casing, north edge, stamped X			210.885	567532.48	134539.24	2.96	##################		210.97	210.89	No GS	210.89	
3303	A4974	299-W22-43	244	211.868	Top of casing, north edge, stamped X			210.885	567532.48	134539.24	2.95	04-Feb-03		210.97	210.89	No GS	210.89	
3303	A4974	299-W22-43	244	211.868	Top of casing, north edge, stamped X			210.885	567532.48	134539.24	2.9	18-Apr-03		210.98	210.89	No GS	210.89	2
3304	A4975	299-W22-44	246	207.759	Top of outer casing, north edge			206.735	566955.99	134484.42	3.36	##################		206.73	206.74	No GS	206.74	
3304	A4975	299-W22-44	246	207.759	Top of outer casing, north edge			206.735	566955.99	134484.42	3.36	03-Feb-04		206.73	206.74	No GS	206.74	
3304	A4975	299-W22-44	246	207.759	Top of outer casing, north edge			206.735	566955.99	134484.42	3.35	28-Jun-05		206.74	206.74	No GS	206.74	2
3305	A4976	299-W22-45	240	204.126	Top of outer casing			203.135	566945.16	134292.51	3.26	##################		203.13	203.14	No GS	203.14	
3305	A4976	299-W22-45	240	204.126	Top of outer casing			203.135	566945.16	134292.51	3.26	04-Feb-04		203.13	203.14	No GS	203.14	2
3306	A4977	299-W22-46	241	205.641	Top of outer casing, north edge			204.545	566903.85	134127.84	3.58	##################		204.55	204.55	No GS	204.55	
3306	A4977	299-W22-46	241	205.641	Top of outer casing, north edge			204.545	566903.85	134127.84		11-Aug-98		No Stickup	204.55	No GS	204.55	
3306	A4977	299-W22-46	241	205.641	Top of outer casing, north edge			204.545	566903.85	134127.84	3.58	23-Jun-03		204.55	204.55	No GS	204.55	
3306	A4977	299-W22-46	241	205.641	Top of outer casing, north edge			204.545	566903.85	134127.84	3.58	13-Jul-06		204.55	204.55	No GS	204.55	2
3307	C4667	299-W22-47	348.6	206.275	Top of casing, north edge			205.533	566908.74	134076.28	2.47	31-Jan-05		205.52	205.53	No GS	205.53	
3307	C4667	299-W22-47	348.6	206.275	Top of casing, north edge			205.533	566908.74	134076.28		17-Jan-06		No Stickup	205.53	No GS	205.53	2
3308	B8812	299-W22-48	249	207.895	Top of casing, stamped X			207.132	566996.641	134425.096	2.5	31-Jan-00		207.13	207.13	No GS	207.13	
3308	B8812	299-W22-48	249	207.895	Top of casing, stamped X			207.132	566996.641	134425.096	2.5	17-Oct-05		207.13	207.13	No GS	207.13	
3308	B8812	299-W22-48	249	207.895	Top of casing, stamped X			207.132	566996.641	134425.096	2.5	26-Jul-06		207.13	207.13	No GS	207.13	
3308	B8812	299-W22-48	249	207.895	Top of casing, stamped X			207.132	566996.641	134425.096	2.5	18-Jan-07		207.13	207.13	No GS	207.13	
3308	B8812	299-W22-48	249	207.895	Top of casing, stamped X			207.132	566996.641	134425.096	2.5	25-Jan-07		207.13	207.13	No GS	207.13	2
3309	B8813	299-W22-49	239	204.719	Top of casing, stamped X			203.927	566904.383	134201.625	2.57	31-Jan-00		203.94	203.93	No GS	203.93	
3309	B8813	299-W22-49	239	204.719	Top of casing, stamped X			203.927	566904.383	134201.625		21-Mar-02		No Stickup	203.93	No GS	203.93	
3309	B8813	299-W22-49	239	204.719	Top of casing, stamped X			203.927	566904.383	134201.625		16-Mar-05		No Stickup	203.93	No GS	203.93	
3309	B8813	299-W22-49	239	204.719	Top of casing, stamped X			203.927	566904.383	134201.625	2.6	09-May-05		203.93	203.93	No GS	203.93	
3309	B8813	299-W22-49	239	204.719	Top of casing, stamped X			203.927	566904.383	134201.625		21-Dec-05		No Stickup	203.93	No GS	203.93	2
3310	B8814	299-W22-50	547	205.012	Top of casing, stamped X			204.142	566904.261	134139.756	2.86	09-Feb-00		204.14	204.14	No GS	204.14	
3310	B8814	299-W22-50	547	205.012	Top of casing, stamped X			204.142	566904.261	134139.756		14-Mar-02		No Stickup	204.14	No GS	204.14	
3310	B8814	299-W22-50	547	205.012	Top of casing, stamped X			204.142	566904.261	134139.756		14-Mar-02		No Stickup	204.14	No GS	204.14	
3310	B8814	299-W22-50	547	205.012	Top of casing, stamped X			204.142	566904.261	134139.756		13-Jul-04		No Stickup	204.14	No GS	204.14	
3310	B8814	299-W22-50	547	205.012	Top of casing, stamped X			204.142	566904.261	134139.756	2.61	18-Jul-06		204.22	204.14	No GS	204.14	2
3311	A7858	299-W22-51	50	208.329	Top of casing (assumed)				567297.844	133972.151		##################		No Stickup	No DISC Z	No GS	207.41	
3311	A7858	299-W22-51	50	208.329	Top of casing (assumed)				567297.844	133972.151		02-Dec-03		No Stickup	No DISC Z	No GS	207.41	
3311	A7858	299-W22-51	50	208.329	Top of casing (assumed)				567297.844	133972.151		06-Jul-04		No Stickup	No DISC Z	No GS	207.41	4
3312	A7859	299-W22-52	50	208.329	Top of casing (assumed)				567358.756	133972.296		##################		No Stickup	No DISC Z	No GS	207.41	4
3313	A7860	299-W22-53	50	208.329	Top of casing (assumed)				566747.432	134235.868		##################	241-SX	No Stickup	No DISC Z	No GS	208.33	4
3314	A7861	299-W22-54	50	208.329	Top of casing (assumed)				566847.728	134312.292		##################	241-SX	No Stickup	No DISC Z	No GS	208.33	4
3315	A7862	299-W22-55	50	208.329	Top of casing (assumed)				566848.204	134152.277		##################		No Stickup	No DISC Z	No GS	207.41	4
3316	A7863	299-W22-56	50	205.891	Top of casing (assumed)				567243.131	133926.337		##################		No Stickup	No DISC Z	No GS	204.98	
3316	A7863	299-W22-56	50	205.891	Top of casing (assumed)				567243.131	133926.337		17-Nov-03		No Stickup	No DISC Z	No GS	204.98	4
3317	A7864	299-W22-57	50	208.329	Top of casing (assumed)				567419.673	133970.917		##################		No Stickup	No DISC Z	No GS	207.41	4
3321	A7868	299-W22-61	121	208.652	Top of casing, north edge, stamped X				567546.203	133916.247		##################		No Stickup	No DISC Z	No GS	207.74	
3321	A7868	299-W22-61	121	208.652	Top of casing, north edge, stamped X				567546.203	133916.247	0.69	15-Jun-06		208.44	No DISC Z	No GS	208.44	3
3322	A7869	299-W22-62	50	211.378	Top of casing (assumed)				567616.877	134649.339		##################		No Stickup	No DISC Z	No GS	210.46	4
3323	A7870	299-W22-63	122	208.641	Top of casing, north edge, stamped X				567559.096	133916.389		##################		No Stickup	No DISC Z	No GS	207.73	
3323	A7870	299-W22-63	122	208.641	Top of casing, north edge, stamped X				567559.096	133916.389	1.28	15-Jun-06		208.25	No DISC Z	No GS	208.25	3
3324	A7871	299-W22-64	80						567037.9	134260.5		##################		No TOC	No DISC Z	No GS	No TOC	5
3325	A7872	299-W22-65	50	208.329	Top of casing (assumed)				567557.769	133916.727		##################		No Stickup	No DISC Z	No GS	207.41	4
3326	A7873	299-W22-66	50	207.719	Top of casing (assumed)				567485.283	133788.029		##################		No Stickup	No DISC Z	No GS	206.80	4
3327	A7874	299-W22-67	115	204.367	Top of casing (assumed)				566977.435	134251.535		##################		No Stickup	No DISC Z	No GS	203.45	4
3329	C4969	299-W22-69	376.55	207.956	Top of pump plate, north edge			207.267	567179.6	134347.83		23-May-06		No Stickup	207.27	No GS	207.27	2
3332	C4970	299-W22-72	357.8	208.022	Top of pump plate, north edge			207.342	567237.37	134207.08	2.25	27-Apr-06		207.34	207.34	No GS	207.34	
3332	C4970	299-W22-72	357.8	208.022	Top of pump plate, north edge			207.342	567237.37	134207.08		23-May-06		No Stickup	207.34	No GS	207.34	2
3333	A7877	299-W22-73	60	211.296	Top of casing, north edge, stamped X				567597.668	134511.611		##################		No Stickup	No DISC Z	No GS	210.38	
3333	A7877	299-W22-73	60	211.296	Top of casing, north edge, stamped X				567597.668	134511.611	0.9	01-Sep-04		211.02	No DISC Z	No GS	211.02	3
3334	A7878	299-W22-74	174	208.855	Top of casing, north edge, stamped X				567547.903	133926.126	1.92	29-Sep-99		208.27	No DISC Z	No GS	208.27	3
3334	A7878	299-W22-74	174	208.855	Top of casing, north edge, stamped X				567547.903	133926.126	1.9	10-Feb-03		208.28	No DISC Z	No GS	208.28	
3335	A7879	299-W22-75	175	211.586	Top of casing, north edge, stamped X				567594.191	134490.421		##################		No Stickup	No DISC Z	No GS	210.67	
3335	A7879	299-W22-75	175	211.586	Top of casing, north edge, stamped X				567594.191	134490.421	1.3	23-Feb-04		211.19	No DISC Z	No GS	211.19	3
3338	A7882	299-W22-78				210.997	Brass survey marker	210.997	567606.03	134499.76		##################		No TOC	211.00	211.00	211.00	1
3339	B8552	299-W22-79	286	211.735	Top of casing, stamped X			210.941	567629.54	134464.846		##################		No Stickup	210.94	No GS	210.94	2
3340	C3115	299-W22-80	251	200.851	Top of casing, stamped X			199.971	566842.851	134125.649	2.84	19-Sep-00		199.99	199.97	No GS	199.97	2
3341	C3123	299-W22-81	270	206.644	Top of casing			205.909	567000.263	134354.189	2.39	05-Apr-01		205.92	205.91	No GS	205.91	
3341	C3123	299-W22-81	270	206.644	Top of casing			205.909	567000.263	134354.189	2.4	14-Jan-04		205.91	205.91	No GS	205.91	2
3342	C3124	299-W22-82		206.872	Top of casing			206.127	567004.731	134167.07	2.4	05-Apr-01		206.14	206.13	No GS	206.13	
3342	C3124	299-W22-82		206.872	Top of casing			206.127	567004.731	134167.07	2.4	17-Oct-05		206.14	206.13	No GS	206.13	
3342	C3124	299-W22-82		206.872	Top of casing			206.127	567004.731	134167.07	2.4	20-Dec-05		206.14	206.13	No GS	206.13	
3342	C3124	299-W22-82		206.872	Top of casing			206.127	567004.731	134167.07		23-Mar-06		No Stickup	206.13	No GS	206.13	

sortOrder	Well_ID	WellName	Total Depth (ft)	Top of Casing Elevation (m)	Top of Casing Survey Point Description	Ground Surface Elevation (m)	Ground Surface Survey Point Description	DISC_Z	EASTING	NORTHING	WELL_STICKUP	DATE_INSPECTED	In Tank Farm?	Ground Surface Elevation from TOC-Stickup (m) - Priority 3	DISC Z from HWIS (m) - Priority 2	Ground Surface Elevation, from HWIS (m) - Priority 1	Best Est. Ground Surface Elevation (m)	Best Est. Rank
3342	C3124	299-W22-82		206.872	Top of casing			206.127	567004.731	134167.07		10-Jan-07		No Stickup	206.13	No GS	206.13	2
3343	C3126	299-W22-83		207.015	Top of casing			206.338	567009.082	134092.546	2.22	05-Apr-01		206.34	206.34	No GS	206.34	2
3344	C3398	299-W22-84	273.5	208.51	Top of casing, stamped X			207.793	566978.76	134547.62		##########		No Stickup	207.79	No GS	207.79	
3344	C3398	299-W22-84	273.5	208.51	Top of casing, stamped X			207.793	566978.76	134547.62		12-Nov-01		No Stickup	207.79	No GS	207.79	
3344	C3398	299-W22-84	273.5	208.51	Top of casing, stamped X			207.793	566978.76	134547.62		14-Mar-02		No Stickup	207.79	No GS	207.79	
3344	C3398	299-W22-84	273.5	208.51	Top of casing, stamped X			207.793	566978.76	134547.62		24-Sep-02		No Stickup	207.79	No GS	207.79	2
3345	C3399	299-W22-85		204.409	Top of casing, stamped X			203.682	566902.9	134260.58		##########		No Stickup	203.68	No GS	203.68	
3345	C3399	299-W22-85		204.409	Top of casing, stamped X			203.682	566902.9	134260.58		12-Nov-01		No Stickup	203.68	No GS	203.68	
3345	C3399	299-W22-85		204.409	Top of casing, stamped X			203.682	566902.9	134260.58		21-Mar-02		No Stickup	203.68	No GS	203.68	
3345	C3399	299-W22-85		204.409	Top of casing, stamped X			203.682	566902.9	134260.58	2.37	17-Jan-07		203.69	203.68	No GS	203.68	2
3346	C4971	299-W22-86	350	206.417	Top of pump plate, north edge			205.7	567186.74	134041.31	2.38	27-Apr-06		205.69	205.70	No GS	205.70	
3346	C4971	299-W22-86	350	206.417	Top of pump plate, north edge			205.7	567186.74	134041.31		23-May-06		No Stickup	205.70	No GS	205.70	
3346	C4971	299-W22-86	350	206.417	Top of pump plate, north edge			205.7	567186.74	134041.31		02-Jan-07		No Stickup	205.70	No GS	205.70	2
3347	C4977	299-W22-87	379.5	212.015	Top of casing, north edge			211.274	567541.75	134539.88		30-Mar-06		No Stickup	211.27	No GS	211.27	2
3349	A4979	299-W23-1	262	204.057	Top of casing, north edge, stamped X			203.924	566850.156	134424.771	0.5	05-Jun-52	241-S	203.90	203.92	No GS	203.92	
3349	A4979	299-W23-1	262	204.057	Top of casing, north edge, stamped X			203.924	566850.156	134424.771	1.5	11-Apr-01	241-S	203.60	203.92	No GS	203.92	2
3350	A4985	299-W23-2	236	203.254	Top of casing, north edge, stamped X			203.094	566853.868	134258.585		09-Sep-54	241-SX	No Stickup	203.09	No GS	203.09	
3350	A4985	299-W23-2	236	203.254	Top of casing, north edge, stamped X			203.094	566853.868	134258.585	0.5	09-Sep-54	241-SX	203.10	203.09	No GS	203.09	2
3351	A4986	299-W23-3	232	203.28	Top of casing, stamped X			203.131	566851.07	134162.585	0.5	##########	241-SX	203.13	203.13	No GS	203.13	
3351	A4986	299-W23-3	232	203.28	Top of casing, stamped X			203.131	566851.07	134162.585		30-Aug-95	241-SX	No Stickup	203.13	No GS	203.13	2
3352	A4987	299-W23-4	300	202.999	Top of casing, north edge, stamped X				566628.216	134391.881	1.5	05-Jan-00		202.54	No DISC Z	No GS	202.54	3
3352	A4987	299-W23-4	300	202.999	Top of casing, north edge, stamped X				566628.216	134391.881	1.5	27-Jun-01		202.54	No DISC Z	No GS	202.54	
3353	A4988	299-W23-5	250	203.501	Top of outer casing, north edge			203.355	566871.01	134190.35	4	##########	241-SX	202.28	203.36	No GS	203.36	2
3354	A4989	299-W23-6	250	204.293	Top of outer casing, north edge				566871.04	134131.95	3	##########		203.38	No DISC Z	No GS	203.38	
3354	A4989	299-W23-6	250	204.293	Top of outer casing, north edge				566871.04	134131.95	2.95	04-Apr-03		203.39	No DISC Z	No GS	203.39	3
3354	A4989	299-W23-6	250	204.293	Top of outer casing, north edge				566871.04	134131.95	2.95	23-Feb-04		203.39	No DISC Z	No GS	203.39	
3354	A4989	299-W23-6	250	204.293	Top of outer casing, north edge				566871.04	134131.95	2.95	19-May-04		203.39	No DISC Z	No GS	203.39	
3354	A4989	299-W23-6	250	204.293	Top of outer casing, north edge				566871.04	134131.95	2.87	19-May-04		203.42	No DISC Z	No GS	203.42	
3355	A4990	299-W23-7	250	203.304	Top of casing, north edge, stamped X			203.153	566870.358	134342.347	0.5	##########	241-SX	203.15	203.15	No GS	203.15	
3355	A4990	299-W23-7	250	203.304	Top of casing, north edge, stamped X			203.153	566870.358	134342.347		30-Aug-95	241-SX	No Stickup	203.15	No GS	203.15	2
3356	A4991	299-W23-8	235	203.437	Top of outer casing, north edge				566707.13	134287.75	3	##########		202.52	No DISC Z	No GS	202.52	
3356	A4991	299-W23-8	235	203.437	Top of outer casing, north edge				566707.13	134287.75	2.9	11-Mar-03		202.55	No DISC Z	No GS	202.55	3
3357	A7883	299-W23-9	235	203.708	Top of casing, north edge, stamped X			202.741	566641.985	134274.625	3.17	20-Jun-01		202.74	202.74	No GS	202.74	
3357	A7883	299-W23-9	235	203.708	Top of casing, north edge, stamped X			202.741	566641.985	134274.625		11-Apr-02		No Stickup	202.74	No GS	202.74	
3357	A7883	299-W23-9	235	203.708	Top of casing, north edge, stamped X			202.741	566641.985	134274.625	2.96	13-Sep-05		202.81	202.74	No GS	202.74	2
3358	A7884	299-W23-10	235	203.79	Top of casing, north edge, stamped X			202.823	566570.346	134256.322	3.18	25-Jun-01		202.82	202.82	No GS	202.82	
3358	A7884	299-W23-10	235	203.79	Top of casing, north edge, stamped X			202.823	566570.346	134256.322		20-Aug-02		No Stickup	202.82	No GS	202.82	
3358	A7884	299-W23-10	235	203.79	Top of casing, north edge, stamped X			202.823	566570.346	134256.322		03-Feb-03		No Stickup	202.82	No GS	202.82	
3358	A7884	299-W23-10	235	203.79	Top of casing, north edge, stamped X			202.823	566570.346	134256.322	3.15	14-Apr-03		202.83	202.82	No GS	202.82	
3358	A7884	299-W23-10	235	203.79	Top of casing, north edge, stamped X			202.823	566570.346	134256.322	3.15	22-Aug-03		202.83	202.82	No GS	202.82	
3358	A7884	299-W23-10	235	203.79	Top of casing, north edge, stamped X			202.823	566570.346	134256.322	3.15	22-Oct-06		202.83	202.82	No GS	202.82	
3358	A7884	299-W23-10	235	203.79	Top of casing, north edge, stamped X			202.823	566570.346	134256.322	3.15	24-Oct-07		202.83	202.82	No GS	202.82	2
3359	A4980	299-W23-11	235	203.552	Top of casing, north edge, stamped X			202.709	566512.273	134299.012	2.8	##########		202.70	202.71	No GS	202.71	
3359	A4980	299-W23-11	235	203.552	Top of casing, north edge, stamped X			202.709	566512.273	134299.012	2.8	22-Aug-03		202.70	202.71	No GS	202.71	2
3360	A4981	299-W23-12		204.108	Top of outer casing, north edge			203.955	566847.44	134424.74	0.5	##########	241-S	203.96	203.96	No GS	203.96	2
3361	A4982	299-W23-13	218.2	204.162	stamped X			203.255	566712.8	134445.93	3.03	25-Jan-00		203.24	203.26	No GS	203.26	
3361	A4982	299-W23-13	218.2	204.162	stamped X			203.255	566712.8	134445.93	3.05	11-Dec-03		203.23	203.26	No GS	203.26	2
3362	A4983	299-W23-14	224.4	203.452	stamped X			202.535	566708.67	134290.17		17-Sep-98		No Stickup	202.54	No GS	202.54	
3362	A4983	299-W23-14	224.4	203.452	stamped X			202.535	566708.67	134290.17	2.98	27-Jun-00		202.54	202.54	No GS	202.54	
3362	A4983	299-W23-14	224.4	203.452	stamped X			202.535	566708.67	134290.17	3	20-Feb-03		202.54	202.54	No GS	202.54	
3362	A4983	299-W23-14	224.4	203.452	stamped X			202.535	566708.67	134290.17	3	06-Jul-04		202.54	202.54	No GS	202.54	
3362	A4983	299-W23-14	224.4	203.452	stamped X			202.535	566708.67	134290.17	3	01-Sep-04		202.54	202.54	No GS	202.54	
3362	A4983	299-W23-14	224.4	203.452	stamped X			202.535	566708.67	134290.17		15-Jun-06		No Stickup	202.54	No GS	202.54	2
3363	A4984	299-W23-15	225	200.843	Top of outer casing, north edge			199.795	566794	134127.23	3.44	##########		199.79	199.80	No GS	199.80	
3363	A4984	299-W23-15	225	200.843	Top of outer casing, north edge			199.795	566794	134127.23		31-Jul-98		No Stickup	199.80	No GS	199.80	
3363	A4984	299-W23-15	225	200.843	Top of outer casing, north edge			199.795	566794	134127.23	3.44	27-Mar-07		199.79	199.80	No GS	199.80	2
3364	A7885	299-W23-16	237	206.378	Top of casing			205.458	566657.069	134661.516		##########		No Stickup	205.46	No GS	205.46	
3364	A7885	299-W23-16	237	206.378	Top of casing			205.458	566657.069	134661.516	3	25-Mar-03		205.46	205.46	No GS	205.46	
3364	A7885	299-W23-16	237	206.378	Top of casing			205.458	566657.069	134661.516	3	29-Jul-03		205.46	205.46	No GS	205.46	2
3365	A7886	299-W23-17	232.8	204.136	Top of casing			203.213	566532.111	134630.756		##########		No Stickup	203.21	No GS	203.21	
3365	A7886	299-W23-17	232.8	204.136	Top of casing			203.213	566532.111	134630.756	3.02	05-Nov-02		203.22	203.21	No GS	203.21	
3365	A7886	299-W23-17	232.8	204.136	Top of casing			203.213	566532.111	134630.756	3.02	29-Jul-03		203.22	203.21	No GS	203.21	2
3366	B8809	299-W23-19	246			202.49	Ground surface		566759.115	134166.653		##########	241-SX	No TOC	No DISC Z	202.49	202.49	
3366	B8809	299-W23-19	246			202.49	Ground surface		566759.115	134166.653		10-Oct-02	241-SX	No TOC	No DISC Z	202.49	202.49	
3366	B8809	299-W23-19	246			202.49	Ground surface		566759.115	134166.653		16-Jan-03	241-SX	No TOC	No DISC Z	202.49	202.49	
3366	B8809	299-W23-19	246			202.49	Ground surface		566759.115	134166.653		20-Apr-04	241-SX	No TOC	No DISC Z	202.49	202.49	
3366	B8809	299-W23-19	246			202.49	Ground surface		566759.115	134166.653		22-Jun-06	241-SX	No TOC	No DISC Z	202.49	202.49	1
3367	C3112	299-W23-20	260	203.795	Top of casing, stamped X			203.095	566717.669	134446.189	2.23	19-Sep-00		203.12	203.10	No GS	203.10	
3367	C3112	299-W23-20	260	203.795	Top of casing, stamped X			203.095	566717.669	134446.189		14-Mar-02		No Stickup	203.10	No GS	203.10	
3367	C3112	299-W23-20	260	203.795	Top of casing, stamped X			203.095	566717.669	134446.189		13-Jul-04		No Stickup	203.10	No GS	203.10	
3367	C3112	299-W23-20	260	203.795	Top of casing, stamped X			203.095	566717.669	134446.189		09-Jan-07		No Stickup	203.10	No GS	203.10	2
3368	C3113	299-W23-21	259	203.352	Top of casing, stamped X			202.579	566707.737	134293.994		16-Jan-01		No Stickup	202.58	No GS	202.58	
3368	C3113	299-W23-21	259	203.352	Top of casing, stamped X			202.579	566707.737	134293.994		21-Mar-02		No Stickup	202.58	No GS	202.58	2
3369	A7887	299-W23-51	150	204.046	Top of casing, north edge, stamped X				566849.897	134487.101	0	##########	241-S	204.05	No DISC Z	No GS	204.05	3
3370	A7888	299-W23-52	150	204.058	Top of casing, north edge, stamped X			204.059	566815.338	134509.725	0	##########	241-S	204.06	204.06	No GS	204.06	2
3371	A7889	299-W23-53	150	203.263	Top of casing, north edge, stamped X				566785.253	134490.365	0	##########	241-S	203.26	No DISC Z	No GS	203.26	3
3372	A7890	299-W23-54	150	204.31	Top of casing, north edge, stamped X				566817.493	134458.708		##########	241-S	No Stickup	No DISC Z	No GS	204.31	4
3373	A7891	299-W23-55	150	203.379	Top of casing, north edge, stamped X				566785.477	134458.658		##########	241-S	No Stickup	No DISC Z	No GS	203.38	4
3374	A7892	299-W23-56	150	204.2	Top of casing, north edge, stamped X				566817.631	134395.675	0.8	##########	241-S	203.96	No DISC Z	No GS	203.96	3
3375	A7893	299-W23-57	150	203.367	Top of casing, north edge, stamped X				566785.551	134427.63	0	##########	241-S	203.37	No DISC Z	No GS	203.37	3
3376	A7894	299-W23-58	101	202.729	Top of casing, north edge, stamped X				566763.544	134281.229		##########	241-SX	No Stickup	No DISC Z	No GS	202.73	4
3377	A7895	299-W23-59	101	202.97	Top of casing, north edge, stamped X				566789.481	134286.108	0	##########	241-SX	202.97	No DISC Z	No GS	202.97	3
3378	A7896	299-W23-60	101	203.735	Top of casing, north edge, stamped X				566819.987	134286.006	1	##########	241-SX	203.43	No DISC Z	No GS	203.43	3
3379	A7897	299-W23-61	102	203.167	Top of casing, north edge, stamped X				566853.482	134286.014	0	##########	241-SX	203.17	No DISC Z	No GS	203.17	3
3380	A7898	299-W23-62	101	203.211	Top of casing, north edge, stamped X			203.2	566824.696	134254.065	0	##########	241-SX	203.21	203.20	No GS	203.20	2
3381	A7899	299-W23-63		203.128	Top of casing, north edge, stamped X				566610.647	134408.87		29-Sep-99		No Stickup	No DISC Z	No GS	202.21	4
3381	A7899	299-W23-63		203.128	Top of casing, north edge, stamped X				566610.647	134408.87		29-Dec-05		No Stickup	No DISC Z	No GS	202.21	4
3382	A7900	299-W23-64	125	202.791	Top of casing, north edge, stamped X				566791.262	134216.627		##########	241-SX	No Stickup	No DISC Z	No GS	202.79	4
3383	A7901	299-W23-65	125	202.537	Top of casing, north edge, stamped X				566756.746	134219.298		##########	241-SX	No Stickup	No DISC Z	No GS	202.54	4

sortOrder	Well_ID	WellName	Total Depth (ft)	Top of Casing Elevation (m)	Top of Casing Survey Point Description	Ground Surface Elevation (m)	Ground Surface Survey Point Description	DISC_Z	EASTING	NORTHING	WELL_STICKUP	DATE_INSPECTED	In Tank Farm?	Ground Surface Elevation from TOC-Stickup (m) - Priority 3	DISC Z from HWIS (m) - Priority 2	Ground Surface Elevation, from HWIS (m) - Priority 1	Best Est. Ground Surface Elevation (m)	Best Est. Rank
3384	A7902	299-W23-66	126	203.271	Top of casing, north edge, stamped X				566850.972	134211.877		##########	241-SX	No Stickup	No DISC Z	No GS	203.27	4
3385	A7903	299-W23-67	126	203.07	Top of casing, north edge, stamped X				566821.399	134212.249		##########	241-SX	No Stickup	No DISC Z	No GS	203.07	4
3386	A7904	299-W23-68	125	202.809	Top of casing, north edge, stamped X			202.821	566785.738	134192.418		##########	241-SX	No Stickup	202.82	No GS	202.82	2
3387	A7905	299-W23-69	125	203.078	Top of casing, north edge, stamped X				566813.81	134160.111		##########	241-SX	No Stickup	No DISC Z	No GS	203.08	4
3388	A7906	299-W23-70	125	202.443	Top of casing, north edge, stamped X				566765.965	134159.816		##########	241-SX	No Stickup	No DISC Z	No GS	202.44	4
3389	A7907	299-W23-71	54	204.671	Top of casing (assumed)				566641.957	134372.75		##########		No Stickup	No DISC Z	No GS	203.76	4
3389	A7907	299-W23-71	54	204.671	Top of casing (assumed)				566641.957	134372.75		17-Nov-03		No Stickup	No DISC Z	No GS	203.76	4
3390	A7908	299-W23-72	100	203.139	Top of casing, north edge, stamped X				566823.404	134182.964		##########	241-SX	No Stickup	No DISC Z	No GS	203.14	4
3391	A7909	299-W23-73	88	203.144	Top of casing, north edge, stamped X			203.108	566834.497	134250.076		##########	241-SX	No Stickup	203.11	No GS	203.11	2
3392	A7910	299-W23-74	75	203.183	Top of casing, north edge, stamped X				566845.827	134245.823		##########	241-SX	No Stickup	No DISC Z	No GS	203.18	4
3393	A7911	299-W23-75	75	203.213	Top of casing, north edge, stamped X				566850.059	134233.987		##########	241-SX	No Stickup	No DISC Z	No GS	203.21	4
3394	A7912	299-W23-76	75	203.294	Top of casing, north edge, stamped X				566843.373	134223.004		##########	241-SX	No Stickup	No DISC Z	No GS	203.29	4
3395	A7913	299-W23-77	75	203.222	Top of casing, north edge, stamped X				566830.698	134221.128		##########	241-SX	No Stickup	No DISC Z	No GS	203.22	4
3396	A7914	299-W23-78	75	203.18	Top of casing, north edge, stamped X				566821.309	134230.232		##########	241-SX	No Stickup	No DISC Z	No GS	203.18	4
3397	A7915	299-W23-79	75	203.202	Top of casing, north edge, stamped X				566822.744	134242.969		##########	241-SX	No Stickup	No DISC Z	No GS	203.20	4
3398	A7916	299-W23-80	135	203.22	Top of casing, north edge, stamped X				566841.599	134217.453		##########	241-SX	No Stickup	No DISC Z	No GS	203.22	4
3399	A7917	299-W23-81	75	203.246	Top of casing, north edge, stamped X				566850.134	134202.859		##########	241-SX	No Stickup	No DISC Z	No GS	203.25	4
3400	A7918	299-W23-82	75	203.225	Top of casing, north edge, stamped X				566843.778	134191.855		##########	241-SX	No Stickup	No DISC Z	No GS	203.23	4
3401	A7919	299-W23-83	75	203.134	Top of casing, north edge, stamped X				566832.459	134189.661		##########	241-SX	No Stickup	No DISC Z	No GS	203.13	4
3402	A7920	299-W23-84	75	203.17	Top of casing, north edge, stamped X				566822.074	134198.088		##########	241-SX	No Stickup	No DISC Z	No GS	203.17	4
3403	A7921	299-W23-85	75	203.151	Top of casing, north edge, stamped X				566827.796	134216.407		##########	241-SX	No Stickup	No DISC Z	No GS	203.15	4
3404	A7922	299-W23-86	75	203.076	Top of casing, north edge, stamped X				566818.822	134168.792		##########	241-SX	No Stickup	No DISC Z	No GS	203.08	4
3405	A7923	299-W23-87	75	203.01	Top of casing, north edge, stamped X				566802.771	134158.079		##########	241-SX	No Stickup	No DISC Z	No GS	203.01	4
3406	A7924	299-W23-88	75	202.877	Top of casing, north edge, stamped X				566793.582	134163.121		##########	241-SX	No Stickup	No DISC Z	No GS	202.88	4
3407	A7925	299-W23-89	75	202.678	Top of casing, north edge, stamped X				566789.869	134174.902		##########	241-SX	No Stickup	No DISC Z	No GS	202.68	4
3408	A7926	299-W23-90	75	202.775	Top of casing, north edge, stamped X				566795.612	134184.472		##########	241-SX	No Stickup	No DISC Z	No GS	202.78	4
3409	A7927	299-W23-91	75	202.983	Top of casing, north edge, stamped X				566815.766	134182.354		##########	241-SX	No Stickup	No DISC Z	No GS	202.98	4
3410	A7928	299-W23-92	135	203	Top of casing, north edge, stamped X				566813.986	134192.757		##########	241-SX	No Stickup	No DISC Z	No GS	203.00	4
3411	A7929	299-W23-93	75	202.982	Top of casing, north edge, stamped X				566804.419	134188.108		##########	241-SX	No Stickup	No DISC Z	No GS	202.98	4
3412	A7930	299-W23-94	135	202.892	Top of casing, north edge, stamped X				566792.731	134195.072		##########	241-SX	No Stickup	No DISC Z	No GS	202.89	4
3413	A7931	299-W23-95	75	202.71	Top of casing, north edge, stamped X				566790.03	134206.067		##########	241-SX	No Stickup	No DISC Z	No GS	202.71	4
3414	A7932	299-W23-96	75	203.09	Top of casing, north edge, stamped X				566812.282	134216.136		##########	241-SX	No Stickup	No DISC Z	No GS	203.09	4
3415	A7933	299-W23-97	75	203.119	Top of casing, north edge, stamped X				566818.939	134206.129		##########	241-SX	No Stickup	No DISC Z	No GS	203.12	4
3416	A7934	299-W23-98	75	203.044	Top of casing, north edge, stamped X				566815.28	134225.256		##########	241-SX	No Stickup	No DISC Z	No GS	203.04	4
3417	A7935	299-W23-99	135	202.863	Top of casing, north edge, stamped X				566804.397	134220.432		##########	241-SX	No Stickup	No DISC Z	No GS	202.86	4
3418	A7936	299-W23-100	75	202.887	Top of casing, north edge, stamped X				566793.108	134225.802		##########	241-SX	No Stickup	No DISC Z	No GS	202.89	4
3419	A7937	299-W23-101	75	202.801	Top of casing, north edge, stamped X				566797.645	134248.121		##########	241-SX	No Stickup	No DISC Z	No GS	202.80	4
3420	A7938	299-W23-102	75	202.944	Top of casing, north edge, stamped X				566811.292	134247.915		##########	241-SX	No Stickup	No DISC Z	No GS	202.94	4
3421	A7939	299-W23-103	75	203.16	Top of casing, north edge, stamped X				566818.899	134237.134		##########	241-SX	No Stickup	No DISC Z	No GS	203.16	4
3422	A7940	299-W23-104	75	202.764	Top of casing, north edge, stamped X				566787.935	134237.516		##########	241-SX	No Stickup	No DISC Z	No GS	202.76	4
3423	A7941	299-W23-105	105	202.688	Top of casing, north edge, stamped X				566784.301	134225.659		##########	241-SX	No Stickup	No DISC Z	No GS	202.69	4
3424	A7942	299-W23-106	75	202.657	Top of casing, north edge, stamped X				566772.375	134219.487		##########	241-SX	No Stickup	No DISC Z	No GS	202.66	4
3425	A7943	299-W23-107	75	202.575	Top of casing, north edge, stamped X				566761.755	134226.173		##########	241-SX	No Stickup	No DISC Z	No GS	202.58	4
3426	A7944	299-W23-108	130	202.562	Top of casing, north edge, stamped X				566759.327	134238.599		##########	241-SX	No Stickup	No DISC Z	No GS	202.56	4
3427	A7945	299-W23-109	75	202.557	Top of casing, north edge, stamped X				566767.108	134248.322		##########	241-SX	No Stickup	No DISC Z	No GS	202.56	4
3428	A7946	299-W23-110	75	202.628	Top of casing, north edge, stamped X				566780.024	134248.082		##########	241-SX	No Stickup	No DISC Z	No GS	202.63	4
3429	A7947	299-W23-111	125	202.666	Top of casing, north edge, stamped X				566784.624	134213.404		##########	241-SX	No Stickup	No DISC Z	No GS	202.67	4
3430	A7948	299-W23-112	75	202.76	Top of casing, north edge, stamped X				566786.997	134198.721		##########	241-SX	No Stickup	No DISC Z	No GS	202.76	4
3431	A7949	299-W23-113	75	202.672	Top of casing, north edge, stamped X				566774.603	134188.339		##########	241-SX	No Stickup	No DISC Z	No GS	202.67	4
3432	A7950	299-W23-114	75	202.535	Top of casing, north edge, stamped X				566765.519	134191.727		##########	241-SX	No Stickup	No DISC Z	No GS	202.54	4
3433	A7951	299-W23-115	75	202.575	Top of casing, north edge, stamped X				566759.35	134200.195		##########	241-SX	No Stickup	No DISC Z	No GS	202.58	4
3434	A7952	299-W23-116	75	202.567	Top of casing, north edge, stamped X				566761.153	134211.729		##########	241-SX	No Stickup	No DISC Z	No GS	202.57	4
3435	A7953	299-W23-117	75	202.649	Top of casing, north edge, stamped X				566786.183	134180.113		##########	241-SX	No Stickup	No DISC Z	No GS	202.65	4
3436	A7954	299-W23-118	75	202.624	Top of casing, north edge, stamped X				566787.186	134167.333		##########	241-SX	No Stickup	No DISC Z	No GS	202.62	4
3437	A7955	299-W23-119	75	202.603	Top of casing, north edge, stamped X				566778.032	134158.64		##########	241-SX	No Stickup	No DISC Z	No GS	202.60	4
3438	A7956	299-W23-120	75	202.535	Top of casing, north edge, stamped X				566759.08	134169.72		##########	241-SX	No Stickup	No DISC Z	No GS	202.54	4
3439	A7957	299-W23-121	125	202.491	Top of casing, north edge, stamped X				566762.806	134182.859		##########	241-SX	No Stickup	No DISC Z	No GS	202.49	4
3440	A7958	299-W23-122	100	203.89	Top of casing, north edge, stamped X				566826.044	134460.307	0	##########	241-S	203.89	No DISC Z	No GS	203.89	3
3441	A7959	299-W23-123	100	203.977	Top of casing, north edge, stamped X				566843.667	134482.887	0	##########	241-S	203.98	No DISC Z	No GS	203.98	3
3442	A7960	299-W23-124	100	204.011	Top of casing, north edge, stamped X				566845.408	134461.495	0	##########	241-S	204.01	No DISC Z	No GS	204.01	3
3443	A7961	299-W23-125	135	202.86	Top of casing, north edge, stamped X				566809.473	134252.474		##########	241-SX	No Stickup	No DISC Z	No GS	202.86	4
3444	A7962	299-W23-126	130	202.812	Top of casing, north edge, stamped X			202.8	566796.608	134254.015		##########	241-SX	No Stickup	202.80	No GS	202.80	2
3445	A7963	299-W23-127	130	202.823	Top of casing, north edge, stamped X			202.787	566789.102	134264.322		##########	241-SX	No Stickup	202.79	No GS	202.79	2
3446	A7964	299-W23-128	130	202.922	Top of casing, north edge, stamped X			202.904	566791.302	134273.747		##########	241-SX	No Stickup	202.90	No GS	202.90	2
3447	A7965	299-W23-129	130	203.094	Top of casing, north edge, stamped X			203.068	566806.486	134280.834		##########	241-SX	No Stickup	203.07	No GS	203.07	2
3448	A7966	299-W23-130	130	203.135	Top of casing, north edge, stamped X			203.109	566816.799	134273.851		##########	241-SX	No Stickup	203.11	No GS	203.11	2
3449	A7967	299-W23-131	130	203.105	Top of casing, north edge, stamped X			203.072	566818.69	134263.199		##########	241-SX	No Stickup	203.07	No GS	203.07	2
3450	A7968	299-W23-132	140	203.099	Top of casing, north edge, stamped X				566841.973	134309.074	0	##########	241-SX	203.10	No DISC Z	No GS	203.10	3
3451	A7969	299-W23-133	100	203.102	Top of casing, north edge, stamped X				566835.306	134283.901	0	##########	241-SX	203.10	No DISC Z	No GS	203.10	3
3452	A7970	299-W23-134	100	203.073	Top of casing, north edge, stamped X				566822.972	134291.779	0	##########	241-SX	203.07	No DISC Z	No GS	203.07	3
3453	A7971	299-W23-135	140	203.096	Top of casing, north edge, stamped X			203.092	566810.817	134308.801	0	##########	241-SX	203.10	203.09	No GS	203.09	2
3454	A7972	299-W23-136	100	202.708	Top of casing, north edge, stamped X				566790.866	134295.925	0	##########	241-SX	202.71	No DISC Z	No GS	202.71	3
3455	A7973	299-W23-137	140	202.659	Top of casing, north edge, stamped X				566772.974	134310.495	0	##########	241-SX	202.66	No DISC Z	No GS	202.66	3
3456	A7974	299-W23-138	100	202.772	Top of casing, north edge, stamped X				566773.342	134283.742	0	##########	241-SX	202.77	No DISC Z	No GS	202.77	3
3457	A7975	299-W23-139	100	202.601	Top of casing, north edge, stamped X				566759.65	134295.926	0	##########	241-SX	202.60	No DISC Z	No GS	202.60	3
3458	A7976	299-W23-140	100	203.142	Top of casing, north edge, stamped X				566842.671	134277.912	0	##########	241-SX	203.14	No DISC Z	No GS	203.14	3
3459	A7977	299-W23-141	100	203.073	Top of casing, north edge, stamped X				566828.092	134277.107	0	##########	241-SX	203.07	No DISC Z	No GS	203.07	3
3460	A7978	299-W23-142	100	202.918	Top of casing, north edge, stamped X			202.903	566779.924	134277.528		##########	241-SX	No Stickup	202.90	No GS	202.90	2
3461	A7979	299-W23-143	140	202.671	Top of casing, north edge, stamped X				566782.572	134256.584		##########	241-SX	No Stickup	No DISC Z	No GS	202.67	4
3462	A7980	299-W23-144	100	202.589	Top of casing, north edge, stamped X				566759.8	134264.763		##########	241-SX	No Stickup	No DISC Z	No GS	202.59	4
3463	A7981	299-W23-145	100	203.894	Top of casing, north edge, stamped X				566841.757	134515.006	0	##########	241-S	203.89	No DISC Z	No GS	203.89	3
3464	A7982	299-W23-146	100	203.866	Top of casing, north edge, stamped X				566834.77	134488.65	0	##########	241-S	203.87	No DISC Z	No GS	203.87	3
3465	A7983	299-W23-147	100	205.286	Top of casing, north edge, stamped X				566821.987	134496.935	2	##########	241-S	204.68	No DISC Z	No GS	204.68	3
3466	A7984	299-W23-148	100	203.481	Top of casing, north edge, stamped X				566810.688	134514.945	0	##########	241-S	203.48	No DISC Z	No GS	203.48	3
3467	A7985	299-W23-149	100	203.315	Top of casing, north edge, stamped X				566798.674	134489.545	0	##########	241-S	203.32	No DISC Z	No GS	203.32	3
3468	A7986	299-W23-150	100	203.327	Top of casing, north edge, stamped X				566790.522	134507.539	0	##########	241-S	203.33	No DISC Z	No GS	203.33	3
3469	A7987	299-W23-151	100	203.208	Top of casing, north edge, stamped X				566779.591	134514.76	0	##########	241-S	203.21	No DISC Z	No GS	203.21	3
3470	A7988	299-W23-152	100	203.197	Top of casing, north edge, stamped X				566767.686	134489.509	0	##########	241-S	203.20	No DISC Z	No GS	203.20	3
3471	A7989	299-W23-153	100	203.011	Top of casing, north edge, stamped X				566759.473	134507.492	0	##########	241-S	203.01	No DISC Z	No GS	203.01	3

sortOrder	Well_ID	WellName	Total Depth (ft)	Top of Casing Elevation (m)	Top of Casing Survey Point Description	Ground Surface Elevation (m)	Ground Surface Survey Point Description	DISC_Z	EASTING	NORTHING	WELL_STICKUP	DATE_INSPECTED	In Tank Farm?	Ground Surface Elevation from TOC-Stickup (m) - Priority 3	DISC Z from HWIS (m) - Priority 2	Ground Surface Elevation, from HWIS (m) - Priority 1	Best Est. Ground Surface Elevation (m)	Best Est. Rank
3472	A7990	299-W23-154	100	204.236	Top of casing, north edge, stamped X				566816.765	134476.471	0	##########	241-S	204.24	No DISC Z	No GS	204.24	3
3473	A7991	299-W23-155	100	203.393	Top of casing, north edge, stamped X				566798.885	134458.402	0	##########	241-S	203.39	No DISC Z	No GS	203.39	3
3474	A7992	299-W23-156	100	203.294	Top of casing, north edge, stamped X				566790.649	134476.385	0	##########	241-S	203.29	No DISC Z	No GS	203.29	3
3475	A7993	299-W23-157	100	203.246	Top of casing, north edge, stamped X				566782.47	134481.206	0	##########	241-S	203.25	No DISC Z	No GS	203.25	3
3476	A7994	299-W23-158	100	203.245	Top of casing, north edge, stamped X				566767.76	134458.487	0	##########	241-S	203.25	No DISC Z	No GS	203.25	3
3477	A7995	299-W23-159	100	203.134	Top of casing, north edge, stamped X				566759.615	134476.31	0	##########	241-S	203.13	No DISC Z	No GS	203.13	3
3478	A7996	299-W23-160	100	203.93	Top of casing, north edge, stamped X				566841.936	134452.597	0	##########	241-S	203.93	No DISC Z	No GS	203.93	3
3479	A7997	299-W23-161	100	203.872	Top of casing, north edge, stamped X				566835.569	134425.376	0	##########	241-S	203.87	No DISC Z	No GS	203.87	3
3480	A7998	299-W23-162	100	203.885	Top of casing, north edge, stamped X				566822.671	134447.553	0	##########	241-S	203.89	No DISC Z	No GS	203.89	3
3481	A7999	299-W23-163	100	203.499	Top of casing, north edge, stamped X				566803.93	134427.386	0	##########	241-S	203.50	No DISC Z	No GS	203.50	3
3482	A8000	299-W23-164	100	203.368	Top of casing, north edge, stamped X				566789.828	134441.724	0	##########	241-S	203.37	No DISC Z	No GS	203.37	3
3483	A8001	299-W23-165	100	203.353	Top of casing, north edge, stamped X				566782.555	134450.17	0	##########	241-S	203.35	No DISC Z	No GS	203.35	3
3484	A8002	299-W23-166	100	203.285	Top of casing, north edge, stamped X				566770.365	134426.712	0	##########	241-S	203.29	No DISC Z	No GS	203.29	3
3485	A8003	299-W23-167	100	203.135	Top of casing, north edge, stamped X				566759.64	134445.172	0	##########	241-S	203.14	No DISC Z	No GS	203.14	3
3486	A8004	299-W23-168	100	203.946	Top of casing, north edge, stamped X				566848.995	134410.824	0	##########	241-S	203.95	No DISC Z	No GS	203.95	3
3487	A8005	299-W23-169	100	203.824	Top of casing, north edge, stamped X				566835.155	134395.511	0	##########	241-S	203.82	No DISC Z	No GS	203.82	3
3488	A8006	299-W23-170	100	204.363	Top of casing, north edge, stamped X				566820.941	134410.661	2	##########	241-S	203.75	No DISC Z	No GS	203.75	3
3489	A8007	299-W23-171	100	203.814	Top of casing, north edge, stamped X			203.808	566810.842	134421.601	0	##########	241-S	203.81		203.81	203.81	2
3490	A8008	299-W23-172	100	203.537	Top of casing, north edge, stamped X				566799.138	134396.17	0	##########	241-S	203.54	No DISC Z	No GS	203.54	3
3491	A8009	299-W23-173	100	203.399	Top of casing, north edge, stamped X				566790.789	134414.243	0	##########	241-S	203.40	No DISC Z	No GS	203.40	3
3492	A8010	299-W23-174	100	203.4	Top of casing, north edge, stamped X				566782.572	134419.13	0	##########	241-S	203.40	No DISC Z	No GS	203.40	3
3493	A8011	299-W23-175	100	203.243	Top of casing, north edge, stamped X				566772.806	134395.32	0	##########	241-S	203.24	No DISC Z	No GS	203.24	3
3494	A8012	299-W23-176	100	203.177	Top of casing, north edge, stamped X				566758.812	134410.485	0	##########	241-S	203.18	No DISC Z	No GS	203.18	3
3495	A8013	299-W23-177		203.872	Top of casing, north edge, stamped X				566824.842	134461.54	0	##########	241-S	203.87	No DISC Z	No GS	203.87	3
3496	A8014	299-W23-178	105	203.553	Top of casing, north edge, stamped X				566806.777	134455.691	0	##########	241-S	203.55	No DISC Z	No GS	203.55	3
3497	A8015	299-W23-179	100	204.065	Top of casing, north edge, stamped X				566848.54	134499.164	0	##########	241-S	204.07	No DISC Z	No GS	204.07	3
3498	A8016	299-W23-180	100	203.755	Top of casing, north edge, stamped X				566825.531	134516.425	0	##########	241-S	203.76	No DISC Z	No GS	203.76	3
3499	A8017	299-W23-181	100	203.459	Top of casing, north edge, stamped X				566807.763	134489.49	0	##########	241-S	203.46	No DISC Z	No GS	203.46	3
3500	A8018	299-W23-182	100	203.798	Top of casing, north edge, stamped X				566797.76	134516.321	0	##########	241-S	203.80	No DISC Z	No GS	203.80	3
3501	A8019	299-W23-183	100	203.013	Top of casing, north edge, stamped X				566760.202	134494.547	0	##########	241-S	203.01	No DISC Z	No GS	203.01	3
3502	A8020	299-W23-184	100	203.122	Top of casing, north edge, stamped X				566767.743	134516.335	0	##########	241-S	203.12	No DISC Z	No GS	203.12	3
3503	A8021	299-W23-185	100	204.026	Top of casing, north edge, stamped X				566848.602	134437.465	0	##########	241-S	204.03	No DISC Z	No GS	204.03	3
3504	A8022	299-W23-186	100	204.124	Top of casing, north edge, stamped X			204.123	566821.713	134434.037	0	##########	241-S	204.12		204.12	204.12	2
3505	A8023	299-W23-187	100	203.942	Top of casing, north edge, stamped X				566830.994	134454.475	0	##########	241-S	203.94	No DISC Z	No GS	203.94	3
3506	A8024	299-W23-188	100	203.147	Top of casing (assumed)				566816.417	134510.109		##########	241-S	No Stickup	No DISC Z	No GS	203.15	4
3507	A8025	299-W23-189	100	203.371	Top of casing, north edge, stamped X				566789.226	134495.937	0	##########	241-S	203.37	No DISC Z	No GS	203.37	3
3508	A8026	299-W23-190	100	203.167	Top of casing, north edge, stamped X				566846.568	134289.791	0	##########	241-SX	203.17	No DISC Z	No GS	203.17	3
3509	A8027	299-W23-191	100	203.151	Top of casing, north edge, stamped X				566821.281	134301.839	0	##########	241-SX	203.15	No DISC Z	No GS	203.15	3
3510	A8028	299-W23-192	100	203.146	Top of casing, north edge, stamped X				566830.745	134309.483	0	##########	241-SX	203.15	No DISC Z	No GS	203.15	3
3511	A8029	299-W23-193	100	202.809	Top of casing, north edge, stamped X				566795.682	134308.821	0	##########	241-SX	202.81	No DISC Z	No GS	202.81	3
3512	A8030	299-W23-194	100	202.689	Top of casing, north edge, stamped X				566784.335	134305.095	0	##########	241-SX	202.69	No DISC Z	No GS	202.69	3
3513	A8031	299-W23-195	100	202.8	Top of casing, north edge, stamped X				566784.135	134287.65	0	##########	241-SX	202.80	No DISC Z	No GS	202.80	3
3514	A8032	299-W23-196	100	202.585	Top of casing, north edge, stamped X				566763.596	134306.182	0	##########	241-SX	202.59	No DISC Z	No GS	202.59	3
3515	A8033	299-W23-197	100	203.138	Top of casing, north edge, stamped X				566850.167	134266.762	0	##########	241-SX	203.14	No DISC Z	No GS	203.14	3
3516	A8034	299-W23-198	100	203.129	Top of casing, north edge, stamped X				566843.399	134254.598	0	##########	241-SX	203.13	No DISC Z	No GS	203.13	3
3517	A8035	299-W23-199	105	203.3	Top of casing, north edge, stamped X				566785.849	134469.608	0	##########	241-S	203.30	No DISC Z	No GS	203.30	3
3518	A8036	299-W23-200	105	203.254	Top of casing, north edge, stamped X				566772.839	134455.701	0	##########	241-S	203.25	No DISC Z	No GS	203.25	3
3519	A8037	299-W23-201	105	203.1	Top of casing, north edge, stamped X				566756.995	134464.842	0	##########	241-S	203.10	No DISC Z	No GS	203.10	3
3520	A8038	299-W23-202	105	203.389	Top of casing, north edge, stamped X				566791.251	134430.398	0	##########	241-S	203.39	No DISC Z	No GS	203.39	3
3521	A8039	299-W23-203	105	203.131	Top of casing, north edge, stamped X				566760.604	134433.899	0	##########	241-S	203.13	No DISC Z	No GS	203.13	3
3522	A8040	299-W23-204	105	203.828	Top of casing, north edge, stamped X				566842.005	134397.384	0	##########	241-S	203.83	No DISC Z	No GS	203.83	3
3523	A8041	299-W23-205		203.633	Top of casing, north edge, stamped X				566825.275	134398.152	0	##########	241-S	203.63	No DISC Z	No GS	203.63	3
3524	A8042	299-W23-206	105	203.628	Top of casing, north edge, stamped X				566807.331	134395.673	0	##########	241-S	203.63	No DISC Z	No GS	203.63	3
3525	A8043	299-W23-207	105	203.43	Top of casing, north edge, stamped X				566786.133	134403.286	0	##########	241-S	203.43	No DISC Z	No GS	203.43	3
3526	A8044	299-W23-208	105	203.109	Top of casing, north edge, stamped X				566759.392	134399.018	0	##########	241-S	203.11	No DISC Z	No GS	203.11	3
3527	A8045	299-W23-210	100	203.234	Top of casing, north edge, stamped X				566694.629	134531.47	1.27	##########		202.85	No DISC Z	No GS	202.85	3
3527	A8045	299-W23-210	100	203.234	Top of casing, north edge, stamped X				566694.629	134531.47	1.3	29-Dec-05		202.84	No DISC Z	No GS	202.84	3
3528	A8046	299-W23-212	130	203.314	Top of casing, north edge, stamped X			203.296	566786.677	134503.646	0	##########	241-S	203.31	203.30	No GS	203.30	2
3529	A8047	299-W23-213	130	203.35	Top of casing, north edge, stamped X			203.32	566784.809	134464.443	0	##########	241-S	203.35	203.32	No GS	203.32	2
3530	A8048	299-W23-216	130	203.556	Top of casing, north edge, stamped X			203.535	566803.784	134455.1	0	##########	241-S	203.56	203.54	No GS	203.54	2
3531	A8049	299-W23-218	130	203.961	Top of casing, north edge, stamped X			203.939	566842.168	134421.343	0	##########	241-S	203.96	203.94	No GS	203.94	2
3532	A8050	299-W23-220	130	203.387	Top of casing, north edge, stamped X			203.372	566785.425	134401.976	0	##########	241-S	203.39	203.37	No GS	203.37	2
3533	A8051	299-W23-223	130	203.106	Top of casing, north edge, stamped X			203.072	566810.526	134284.052	0	##########	241-SX	203.11	203.07	No GS	203.07	2
3534	A8052	299-W23-225	130	203.229	Top of casing, north edge, stamped X			203.207	566823.573	134259.152	0	##########	241-SX	203.23	203.21	No GS	203.21	2
3535	A8053	299-W23-226	130	202.601	Top of casing, north edge, stamped X			202.575	566773.457	134252.147		##########	241-SX	No Stickup	202.58	No GS	202.58	4
3536	A8054	299-W23-227	130	202.742	Top of casing, north edge, stamped X			202.713	566766.27	134277.936		##########	241-SX	No Stickup	202.71	No GS	202.71	4
3538	A8055	299-W23-229	60	203.175	Top of casing, north edge, stamped X			203.173	566848.718	134331.856		##########	241-SX	No Stickup	203.17	No GS	203.17	4
3539	A8056	299-W23-230							566549.69	134585.53		##########		No TOC	No DISC Z	No GS	No TOC	5
3540	A9518	299-W23-231				201.48	Brass survey marker	201.48	566301.33	134601.06		##########		No TOC	201.48	201.48	201.48	1
3541	B2826	299-W23-232				199.61	(assumed)		566793.69	134124.04		##########		No TOC	No DISC Z	199.61	199.61	1
3542	B2827	299-W23-233							566782.8	134217.1		##########	241-SX	No TOC	No DISC Z	No GS	No TOC	5
3543	B2828	299-W23-234							566785.62	134226.27		##########	241-SX	No TOC	No DISC Z	No GS	202.69	5
3544	B2829	299-W23-235							566800	134120		##########		No TOC	No DISC Z	No GS	No TOC	5
3546	A8057	299-W26-1	87	200.364	Top of casing, north edge, stamped X				566433.606	133436.036	2.58	##########		199.58	No DISC Z	No GS	199.58	3
3546	A8057	299-W26-1	87	200.364	Top of casing, north edge, stamped X				566433.606	133436.036		04-Jan-06		No Stickup	No DISC Z	No GS	199.45	
3547	A8058	299-W26-2	230	199.185	Top of casing (assumed)				566278.115	133609.863	1	##########		198.88	No DISC Z	No GS	198.88	
3547	A8058	299-W26-2	230	199.185	Top of casing (assumed)				566278.115	133609.863	0.5	22-Oct-04		199.03	No DISC Z	No GS	199.03	3
3548	A5444	299-W26-3	190	199.389	Top of casing, north edge, stamped X				566348.913	133519.682	1.67	##########		198.88	No DISC Z	No GS	198.88	
3548	A5444	299-W26-3	190	199.389	Top of casing, north edge, stamped X				566348.913	133519.682	1.25	25-Feb-04		199.01	No DISC Z	No GS	199.01	3
3549	A8059	299-W26-4	77	199.777	Top of casing, north edge, stamped X				566369.97	133500.934	2.28	##########		199.08	No DISC Z	No GS	199.08	
3549	A8059	299-W26-4	77	199.777	Top of casing, north edge, stamped X				566369.97	133500.934	2.1	04-Jan-06		199.14	No DISC Z	No GS	199.14	3
3550	A8060	299-W26-5	115	200.31	Top of casing, north edge, stamped X				566363.027	133507.144	1.98	##########		199.71	No DISC Z	No GS	199.71	
3550	A8060	299-W26-5	115	200.31	Top of casing, north edge, stamped X				566363.027	133507.144	2.1	04-Jan-06		199.67	No DISC Z	No GS	199.67	3
3551	A5445	299-W26-6	227	200.083	Top of casing, north edge, stamped X				566463.375	133406.002	1.6	18-Apr-01		199.60	No DISC Z	No GS	199.60	3
3552	A5446	299-W26-7	206.9	199.791	Top of outer casing, north edge			198.754	566325.45	133242.42	3.41	##########		198.75	198.75	No GS	198.75	2
3553	A4994	299-W26-8	215.7	204.197	Top of casing, north edge, stamped X			203.29	566645.678	133663.488	2.96	##########		203.29	203.29	No GS	203.29	
3553	A4994	299-W26-8	215.7	204.197	Top of casing, north edge, stamped X			203.29	566645.678	133663.488	2.97	09-Sep-03		203.29	203.29	No GS	203.29	
3553	A4994	299-W26-8	215.7	204.197	Top of casing, north edge, stamped X			203.29	566645.678	133663.488	2.96	14-May-04		203.29	203.29	No GS	203.29	
3553	A4994	299-W26-8	215.7	204.197	Top of casing, north edge, stamped X			203.29	566645.678	133663.488	3	22-Oct-04		203.28	203.29	No GS	203.29	2

sortOrder	Well_ID	WellName	Total Depth (ft)	Top of Casing Elevation (m)	Top of Casing Survey Point Description	Ground Surface Elevation (m)	Ground Surface Survey Point Description	DISC_Z	EASTING	NORTHING	WELL_STICKUP	DATE_INSPECTED	In Tank Farm?	Ground Surface Elevation from TOC-Stickup (m) - Priority 3	DISC Z from HWIS (m) - Priority 2	Ground Surface Elevation, from HWIS (m) - Priority 1	Best Est. Ground Surface Elevation (m)	Best Est. Rank
3554	A4995	299-W26-9	206.2	200.5	Top of casing, north edge, stamped X			199.599	566491.847	133228.77	3	##########		199.59	199.60	No GS	199.60	
3554	A4995	299-W26-9	206.2	200.5	Top of casing, north edge, stamped X			199.599	566491.847	133228.77	2.96	08-Dec-03		199.60	199.60	No GS	199.60	2
3555	A4992	299-W26-10	223	205.546	Top of outer casing, north edge			204.425	566683.22	133499.11	3.46	##########		204.49	204.43	No GS	204.43	
3555	A4992	299-W26-10	223	205.546	Top of outer casing, north edge			204.425	566683.22	133499.11		26-Aug-96		No Stickup	204.43	No GS	204.43	
3555	A4992	299-W26-10	223	205.546	Top of outer casing, north edge			204.425	566683.22	133499.11	3.45	08-Dec-03		204.49	204.43	No GS	204.43	2
3556	A4993	299-W26-11	169	206.658	Top of casing, north edge, stamped X			205.761	566889.222	133680.314	2.92	##########		205.77	205.76	No GS	205.76	
3556	A4993	299-W26-11	169	206.658	Top of casing, north edge, stamped X			205.761	566889.222	133680.314	2.92	06-Jul-04		205.77	205.76	No GS	205.76	2
3557	A5409	299-W26-12	230	207.015	Top of outer casing, north edge			205.965	566900.97	133689.86	3.46	##########		205.96	205.97	No GS	205.97	
3557	A5409	299-W26-12	230	207.015	Top of outer casing, north edge			205.965	566900.97	133689.86		26-Aug-96		No Stickup	205.97	No GS	205.97	2
3558	B8817	299-W26-13	240	199.815	Top of casing, stamped X			199.037	566424.387	133293.598	2.59	31-Jan-00		199.03	199.04	No GS	199.04	2
3559	B8828	299-W26-14	260.477	205.43	Top of casing, north edge, stamped X			204.675	566682.69	133539.21	2.48	29-Apr-03		204.67	204.68	No GS	204.68	
3559	B8828	299-W26-14	260.477	205.43	Top of casing, north edge, stamped X			204.675	566682.69	133539.21	2.49	05-May-03		204.67	204.68	No GS	204.68	
3559	B8828	299-W26-14	260.477	205.43	Top of casing, north edge, stamped X			204.675	566682.69	133539.21	2.49	24-Jul-03		204.67	204.68	No GS	204.68	
3559	B8828	299-W26-14	260.477	205.43	Top of casing, north edge, stamped X			204.675	566682.69	133539.21		21-Jan-05		No Stickup	204.68	No GS	204.68	
3559	B8828	299-W26-14	260.477	205.43	Top of casing, north edge, stamped X			204.675	566682.69	133539.21	3.05	12-Jul-05		204.50	204.68	No GS	204.68	2
3560	A8061	299-W26-51	100	200.209	Top of casing, north edge, stamped X				566214.265	133589.584		##########		No Stickup	No DISC Z	No GS	199.29	
3560	A8061	299-W26-51	100	200.209	Top of casing, north edge, stamped X				566214.265	133589.584	2	04-Jan-06		199.60	No DISC Z	No GS	199.60	3
3561	A8062	299-W27-1	257	206.85	Top of casing, north edge, stamped X				567575.12	133750.345	0	##########		206.85	No DISC Z	No GS	206.85	
3561	A8062	299-W27-1	257	206.85	Top of casing, north edge, stamped X				567575.12	133750.345		21-Aug-97		No Stickup	No DISC Z	No GS	205.94	
3561	A8062	299-W27-1	257	206.85	Top of casing, north edge, stamped X				567575.12	133750.345	2.2	10-Jan-02		206.18	No DISC Z	No GS	206.18	3
3561	A8062	299-W27-1	257	206.85	Top of casing, north edge, stamped X				567575.12	133750.345		04-Mar-02		No Stickup	No DISC Z	No GS	205.94	
3562	A5410	299-W27-2	435	207.404	Top of casing, north edge, stamped X			206.487	566908.267	133670.351	2.98	##########		206.50	206.49	No GS	206.49	2
4557	A5151	699-39-79	295	206.45	Top of casing, stamped X				565890.897	135411.873	1.55	16-Nov-99		205.98	No DISC Z	No GS	205.98	3
4557	A5151	699-39-79	295	206.45	Top of casing, stamped X				565890.897	135411.873	1.6	19-Jun-00		205.96	No DISC Z	No GS	205.96	
4557	A5151	699-39-79	295	206.45	Top of casing, stamped X				565890.897	135411.873		08-Jan-02		No Stickup	No DISC Z	No GS	205.54	
4557	A5151	699-39-79	295	206.45	Top of casing, stamped X				565890.897	135411.873		22-Mar-04		No Stickup	No DISC Z	No GS	205.54	
4558	A8509	699-31-84A		191.581	Top of casing (assumed)				564383.098	132999.147		##########		No Stickup	No DISC Z	No GS	190.67	4
4559	A5130	699-32-72A	580	204.661	Top of casing, north edge, stamped X	203.75			567942.676	133362.612	1.96	25-Jan-00		204.06	No DISC Z	203.75	203.75	3
4560	A5130	699-32-72A	580	204.661	Top of casing, north edge, stamped X	203.75			567942.676	133362.612	1.96	11-Aug-03		204.06	No DISC Z	203.75	203.75	
4561	A5130	699-32-72A	580	204.661	Top of casing, north edge, stamped X	203.75			567942.676	133362.612	1.89	06-May-04		204.08	No DISC Z	203.75	203.75	
4562	A5130	699-32-72A	580	204.661	Top of casing, north edge, stamped X	203.75			567942.676	133362.612	1.96	09-Jul-04		204.06	No DISC Z	203.75	203.75	
4563	A5130	699-32-72A	580	204.661	Top of casing, north edge, stamped X	203.75			567942.676	133362.612	1.97	26-Sep-05		204.06	No DISC Z	203.75	203.75	
1564.5	A5139	699-35-066		222.452	Top of casing, north edge, stamped X						2.18	12-Feb-93		221.79	No DISC Z	No GS	221.79	3
4564	A8559	699-35-78B	638	202.16	Top of casing (assumed)				566047.649	134279.214		##########		No Stickup	No DISC Z	No GS	201.25	4
4565	A8571	699-36-58A	360	225.431	Top of casing, north edge, stamped X				572251.672	134536.248	2.24	##########		224.75	No DISC Z	No GS	224.75	3
4566	A8571	699-36-58A	360	225.431	Top of casing, north edge, stamped X				572251.672	134536.248		14-Aug-03		No Stickup	No DISC Z	No GS	224.52	
4567	A8571	699-36-58A	360	225.431	Top of casing, north edge, stamped X				572251.672	134536.248		31-Aug-04		No Stickup	No DISC Z	No GS	224.52	
4568	A8573	699-36-61B	568	229.384	Top of casing, north edge, stamped X				571401.207	134586.889	2.81	##########		228.53	No DISC Z	No GS	228.53	
4569	A8573	699-36-61B	568	229.384	Top of casing, north edge, stamped X				571401.207	134586.889	2.8	17-Nov-03		228.53	No DISC Z	No GS	228.53	3
4570	A8573	699-36-61B	568	229.384	Top of casing, north edge, stamped X				571401.207	134586.889	2.92	19-Mar-04		228.49	No DISC Z	No GS	228.49	
4571	A5455	699-36-63A		227.081	Brass survey marker			227.081	570751.11	134282.935		##########		No Stickup	227.08	No GS	227.08	2
4572	A9901	699-36-70A	440	216.047	Top of casing			215.227	568466.679	134308.839	2.69	##########		215.23	215.23	No GS	215.23	2
4573	C4299	699-36-70B	427	215.24	Top of casing, north edge			214.492	568427.79	134625.98	2.46	29-Oct-04		214.49	214.49	No GS	214.49	
4574	C4299	699-36-70B	427	215.24	Top of casing, north edge			214.492	568427.79	134625.98	2.46	15-Apr-05		214.49	214.49	No GS	214.49	2
4575	B2822	699-37-47A		218.438	Brass survey marker			219.492	575556.97	134893.26		##########		No Stickup	219.49	No GS	219.49	
4576	B2822	699-37-47A		218.438	Brass survey marker			219.492	575556.97	134893.26		30-Sep-96		No Stickup	219.49	No GS	219.49	
4577	B2822	699-37-47A		218.438	Brass survey marker			219.492	575556.97	134893.26	3.49	06-Jan-08		217.37	219.49	No GS	219.49	2
4578	A8580	699-37-82B	627	194.939	Top of casing (assumed)				564904.599	134733.616	2	##########		194.33	No DISC Z	No GS	194.33	
4579	A8580	699-37-82B	627	194.939	Top of casing (assumed)				564904.599	134733.616	2.07	07-Aug-03		194.31	No DISC Z	No GS	194.31	3
4580	A8583	699-37-83		194.896	Top of casing (assumed)				564709.845	134742.796		##########		No Stickup	No DISC Z	No GS	193.98	4
4581	A8584	699-37-84	626	194.759	Top of casing, north edge, stamped X			194.133	564246.757	134768.37	2.05	##########		194.13	194.13	No GS	194.13	
4582	A8584	699-37-84	626	194.759	Top of casing, north edge, stamped X			194.133	564246.757	134768.37	2.7	31-Jul-06		193.94	194.13	No GS	194.13	2
4583	A8585	699-37-89	650	194.861	Top of casing (assumed)				562880.724	134737.896		##########		No Stickup	No DISC Z	No GS	193.95	4
4584	A8586	699-37-92	688	197.741	Top of casing (assumed)				561920.394	134597.154		##########		No Stickup	No DISC Z	No GS	196.83	4
4585	A5464	699-38-61		228.167	Top of casing, north edge, stamped X			227.261	571219.097	134997.282	3	##########		227.25	227.26	No GS	227.26	
4586	A5464	699-38-61		228.167	Top of casing, north edge, stamped X			227.261	571219.097	134997.282	2.97	30-Sep-03		227.26	227.26	No GS	227.26	
4587	A5464	699-38-61		228.167	Top of casing, north edge, stamped X			227.261	571219.097	134997.282		18-Jun-04		No Stickup	227.26	No GS	227.26	
4588	A5464	699-38-61		228.167	Top of casing, north edge, stamped X			227.261	571219.097	134997.282	2.97	18-Jun-04		227.26	227.26	No GS	227.26	
4589	A5464	699-38-61		228.167	Top of casing, north edge, stamped X			227.261	571219.097	134997.282		23-Jun-04		No Stickup	227.26	No GS	227.26	
4590	A5464	699-38-61		228.167	Top of casing, north edge, stamped X			227.261	571219.097	134997.282		23-Jun-04		No Stickup	227.26	No GS	227.26	2
4591	A5148	699-38-65	536	230.709	Top of casing, north edge, stamped X				570090.185	135039.847	2.25	18-Dec-00		230.02	No DISC Z	No GS	230.02	3
4592	A5148	699-38-65	536	230.709	Top of casing, north edge, stamped X				570090.185	135039.847		11-Apr-02		No Stickup	No DISC Z	No GS	229.79	
4593	A5148	699-38-65	536	230.709	Top of casing, north edge, stamped X				570090.185	135039.847	2.21	14-Aug-07		230.04	No DISC Z	No GS	230.04	
4594	A5149	699-38-70	413	217.704	Top of casing, north edge, stamped X				568500.94	135089.205	1.7	26-Jan-00		217.19	No DISC Z	No GS	217.19	3
4595	A5149	699-38-70	413	217.704	Top of casing, north edge, stamped X				568500.94	135089.205	1.7	03-Feb-03		217.19	No DISC Z	No GS	217.19	
4596	C4236	699-38-70B	478.5	222.559	Top of casing, north edge			221.821	568469.1	135331.04	2.45	15-Mar-04		221.81	221.82	No GS	221.82	
4597	C4236	699-38-70B	478.5	222.559	Top of casing, north edge			221.821	568469.1	135331.04	2.45	20-May-04		221.81	221.82	No GS	221.82	
4598	C4236	699-38-70B	478.5	222.559	Top of casing, north edge			221.821	568469.1	135331.04		16-Mar-05		No Stickup	221.82	No GS	221.82	2
4599	A5151	699-39-79	295	206.45	Top of casing, stamped X				565890.897	135411.873	1.55	16-Nov-99		205.98	No DISC Z	No GS	205.98	3
4600	A5151	699-39-79	295	206.45	Top of casing, stamped X				565890.897	135411.873	1.6	19-Jun-00		205.96	No DISC Z	No GS	205.96	
4601	A5151	699-39-79	295	206.45	Top of casing, stamped X				565890.897	135411.873		08-Jan-02		No Stickup	No DISC Z	No GS	205.54	
4602	A5151	699-39-79	295	206.45	Top of casing, stamped X				565890.897	135411.873		22-Mar-04		No Stickup	No DISC Z	No GS	205.54	
4603	B8107	699-39-79O	295	206.583	Top of casing (assumed)				565890.897	135411.873		##########		No Stickup	No DISC Z	No GS	205.67	4
4604	B8108	699-39-79P	295	206.437	Top of casing (assumed)				565890.897	135411.873		##########		No Stickup	No DISC Z	No GS	205.52	4
4605	A5158	699-40-62	384	228.93	Top of casing, north edge, stamped X				571164.292	135764.444	0.2	09-Jun-99		228.87	No DISC Z	No GS	228.87	
4606	A5158	699-40-62	384	228.93	Top of casing, north edge, stamped X				571164.292	135764.444	0.2	06-Sep-05		228.87	No DISC Z	No GS	228.87	3
4607	C4235	699-40-65	459	231.028	Top of casing, north edge			230.335	570057.48	135881.16	2.26	04-Feb-04		230.34	230.34	No GS	230.34	
4608	C4235	699-40-65	459	231.028	Top of casing, north edge			230.335	570057.48	135881.16	2.26	12-Feb-04		230.34	230.34	No GS	230.34	
4609	C4235	699-40-65	459	231.028	Top of casing, north edge			230.335	570057.48	135881.16	2.27	15-Mar-04		230.34	230.34	No GS	230.34	
4610	C4235	699-40-65	459	231.028	Top of casing, north edge			230.335	570057.48	135881.16	2.27	15-Jun-04		230.34	230.34	No GS	230.34	
4611	C4235	699-40-65	459	231.028	Top of casing, north edge			230.335	570057.48	135881.16	2.27	01-Feb-07		230.34	230.34	No GS	230.34	2
4612	A8643	699-40-80	559	200.861	Top of casing (assumed)				565518.011	135547.796		##########		No Stickup	No DISC Z	No GS	199.95	
4613	A8643	699-40-80	559	200.861	Top of casing (assumed)				565518.011	135547.796		##########		No Stickup	No DISC Z	No GS	199.95	4
4614	A8696	699-43-81							565095.336	136642.383		##########		No TOC	No DISC Z	No GS	No TOC	5
4615	A8697	699-43-83	255						564475.245	136472.267	3	##########		No TOC	No DISC Z	No GS	No TOC	
4616	A8697	699-43-83	255						564475.245	136472.267		17-Jun-04		No TOC	No DISC Z	No GS	No TOC	5
4617	A8698	699-43-84	580	199.267	Top of casing, north edge, stamped X			198.661	564184.494	136656.217	1.98	##########		198.66	198.66	No GS	198.66	
4618	A8698	699-43-84	580	199.267	Top of casing, north edge, stamped X			198.661	564184.494	136656.217	2.8	31-Jul-06		198.41	198.66	No GS	198.66	2
4619	A8701	699-43-91B		205.82	Top of casing (assumed)				562186.522	136693.27		##########		No Stickup	No DISC Z	No GS	204.91	4

sortOrder	Well_ID	WellName	Total Depth (ft)	Top of Casing Elevation (m)	Top of Casing Survey Point Description	Ground Surface Elevation (m)	Ground Surface Survey Point Description	DISC_Z	EASTING	NORTHING	WELL_STICKUP	DATE_INSPECTED	In Tank Farm?	Ground Surface Elevation from TOC-Stickup (m) - Priority 3	DISC Z from HWIS (m) - Priority 2	Ground Surface Elevation, from HWIS (m) - Priority 1	Best Est. Ground Surface Elevation (m)	Best Est. Rank
4620	A5188	699-44-64	452	222.193	Top of casing, north edge, stamped X				570390.651	136897.434	2.25	28-Nov-00		221.51	No DISC Z	No GS	221.51	3
4621	A5188	699-44-64	452	222.193	Top of casing, north edge, stamped X				570390.651	136897.434	2.31	05-Jun-06		221.49	No DISC Z	No GS	221.49	
4622	A9718	699-44-64P	452	222.308	Top of casing (assumed)				570390.651	136897.434		##################		No Stickup	No DISC Z	No GS	221.39	4
4623	A5196	699-45-69A	368	222.138	Top of casing, north edge, stamped X				568729.3	137182.679	1.12	23-Sep-99		221.80	No DISC Z	No GS	221.80	3
4623.5	C5574	699-45-69C	455	222.569	Top of casing, north edge	221.673		221.673	568947.12	137233.81				No Stickup	221.67	221.67	221.67	2
4624	A8723	699-45-78	730	211.319	Top of casing (assumed)				566027.833	137045.119		##################		No Stickup	No DISC Z	No GS	210.40	
4625	A8723	699-45-78	730	211.319	Top of casing (assumed)				566027.833	137045.119		##################		No Stickup	No DISC Z	No GS	210.40	4
4625.5	A8742	699-45-85B	723	242.426	Top of casing (assumed)				564039.49	137389.363				No Stickup	No DISC Z	No GS	241.51	4
4626	A5202	699-47-60	287	199.578	Top of casing, north edge, stamped X			198.812	571474.38	137968.732		22-Nov-89		No Stickup	198.81	No GS	198.81	
4627	A5202	699-47-60	287	199.578	Top of casing, north edge, stamped X			198.812	571474.38	137968.732	2.49	29-Nov-99		198.82	198.81	No GS	198.81	
4628	A5202	699-47-60	287	199.578	Top of casing, north edge, stamped X			198.812	571474.38	137968.732		10-Jan-02		No Stickup	198.81	No GS	198.81	
4629	A5202	699-47-60	287	199.578	Top of casing, north edge, stamped X			198.812	571474.38	137968.732	2.53	09-Feb-04		198.81	198.81	No GS	198.81	2
4630	A8754	699-47-80B		218.112	Top of casing (assumed)				565556.233	137755.805		##################		No Stickup	No DISC Z	No GS	217.20	4
4630.5	A8757	699-47-092		247.191	Top of casing (assumed)									No Stickup	No DISC Z	No GS	246.28	4
4631	C5196	699-48-50B	215.2	186.303	Top of casing, north edge			185.562	573334.48	138044.28		05-Dec-06		No Stickup	185.56	No GS	185.56	2
4632	A8772	699-48-77A	457.7	206.674	Top of casing, north edge, stamped X			205.922	566413.228	137968.857		##################		No Stickup	205.92	No GS	205.92	
4633	A8772	699-48-77A	457.7	206.674	Top of casing, north edge, stamped X			205.922	566413.228	137968.857	2.46	31-Jan-07		205.92	205.92	No GS	205.92	2
4634	A8774	699-48-77C	437.2	206.585	Top of outer casing			205.864	566468.954	138086.801		##################		No Stickup	205.86	No GS	205.86	
4635	A8774	699-48-77C	437.2	206.585	Top of outer casing			205.864	566468.954	138086.801	2.34	30-Jan-03		205.87	205.86	No GS	205.86	
4636	A8774	699-48-77C	437.2	206.585	Top of outer casing			205.864	566468.954	138086.801	3.35	19-Jan-04		205.56	205.86	No GS	205.86	2
4637	A5221	699-49-79	290	211.077	Top of casing, north edge, stamped X			210.749	565771.123	138271.108	1.1	22-Sep-99		210.74	210.75	No GS	210.75	
4638	A5221	699-49-79	290	211.077	Top of casing, north edge, stamped X			210.749	565771.123	138271.108		10-Jan-02		No Stickup	210.75	No GS	210.75	
4639	A5221	699-49-79	290	211.077	Top of casing, north edge, stamped X			210.749	565771.123	138271.108	1.03	13-Feb-03		210.76	210.75	No GS	210.75	
4640	A5221	699-49-79	290	211.077	Top of casing, north edge, stamped X			210.749	565771.123	138271.108		18-Apr-05		No Stickup	210.75	No GS	210.75	
4641	A5221	699-49-79	290	211.077	Top of casing, north edge, stamped X			210.749	565771.123	138271.108	1.35	26-Jan-06		210.67	210.75	No GS	210.75	
4642	A5221	699-49-79	290	211.077	Top of casing, north edge, stamped X			210.749	565771.123	138271.108	1.35	16-Feb-06		210.67	210.75	No GS	210.75	
4643	A5221	699-49-79	290	211.077	Top of casing, north edge, stamped X			210.749	565771.123	138271.108	1.03	05-Feb-08		210.76	210.75	No GS	210.75	2
	C4882	699-50-059	173.2			172.1	Ground surface		571946.9	138741.72				No TOC	No DISC Z	172.10	172.10	1
4644	A5229	699-50-85	600	226.375	Top of casing, north edge, stamped X				564130.196	138669.323		14-Feb-94		No Stickup	No DISC Z	No GS	225.46	
4645	A5229	699-50-85	600	226.375	Top of casing, north edge, stamped X				564130.196	138669.323	1.56	07-Mar-01		225.90	No DISC Z	No GS	225.90	3
4646	A5229	699-50-85	600	226.375	Top of casing, north edge, stamped X				564130.196	138669.323		03-May-06		No Stickup	No DISC Z	No GS	225.46	
4647	A8814	699-50-96	1106	245.031	Top of casing (assumed)				560498.644	138598.927		##################		No Stickup	No DISC Z	No GS	244.12	4
4648	A8818	699-50-99	730	243.051	Top of casing (assumed)				559791.933	138597.775		##################		No Stickup	No DISC Z	No GS	242.14	4
4649	A5231	699-51-63	184.6	175.302	Top of casing, north edge, stamped X				570664.4	139148.408	1.6	10-Sep-99		174.81	No DISC Z	No GS	174.81	3
4650	A5231	699-51-63	184.6	175.302	Top of casing, north edge, stamped X				570664.4	139148.408	1.6	08-May-03		174.81	No DISC Z	No GS	174.81	
4651	A5231	699-51-63	184.6	175.302	Top of casing, north edge, stamped X				570664.4	139148.408	1.7	29-Sep-03		174.78	No DISC Z	No GS	174.78	
4652	A5231	699-51-63	184.6	175.302	Top of casing, north edge, stamped X				570664.4	139148.408	1.7	21-Jun-07		174.78	No DISC Z	No GS	174.78	
4653	A5232	699-51-75	382	196.561	Top of casing, north edge, stamped X				566978.076	138906.286		20-Feb-94		No Stickup	No DISC Z	No GS	195.65	
4654	A5232	699-51-75	382	196.561	Top of casing, north edge, stamped X				566978.076	138906.286	2.08	04-Dec-00		195.93	No DISC Z	No GS	195.93	3
4655	A5232	699-51-75	382	196.561	Top of casing, north edge, stamped X				566978.076	138906.286		10-Jan-02		No Stickup	No DISC Z	No GS	195.65	
4656	A5232	699-51-75	382	196.561	Top of casing, north edge, stamped X				566978.076	138906.286	2.63	05-Mar-07		195.76	No DISC Z	No GS	195.76	
4657	A5232	699-51-75	382	196.561	Top of casing, north edge, stamped X				566978.076	138906.286		05-Feb-08		No Stickup	No DISC Z	No GS	195.65	
4658	A8869	699-55-60B	288	175.917	Top of casing (assumed)				571550.483	140366.395	1	##################		175.61	No DISC Z	No GS	175.61	
4659	A8869	699-55-60B	288	175.917	Top of casing (assumed)				571550.483	140366.395	1	17-May-04		175.61	No DISC Z	No GS	175.61	3
4660	A8869	699-55-60B	288	175.917	Top of casing (assumed)				571550.483	140366.395	0.9	13-Jul-04		175.64	No DISC Z	No GS	175.64	
4661	A8869	699-55-60B	288	175.917	Top of casing (assumed)				571550.483	140366.395	1.2	19-Oct-04		175.55	No DISC Z	No GS	175.55	
4662	A8871	699-55-63	198	175.406	Top of casing (assumed)				570758.372	140265.131		##################		No Stickup	No DISC Z	No GS	174.49	4
4663	A5260	699-55-70	205	174.435	Top of casing, north edge, stamped X				568529.958	140318.965	1.3	##################		174.04	No DISC Z	No GS	174.04	3
4664	A5261	699-55-76	238	178.727	Top of casing, north edge, stamped X				566723.421	140225.816		20-Feb-94		No Stickup	No DISC Z	No GS	177.81	
4665	A5261	699-55-76	238	178.727	Top of casing, north edge, stamped X				566723.421	140225.816	1.9	14-Dec-00		178.15	No DISC Z	No GS	178.15	3
4666	A5261	699-55-76	238	178.727	Top of casing, north edge, stamped X				566723.421	140225.816		01-May-06		No Stickup	No DISC Z	No GS	177.81	
4667	A5261	699-55-76	238	178.727	Top of casing, north edge, stamped X				566723.421	140225.816	1.87	31-May-06		178.16	No DISC Z	No GS	178.16	
4668	A5262	699-55-89	235	185.289	Top of casing, north edge, stamped X				562886.578	140199.451	1.23	05-Oct-99		184.91	No DISC Z	No GS	184.91	3
4669	A5262	699-55-89	235	185.289	Top of casing, north edge, stamped X				562886.578	140199.451		01-May-06		No Stickup	No DISC Z	No GS	184.37	
4670	A5262	699-55-89	235	185.289	Top of casing, north edge, stamped X				562886.578	140199.451	1.15	31-May-06		184.94	No DISC Z	No GS	184.94	
4671	A5263	699-55-95	530	238.092	Top of casing, north edge, stamped X				560944.724	140231.066	2.05	##################		237.47	No DISC Z	No GS	237.47	3
4672	A5270	699-57-83A	355	177.174	Top of casing, north edge, stamped X				564582.814	140825.13	1.37	##################		176.76	No DISC Z	No GS	176.76	
4673	A5270	699-57-83A	355	177.174	Top of casing, north edge, stamped X				564582.814	140825.13	1.35	13-Dec-05		176.76	No DISC Z	No GS	176.76	3
4674	A5270	699-57-83A	355	177.174	Top of casing, north edge, stamped X				564582.814	140825.13	1.3	31-May-06		176.78	No DISC Z	No GS	176.78	
4675	A5278	699-59-80B	198	178.8	Top of casing, north edge, stamped X				565637.671	141574.964	1.95	##################		178.21	No DISC Z	No GS	178.21	3
4676	A5293	699-63-90	253	156.855	Top of casing, north edge, stamped X				562367.221	142612.351		21-Aug-91		No Stickup	No DISC Z	No GS	155.94	
4677	A5293	699-63-90	253	156.855	Top of casing, north edge, stamped X				562367.221	142612.351	1.89	06-Sep-00		156.28	No DISC Z	No GS	156.28	3
4678	A5293	699-63-90	253	156.855	Top of casing, north edge, stamped X				562367.221	142612.351		03-Jan-02		No Stickup	No DISC Z	No GS	155.94	
4679	B8801	B8801							566787.73	134123.18				No TOC	No DISC Z	No GS	No TOC	5
4679.5	C3082	C3082				201.84			566789.7	134255.1				No TOC	No DISC Z	201.84	201.84	5
4680	C3102	C3102	227			205.482	Brass survey marker	205.482	566933.55	136399.73				No TOC	205.48	205.48	205.48	1
4681	C3532	C3532		208.542	Top of casing, north edge, stamped X				566480.92	135444.832				No Stickup	No DISC Z	No GS	207.63	4
4682	C3650	C3650		218.661	Top of casing (assumed)				567379.961	136762.344	0.65	20-Jun-06		218.46	No DISC Z	No GS	218.46	3
4683	C3651	C3651		218.842	Top of casing (assumed)				567379.862	136763.862		09-Aug-06		No Stickup	No DISC Z	No GS	217.93	4
4684	C3768	C3768		199.322	Top of casing, north edge, stamped X				566767.622	134140.965		##################		No Stickup	No DISC Z	No GS	198.41	
4685	C3768	C3768		199.322	Top of casing, north edge, stamped X				566767.622	134140.965	0	21-Aug-07		199.32	No DISC Z	No GS	199.32	3
4686	C3768	C3768		199.322	Top of casing, north edge, stamped X				566767.622	134140.965		21-Aug-07		No Stickup	No DISC Z	No GS	198.41	
4687	C3808	C3808	225.25			204.432	Brass survey marker	204.432	566610.056	134981.758				No TOC	204.43	204.43	204.43	1
4688	C3830	C3830	116.75	206.44	Top of casing				566739.113	136168.393			241-TX	No Stickup	No DISC Z	No GS	206.44	4
4689	C3831	C3831		205.719	Top of casing				566710.634	136142.785			241-TX	No Stickup	No DISC Z	No GS	205.72	4
4690	C3832	C3832	114.2	205.587	Top of casing				566718.581	136143.632			241-TX	No Stickup	No DISC Z	No GS	205.59	4
4691	C3840	C3840	60.1			207.948	Brass survey marker	207.948	566489.95	135286.683				No TOC	207.95	207.95	207.95	1
4692	C3841	C3841	91			208.38	Brass survey marker	208.38	566442.54	135331.383				No TOC	208.38	208.38	208.38	1
4693	C3843	C3843	65			208.772	Brass survey marker	208.772	566381.44	135424.765				No TOC	208.77	208.77	208.77	1
4694	C3845	C3845	50			206.917	Brass survey marker	206.917	566541.284	135346.737				No TOC	206.92	206.92	206.92	1
4695	C3847	C3847	62.2			207.023	Brass survey marker	207.023	566580.975	135421.688				No TOC	207.02	207.02	207.02	1
4696	C3851	C3851	50			202.695	Brass survey marker	202.695	566755.482	135635.966				No TOC	202.70	202.70	202.70	1
4697	C3860	C3860	61			203.5	Brass survey marker	203.5	566696.236	135954.02				No TOC	203.50	203.50	203.50	1
4698	C3862	C3862	60			206.88	Brass survey marker	206.88	566469.29	135987.55				No TOC	206.88	206.88	206.88	1
4699	C3863	C3863	67			207.12	Brass survey marker	207.12	566430.23	136004.42				No TOC	207.12	207.12	207.12	1
4700	C3864	C3864	70			203.33	Brass survey marker	203.33	566850.69	136050.03				No TOC	203.33	203.33	203.33	1
4701	C3865	C3865	50			209.14	Brass survey marker	209.14	566306.317	135674.346				No TOC	209.14	209.14	209.14	1
4702	C3871	C3871	58			207.157	Brass survey marker	207.157	566541.709	135352.735				No TOC	207.16	207.16	207.16	1
4703	C3872	C3872	63			207.138	Brass survey marker	207.138	566581.103	135423.224				No TOC	207.14	207.14	207.14	1

sortOrder	Well_ID	WellName	Total Depth (ft)	Top of Casing Elevation (m)	Top of Casing Survey Point Description	Ground Surface Elevation (m)	Ground Surface Survey Point Description	DISC_Z	EASTING	NORTHING	WELL_STICKUP	DATE_INSPECTED	In Tank Farm?	Ground Surface Elevation from TOC-Stickup (m) - Priority 3	DISC Z from HWIS (m) - Priority 2	Ground Surface Elevation, from HWIS (m) - Priority 1	Best Est. Ground Surface Elevation (m)	Best Est. Rank
4704	C3875	C3875	62.6			203.711	Brass survey marker	203.711	566694.554	135954.233			No TOC		203.71	203.71	203.71	1
4705	C4104	C4104	126.14						566787.83	136721			241-T	No TOC	No DISC Z	No GS	205.84	5
4706	C4105	C4105	130.73						566761	136721			241-T	No TOC	No DISC Z	No GS	205.75	5
4707	C4163	C4163	65						564299.216	136342.8				No TOC	No DISC Z	No GS	No TOC	5
4708	C4175	C4175	227.5			204.93	(assumed)		566931.9	136348.82				No TOC	No DISC Z	204.93	204.93	1
4709	C4176	C4176	245						567548.27	133914.01				No TOC	No DISC Z	No GS	208.42	5
4710	C4177	C4177	50			203.72	(assumed)		566676.79	135930.1				No TOC	No DISC Z	203.72	203.72	1
4711	C4178	C4178	54			203.19	(assumed)		566705.52	135922.76				No TOC	No DISC Z	203.19	203.19	1
4712	C4179	C4179	52			203.42	(assumed)		566706.98	135929.6				No TOC	No DISC Z	203.42	203.42	1
4713	C4180	C4180	54			203.47	(assumed)		566690.58	135923.14				No TOC	No DISC Z	203.47	203.47	1
4714	C4181	C4181	50			203.58	(assumed)		566691.67	135929.94				No TOC	No DISC Z	203.58	203.58	1
4715	C4182	C4182	54			203.85	(assumed)		566675.65	135923.63				No TOC	No DISC Z	203.85	203.85	1
4716	C4183	C4183	50			203.74	(assumed)		566676.87	135930.56				No TOC	No DISC Z	203.74	203.74	1
4717	C4219	C4219	50.5			212.86	Brass survey marker	212.86	567612.35	134672.85				No TOC	212.86	212.86	212.86	1
4718	C4225	C4225	50			210.87	Brass survey marker	210.87	567591.99	134532.42				No TOC	210.87	210.87	210.87	1
4719	C4226	C4226	50.5			210.83	Brass survey marker	210.83	567612.21	134497.82				No TOC	210.83	210.83	210.83	1
4720	C4227	C4227	50.5			210.9	Brass survey marker	210.9	567592.14	134469.87				No TOC	210.90	210.90	210.90	1
4721	C4228	C4228	50.5			210.77	Brass survey marker	210.77	567574.63	134502.34				No TOC	210.77	210.77	210.77	1
4722	C4229	C4229	50.6			210.93	Brass survey marker	210.93	567591.66	134538.21				No TOC	210.93	210.93	210.93	1
4723	C4231	C4231	50			210.69	Brass survey marker	210.69	567556.4	134526.53				No TOC	210.69	210.69	210.69	1
4724	C4232	C4232	50.2			210.68	Brass survey marker	210.68	567568.76	134504.1				No TOC	210.68	210.68	210.68	1
4725	C4241	C4241	153			209.396	Brass survey marker	209.396	566300.915	135496.372				No TOC	209.40	209.40	209.40	1
4726	C4242	C4242	168			209.403	Brass survey marker	209.403	566297.496	135618.032				No TOC	209.40	209.40	209.40	1
4727	C4243	C4243	170			208.543	Brass survey marker	208.543	566316.333	135853.89				No TOC	208.54	208.54	208.54	1
4728	C4245	C4245	165			207.598	Brass survey marker	207.598	566323.791	135997.879				No TOC	207.60	207.60	207.60	1
4729	C4246	C4246	168			207.634	Brass survey marker	207.634	566321.931	135996.437				No TOC	207.63	207.63	207.63	1
4730	C4555	C4555	50			210.53	Brass survey marker	210.53	567556.29	134502.82				No TOC	210.53	210.53	210.53	1
4731	C4556	C4556	50			210.82	Brass survey marker	210.82	567556.52	134475.98				No TOC	210.82	210.82	210.82	1
4732	C4557	C4557	226.5			207.3	(assumed)		567172.76	134176.07				No TOC	No DISC Z	207.30	207.30	1
4733	C4559	C4559	129.5			205.09	(assumed)		566848.38	134931.96				No TOC	No DISC Z	205.09	205.09	1
4734	C4595	C4595	62			206.786	(assumed)		566853.816	136759.521			241-T	No TOC	No DISC Z	206.79	206.79	1
4735	C4716	C4716	50.5			211.72	(assumed)		567638.48	134647				No TOC	No DISC Z	211.72	211.72	1
4736	C4738	C4738	132.5			218.46	(assumed)		567452.39	136897.69				No TOC	No DISC Z	218.46	218.46	1
4737	C4748	C4748	67			202	(assumed)		566797	135616				No TOC	No DISC Z	202.00	202.00	1
4738	C4749	C4749	66			202	(assumed)		566795	135616				No TOC	No DISC Z	202.00	202.00	1
4739	C4752	C4752	67			201.7	(assumed)		566776	135602				No TOC	No DISC Z	201.70	201.70	1
4740	C4753	C4753	73			204	(assumed)		566735	135681				No TOC	No DISC Z	204.00	204.00	1
4741	C4755	C4755	70			203.1	(assumed)		566775	135680				No TOC	No DISC Z	203.10	203.10	1
4742	C4756	C4756	65			202.8	(assumed)		566815	135679				No TOC	No DISC Z	202.80	202.80	1
4743	C4759	C4759	67			201.7	(assumed)		566777	135603				No TOC	No DISC Z	201.70	201.70	1
4744	C4760	C4760	74			204.7	(assumed)		566696	135708				No TOC	No DISC Z	204.70	204.70	1
4745	C4761	C4761	78			204.4	(assumed)		566699	135667				No TOC	No DISC Z	204.40	204.40	1
4746	C4762	C4762	64			204.5	(assumed)		566666	135710				No TOC	No DISC Z	204.50	204.50	1
4747	C4763	C4763	53			205.8	(assumed)		566638	135733				No TOC	No DISC Z	205.80	205.80	1
4748	C4764	C4764	116			205.5	(assumed)		566684	135748				No TOC	No DISC Z	205.50	205.50	1
4749	C4768	C4768	89			204.4	(assumed)		566763	135571				No TOC	No DISC Z	204.40	204.40	1
4750	C4772	C4772	72			202	(assumed)		566795	135617				No TOC	No DISC Z	202.00	202.00	1
4751	C4776	C4776	64			204.4	(assumed)		566699	135668				No TOC	No DISC Z	204.40	204.40	1
4752	C4777	C4777	52			205.8	(assumed)		566638	135733				No TOC	No DISC Z	205.80	205.80	1
4753	C4778	C4778	50			205.8	(assumed)		566638	135734				No TOC	No DISC Z	205.80	205.80	1
4754	C4781	C4781	58			204.4	(assumed)		566765	135570				No TOC	No DISC Z	204.40	204.40	1
4755	C4789	C4789	58			204.6	(assumed)		566668	135707				No TOC	No DISC Z	204.60	204.60	1
4756	C4792	C4792	51			205.5	(assumed)		566684	135749				No TOC	No DISC Z	205.50	205.50	1
4757	C4793	C4793	52			205.5	(assumed)		566684	135750				No TOC	No DISC Z	205.50	205.50	1
4758	C4794	C4794	51			205.5	(assumed)		566684	135748				No TOC	No DISC Z	205.50	205.50	1
4759	C4800	C4800	51			201.7	(assumed)		566777	135602				No TOC	No DISC Z	201.70	201.70	1
4760	C4801	C4801	54			201.7	(assumed)		566777	135601				No TOC	No DISC Z	201.70	201.70	1
4761	C4802	C4802	61			201.7	(assumed)		566777	135601				No TOC	No DISC Z	201.70	201.70	1
4762	C4804	C4804	52			204	(assumed)		566735	135682				No TOC	No DISC Z	204.00	204.00	1
4763	C4807	C4807	52			202.8	(assumed)		566814	135679				No TOC	No DISC Z	202.80	202.80	1
4764	C4809	C4809	70			201.7	(assumed)		566777	135603				No TOC	No DISC Z	201.70	201.70	1
4765	C4810	C4810	56			204.6	(assumed)		566730	135619				No TOC	No DISC Z	204.60	204.60	1
4766	C4856	C4856	85			202.6	(assumed)		566765	135637				No TOC	No DISC Z	202.60	202.60	1
4767	C4859	C4859	82			202.6	(assumed)		566764	135637				No TOC	No DISC Z	202.60	202.60	1
4768	C4862	C4862	52			202.6	(assumed)		566763	135637				No TOC	No DISC Z	202.60	202.60	1
4769	C4863	C4863	106			202.6	(assumed)		566764	135637				No TOC	No DISC Z	202.60	202.60	1
4770	C4864	C4864	99			202.6	(assumed)		566765	135638				No TOC	No DISC Z	202.60	202.60	1
4771	C4883	C4883	150			207.17	Brass survey marker		566429.86	136005.68				No TOC	No DISC Z	207.17	207.17	1
4772	C4884	C4884	150			206.82	Brass survey marker		566469.65	135988.75				No TOC	No DISC Z	206.82	206.82	1
4773	C4885	C4885	150						566585.16	135886.06				No TOC	No DISC Z	No GS	No TOC	5
4774	C4886	C4886	150			206.31	Brass survey marker	206.31	566584.38	135851.81				No TOC	206.31	206.31	206.31	1
4775	C4937	C4937	64.1			200.6	(assumed)		566754.8	135586.8				No TOC	No DISC Z	200.60	200.60	1
4776	C4938	C4938	64			201.8	(assumed)		566746.6	135587				No TOC	No DISC Z	201.80	201.80	1
4777	C5198	C5198	121			204.9	(assumed)		566729.5	135604.5				No TOC	No DISC Z	204.90	204.90	1
4778	C5199	C5199	66			204.9	(assumed)		566729.4	135603.8				No TOC	No DISC Z	204.90	204.90	1
4779	C5200	C5200	109			204.9	(assumed)		566777.1	135583.6				No TOC	No DISC Z	204.90	204.90	1
4780	C5201	C5201	66			204.9	(assumed)		566778.6	135583.5				No TOC	No DISC Z	204.90	204.90	1
4781	C5202	C5202	109			202.4	(assumed)		566775.5	135603.1				No TOC	No DISC Z	202.40	202.40	1
4782	C5203	C5203	55			202.4	(assumed)		566775.5	135602				No TOC	No DISC Z	202.40	202.40	1
4783	C5204	C5204				202.6	(assumed)		566745.7	135635.9				No TOC	No DISC Z	202.60	202.60	1
4784	C5205	C5205				202.6	(assumed)		566745.7	135635.9				No TOC	No DISC Z	202.60	202.60	1
4785	C5206	C5206	88			203.2	(assumed)		566762.9	135635.1				No TOC	No DISC Z	203.20	203.20	1
4786	C5207	C5207	50			203.2	(assumed)		566762.4	135634.7				No TOC	No DISC Z	203.20	203.20	1
4787	C5208	C5208	116			200.6	Ground surface		566756.7	135586.8				No TOC	No DISC Z	200.60	200.60	1
4788	C5209	C5209	109			203.4	Ground surface		566751	135581.5				No TOC	No DISC Z	203.40	203.40	1
4789	C5210	C5210	114.5			200.6	Ground surface		566766.2	135584.9				No TOC	No DISC Z	200.60	200.60	1
4790	C5211	C5211	114.5			201.8	(assumed)		566745.1	135585.4				No TOC	No DISC Z	201.80	201.80	1
4791	C5221	C5221	64			202.6	(assumed)		566746.6	135635.9				No TOC	No DISC Z	202.60	202.60	1
4792	C5222	C5222	64						566746.8	135635.9				No TOC	No DISC Z	No GS	No TOC	5

sortOrder	Well_ID	WellName	Total Depth (ft)	Top of Casing Elevation (m)	Top of Casing Survey Point Description	Ground Surface Elevation (m)	Ground Surface Survey Point Description	DISC_Z	EASTING	NORTHING	WELL_STICKUP	DATE_INSPECTED	In Tank Farm?	Ground Surface Elevation from TOC-Stickup (m) - Priority 3	DISC Z from HWIS (m) - Priority 2	Ground Surface Elevation, from HWIS (m) - Priority 1	Best Est. Ground Surface Elevation (m)	Best Est. Rank
4793	C5223	C5223	68			202.6	(assumed)		566747.5	135635.8			241-T	No TOC	No DISC Z	202.60	202.60	1
4794	C5224	C5224	84						566745.7	135636.6			241-T	No TOC	No DISC Z	No GS	No TOC	5
4795	C5225	C5225	98			203.2	(assumed)		566761.7	135635.1			241-T	No TOC	No DISC Z	203.20	203.20	1
4796	C5226	C5226	105			203.2	(assumed)		566760.9	135634.9			241-T	No TOC	No DISC Z	203.20	203.20	1
4797	C5227	C5227	108			203.2	(assumed)		566762.4	135635.4			241-T	No TOC	No DISC Z	203.20	203.20	1
4798	C5228	C5228	113			203.2	(assumed)		566761.9	135635.9			241-T	No TOC	No DISC Z	203.20	203.20	1
4799	C5229	C5229	94			202.4	(assumed)		566775.5	135601			241-T	No TOC	No DISC Z	202.40	202.40	1
4800	C5230	C5230	65			202.4	(assumed)		566776.5	135603.3			241-T	No TOC	No DISC Z	202.40	202.40	1
4801	C5231	C5231	84			202.4	(assumed)		566776.5	135604.3			241-T	No TOC	No DISC Z	202.40	202.40	1
4802	C5232	C5232	57			202.4	(assumed)		566775.3	135604.1			241-T	No TOC	No DISC Z	202.40	202.40	1
4803	C5233	C5233	57			202.4	(assumed)		566776.4	135602.4			241-T	No TOC	No DISC Z	202.40	202.40	1
4804	C5234	C5234	94			202.4	(assumed)		566776.7	135602.3			241-T	No TOC	No DISC Z	202.40	202.40	1
4805	C5235	C5235	65			202.4	(assumed)		566777.2	135604.2			241-T	No TOC	No DISC Z	202.40	202.40	1
4806	C5236	C5236	104			202.4	(assumed)		566777	135602.1			241-T	No TOC	No DISC Z	202.40	202.40	1
4807	C5237	C5237	58.5			202.4	(assumed)		566773.8	135602.7			241-T	No TOC	No DISC Z	202.40	202.40	1
4808	C5238	C5238	107			202.4	(assumed)		566774.1	135601.5			241-T	No TOC	No DISC Z	202.40	202.40	1
4809	C5239	C5239	111			202.4	(assumed)		566774.6	135602.2			241-T	No TOC	No DISC Z	202.40	202.40	1
4810	C5240	C5240	105			204.9	(assumed)		566777.9	135583.6			241-T	No TOC	No DISC Z	204.90	204.90	1
4811	C5241	C5241	63			204.9	(assumed)		566776.6	135583.6			241-T	No TOC	No DISC Z	204.90	204.90	1
4812	C5242	C5242	86			204.9	(assumed)		566775.6	135583.3			241-T	No TOC	No DISC Z	204.90	204.90	1
4813	C5326	C5326	96			204.9	(assumed)		566775.2	135583.3			241-T	No TOC	No DISC Z	204.90	204.90	1
4814	C5327	C5327	107			204.9	(assumed)		566774.6	135583.3			241-T	No TOC	No DISC Z	204.90	204.90	1
4815	C5328	C5328	94			204.9	(assumed)		566729.8	135603.1			241-T	No TOC	No DISC Z	204.90	204.90	1
4816	C5329	C5329	68			204.9	(assumed)		566729.4	135605.2			241-T	No TOC	No DISC Z	204.90	204.90	1
4817	C5330	C5330	104			204.9	(assumed)		566729.3	135605.7			241-T	No TOC	No DISC Z	204.90	204.90	1
4818	C5331	C5331	104			204.9	(assumed)		566729.2	135606.5			241-T	No TOC	No DISC Z	204.90	204.90	1
4819	C5332	C5332	118			204.9	(assumed)		566728.5	135604.5			241-T	No TOC	No DISC Z	204.90	204.90	1
4820	C5333	C5333	91			204.9	(assumed)		566728.6	135603.5			241-T	No TOC	No DISC Z	204.90	204.90	1
4821	C5334	C5334	115			204.9	(assumed)		566728.4	135605.7			241-T	No TOC	No DISC Z	204.90	204.90	1
4822	C5335	C5335	117			203.4	Ground surface		566751.2	135582.9			241-T	No TOC	No DISC Z	203.40	203.40	1
4823	C5336	C5336	118			200.6	Ground surface		566755.8	135586.8			241-T	No TOC	No DISC Z	200.60	200.60	1
4824	C5337	C5337	61			200.6	Ground surface		566757	135585.8			241-T	No TOC	No DISC Z	200.60	200.60	1
4825	C5338	C5338	117.7			201.8	Ground surface		566745.3	135587.1			241-T	No TOC	No DISC Z	201.80	201.80	1
4826	C5339	C5339	115.25			200.6	Ground surface		566765.2	135585.9			241-T	No TOC	No DISC Z	200.60	200.60	1
4827	C5340	C5340	64.5			200.6	(assumed)		566763.4	135586.4			241-T	No TOC	No DISC Z	200.60	200.60	1
4828	C5374	C5374	80			206.369	(assumed)		566844.888	136747.216			241-T	No TOC	No DISC Z	206.37	206.37	1
4829	C5375	C5375	80			206.435	(assumed)		566847.044	136754.878			241-T	No TOC	No DISC Z	206.44	206.44	1
4830	C5377	C5377	80			206.901	(assumed)		566854.418	136756.026			241-T	No TOC	No DISC Z	206.90	206.90	1
4831	C5378	C5378	64			206.885	(assumed)		566854.175	136756.112			241-T	No TOC	No DISC Z	206.89	206.89	1
4832	C5379	C5379	80			207.13	(assumed)		566858.041	136754.774			241-T	No TOC	No DISC Z	207.13	207.13	1
4833	C5380	C5380	59			207.139	(assumed)		566857.602	136754.803			241-T	No TOC	No DISC Z	207.14	207.14	1
4834	C5381	C5381	80			207.421	(assumed)		566862.011	136759.775			241-T	No TOC	No DISC Z	207.42	207.42	1
4835	C5382	C5382	80			207.341	(assumed)		566861.134	136759.858			241-T	No TOC	No DISC Z	207.34	207.34	1
4836	C5383	C5383	80			206.707	(assumed)		566852.966	136746.916			241-T	No TOC	No DISC Z	206.71	206.71	1
4837	C5385	C5385	80			206.466	(assumed)		566845.367	136747.058			241-T	No TOC	No DISC Z	206.47	206.47	1
4838	C5589	C5589	100			204.351	(assumed)		566839.076	135120.674			241-U	No TOC	No DISC Z	204.35	204.35	1
4839	C5590	C5590	97.5			204.292	(assumed)		566838.651	135120.793			241-U	No TOC	No DISC Z	204.29	204.29	1
4840	C5591	C5591	100			204.987	(assumed)		566857.951	135113.108			241-U	No TOC	No DISC Z	204.99	204.99	1
4841	C5592	C5592	63.5			204.912	(assumed)		566857.382	135113.162			241-U	No TOC	No DISC Z	204.91	204.91	1
4842	C5594	C5594	92.5			205.879	(assumed)		566864.263	135079.969			241-U	No TOC	No DISC Z	205.88	205.88	1
4843	C5595	C5595	100			204.621	(assumed)		566815.59	135091.222			241-U	No TOC	No DISC Z	204.62	204.62	1
4844	C5596	C5596	84			204.459	(assumed)		566815.938	135090.901			241-U	No TOC	No DISC Z	204.46	204.46	1
4845	C5597	C5597	100			203.838	(assumed)		566798.809	135080.561			241-U	No TOC	No DISC Z	203.84	203.84	1
4846	C5598	C5598	83.5			203.779	(assumed)		566798.153	135080.271			241-U	No TOC	No DISC Z	203.78	203.78	1
4847	C5599	C5599	101.5			203.8	(assumed)		566798.811	135060.698			241-U	No TOC	No DISC Z	203.80	203.80	1
4848	C5600	C5600	90			203.697	(assumed)		566798.512	135060.798			241-U	No TOC	No DISC Z	203.70	203.70	1
4849	C5601	C5601	101			203.974	(assumed)		566822.085	135064.843			241-U	No TOC	No DISC Z	203.97	203.97	1
4850	C5602	C5602	93			204.024	(assumed)		566822.526	135064.713			241-U	No TOC	No DISC Z	204.02	204.02	1
4851	C5603	C5603	98.2			203.465	(assumed)		566752.725	135061.692			241-U	No TOC	No DISC Z	203.47	203.47	1
4852	C5604	C5604	52			203.36	(assumed)		566752.625	135062.227			241-U	No TOC	No DISC Z	203.36	203.36	1
4853	C5605	C5605	99.7			203.739	(assumed)		566794.197	135019.533			241-U	No TOC	No DISC Z	203.74	203.74	1
4854	C5606	C5606	53			203.676	(assumed)		566793.514	135019.484			241-U	No TOC	No DISC Z	203.68	203.68	1
4855	C5607	C5607	102			204.261	(assumed)		566839.917	134997.998			241-U	No TOC	No DISC Z	204.26	204.26	1
4856	C5608	C5608	99			204.289	(assumed)		566839.593	134998.557			241-U	No TOC	No DISC Z	204.29	204.29	1
4857	C5689	C5689	72			205.981	Ground surface		566762.685	136870.811				No TOC	No DISC Z	205.98	205.98	1
4858	C5690	C5690	70.25			205.952	Ground surface		566763.364	136871.088				No TOC	No DISC Z	205.95	205.95	1
4859	C5691	C5691	72			205.974	Ground surface		566762.729	136824.11				No TOC	No DISC Z	205.97	205.97	1
4860	C5693	C5693	72			206.271	Ground surface		566786.723	136830.014				No TOC	No DISC Z	206.27	206.27	1
4861	C5694	C5694	55			206.311	Ground surface		566787.018	136830.702				No TOC	No DISC Z	206.31	206.31	1
4862	C3049	CP-00-02		203.23	Top of casing (assumed)				566866.76	134477.02		##################	241-S	No Stickup	No DISC Z	No GS	203.23	4
4863	C3050	CP-00-02A		203.18	Top of casing (assumed)				566866.85	134477.78		##################	241-S	No Stickup	No DISC Z	No GS	203.18	4
4864	C3051	CP-00-02B		203.21	Top of casing (assumed)				566866.59	134476.27		##################	241-S	No Stickup	No DISC Z	No GS	203.21	4
4865	C3060	CP-02-02		203.44	Top of casing (assumed)				566812.24	134513.56		##################	241-S	No Stickup	No DISC Z	No GS	203.44	4
4866	C3055	CP-04-02		204.15	Top of casing (assumed)				566854.59	134478.82		##################	241-S	No Stickup	No DISC Z	No GS	204.15	4
4867	C3052	CP-04-03		204.15	Top of casing (assumed)				566848.66	134474.86		##################	241-S	No Stickup	No DISC Z	No GS	204.15	4
4868	C3053	CP-04-04		204.05	Top of casing (assumed)				566848.93	134465.09		##################	241-S	No Stickup	No DISC Z	No GS	204.05	4
4869	C3054	CP-04-04A		204.27	Top of casing (assumed)				566849.02	134463.66		##################	241-S	No Stickup	No DISC Z	No GS	204.27	4
4870	C3061	CP-04-04B		204.04	Top of casing (assumed)				566848.89	134464.37		##################	241-S	No Stickup	No DISC Z	No GS	204.04	4
4871	C3059	CP-04-05		203.35	Top of casing (assumed)				566803.29	134488.15		##################	241-S	No Stickup	No DISC Z	No GS	203.35	4
4872	C3057	CP-04-05A		204	Top of casing (assumed)				566845.42	134462.59		##################	241-S	No Stickup	No DISC Z	No GS	204.00	4
4873	C3058	CP-04-05B		204.05	Top of casing (assumed)				566846.98	134462		##################	241-S	No Stickup	No DISC Z	No GS	204.05	4
4874	C3056	CP-04-11		203.83	Top of casing (assumed)				566830.49	134486.99		##################	241-S	No Stickup	No DISC Z	No GS	203.83	4
4875	C3569	CPT-10	107						566354	135334				No TOC	No DISC Z	No GS	No TOC	5
4876	C3570	CPT-11	75			205.24	(assumed)		566701	135660				No TOC	No DISC Z	205.24	205.24	1
4877	C3572	CPT-13A	70						566622	135355				No TOC	No DISC Z	No GS	No TOC	5
4878	C3573	CPT-14A	61						566534	135281				No TOC	No DISC Z	No GS	No TOC	5
4879	C3575	CPT-16	65			201.13	(assumed)		566854	135658				No TOC	No DISC Z	201.13	201.13	1
4880	C3576	CPT-17	50			204.84	(assumed)		566740	135560	1.4	19-Jun-06		No TOC	No DISC Z	204.84	204.84	1
4881	C3577	CPT-18	75			204.53	(assumed)		566729	135629				No TOC	No DISC Z	204.53	204.53	1

sortOrder	Well_ID	WellName	Total Depth (ft)	Top of Casing Elevation (m)	Top of Casing Survey Point Description	Ground Surface Elevation (m)	Ground Surface Survey Point Description	DISC_Z	EASTING	NORTHING	WELL_STICKUP	DATE_INSPECTED	In Tank Farm?	Ground Surface Elevation from TOC-Stickup (m) - Priority 3	DISC Z from HWIS (m) - Priority 2	Ground Surface Elevation, from HWIS (m) - Priority 1	Best Est. Ground Surface Elevation (m)	Best Est. Rank
4882	C3551	CPT-1A	91						566340	135404				No TOC	No DISC Z	No GS	No TOC	5
4883	C3578	CPT-20	81						566609	135467				No TOC	No DISC Z	No GS	No TOC	5
4884	C3579	CPT-21	96			204.25	(assumed)		566762	135552				No TOC	No DISC Z	204.25	204.25	1
4885	C3580	CPT-21A	86			204.2	(assumed)		566762	135552				No TOC	No DISC Z	204.20	204.20	1
4886	C3581	CPT-24	118			204.2	(assumed)		566737	135679				No TOC	No DISC Z	204.20	204.20	1
4887	C3582	CPT-25	52			205.83	(assumed)		566697	135586				No TOC	No DISC Z	205.83	205.83	1
4888	C3583	CPT-26	68			201.44	(assumed)		566831	135667				No TOC	No DISC Z	201.44	201.44	1
4889	C3585	CPT-28	87			205.04	(assumed)		566724	135505				No TOC	No DISC Z	205.04	205.04	1
4890	C3553	CPT-3	52			205.85	(assumed)		566702	135559				No TOC	No DISC Z	205.85	205.85	1
4891	C3587	CPT-30	68						566442	135385				No TOC	No DISC Z	No GS	No TOC	5
4892	C3588	CPT-31	76						566404	135435				No TOC	No DISC Z	No GS	No TOC	5
4893	C3589	CPT-32	70						566489	135447				No TOC	No DISC Z	No GS	No TOC	5
4894	C3590	CPT-33	80						566392	135343				No TOC	No DISC Z	No GS	No TOC	5
4895	C3591	CPT-34	86			208.78	(assumed)		566375.56	135288.03				No TOC	No DISC Z	208.78	208.78	1
4896	C3554	CPT-4	103						566450	135476				No TOC	No DISC Z	No GS	No TOC	5
4897	C3555	CPT-4A	91						566448	135470				No TOC	No DISC Z	No GS	No TOC	5
4898	C3556	CPT-4B	90						566446	135466				No TOC	No DISC Z	No GS	No TOC	5
4899	C3557	CPT-4C	107						566449	135461				No TOC	No DISC Z	No GS	No TOC	5
4900	C3558	CPT-4D	99						566449	135455				No TOC	No DISC Z	No GS	No TOC	5
4901	C3559	CPT-4E	103						566449	135448				No TOC	No DISC Z	No GS	No TOC	5
4902	C3560	CPT-4F	109						566448	135444				No TOC	No DISC Z	No GS	No TOC	5
4903	C3561	CPT-4G	100						566446	135452				No TOC	No DISC Z	No GS	No TOC	5
4904	C3562	CPT-4H	75						566451	135451				No TOC	No DISC Z	No GS	No TOC	5
4905	C3564	CPT-4L	50						566452	135458				No TOC	No DISC Z	No GS	No TOC	5
4906	A9931	CPT-4M	80						566447	135437		##########		No TOC	No DISC Z	No GS	No TOC	5
4907	C3566	CPT-7A	52						566668	135450				No TOC	No DISC Z	No GS	No TOC	5
4908	C3567	CPT-8A	113			201.98	(assumed)		566816	135678				No TOC	No DISC Z	201.98	201.98	1
4909	C3568	CPT-9A	91						566696	135826				No TOC	No DISC Z	No GS	No TOC	5
4910	C4905	P28A	77.75			207.8023519	(assumed)		566612.227	135410.143				No TOC	No DISC Z	207.80	207.80	1
4911	C4866	P29A	66.6			204.8962544	(assumed)		566563.459	135409.229				No TOC	No DISC Z	204.90	204.90	1
4912	C4867	P29B	90.55			204.8962544	(assumed)		566563.459	135408.314				No TOC	No DISC Z	204.90	204.90	1
4913	C4917	P29C	62.17			204.8962544	(assumed)		566564.374	135409.229				No TOC	No DISC Z	204.90	204.90	1
4914	C4918	P29D	53.15			204.8962544	(assumed)		566564.678	135408.314				No TOC	No DISC Z	204.90	204.90	1
4915	C4919	P29E	55.61			204.8962544	(assumed)		566564.069	135409.838				No TOC	No DISC Z	204.90	204.90	1
4916	C4932	P30D	78.5			204.2722125	(assumed)		566531.76	135410.448				No TOC	No DISC Z	204.27	204.27	1
4917	C4934	P30E	73.49			204.2722125	(assumed)		566530.846	135410.448				No TOC	No DISC Z	204.27	204.27	1
4918	C4964	P30G	79.89			204.2722125	(assumed)		566531.15	135409.534				No TOC	No DISC Z	204.27	204.27	1
4919	C4958	P30H	58.26			204.2722125	(assumed)		566531.15	135410.143				No TOC	No DISC Z	204.27	204.27	1
4920	C4960	P30J	60			204.2722125	(assumed)		566532.674	135410.448				No TOC	No DISC Z	204.27	204.27	1
4921	C4962	P30L	62			204.2722125	(assumed)		566531.15	135410.448				No TOC	No DISC Z	204.27	204.27	1
4922	C4873	P31A	72.51			204.6591463	(assumed)		566530.541	135446.719				No TOC	No DISC Z	204.66	204.66	1
4923	C4874	P32A	69.72			208.6564506	(assumed)		566501.89	135419.592				No TOC	No DISC Z	208.66	208.66	1
4924	C4904	P32B	65.94			208.6564506	(assumed)		566501.585	135420.202				No TOC	No DISC Z	208.66	208.66	1
4925	C4927	P32C	50.53			208.6564506	(assumed)		566500.67	135418.982				No TOC	No DISC Z	208.66	208.66	1
4926	C4929	P32E	69			208.6564506	(assumed)		566500.67	135419.592				No TOC	No DISC Z	208.66	208.66	1
4927	C4870	P34A	92.52			204.1377613	(assumed)		566531.15	135371.738				No TOC	No DISC Z	204.14	204.14	1
4928	C4924	P34C	57.25			204.1377613	(assumed)		566531.76	135371.434				No TOC	No DISC Z	204.14	204.14	1
4929	C4865	P35A	90.6			204.8743902	(assumed)		566561.021	135374.786				No TOC	No DISC Z	204.87	204.87	1
4930	C4915	P35B	69.39			204.8743902	(assumed)		566561.63	135374.786				No TOC	No DISC Z	204.87	204.87	1
4931	C4916	P35C	87.11			204.8743902	(assumed)		566561.63	135375.396				No TOC	No DISC Z	204.87	204.87	1
4932	C4878	P37A	65.27			208.434277	(assumed)		566587.234	135436.356				No TOC	No DISC Z	208.43	208.43	1
4933	C4879	P38A	89.24			207.3623693	(assumed)		566587.843	135397.646				No TOC	No DISC Z	207.36	207.36	1
4934	C4935	P38B	85.47			207.3623693	(assumed)		566587.843	135398.256				No TOC	No DISC Z	207.36	207.36	1
4935	C4903	P40A	65.94			207.7906359	(assumed)		566621.371	135461.959				No TOC	No DISC Z	207.79	207.79	1
4936	C4910	P42A	69.22			206.6084223	(assumed)		566614.97	135337.296				No TOC	No DISC Z	206.61	206.61	1
4937	C4875	P43A	81.36			208.681932	(assumed)		566494.879	135360.156				No TOC	No DISC Z	208.68	208.68	1
4938	C4898	P44A	73.33			209.4183569	(assumed)		566498.232	135385.15				No TOC	No DISC Z	209.42	209.42	1
4939	C4930	P44B	70			209.4183569	(assumed)		566498.842	135385.15				No TOC	No DISC Z	209.42	209.42	1
4940	C4900	P45B	51.02			208.9557285	(assumed)		566450.074	135431.479				No TOC	No DISC Z	208.96	208.96	1
4941	C4902	P48A	76.11			209.6600128	(assumed)		566366.254	135484.514				No TOC	No DISC Z	209.66	209.66	1
4942	C4931	P48B	75			209.6600128	(assumed)		566365.339	135485.124				No TOC	No DISC Z	209.66	209.66	1
4943	C4914	P49B	53.15			203.4404472	(assumed)		566757.922	135586.318				No TOC	No DISC Z	203.44	203.44	1

Appendix C

Geologic Model of the 200 West Area

Appendix C

Geologic Model of the 200 West Area

Figures

Table

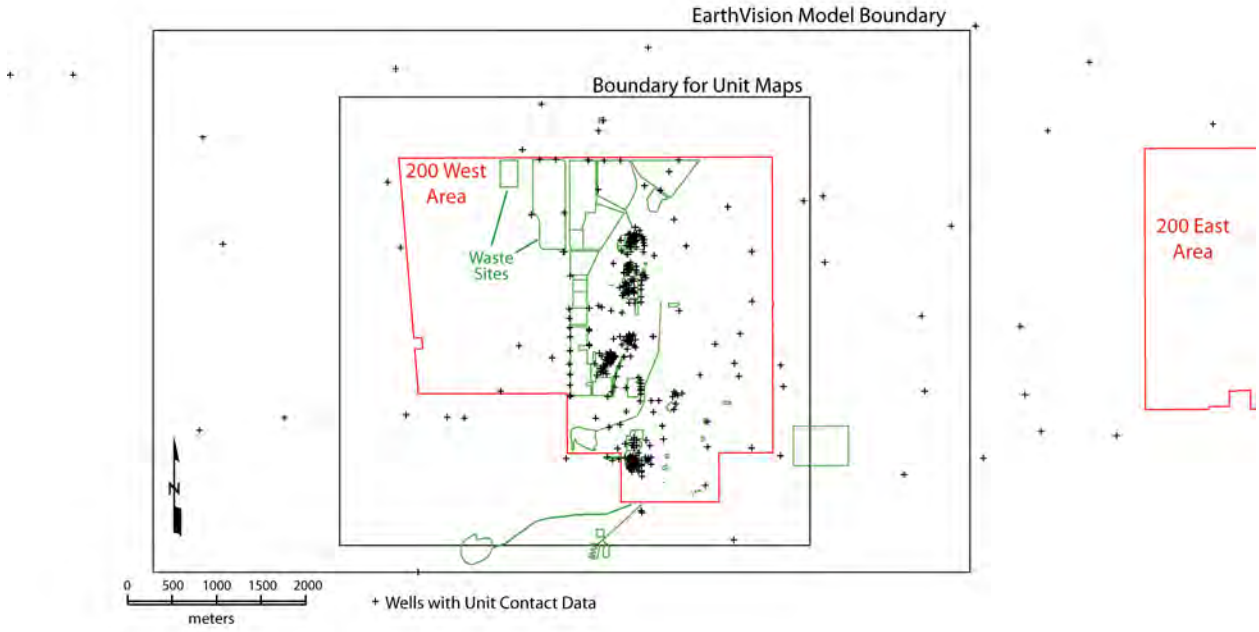


Figure C.1. EarthVision Model Domain for the 200 West Area Geologic Model. Note that the model boundary extends beyond the study area boundary used in subsequent figures, to reduce edge effects.

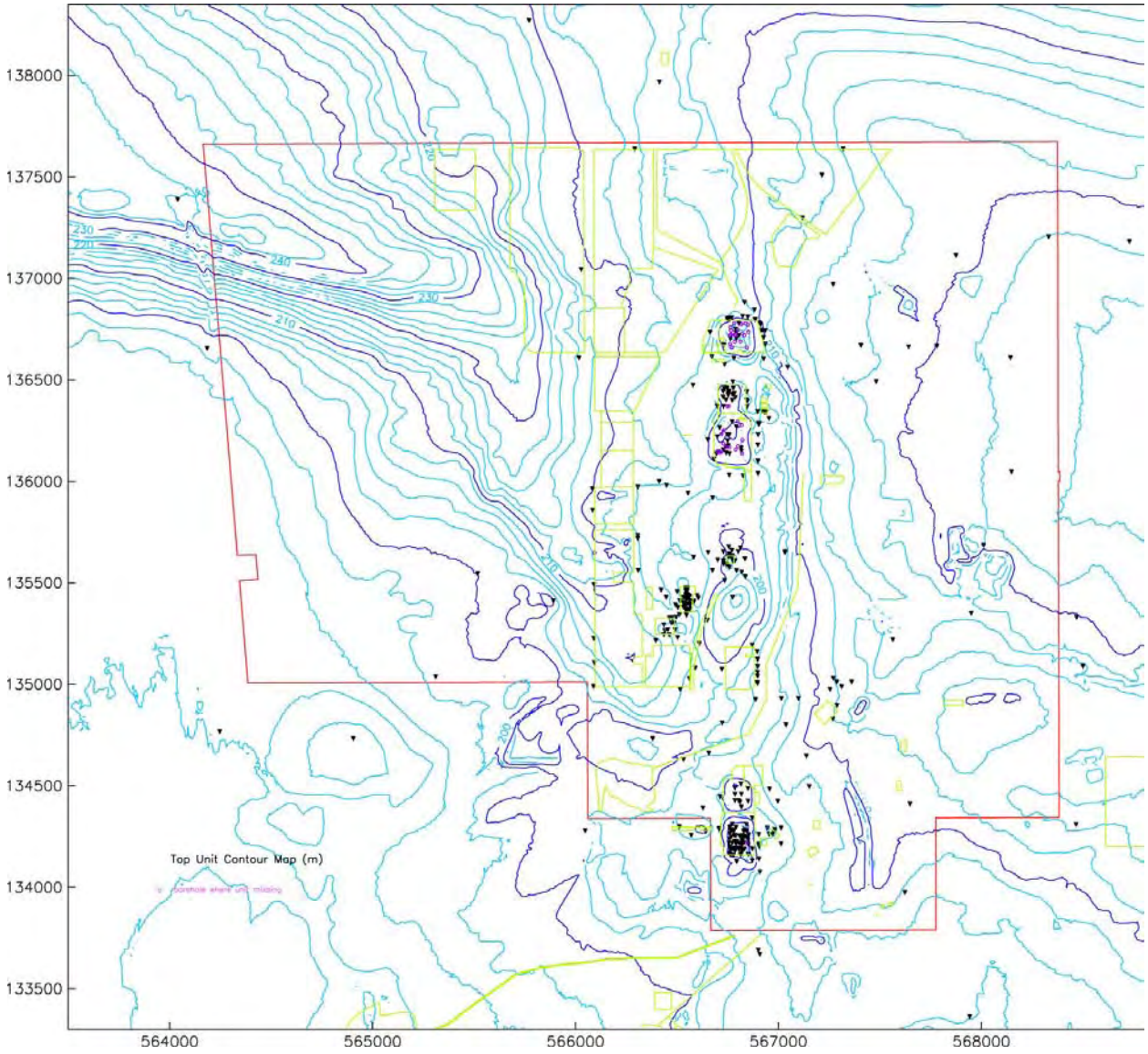


Figure C.2. Structure Contour Map for the Top of the Hanford H1 Unit in and Around the 200 West Area. The irregular surface in the central and southern 200 West Area is due to man-made excavations associated with subsurface facilities (e.g., tank farms). Contours are in meters above mean sea level (MSL).

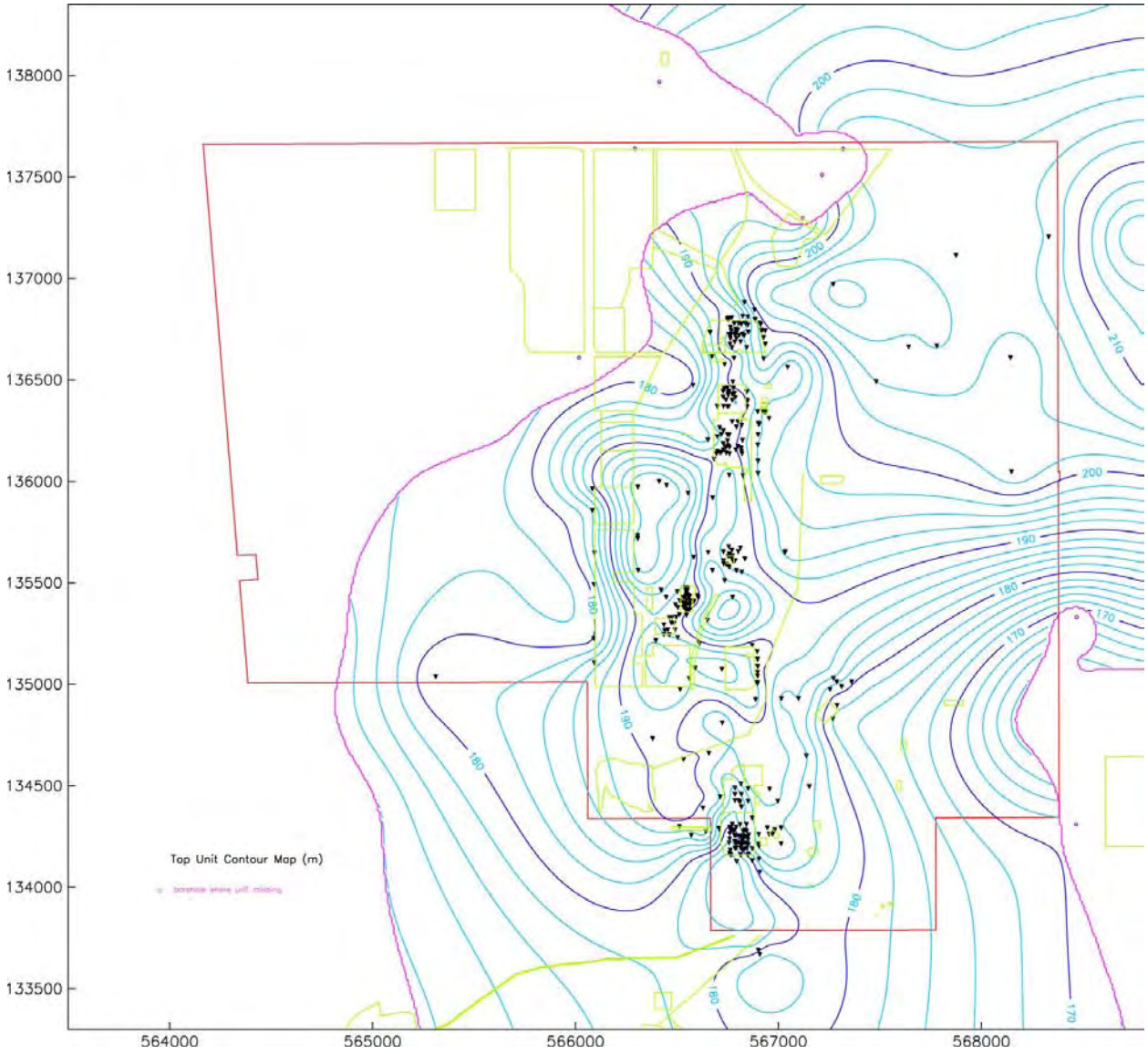


Figure C.3. Structure Contour Map for the Top of the Hanford H2 Unit in and Around the 200 West Area. Contours are in meters above mean sea level (MSL).

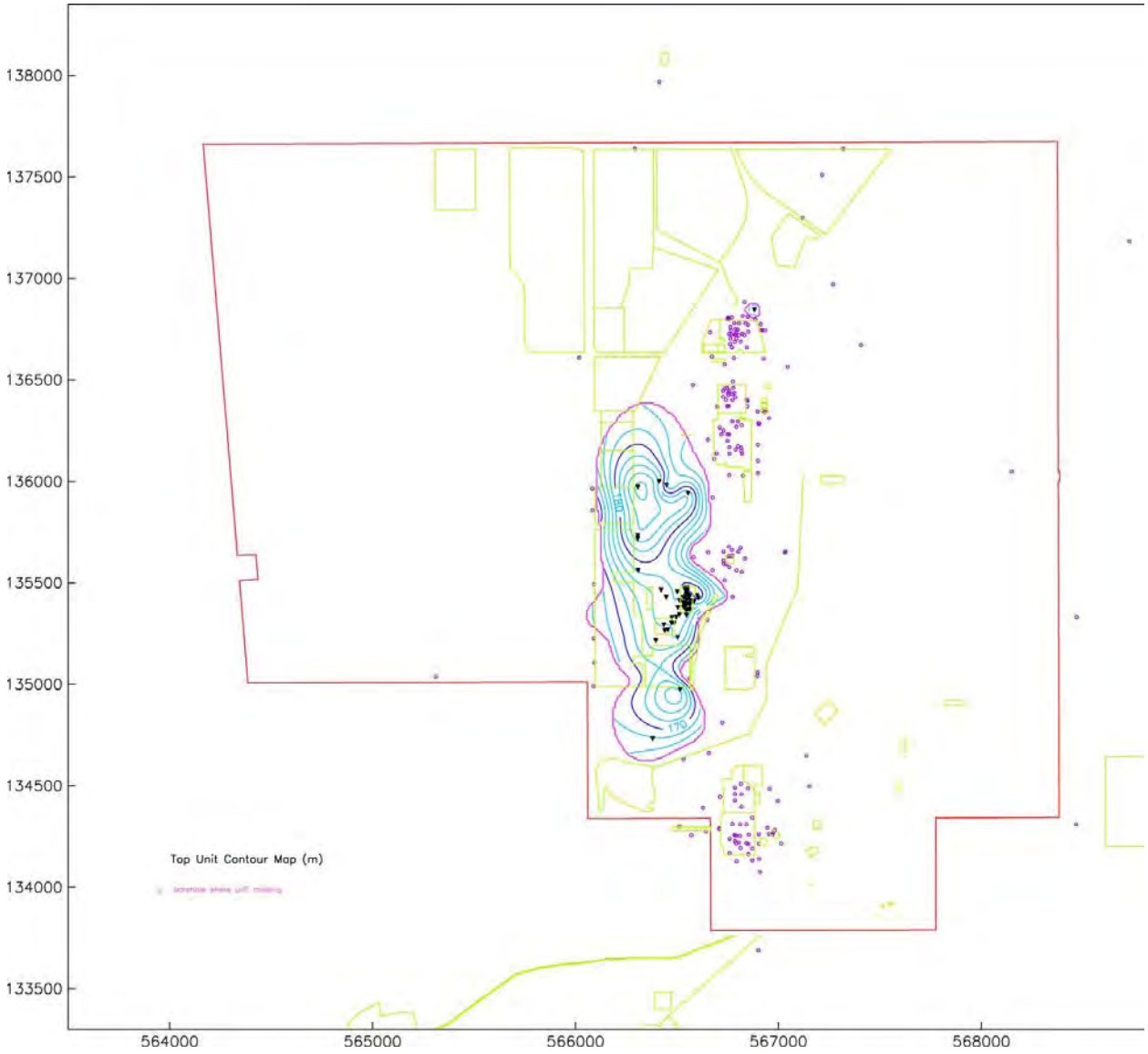


Figure C.4. Structure Contour Map for the Top of the Hanford H3 Unit in and Around the 200 West Area. Contours are in meters above mean sea level (MSL).

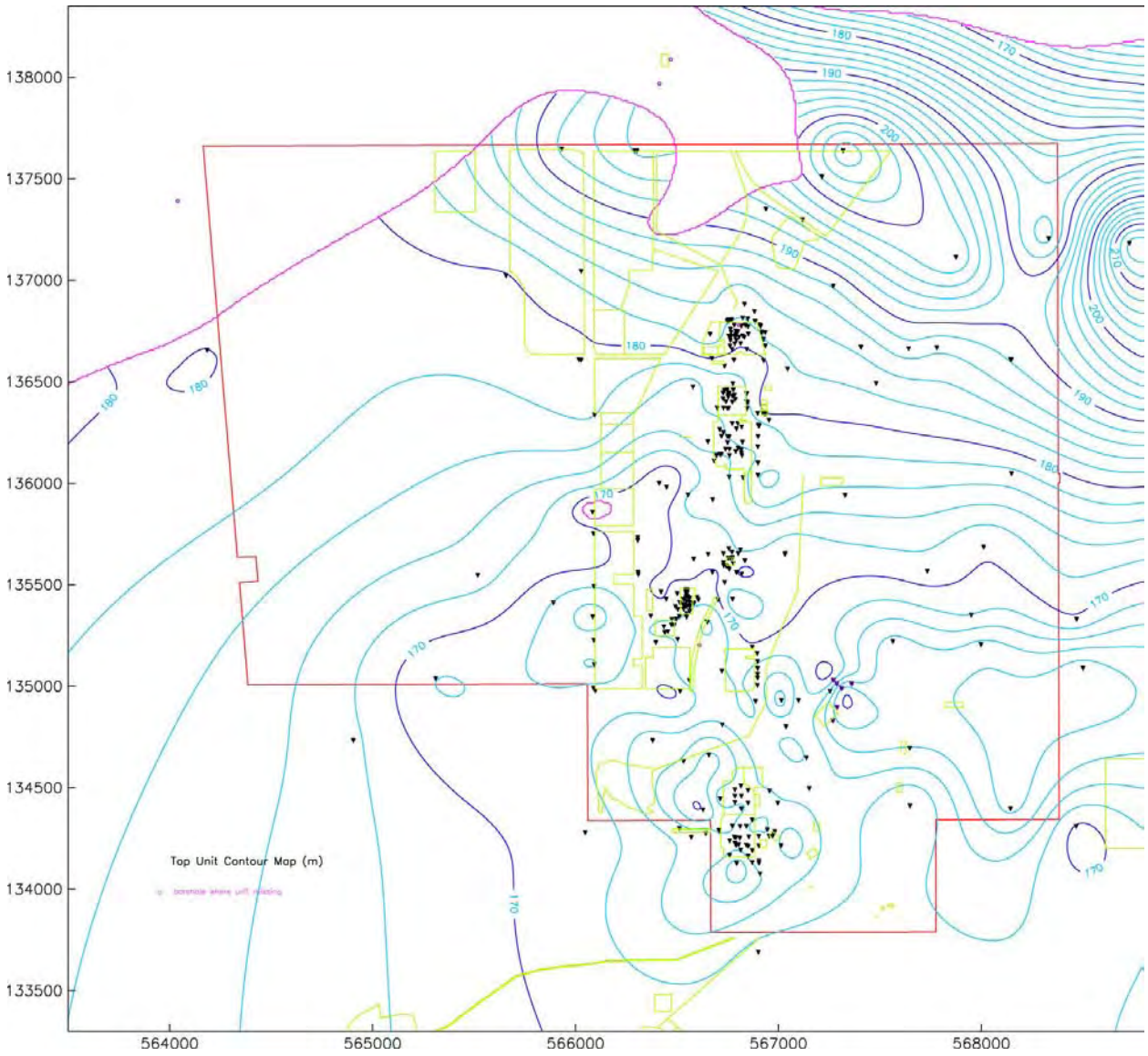


Figure C.5. Structure Contour Map for the Top of the Cold Creek Unit Silt in and Around the 200 West Area. Contours are in meters above mean sea level (MSL). Note that this unit is missing along the northern portion of the study area.

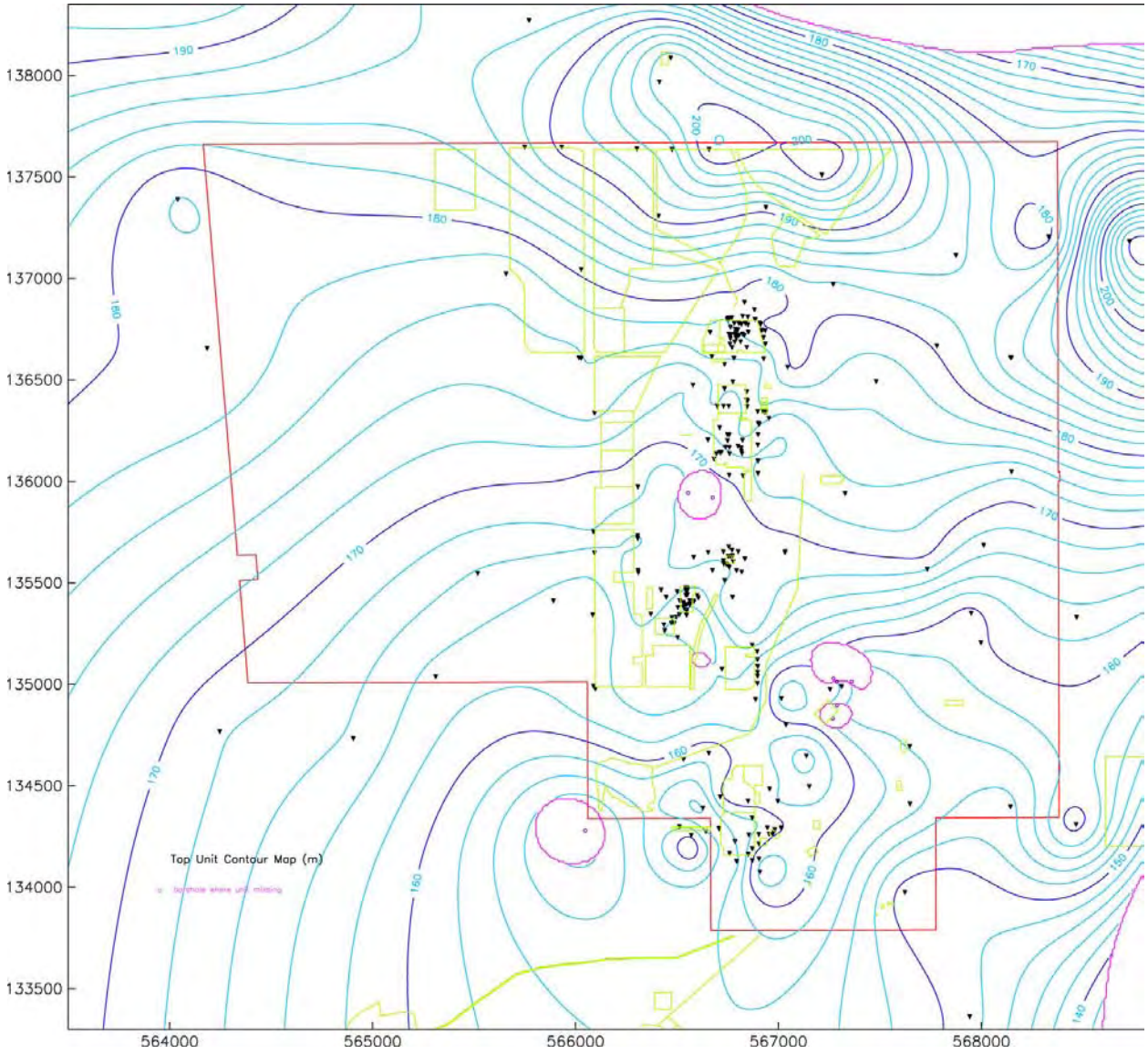


Figure C.6. Structure Contour Map for the Top of the Cold Creek Unit Carbonate Unit in and Around the 200 West Area. Contours are in meters above mean sea level (MSL).

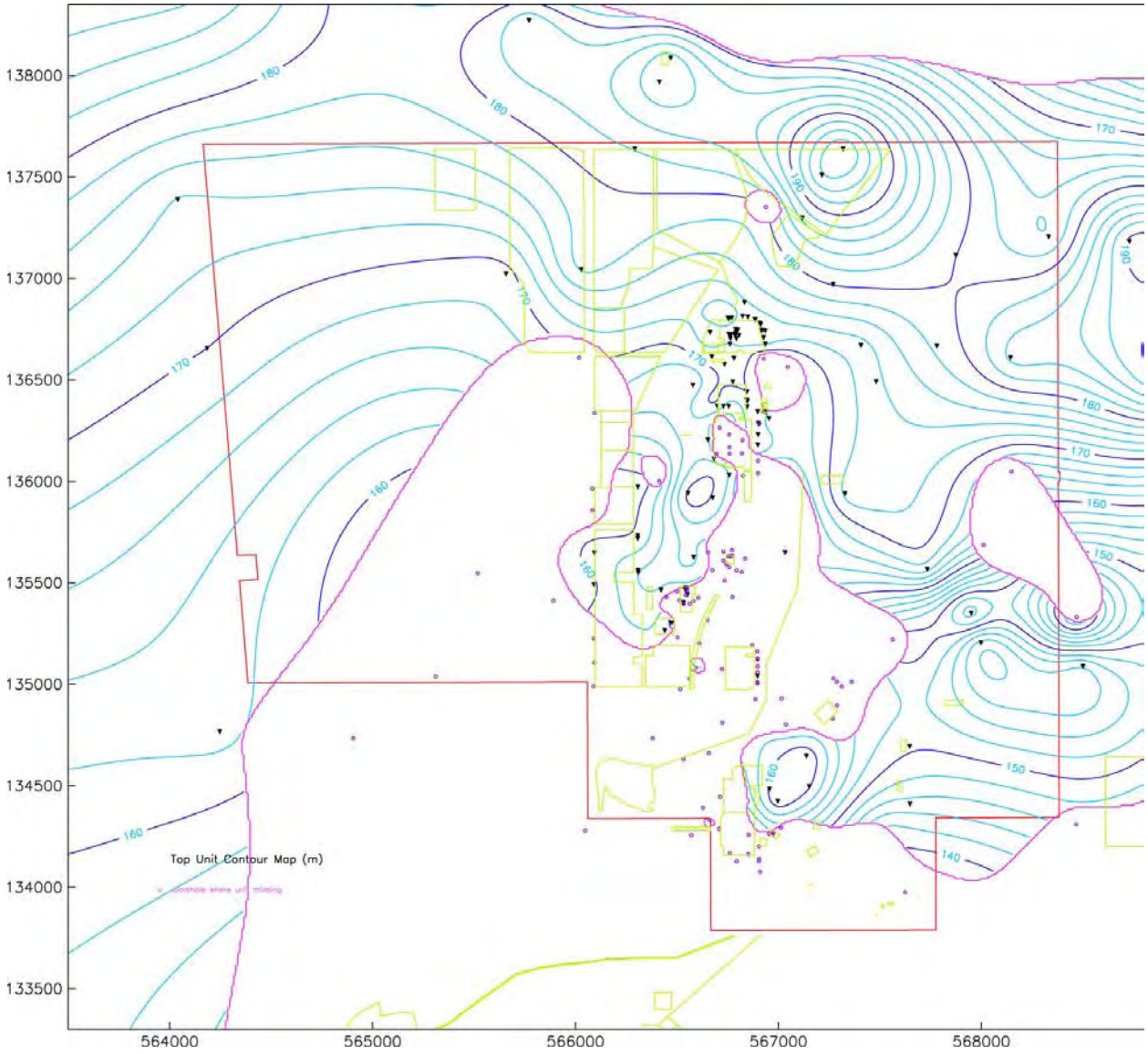


Figure C.7. Structure Contour Map for the Top of the Ringold Formation, Member of Taylor Flat, in and Around the 200 West Area. Contours are in meters above mean sea level (MSL).

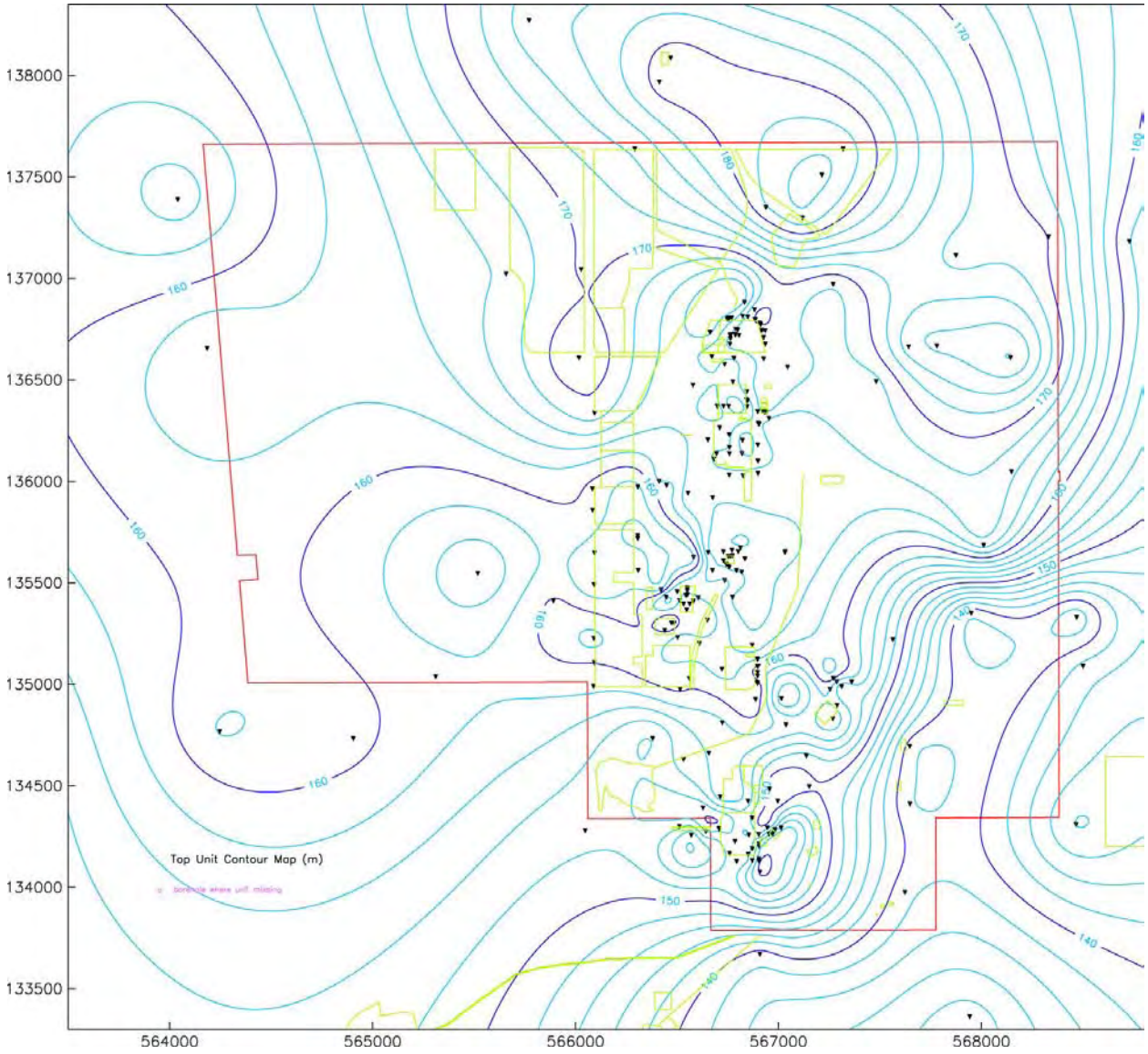


Figure C.8. Structure Contour Map of the Top of the Ringold Formation, Member of Wooded Island, Unit E, in and Around the 200 West Area. Contours are in meters above mean sea level (MSL).

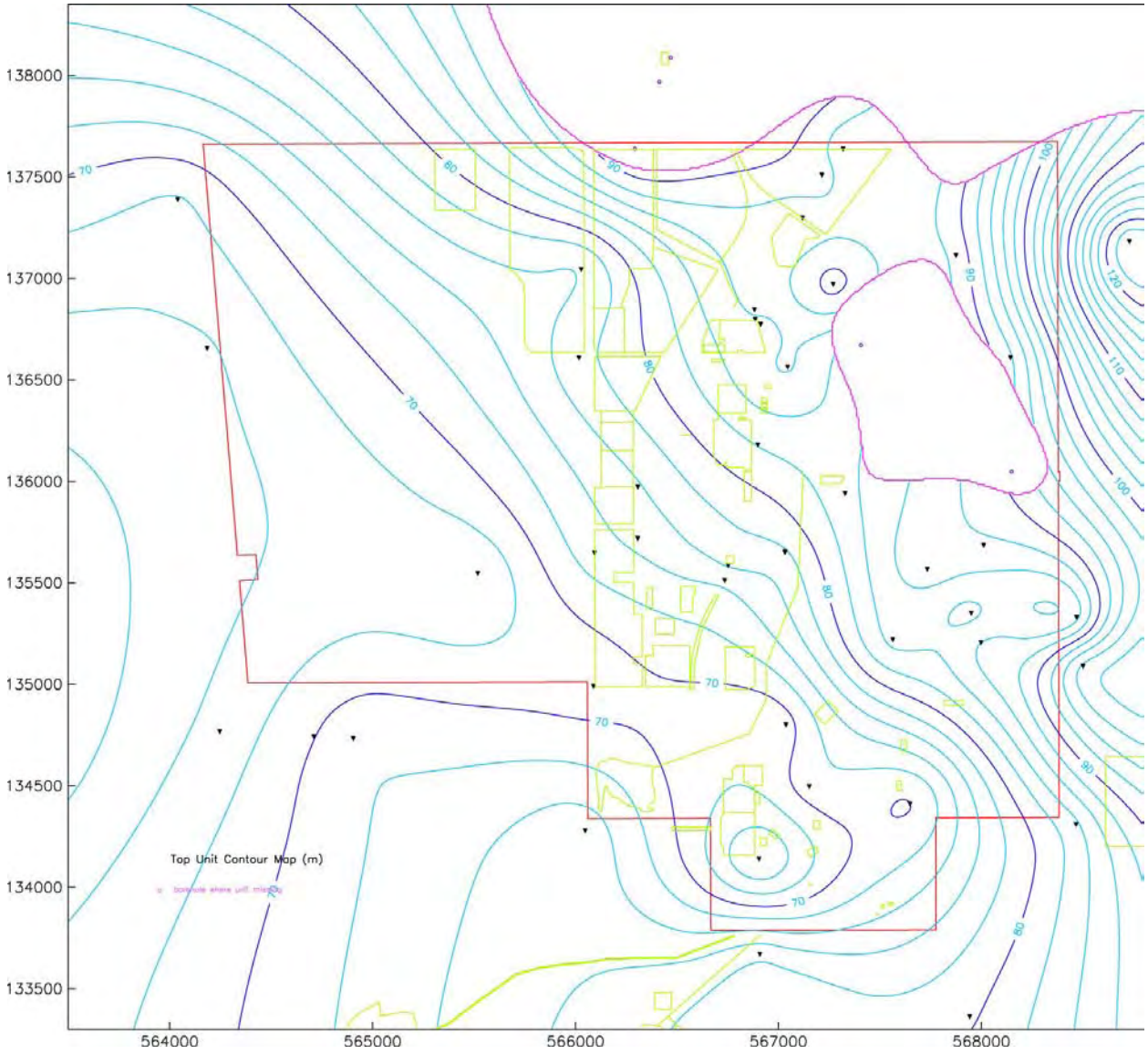


Figure C.9. Structure Contour Map of the Top of the Ringold Formation, Lower Mud Unit, in and Around the 200 West Area. Contours are in meters above mean sea level (MSL).

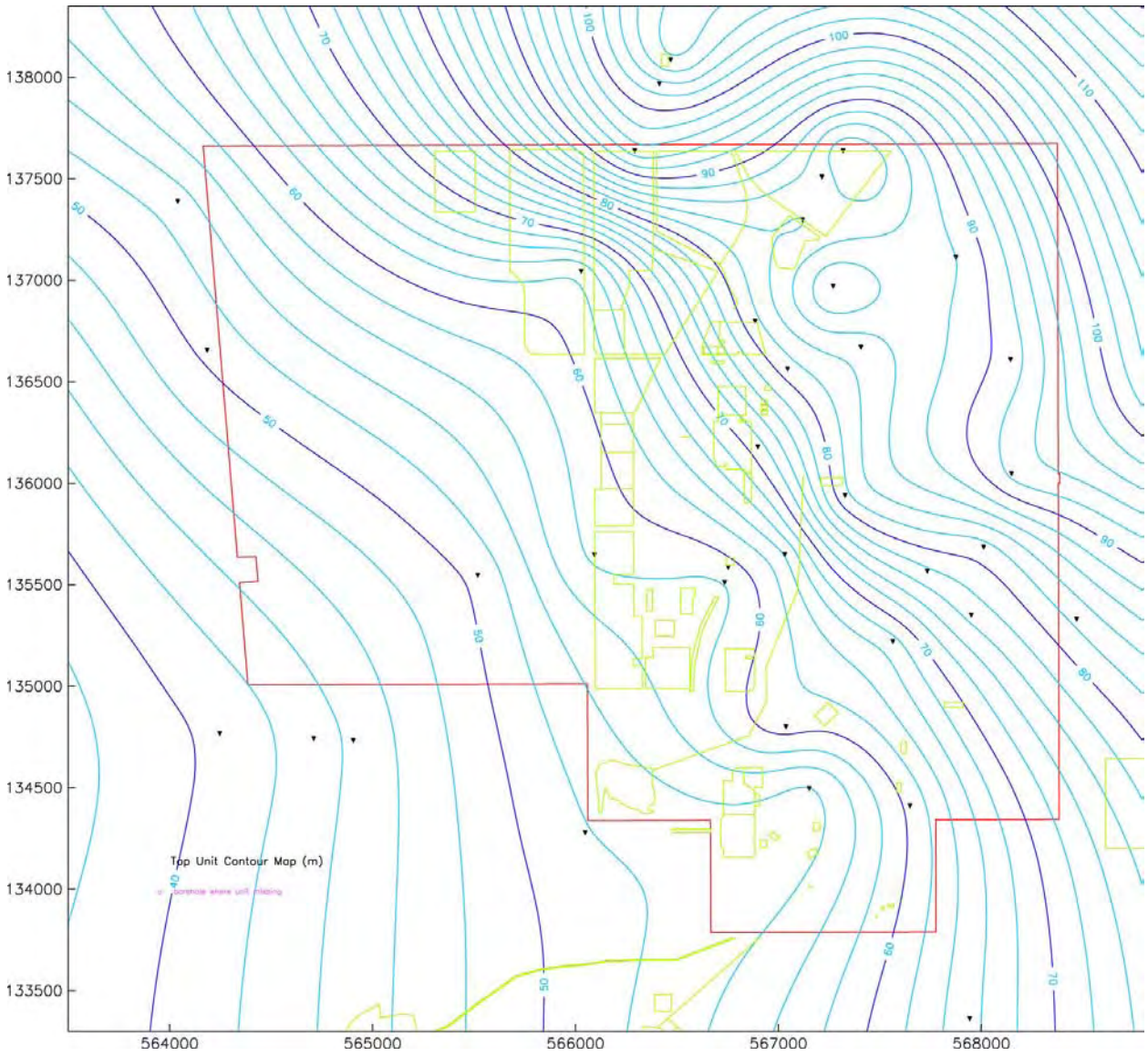


Figure C.10. Structure Contour Map of the Top of the Ringold Formation, Member of Wooded Island, Unit A, in and Around the 200 West Area. Contours are in meters above mean sea level (MSL).

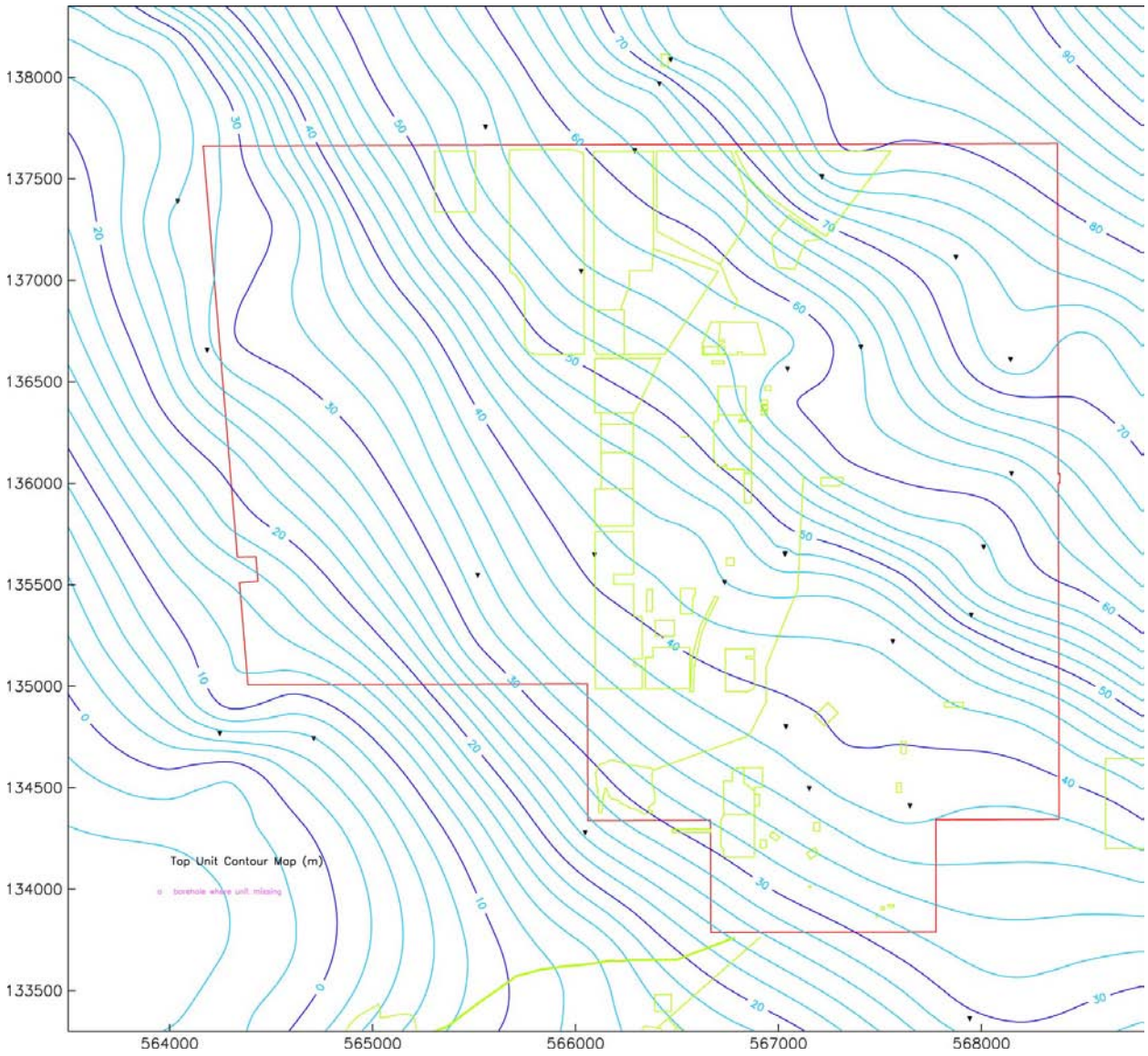


Figure C.11. Structure Contour Map of the Top of Basalt (Undifferentiated) in and Around the 200 West Area. Contours are in meters above mean sea level (MSL).

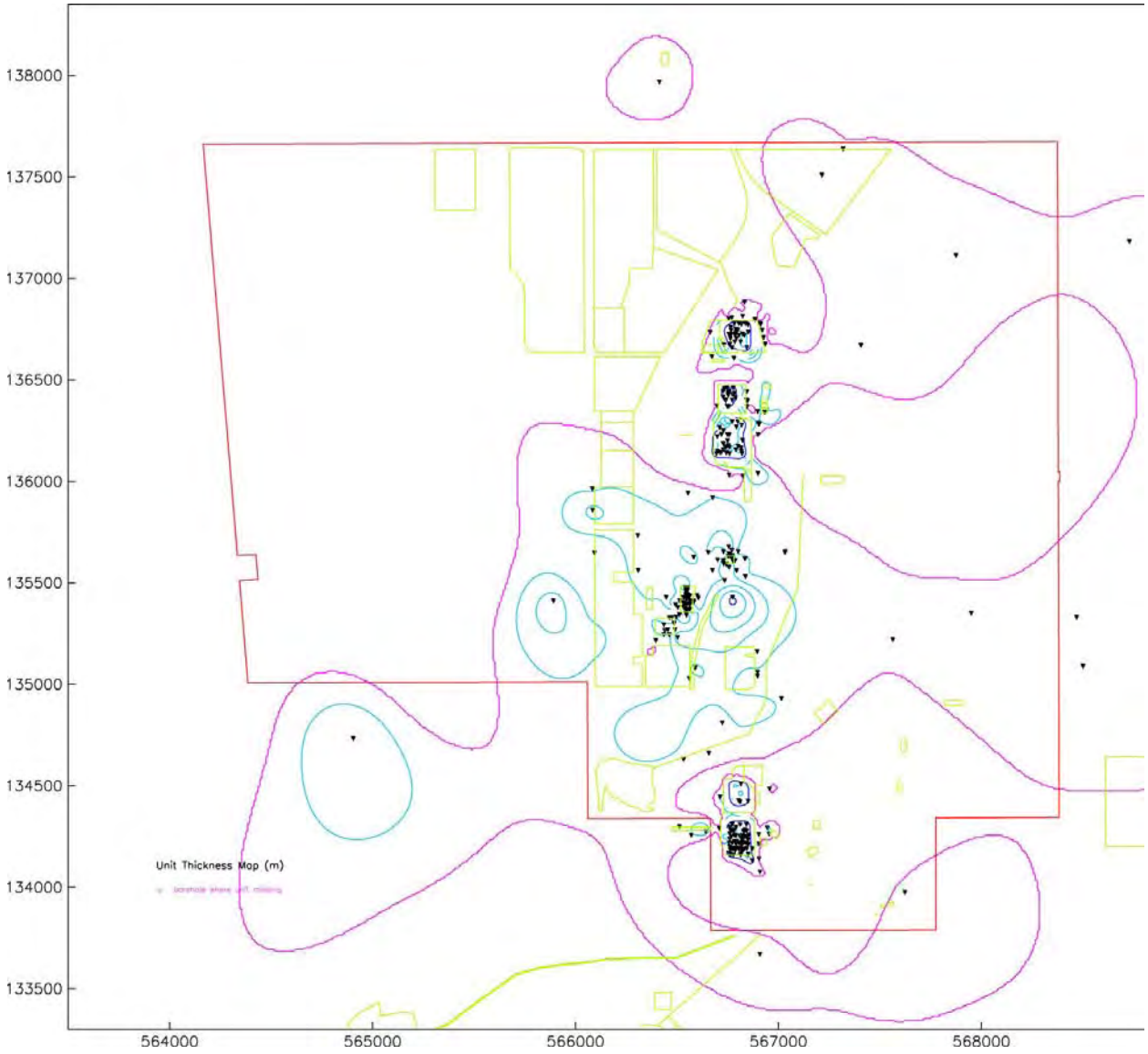


Figure C.12. Isopach Map of Holocene Deposits (Undifferentiated) in and Around the 200 West Area. The irregular surface in the central and southern 200 West Area is due to backfill associated with man-made excavations (e.g., tank farms). Contours are in meters.

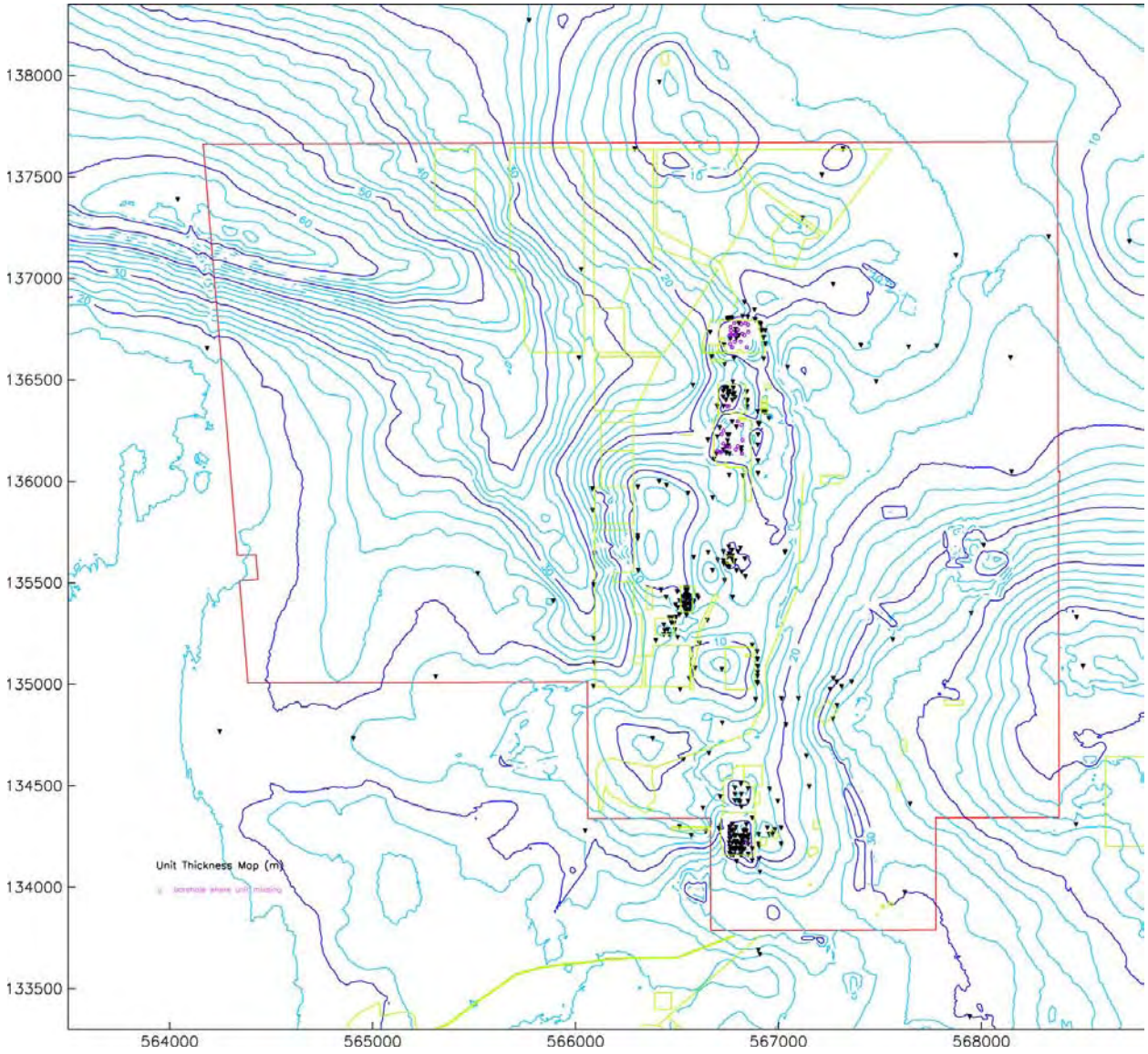


Figure C.13. Isopach Map of the Hanford H1 Unit in and Around the 200 West Area. The irregular surface in the central and southern 200 West Area is due to man-made excavations associated with subsurface facilities (e.g., tank farms). Contours are in meters.

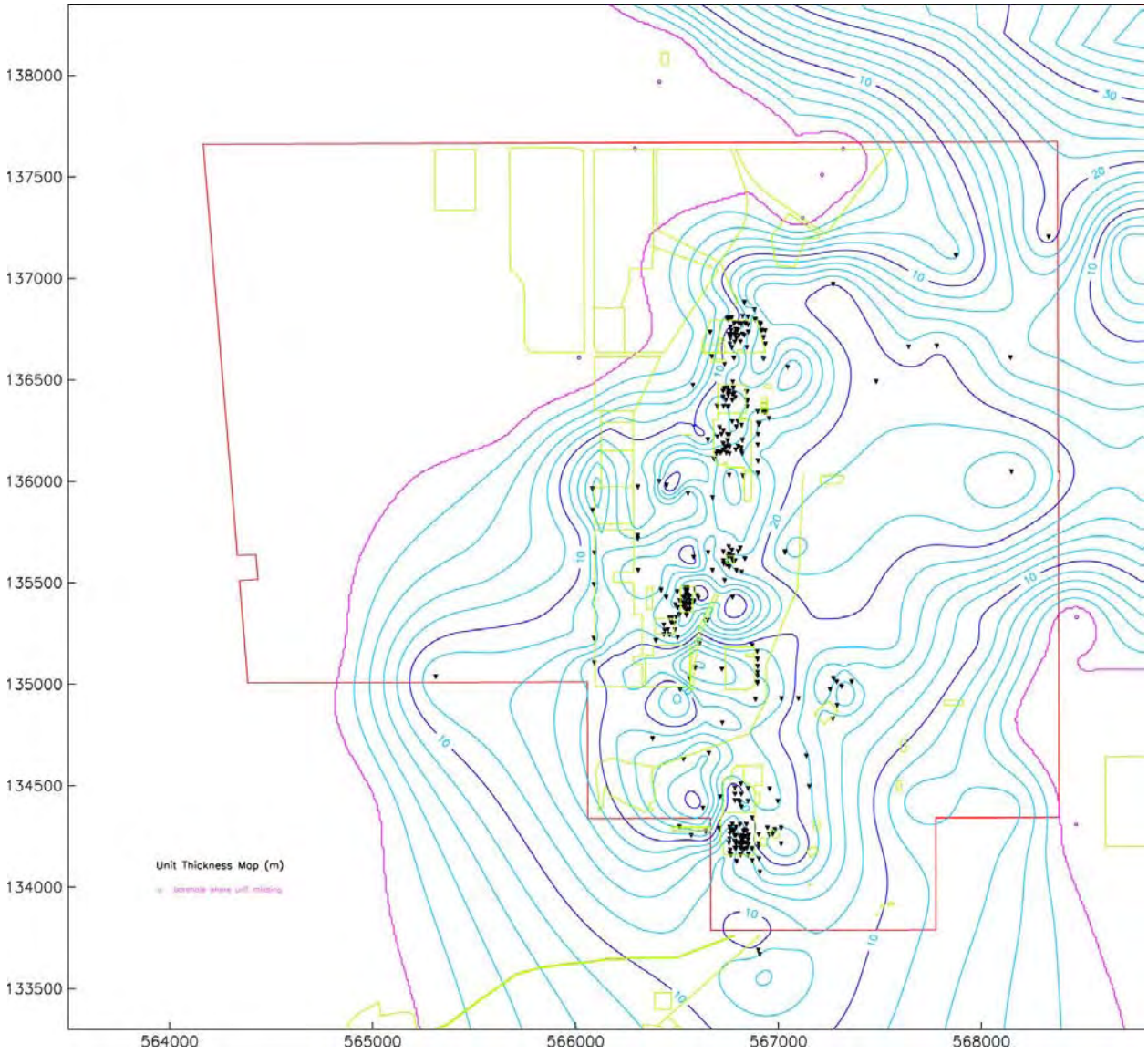


Figure C.14. Isopach Map of the Hanford H2 Unit in and Around the 200 West Area. Contours are in meters.

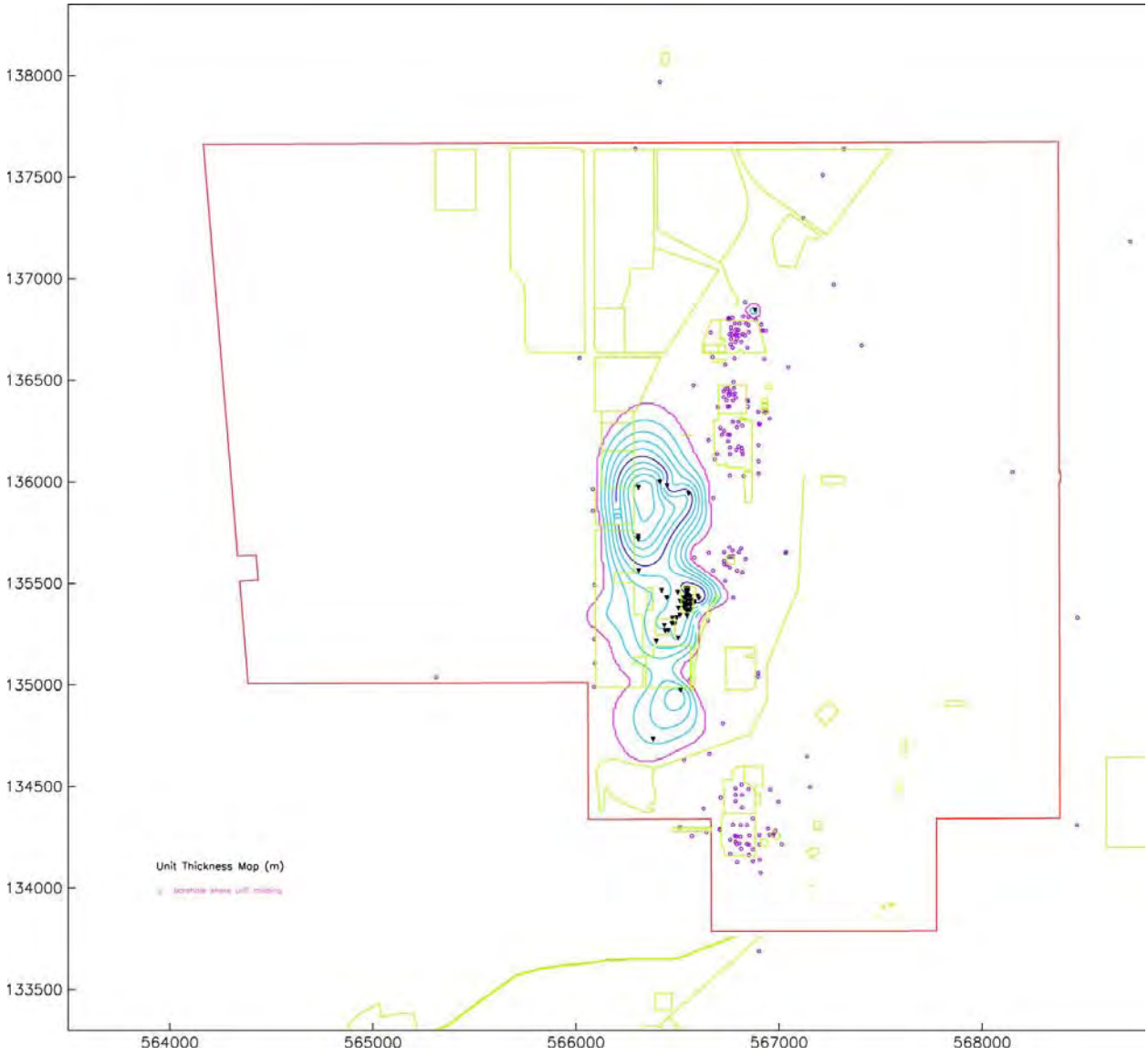


Figure C.15. Isopach Map of the Hanford H3 Unit in and Around the 200 West Area. Contours are in meters.

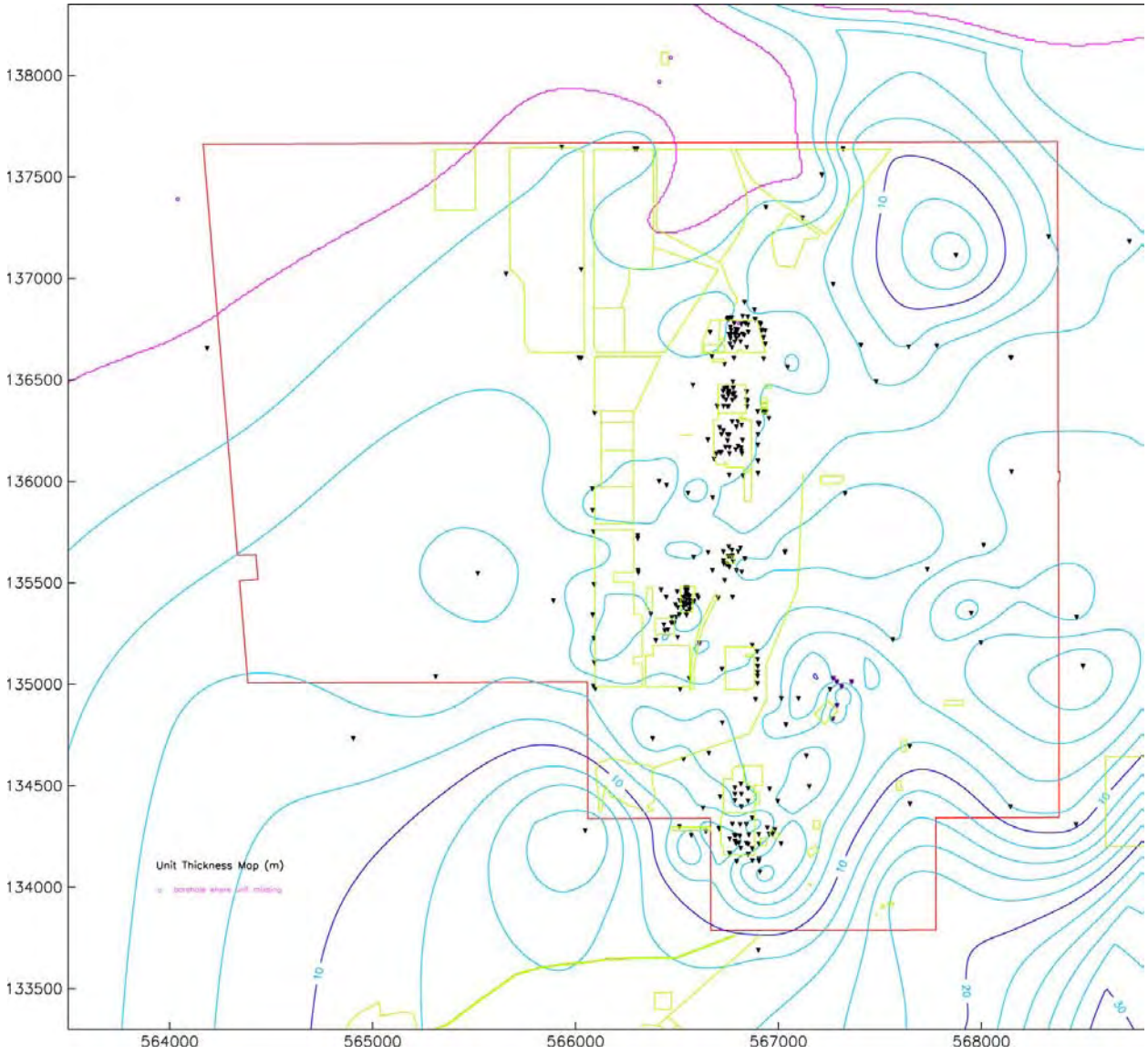


Figure C.16. Isopach Map of the Cold Creek Unit Silt in and Around the 200 West Area. Contours are in meters.

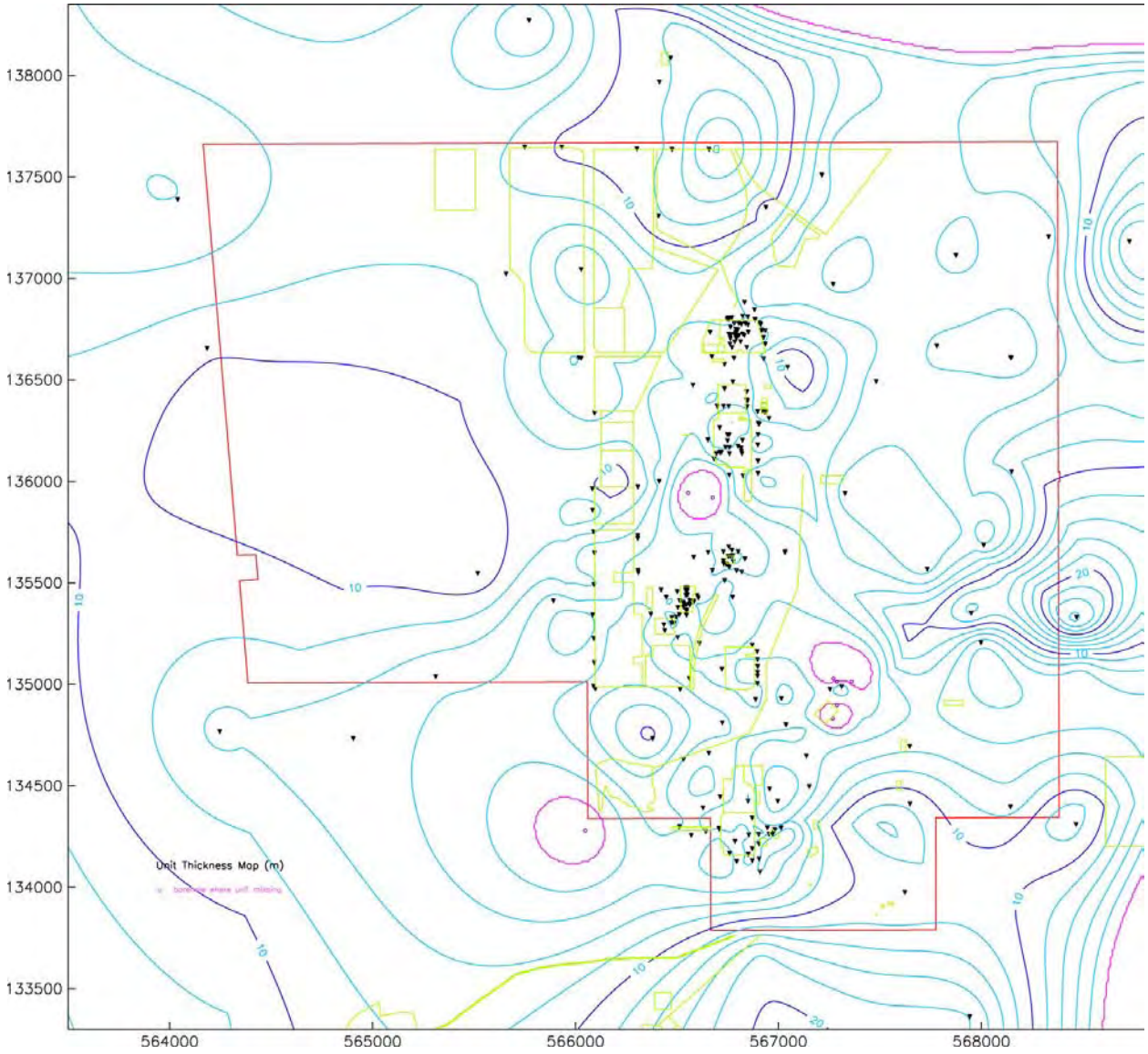


Figure C.17. Isopach Map of the Cold Creek Unit Carbonate in and Around the 200 West Area. Contours are in meters.

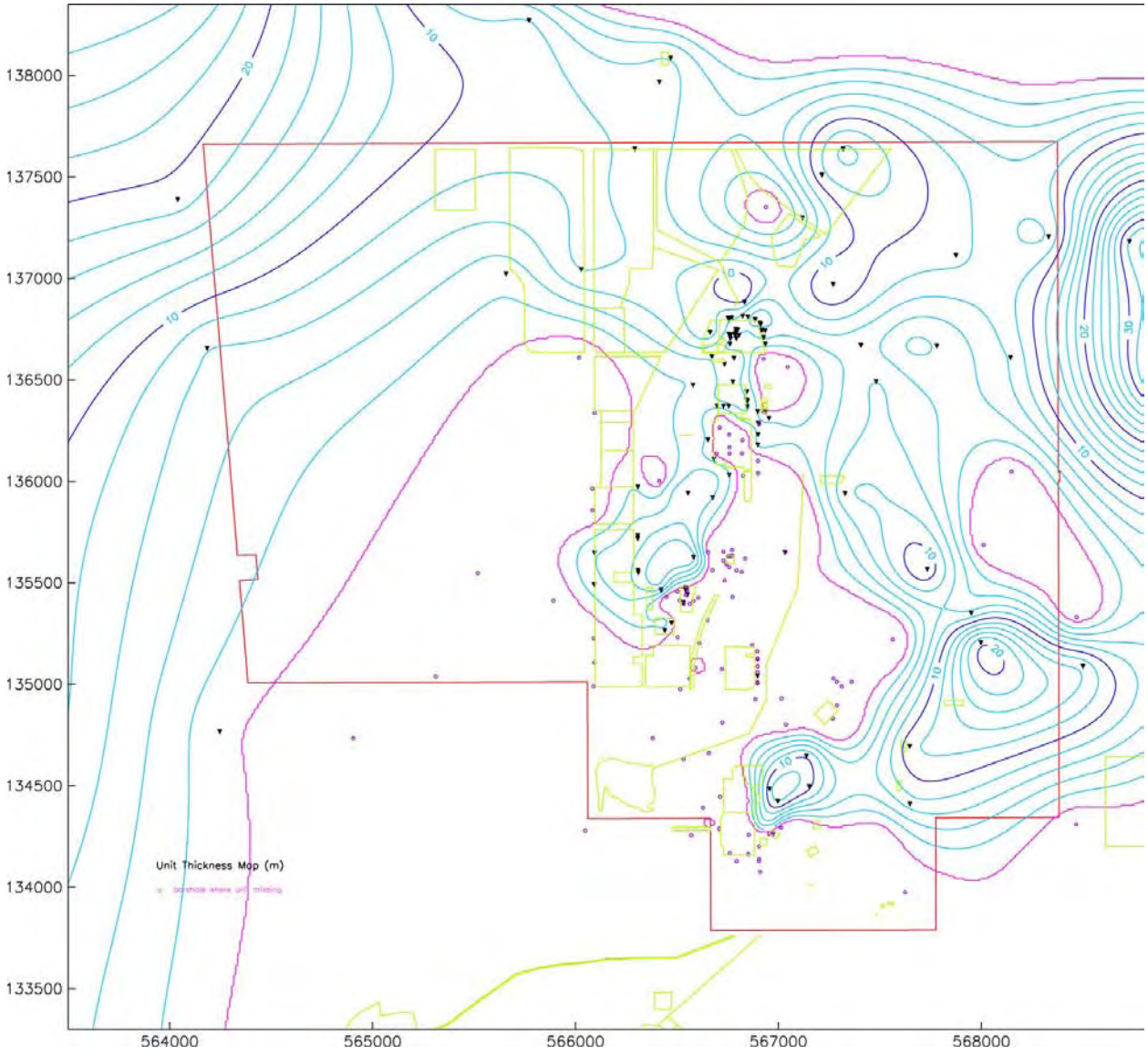


Figure C.18. Isopach Map of the Ringold Formation, Member of Taylor Flat, in and Around the 200 West Area. Contours are in meters.

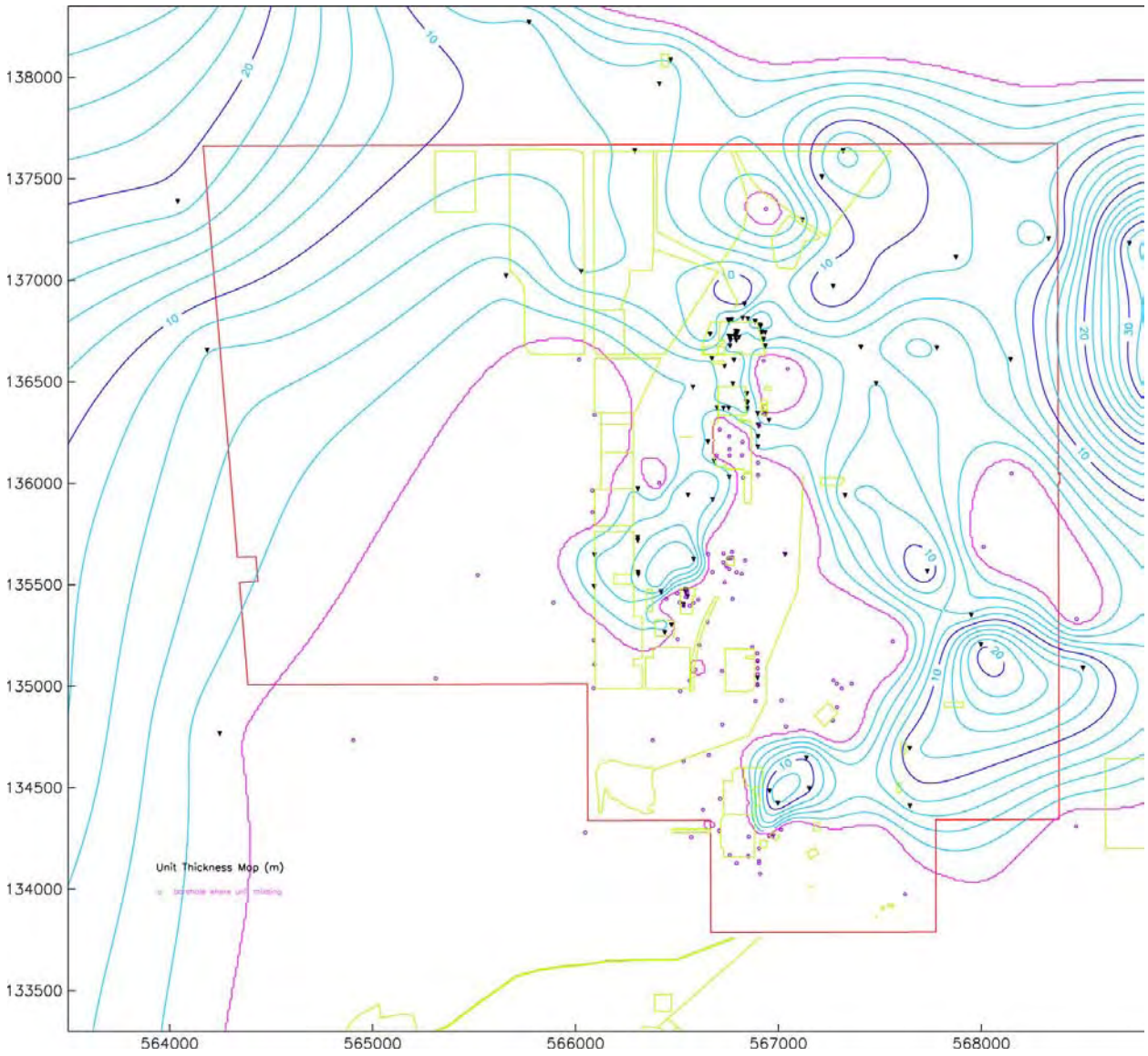


Figure C.19. Isopach Map of the Ringold Formation, Member of Wooded Island, Unit E, in and Around the 200 West Area. Contours are in meters.

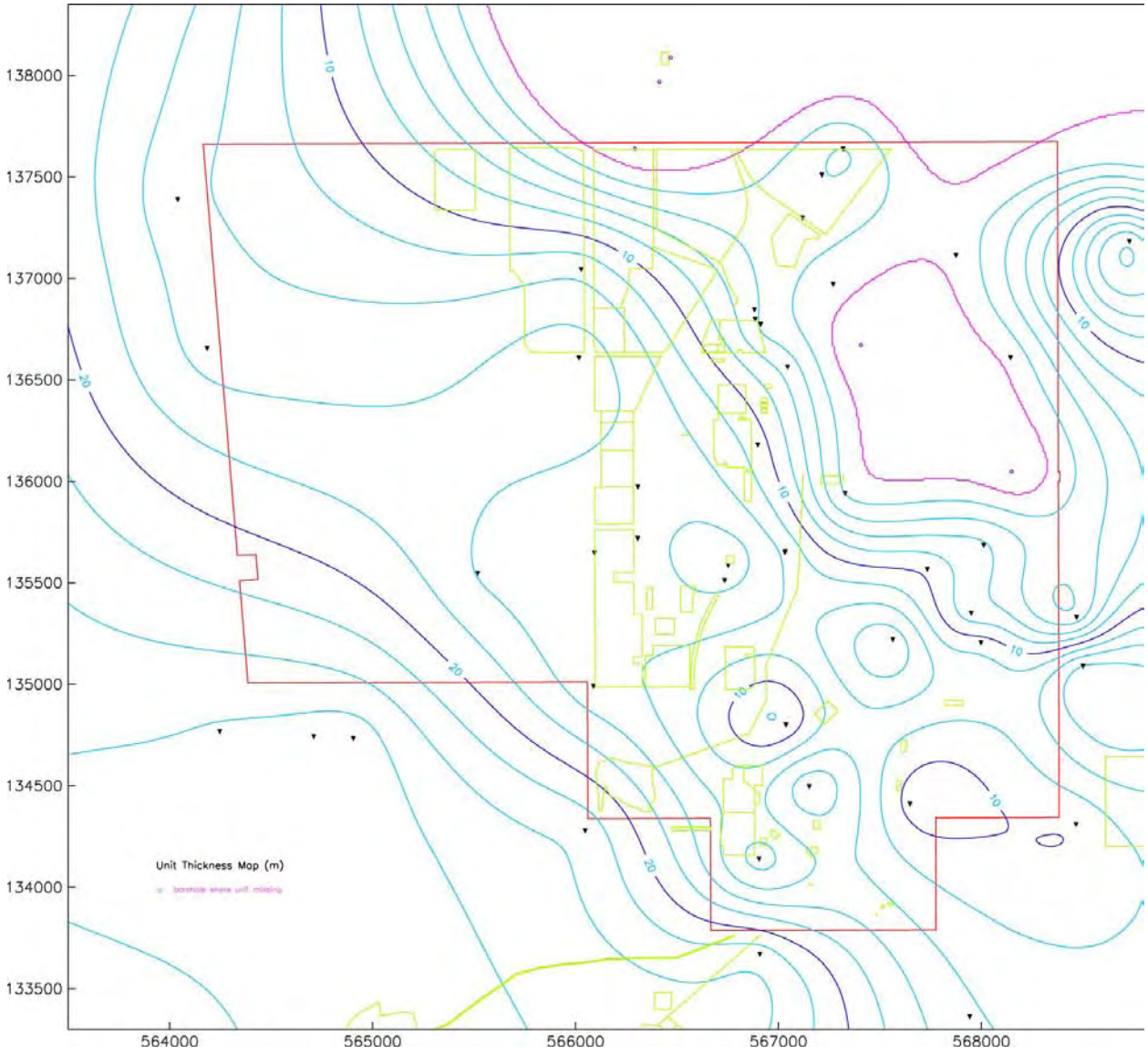


Figure C.20. Isopach Map of the Ringold Formation, Lower Mud Unit, in and Around the 200 West Area. Contours are in meters.

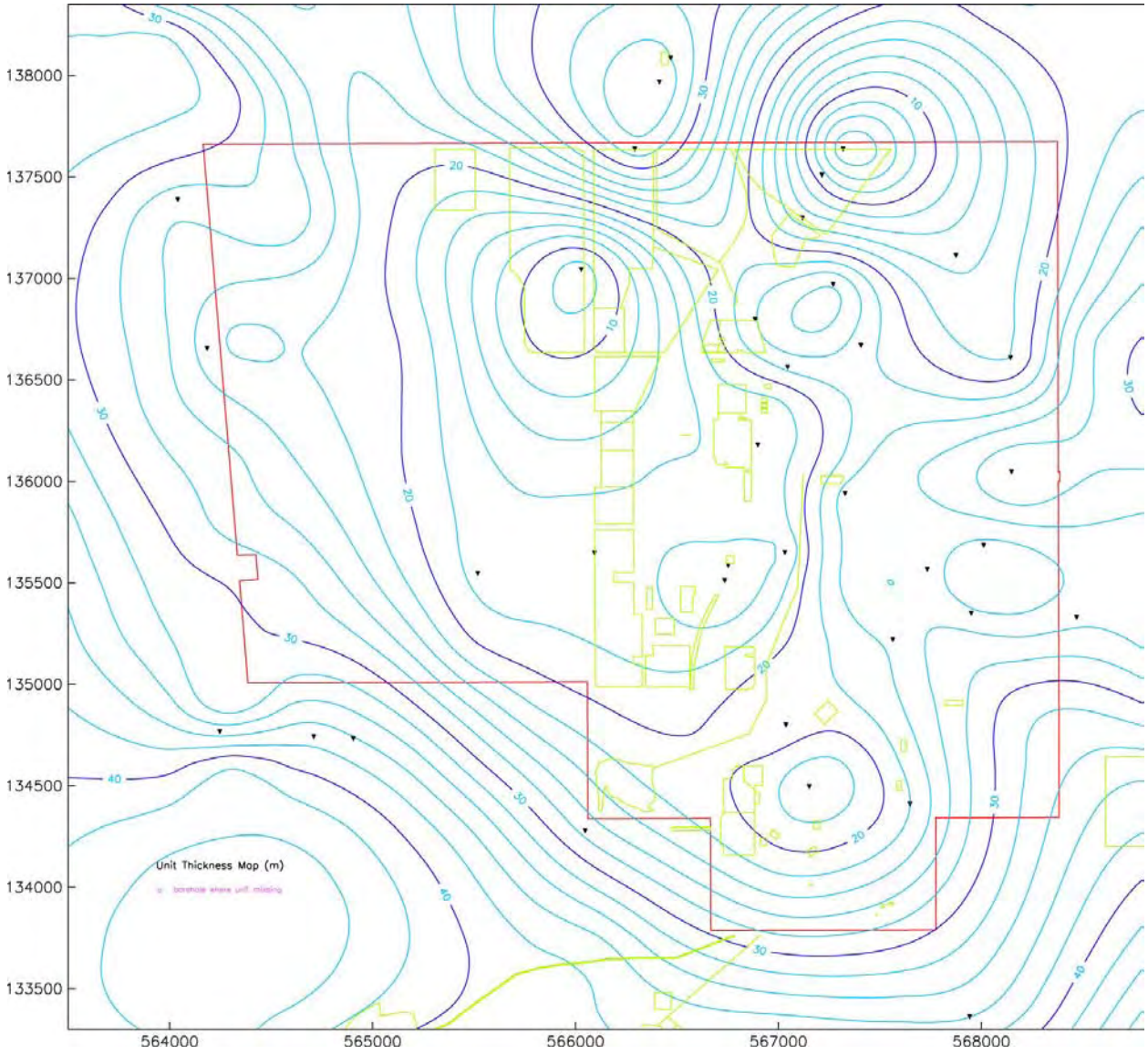


Figure C.21. Isopach Map of the Ringold Formation, Member of Wooded Island, Unit A, in and Around the 200 West Area. Contours are in meters.

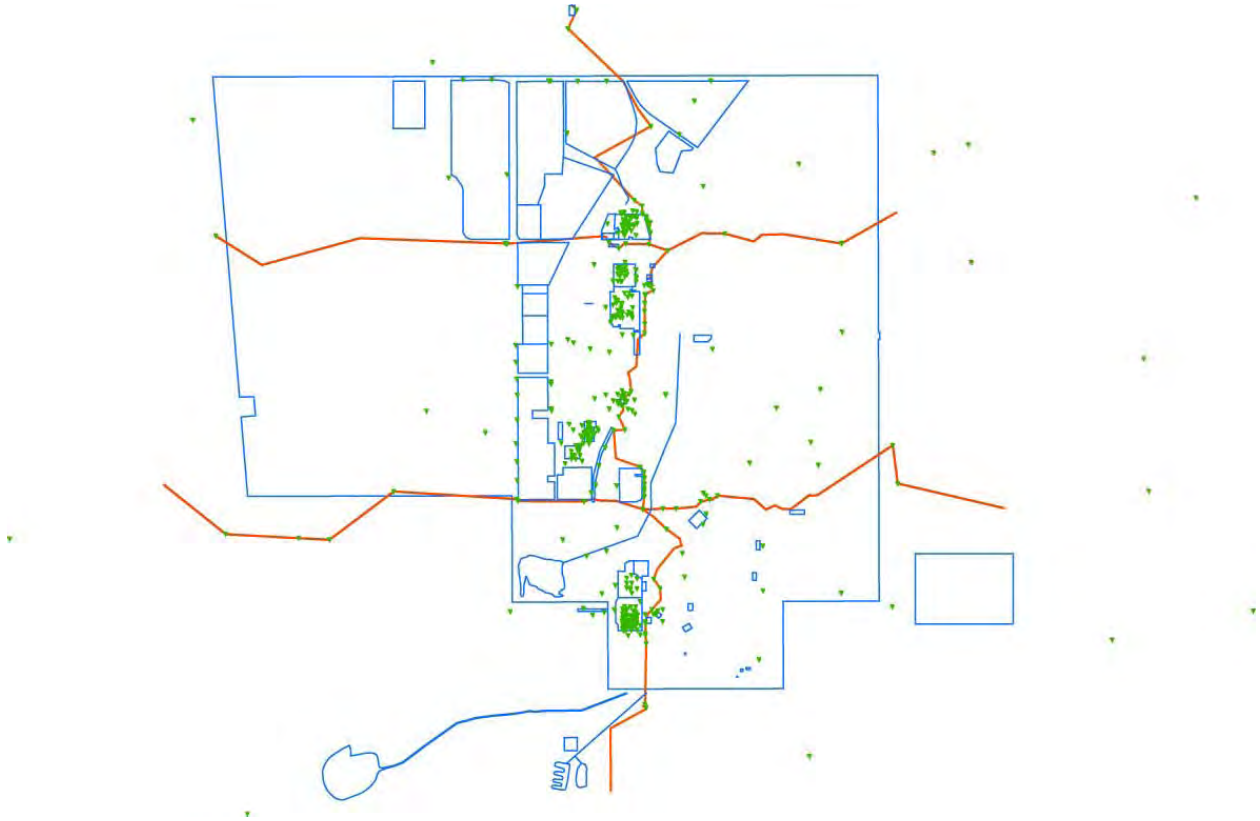


Figure C.22. Cross-Section Location Map

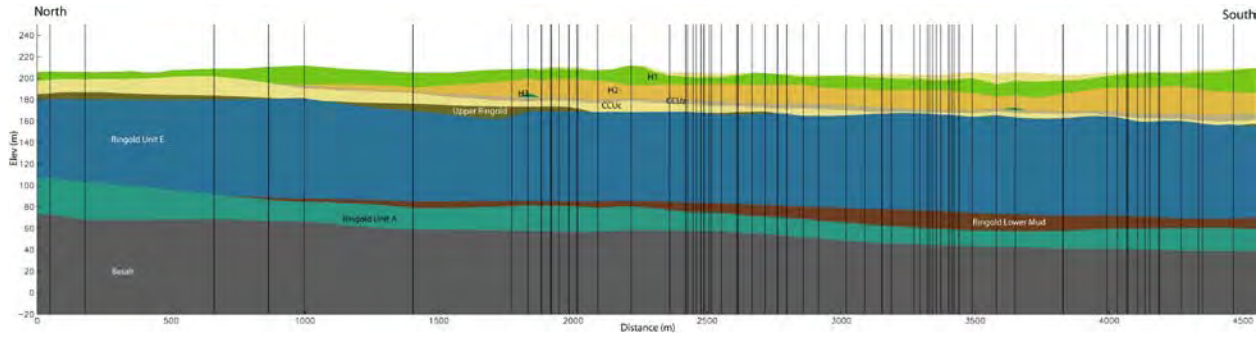


Figure C.23. North-South Cross Section B-B'

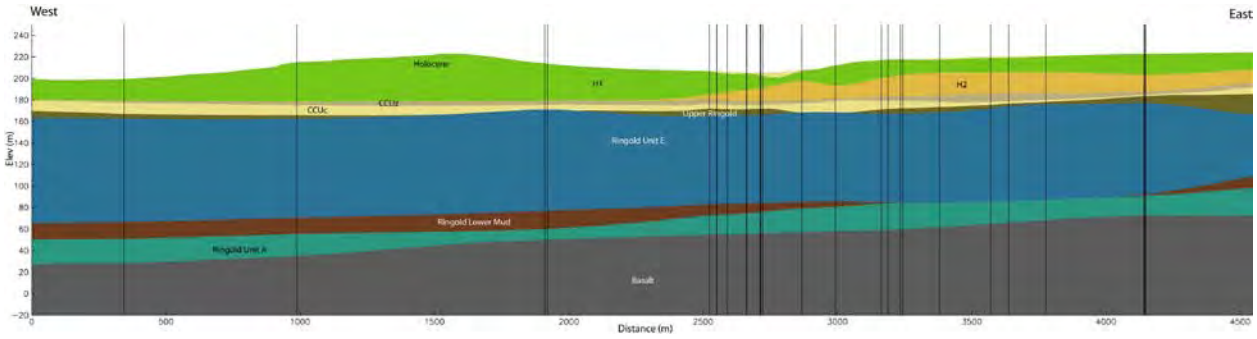


Figure C.24. East-West Cross Section F-F'

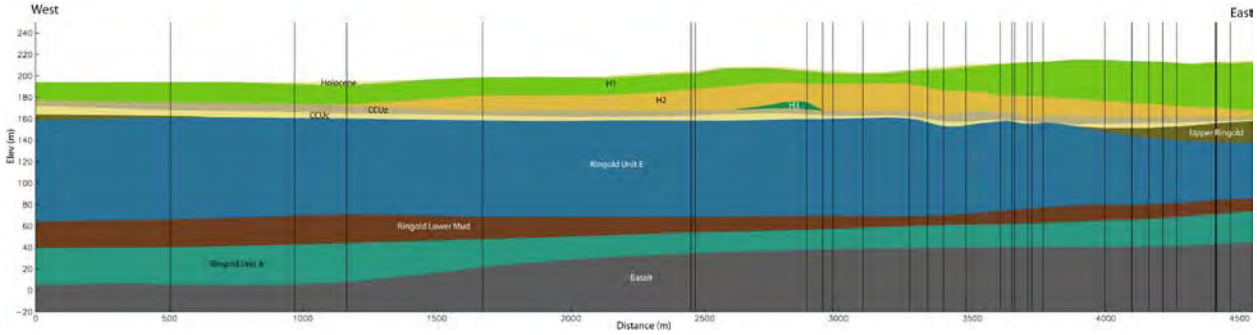


Figure C.25. East-West Cross Section I-I'

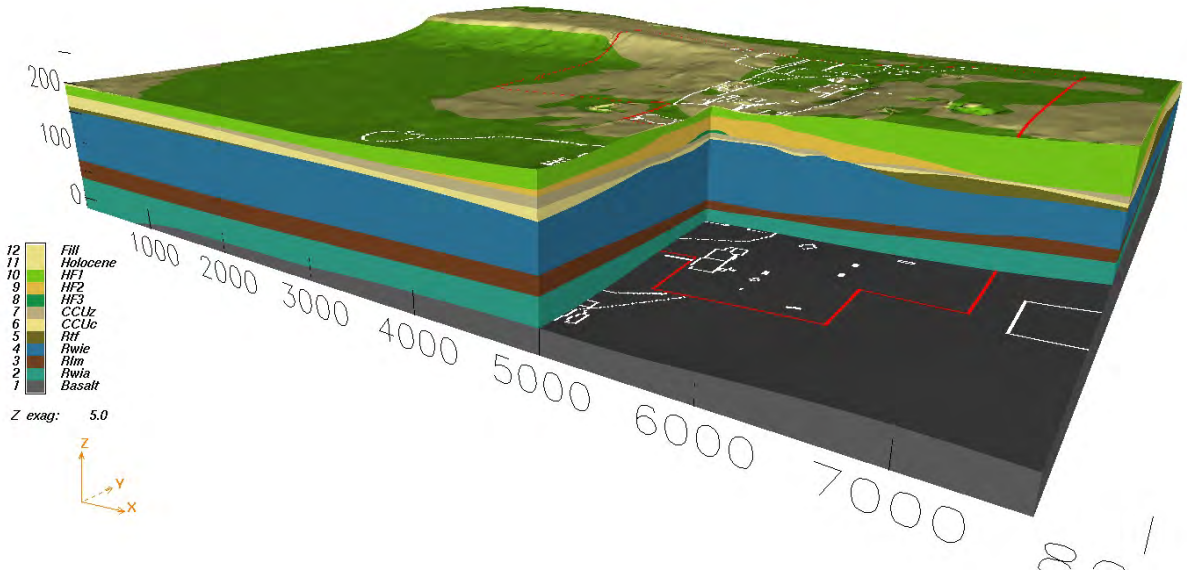


Figure C.26. Three-Dimensional Solid Earth Model with Cutout Along Cross Sections B-B' and I-I'

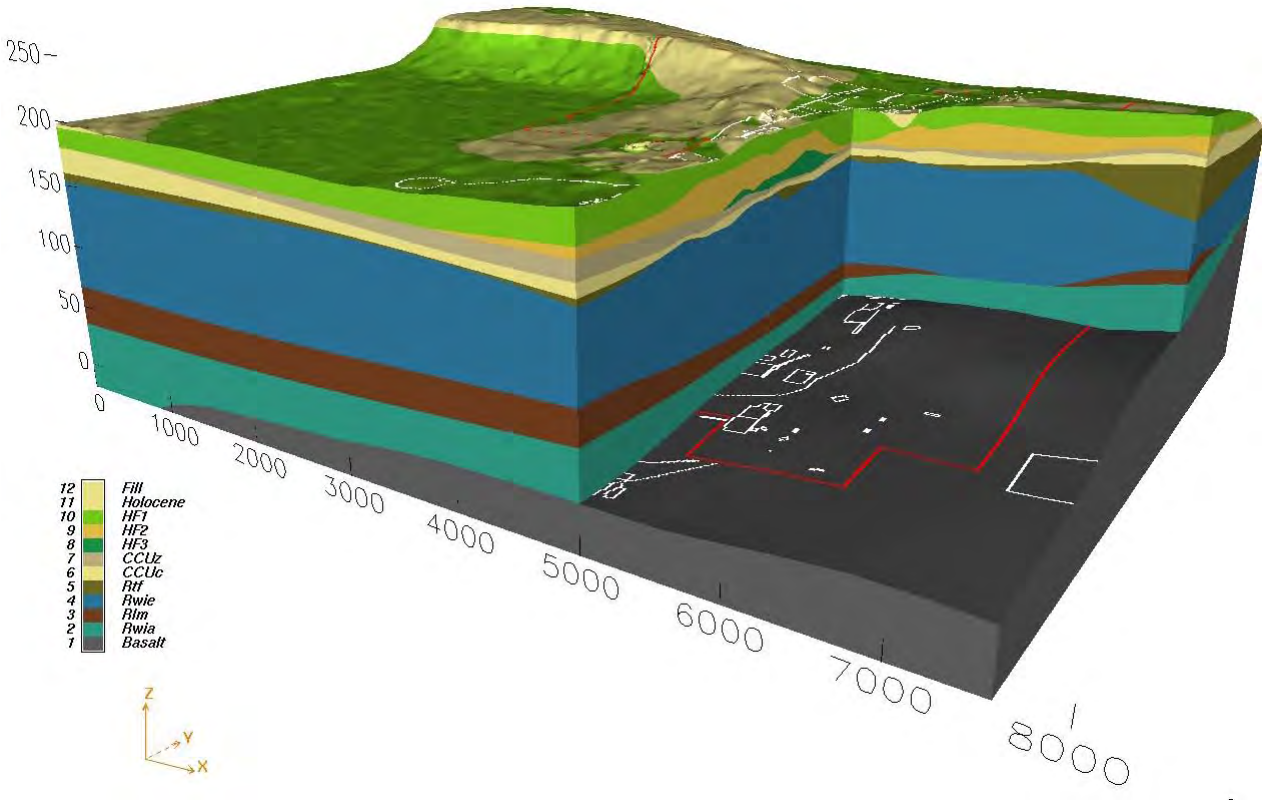


Figure C.27. Three-Dimensional Solid Earth Model with Cutout Along Cross Sections B-B' and F-F'

Table C.1. Top Contact Elevation Data for Stratigraphic Units Used to Build EarthVision Model

# Type: Scattered data			
# Version: 7			
# Format: Free			
# Field: 1 x			
# Field: 2 y			
# Field: 3 z meters			
# Field: 4 Wellid non-numeric			
# Projection: State Plane			
# Zone: 4602 -- Washington (South)			
# Units: Meters			
# Ellipsoid: GRS 1980/NAD83			
# End:			
566752.23	135586.67	59.27	W15-46
566093.439	135648.274	58.42	W15-14
566734.978	135511.737	57.98	W15-5
564904.599	134733.616	44.37	699-37-82B
562367.221	142612.351	105.65	699-63-90
568967.03	136488.48	106.14	699-43-69
565637.671	141574.964	155.65	699-59-80B
560944.724	140231.066	96.04	699-55-95
566723.421	140225.816	133.01	699-55-76
568529.958	140318.965	146.61	699-55-70
566978.076	138906.286	114.87	699-51-75
570664.4	139148.408	120.56	699-51-63
559791.933	138597.775	101.32	699-50-99
560498.644	138598.927	52.09	699-50-96
564039.49	137389.363	53.15	699-46-85B
566047.649	134279.214	51.89	699-35-78B
564130.196	138669.323	63.31	699-50-85
567031.755	135650.695	63.92	W14-9
566468.954	138086.801	108	699-48-77C
566413.228	137968.857	103.51	699-48-77A
561961.05	137899.21	50.9	699-47-92A
564184.494	136656.217	50.53	699-43-84
565518.011	135547.796	50.59	699-40-80
571474.38	137968.732	129.93	699-47-60
566027.833	137045.119	62.58	699-45-78
568947.12	137233.81	111.95	699-45-69C
570390.651	136897.434	119.29	699-44-64P
570390.651	136897.434	119.4	699-44-64
562186.522	136693.27	33.61	699-43-91B
561920.394	134597.154	34.67	699-37-92
562880.724	134737.896	33.93	699-37-89
570057.48	135881.16	98.36	699-40-65
568469.1	135331.04	82.53	699-38-70B
571401.207	134586.889	83.45	699-36-61B
567318.74	137638.72	82.39	W6-6
567118.18	137299.13	83.82	W6-3

570090.185	135039.847	92.25	699-38-65
568148.74	136048.6	92.66	W13-1
564246.757	134768.37	40.51	699-37-84
564383.098	132999.147	41.92	699-31-84A
564709.845	134742.796	43.11	699-37-83
575556.97	134893.26	85.68	699-37-47A
569857.861	134099.244	85.99	699-35-66A
567406.278	136671.046	84.87	W11-2
567214.128	137510.135	84.86	W6-1
567942.676	133362.612	65.38	699-32-72A
567151.707	134496.761	53.75	W22-27
567648.17	134410.86	60.55	W22-24
567036.972	134800.753	60.87	W19-10
567563.693	135220.291	67.24	W19-8
567949.931	135350.792	76.65	W19-4
567733.43	135567.81	77.67	W14-71
567328.44	135941.28	81.71	W14-72
568011.141	135685.695	81.21	W14-8B
567045.135	136563.735	81.1	W11-26
566885.426	136798.78	81.57	W10-24
566898.386	136181.048	71.12	W14-14
567874.67	137113.09	87.92	W11-88
568143.53	136610.04	91.01	W11-86
567269.74	136971.04	89.94	W11-43
566292.031	137638.641	95.2	W7-3

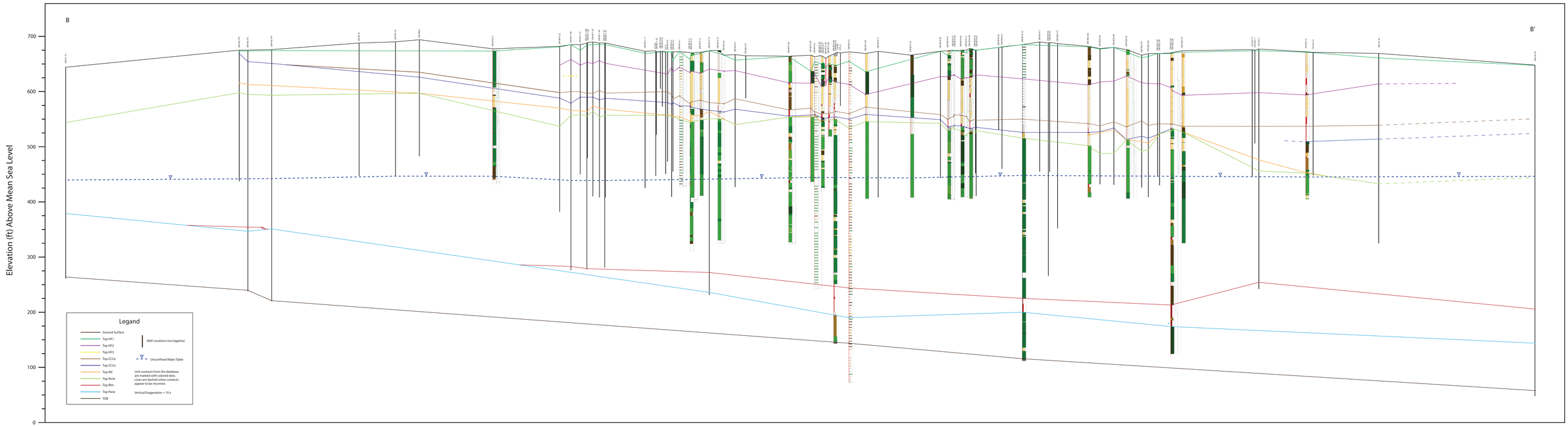
Appendix D

Detailed Geologic Cross Sections Through the 200 West Area

Appendix D

Detailed Geologic Cross Sections Through the 200 West Area

The details of cross sections B-B’ and F-F’ are provided on the following pages.


B
B'
Elevation (ft) Above Mean Sea Level
700
600
500
400
300
200
100
0
Legand
Ground Surface
Top HF1
Top HF2
Top HF3
Top CCUc
Top CCUc
Top Rtf
Top Rwie
Top Rlm
Top Rwia
TOB
Well Locations (no loggolors)
Unconfined Water Table
Unit contacts from the database are marked with colored dots; Lines are dashed when contacts appear to be incorrect.
Vertical Exageration = 10 x

F
West

F'
East

Elevation (ft) Above Mean Sea Level

800
700
600
500
400
300
200
100
0

699-13-84
299-W10-14
299-W10-13
299-W10-71
299-W10-2
299-W10-4
299-W10-53
299-W10-16
299-W11-12
299-W11-26
299-W11-65
299-W11-1
299-W11-7
299-W11-2
299-W11-52
299-W11-3
299-W11-9
299-W11-87
299-W11-86
299-W11-110

Legand

- Ground Surface
- Top HF1
- Top HF2
- Top HF3
- Top CCUz
- Top CCUc
- Top Rtf
- Top Rwie
- Top Rlm
- Top Rwia
- TOB
- Well Locations
- Unconfined Water Table
- Unit contacts from the database are marked with colored dots. Lines are dashed when contacts appear to be incorrect.
- Vertical Exageration = 10 x

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