



August 23, 2011

Karin A. Smith, P.G.
Water Use Regulation Division
South Florida Water Management District
P.O. Box 24680
West Palm Beach, FL 33416-4680

RE: Request for Additional Information
Water Use Permit Application No. 071101-3
Project: Charlotte County Babcock Ranch Water Supply
County: Charlotte Sec 3,10,12,14,15/Twp 41S/R 26E

Dear Ms. Smith,

This letter is in response to your August 4, 2010 letter requesting additional information.

1. Please complete a monitor well and then submit lithologic and water quality information at various depths at the wellfield site that demonstrates that the production horizon is from a single aquifer system, pursuant to Rule 40E- 3.502(1)(FAC).

Response:

Johnson Engineering constructed three monitor wells in the Surficial, Intermediate and Upper Floridan aquifers, in accordance with the drilling and testing program that was provided to the SFWMD on April 21, 2011. The Surficial aquifer well (JE-1502) has casing set to 13 feet below land surface (bls) and a screened interval from 13 to 21 feet bls. The Intermediate aquifer well (JE-1501) has casing set to 62 feet bls and an open hole interval to 240 feet bls. The Upper Floridan aquifer well (JE-1503) has casing set to 470 feet bls and an open hole interval to 1,200 feet bls, as requested by the SFWMD. Well completion reports were provided to the SFWMD on July 11, 2011.

During well construction, well cuttings were collected and described at 10-foot intervals or at major changes in lithology. See attached lithologic log for a description of the lithology for Upper Floridan aquifer well JE-1503. Based on the lithology encountered during construction of JE-1503, the first major production zone of the Upper Floridan aquifer does not occur until approximately 650 feet bls at this location. A suite of static and dynamic geophysical logs, including caliper, natural gamma, dual induction, fluid resistivity, flow and temperature, for JE-1503 support this depth as the first appreciable production zone. See attached geophysical logs included in electronic format on the CD provided with the reviewer's copy of this response. The geophysical logs show flow zones at approximately 514-520, 655-670, 690-710, 755-772, 788-800 and 845-855 feet bls. As a

result, the proposed depths of the production wells have been modified to cased depths of 660 feet bls and total depths of 900 feet bls. Additionally, due to the reduction in allocation requested and the hydraulic properties of the aquifer, as discussed below, the total number of proposed production wells has been decreased to 3 primary production wells. Please see attached revised table A and wellfield location map.

Following completion of test well construction, Johnson Engineering conducted a 72-hour constant rate aquifer performance test (APT) using JE-1503 as the pumping well and existing Lower Hawthorn aquifer well JE-585 as the observation well. JE-585 is located approximately 802 feet from the test well site, and cased to approximately 270 feet BLS and open to 551 feet bls. Water level data recorded at JE-585 and JE-1503 before, during and after the APT show good hydraulic communication between these wells, despite the different cased and total depths. Data from the SFWMD's ROMP 5 site, located approximately 7 miles west of the test site, similarly show nearly identical water levels for the Arcadia (450-600 feet bls) and Suwannee (720-970 feet bls) monitor zones.

The Surficial aquifer (JE-1502), Intermediate aquifer (JE-1501) and Upper Floridan aquifer (JE-1503) test/monitor wells, along with JE-585, were equipped with pressure transducers and dataloggers to monitor water levels before, during and after the pumping portion of the APT. Background data was collected for over 5 days prior to the start of the APT, which involved pumping JE-1503 at 125 gpm for 72 hours. Collection of recovery data continued for 6 days following completion of the pumping portion of the test. During the APT, water levels in JE-1503 declined by approximately 4.5 feet, for a specific capacity of 27.8 gallons per minute per foot (gpm/ft). Water levels measured in JE-585 declined by approximately 0.6 feet during the APT. Water levels measured in the Surficial aquifer well, JE-1502, rose during the APT due to storage of water generated by the APT proximate to the monitor well. See attached hydrographs of water level during the APT for the 4 wells.

Drawdown data from JE-585 were analyzed using a Hantush and Jacob (1955) leaky aquifer solution. The data analysis produced a transmissivity value of 11,440 feet squared per day, a storage coefficient value of 1.1×10^{-3} , and a leakance value of 7.1×10^{-4} per day. Please see attached APT data curve matching analysis. Analysis of recovery data from JE-1503 using the Theis (1946) recovery solution produced a similar transmissivity value of 12,560 feet squared per day. These values also agree well with those measured at the Town and Country Utilities (TCUC; SFWMD #08-00122-W) APT site. Testing at the TCUC wellfield, approximately 4 miles to the south of the Charlotte County Utilities site, reported a transmissivity value of 10,800 feet squared per day, a storage coefficient value of 1.56×10^{-4} , and a leakance value of 2.1×10^{-4} per day.

A single-layer WINFLOW model using the site-specific aquifer parameters described above and a Hantush and Jacob (1955) leaky aquifer solution was used to evaluate potential drawdown due to withdrawal of the requested allocation from the Upper Floridan aquifer. The model simulates maximum daily withdrawals of 3 mgd from 3 Upper Floridan aquifer wells for 90 days without rainfall recharge. Please see attached for revised modeled drawdown. Based on results from the revised modeling, the 1-foot drawdown contour created by withdrawing the requested allocation from the Charlotte County Utilities wellfield may intersect Lower Hawthorn/Upper Floridan aquifer uses at the East Charlotte

Drainage District (#2689) and Lady Moon Farms (#9648) within the SFWMD. The SFWMD lists the source for the East Charlotte Drainage District and Lady Moon Farms as from the Intermediate Aquifer System. However, these permitted users were included in the cumulative impact model because the listed well construction details are similar to those of JE-585, which shows hydraulic connectivity with Upper Floridan test well JE-1503.

Additionally, six Babcock Ranch Lower Hawthorn/Upper Floridan aquifer wells (SFWMD #08-00132-W) were also included in the cumulative impact model. These wells include:

**A5-2 (JE-584)
B6-1 (JE-588)
B6-4 (JE-704)
C4-2 (JE-614)
D3-1 (JE-618)
D4-2 (JE-613)**

Most of these wells are listed as secondary or standby facilities and do not have rated capacities. All wells, with the exception of D3-1, were simulated using a conservative pumping rate of 1 mgd each. The model simulated withdrawals of 72,000 gpd from D3-1 due to the small diameter and low measured yield of that well. Withdrawals by the Town and Country Utilities public supply wellfield (SFWMD #08-00122-W) were also included in the model as a large nearby user in the Upper Floridan aquifer, although the 1-foot drawdown contours of the two projects do not intersect. Please refer to the attached table of users included in the cumulative impact model for number of wells and withdrawal rates. The model simulated withdrawal rates for the facilities permitted through the SFWMD based on the peak day allocations assigned for each facility, as obtained from the SFWMD web site.

Please refer to the attached figure of cumulative drawdown. The cumulative impact model results indicate that up to 20 feet of drawdown may occur at some of the East Charlotte Drainage District wells. Based on the lowest recorded water level of 45.8 feet, NGVD measured at ROMP 5 (Suwannee) and a top of aquifer depth of -396 feet, NGVD (450 feet bls), 421.8 feet of potentiometric head will remain above the top of the aquifer. Model input and output files in electronic format have been provided on a CD attached to the reviewer copy of this response.

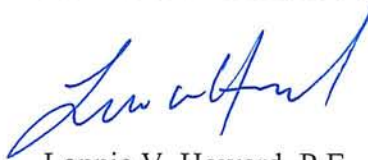
During drilling via reverse-air circulation method, water quality samples were collected at 40-foot intervals and analyzed for dissolved chloride, total dissolved solids (TDS), sulfate and specific conductance. See attached graph and lab reports for results. Additionally, at the time of geophysical logging, water quality samples were collected at specified depths in the borehole using a bailer. Prior to sampling, the well had been shut in for at least 5 days, allowing for representative sampling of native water quality from a specific interval. See attached plot and lab report for results. The water quality results indicate that salinity of the native groundwater peaks around 800 feet bls, with chloride and TDS of approximately 600 and 1,500 milligram per liter (mg/L), respectively, and then becomes fresher with depth, with chlorides and TDS declining below 500 and 1,300 mg/L, respectively, by 1,200

feet. No appreciable flow zones exist from approximately 860 to 1,200 feet bls. The targeted production zone is, therefore, separated from deeper, saline production zones by at least 300 feet of confinement with fresher water quality than that of the production zone.

Should you have any questions or comments, please do not hesitate to contact me at (239) 334-0046.

Sincerely,

JOHNSON ENGINEERING, INC.


Lonnie V. Howard, P.E.
Florida License No. 53167
Johnson Engineering, Inc.
2122 Johnson Street
Fort Myers, FL 33901
(239) 334-0046
E B #642




Kim Arnold, P.G.
Florida License No. 2565
Johnson Engineering, Inc.
2122 Johnson Street
Fort Myers, FL 33901
(239) 334-0046
G B #503



Enclosure

Cc: Terri Couture, Charlotte County Utilities
Bruce Bullert, P.E., Charlotte County Utilities
File 20118669-001

Upper Floridan Aquifer Test Well JE-1503

| <u>Depth (feet bls)</u> | <u>Lithology</u> |
|-------------------------|---|
| 0-13 | SILT with clay, some organic matter and fine sand, sub-angular, light grey (2.5Y 7/2). |
| 13-30 | SHELL with clay. White bivalve shell, up to 1 to 2-inch fragments, some moderately indurated silt stone below 20 feet bls, dark grey (2.5Y 4/1). |
| 30-60 | CLAY with silt, moderately stiff, some shell up to 2-inches and fine-grained limestone, shell casts, dark grey (2.5Y 4/1) to black (2.5Y 2.5/1). Shell decreasing below 50 feet bls. |
| 60-65 | LIMESTONE, fine grained, some shell and shell casts, good porosity, light grey (2.5Y 7/1). |
| 65-70 | CLAY with silt, some shell, light grey (2.5Y 7/1). |
| 70-100 | SILT with clay, some to trace white limestone and shell, light grey (2.5Y 7/1) to white (2.5Y 8/1). |
| 100-160 | CLAY with silt, some to trace limestone and shell fragments, light yellowish brown (2.5Y 6/3) to dark greyish brown (2.5Y 4/2) to dark grey (2.5Y 4/1). With white silty clay below 130 feet bls. |
| 160-180 | SILT with clay, white nodules of clay, some to trace limestone, light brownish grey (2.5Y 6/2). |
| 180-230 | CLAY with silt, white, trace limestone and shell, shell casts, phosphatic sand. Limestone increasing with depth and phosphate becoming coarser. Light grey (2.5Y 7/2) below 210 feet bls. |
| 230-240 | SILT with clay, some limestone and shell fragments, light brownish grey (2.5Y 6/2). |
| 240-280 | CLAY with silt, soft, trace limestone and phosphate, olive grey (2.5Y 5/2). |
| 280-330 | CLAY with silt as above, white (2.5Y 8/1) to light grey (2.5Y 7/2), trace phosphate and white, fine-grained limestone. |
| 330-340 | CLAY with silt, some shell and limestone fragments, pale yellow (2.5Y 7/4). |

| | |
|---------|---|
| 340-420 | SILT with clay, limestone and shell fragments, limestone fine-grained with shell casts, trace phosphate, light grey (2.5Y 7/1). Clay increasing below 360 feet bls and shell and limestone decreasing. |
| 420-460 | CLAY with silt, some limestone, light grey (5Y 7/2). |
| 460-490 | LIMESTONE, fine-grained, very poorly indurated, moldic porosity, with silty clay, some shell, trace phosphate, white (5Y 8/1). |
| 490-500 | CLAY with silt, some shell fragments up to 1-inch and limestone, light grey (5Y 7/1). |
| 500-530 | SILT with clay, shell and limestone fragments, white to light grey (5Y 7/1). Limestone fine-grained and poorly to moderately indurated with shell casts. Clay increasing below 520 feet bls, shell and limestone decreasing. |
| 530-600 | CLAY with silt, soft, some to trace small limestone and shell fragments, limestone fine-grained and moderately indurated, trace coarse phosphate, light grey (5Y 7/1) to white. |
| 600-610 | CLAY with silt, as above, grey (5Y 6/1), phosphatic. |
| 610-620 | LIMESTONE, sandy, fine-grained, poorly indurated, trace phosphate, light grey (5Y 7/2) to grey (5Y 6/1) with clayey sand. |
| 620-650 | SAND with clay, white, soft and sticky, with Interbedded limestone layers, as above, trace phosphate. Clay becoming siltier with depth and limestone decreasing. Drilling notes indicate harder/firmer material from 625 to 636 and 640-660 feet bls. |
| 650-660 | Sandy LIMESTONE to SANDSTONE, fine-grained, poorly indurated, trace phosphate, pale yellow (5Y 8/2). |
| 660-670 | LIMESTONE, fine-grained, poorly indurated, with shell, white to pale yellow. |
| 670-690 | CLAY with silt, some limestone, as above, light grey (5Y 7/2) to white. |
| 690-710 | LIMESTONE, white, fine-grained, poorly indurated with clay, as above, some shell, trace phosphate. |
| 710-760 | LIMESTONE, as above, poorly to moderately indurated, some secondary porosity, with shell, some silt below 720 feet bls, turning light grey (5Y 7/1) below 750 feet bls. |
| 760-780 | LIMESTONE, as above, sandy, poorly indurated, some porosity. |

780-790 CLAY with silt and limestone, as above, pale yellow (2.5Y 8/2).

790-800 LIMESTONE, as from 710-760 feet bls, not sandy, poorly indurated, white.

800-840 LIMESTONE, as above, some silt, light grey (2.5Y 7/2).

840-900 LIMESTONE, as above, sandy, poorly indurated, fine-grained, some shell and shell casts, pale yellow (2.5Y 8/2).

900-930 LIMESTONE, as above, secondary and moldic porosity, some shell.

930-970 LIMESTONE, as above, little porosity and shell.

970-980 LIMESTONE, as above, with shell.

980-1045 Platy LIMESTONE fragments, finely laminated, with fine-grained, poorly indurated limestone, as above.

1045-1050 CLAY with silt, some shell and limestone, as above, light grey (5Y 7/2).

1050-1100 Platy LIMESTONE fragments, as from 980-1,045 feet bls, some limestone with large crystals. Limestone increasing below 1,090 feet bls.

1100-1150 LIMESTONE, silty, fine-grained, poorly indurated, chalky texture, pale yellow (5Y 8/2) to light grey (5Y 7/2). Trace to some shell below 1,120 feet bls, secondary porosity from 1,140 to 1,150 feet bls.

1150-1180 LIMESTONE, silty to sandy, fine-grained, moderately indurated, some to trace shell, small visible crystals, pale yellow (5Y 7/3). Some shell embedded in silty lime matrix below 1,160 feet bls.

1180-1185 As above, with grey (5Y 5/1) lime mud with embedded sand and limestone fragments, some shell molds.

1185-1190 LIMESTONE, silty, fine-grained, poorly indurated, some secondary porosity, light grey (5Y 7/2), some shell, trace visible calcite crystals.

1190-1200 LIMESTONE, as from 1,100-1,150 feet bls, pale yellow (5Y 8/2), some secondary porosity, some shell and grey, fine-grained limestone, trace phosphatic sandstone.

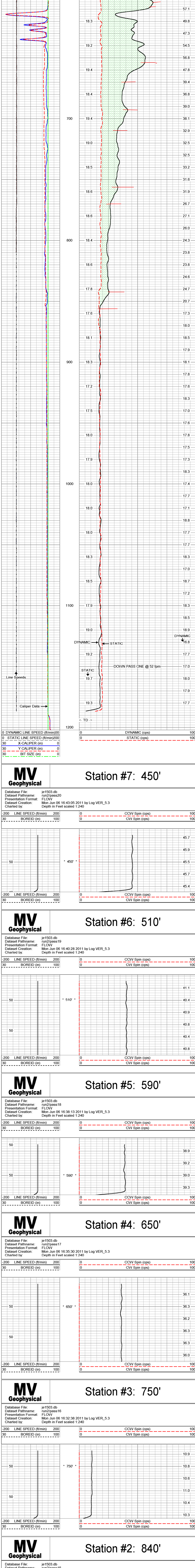
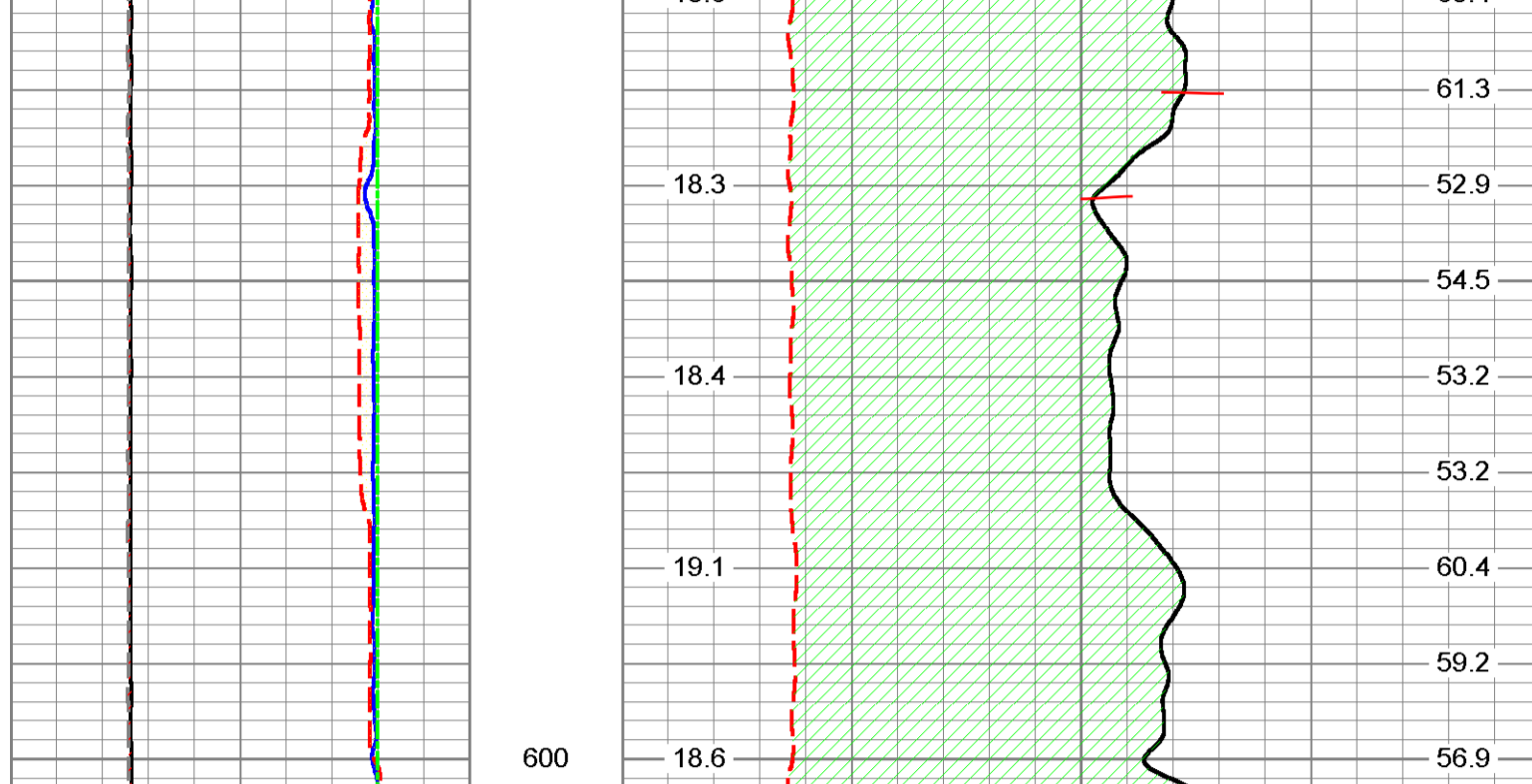
Company: Johnson Engineering, Inc.
 Well: JE1503
 Field: Babcock Ranch
 County: Charlotte
 State: Florida
 Location: CCU Babcock Ranch Test Well Project
 Coordinates: LAT: 26 55 29.6" N LONG: 81 41 28.7" W
 Log Measured From: G.L.
 Emission: G.L.
 Other Services: AT/GS/DL, F, S, D, M, F, S, D, M, F, S, D, M

| | |
|-------------------------|--------|
| Estimated Cement Top | 0 |
| Estimated Cement Bottom | 0 |
| Open Hole Size | 6" |
| Bottom Logged Interval | 1194' |
| Depth (feet) | 1200' |
| Depth (meters) | 365.8m |
| Estimated Cement Top | 0 |
| Estimated Cement Bottom | 0 |
| Open Hole Size | 6" |
| Bottom Logged Interval | 1194' |
| Depth (feet) | 1200' |
| Depth (meters) | 365.8m |

Static and Dynamic down passes were made at 52 fpm.
 7 station performed.
 Q = ~160 gpm

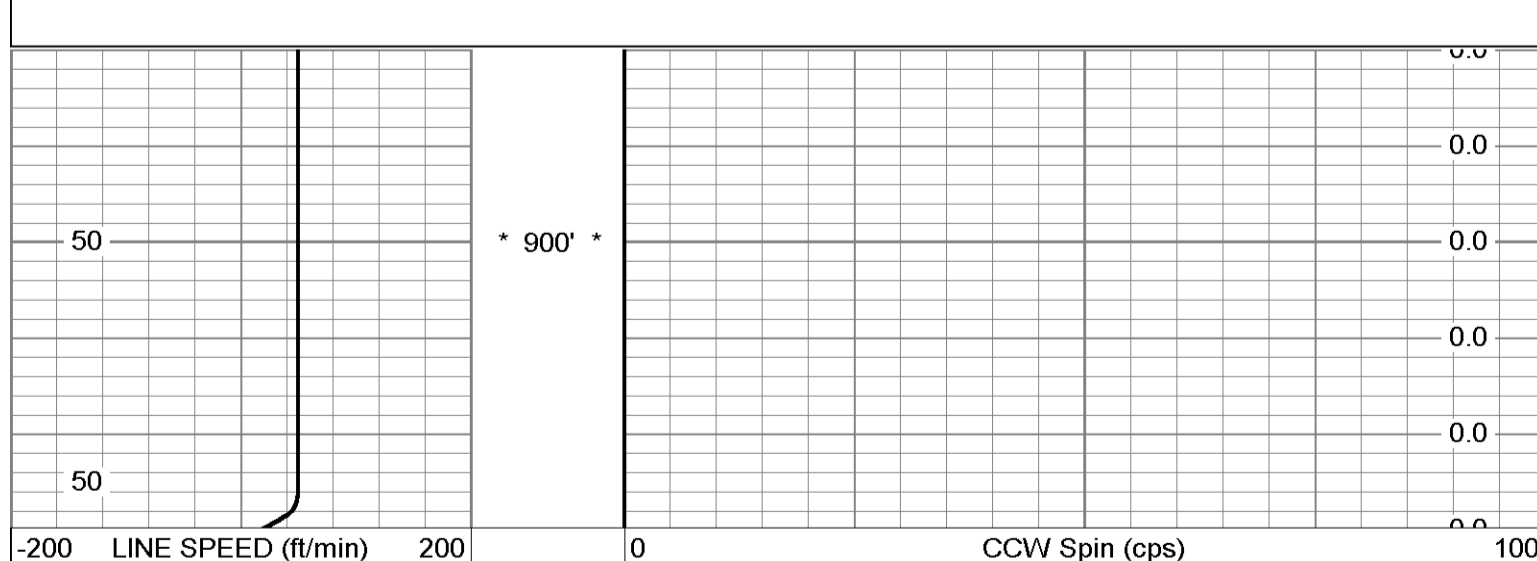
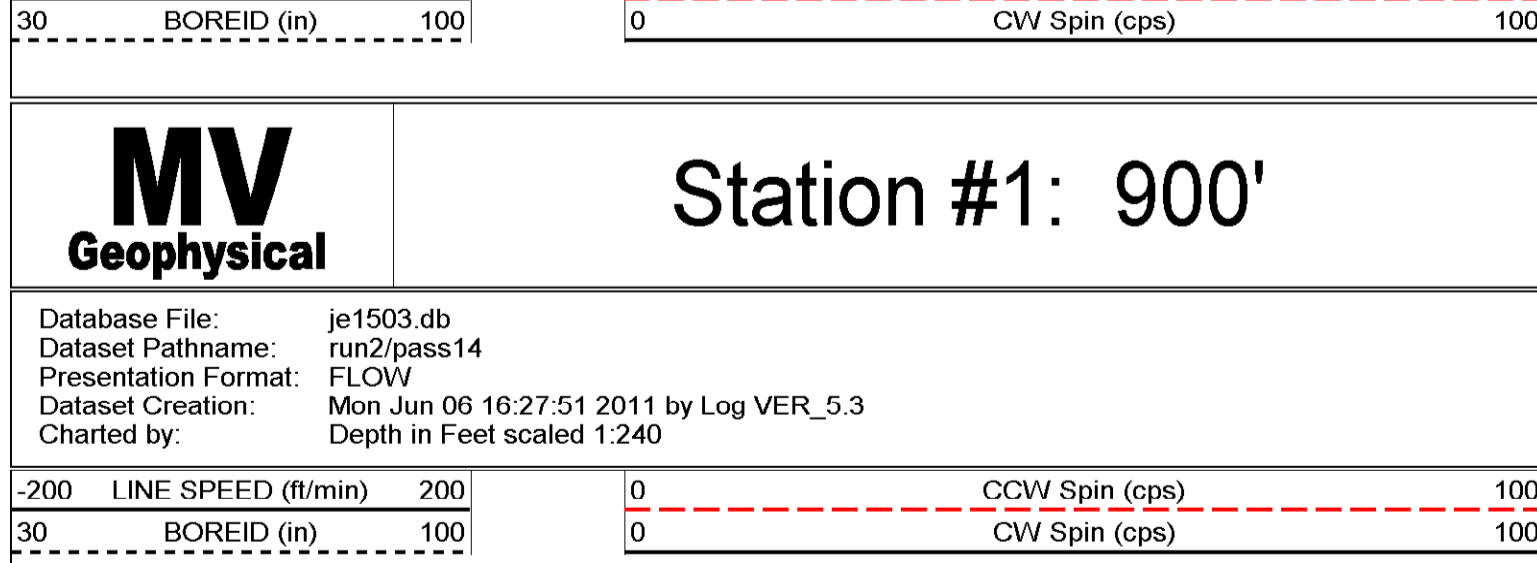
MV Geophysical S/D DOWN @ 52 fpm

Database File: je1503.db
 Dataset Pathname: run2/SID2
 Presentation Format: Q-JE1503
 Dataset Creation: Mon Jun 06 16:04:56 2011
 Charted by: Depth in Feet scaled 1.240



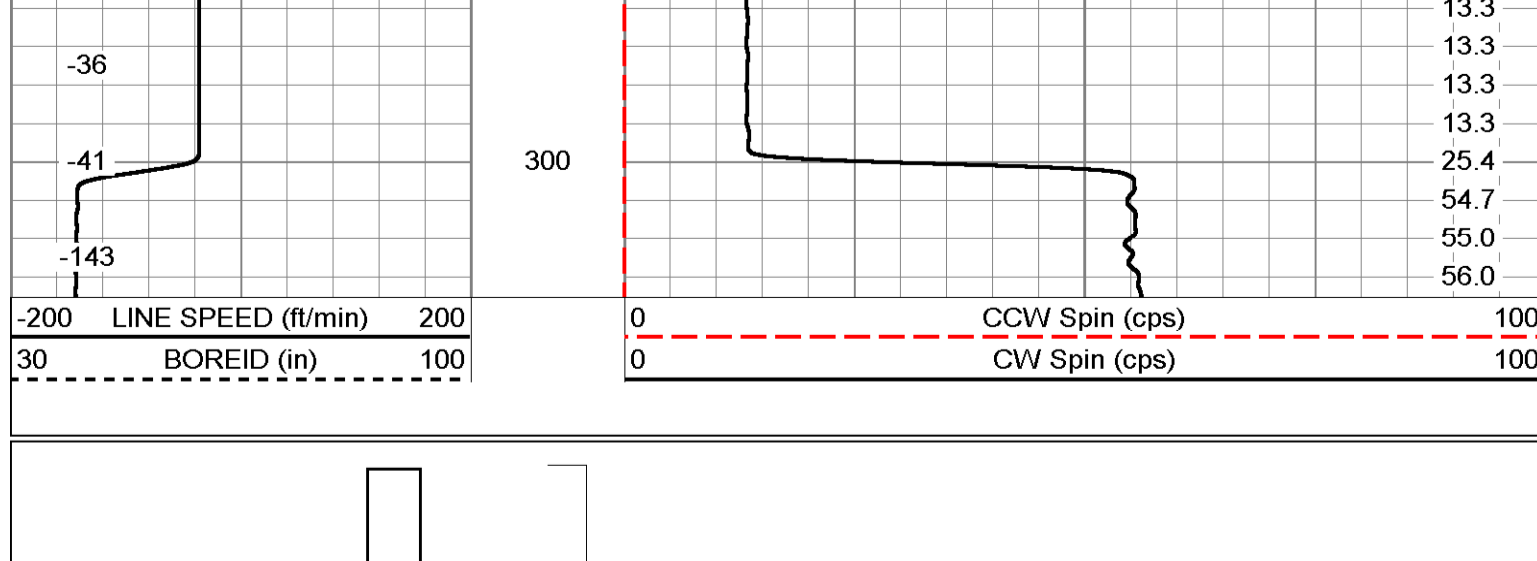
MV Geophysical Station #7: 450'

Database File: je1503.db
 Dataset Pathname: run2/pass20
 Presentation Format: FLOW
 Dataset Creation: Mon Jun 06 16:43:05 2011 by Log VER_5.3
 Charted by: Depth in Feet scaled 1.240



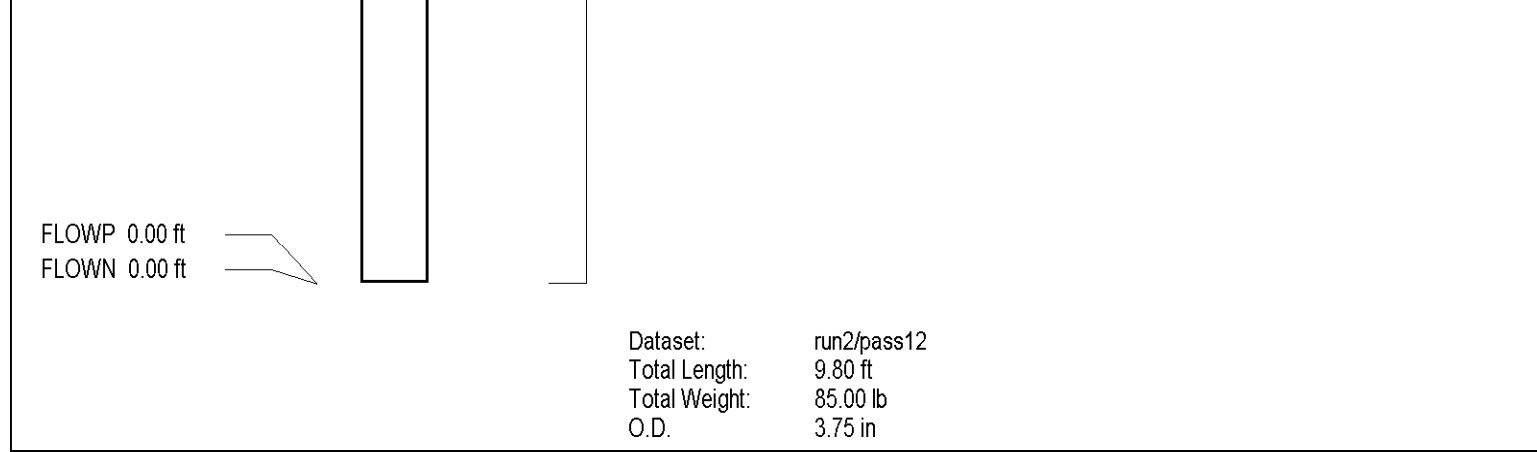
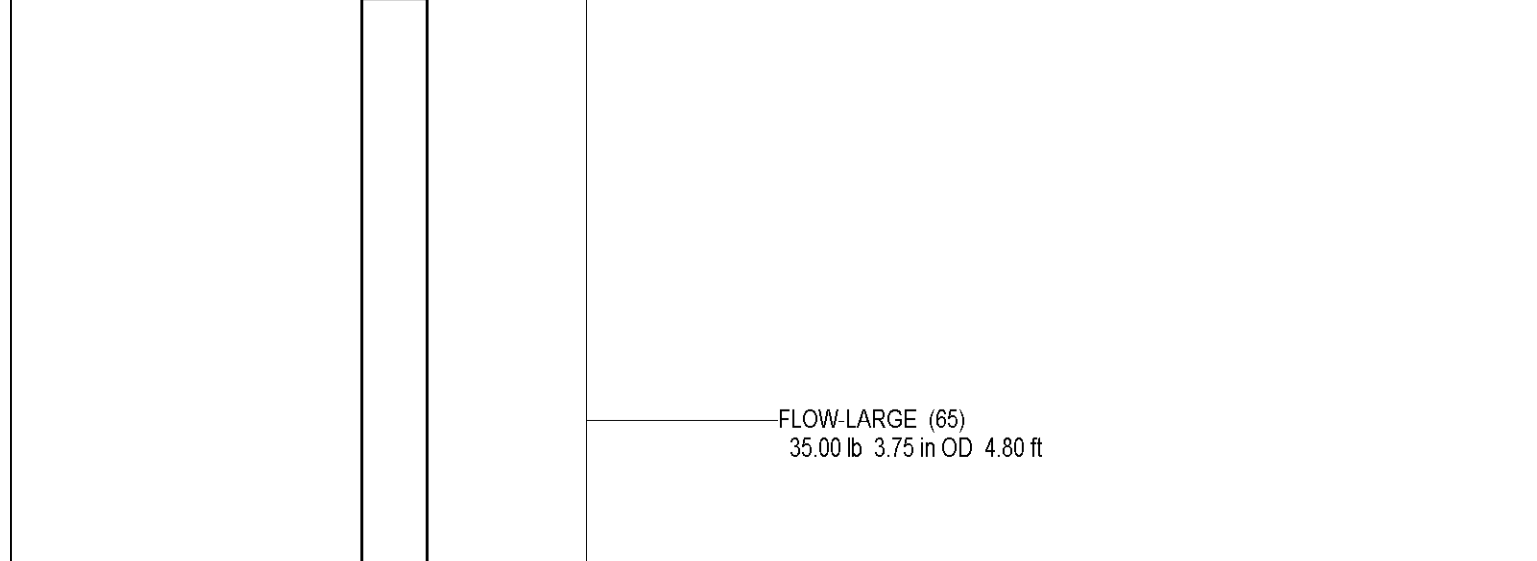
MV Geophysical Station #6: 510'

Database File: je1503.db
 Dataset Pathname: run2/pass19
 Presentation Format: FLOW
 Dataset Creation: Mon Jun 06 16:40:28 2011 by Log VER_5.3
 Charted by: Depth in Feet scaled 1.240



MV Geophysical Station #5: 590'

Database File: je1503.db
 Dataset Pathname: run2/pass18
 Presentation Format: FLOW
 Dataset Creation: Mon Jun 06 16:38:13 2011 by Log VER_5.3
 Charted by: Depth in Feet scaled 1.240



MV Geophysical Station #4: 650'

Database File: je1503.db
 Dataset Pathname: run2/pass17
 Presentation Format: FLOW
 Dataset Creation: Mon Jun 06 16:35:30 2011 by Log VER_5.3
 Charted by: Depth in Feet scaled 1.240

MV Geophysical Station #3: 750'

Database File: je1503.db
 Dataset Pathname: run2/pass16
 Presentation Format: FLOW
 Dataset Creation: Mon Jun 06 16:32:38 2011 by Log VER_5.3
 Charted by: Depth in Feet scaled 1.240

MV Geophysical Station #2: 840'

Database File: je1503.db
 Dataset Pathname: run2/pass15
 Presentation Format: FLOW
 Dataset Creation: Mon Jun 06 16:27:17 2011 by Log VER_5.3
 Charted by: Depth in Feet scaled 1.240

MV Geophysical Station #1: 900'

Database File: je1503.db
 Dataset Pathname: run2/pass14
 Presentation Format: FLOW
 Dataset Creation: Mon Jun 06 16:27:51 2011 by Log VER_5.3
 Charted by: Depth in Feet scaled 1.240

MV Geophysical Q Calibration Down

Database File: je1503.db
 Dataset Pathname: run2/pass12
 Presentation Format: FLOW
 Dataset Creation: Mon Jun 06 16:58:45 2011 by Log VER_5.3
 Charted by: Depth in Feet scaled 1.600

Dataset: run2/pass12
 Total Length: 8.00 ft
 Total Weight: 85.00 lb
 O.D.: 3.75 in

Company **Johnson Engineering, Inc.**
Well **JE1503**

Field **Babcock Ranch**
County **Charlotte** State/Prv. **Florida**

Location **CCU/Babcock Ranch Test Well Project**
Sec **11 41S R2E**
Twp **26 55 29 6 N LONG 81 41 28 7 W**

Company **Johnson Engineering, Inc.**
Well **JE1503**
Field **Babcock Ranch**
County **Charlotte** State/Prv. **Florida**

Location **CCU/Babcock Ranch Test Well Project**
Sec **11 41S R2E**
Twp **26 55 29 6 N LONG 81 41 28 7 W**

Log Measured From **GL** Elevation
Datum **GL** Elevation
K/B
O/F
GL

Date Entered **6-JUN-2011**
Date Measured From **GL**
Depth Upper **1134'**
Depth Lower **1134'**
Bottom Logpoint Interval **40'**

Type Fluid **H2O**
Density / Viscosity **801.998**
Bulk Modulus **2.98E+11**

Time Logged at Bottom **09:55:06/06/2011**
Time Logged at Top **09:56:06/06/2011**
Time Logged at Surface **09:57:06/06/2011**

Log Number **4707** Size **1000'**
Well Name **WJG1503** Well Type **Test**
Well Status **Active** Well Depth **1134'**

Log Number **4707** Size **1000'**
Well Name **WJG1503** Well Type **Test**
Well Status **Active** Well Depth **1134'**

Log Number **4707** Size **1000'**
Well Name **WJG1503** Well Type **Test**
Well Status **Active** Well Depth **1134'**

Log Number **4707** Size **1000'**
Well Name **WJG1503** Well Type **Test**
Well Status **Active** Well Depth **1134'**

Log Number **4707** Size **1000'**
Well Name **WJG1503** Well Type **Test**
Well Status **Active** Well Depth **1134'**

Log Number **4707** Size **1000'**
Well Name **WJG1503** Well Type **Test**
Well Status **Active** Well Depth **1134'**

Log Number **4707** Size **1000'**
Well Name **WJG1503** Well Type **Test**
Well Status **Active** Well Depth **1134'**

All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

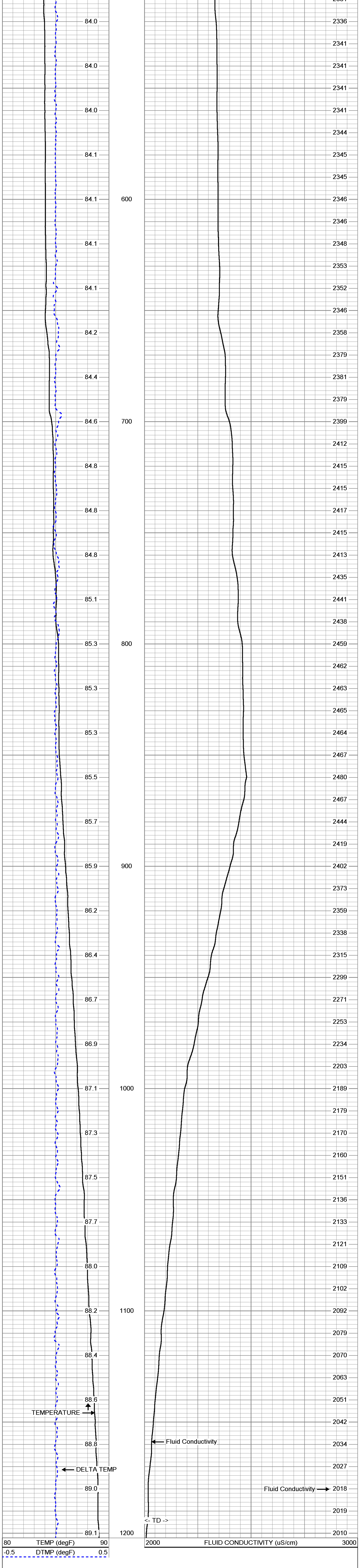
Comments

STATIC and DYNAMIC down passes were performed.
Cw = 2,330 uS/cm @ 28.4 degC @ Q=160 gpm.
FLUID RESISTIVITY CALIBRATION REPORT (Performed: 19-APR-11 14:45)
uS/cm CPS
223.7 3045.14
2564.78 2934.34
4417.01 2667.37

TEMPERATURE CALIBRATION REPORT (Performed: 19-APR-11 14:15)
DEG-F CPS
34.5 141.83
137.5 2605.14

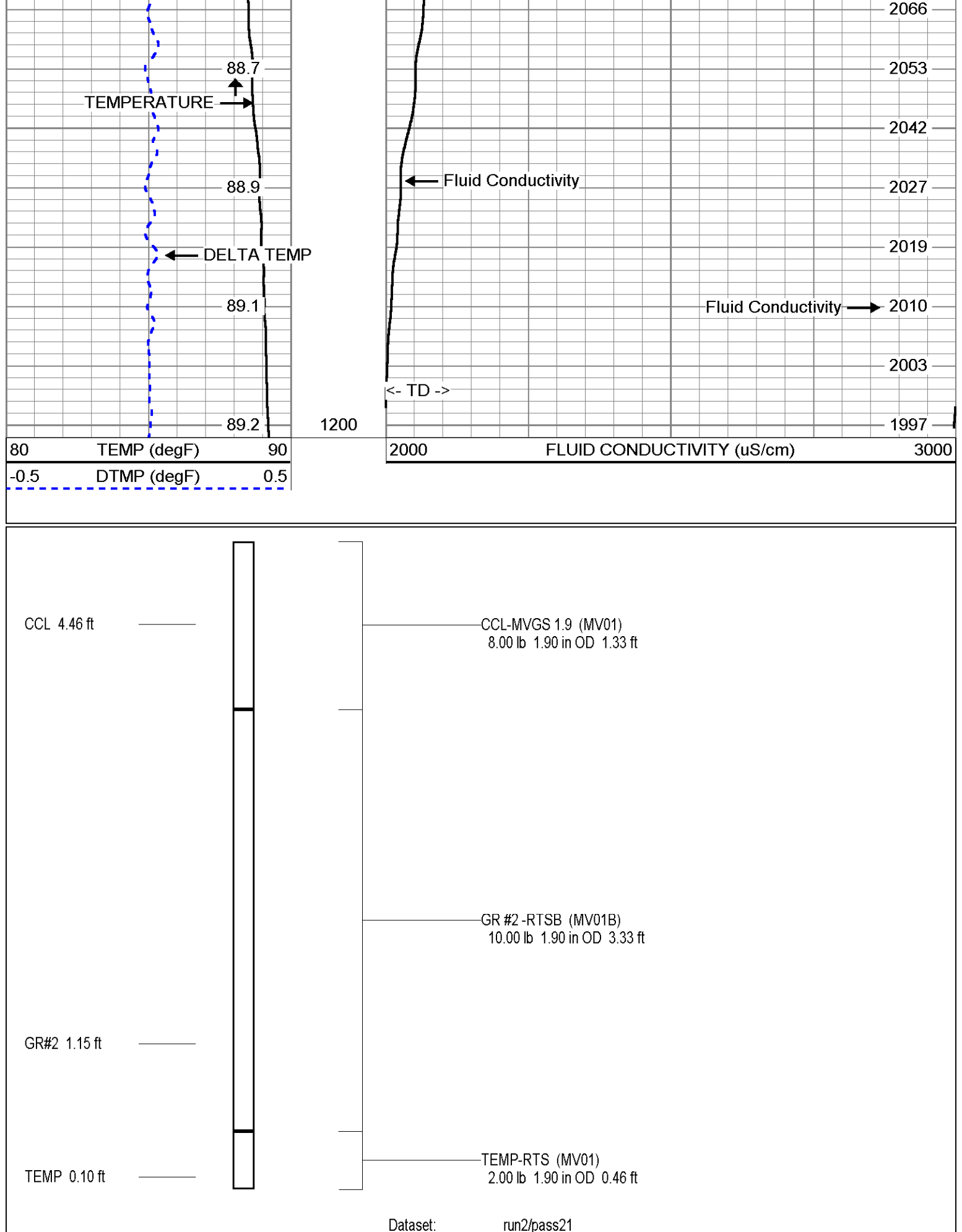
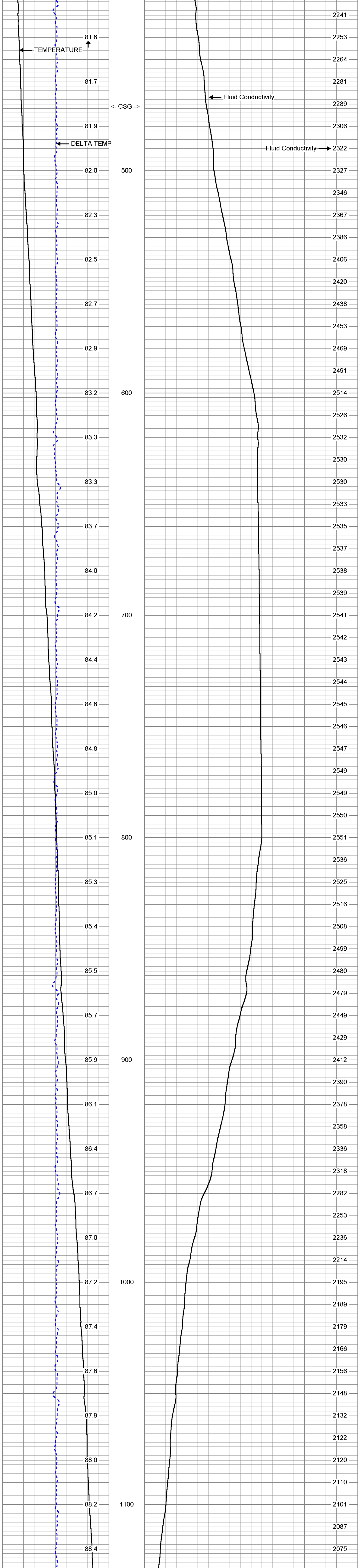
DYNAMIC FCT DOWN

Database File: je1503.db
Dataset Pathname: run2/DFCT
Presentation Format: FCTJ1503
Dataset Creation: Mon Jun 06 18:59:46 2011
Charted by: Depth in Feet scaled 1.240



STATIC FCT DOWN

Database File: je1503.db
Dataset Pathname: run2/SFCT
Presentation Format: FCTJ1503
Dataset Creation: Mon Jun 06 10:57:09 2011
Charted by: Depth in Feet scaled 1.240



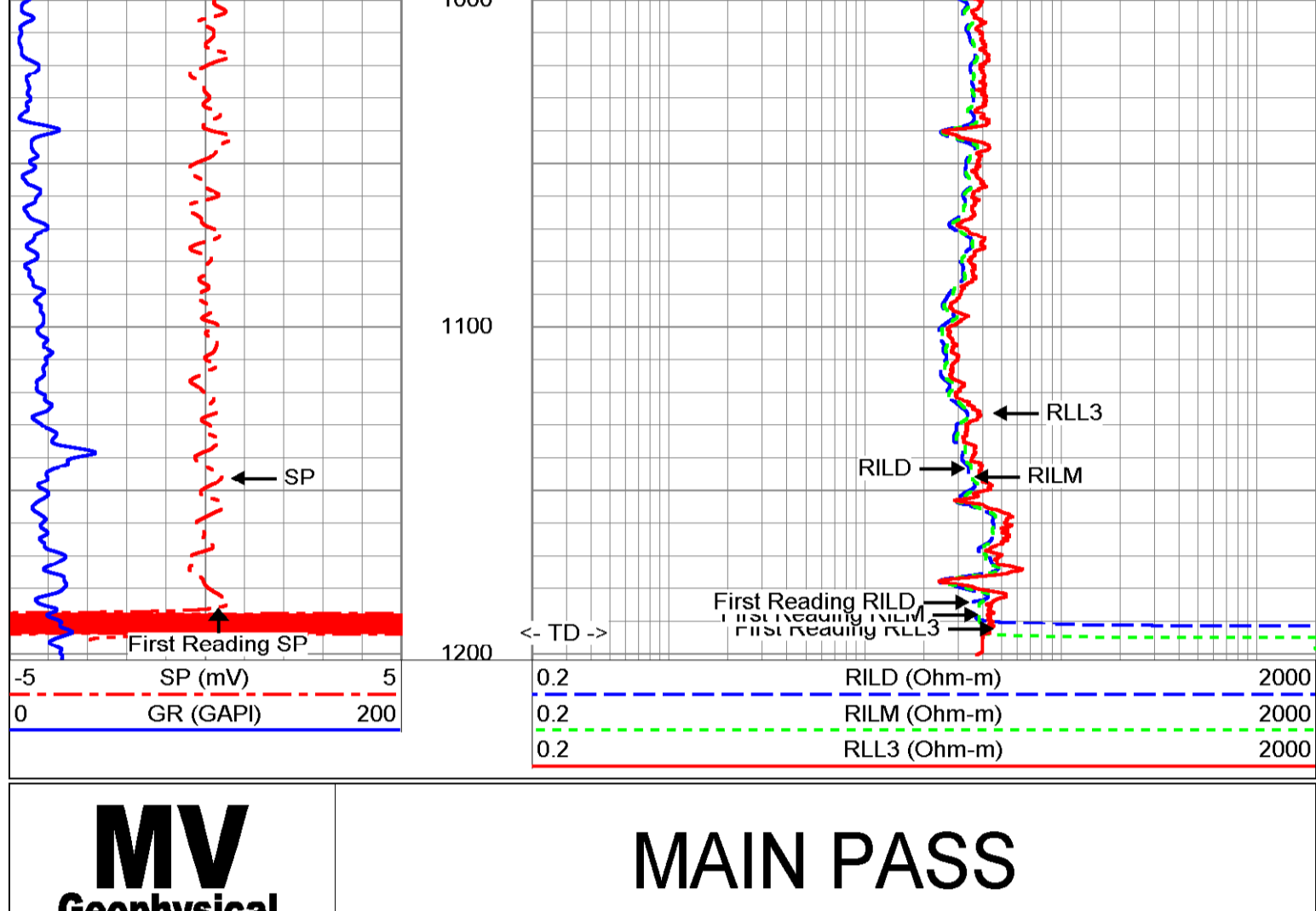
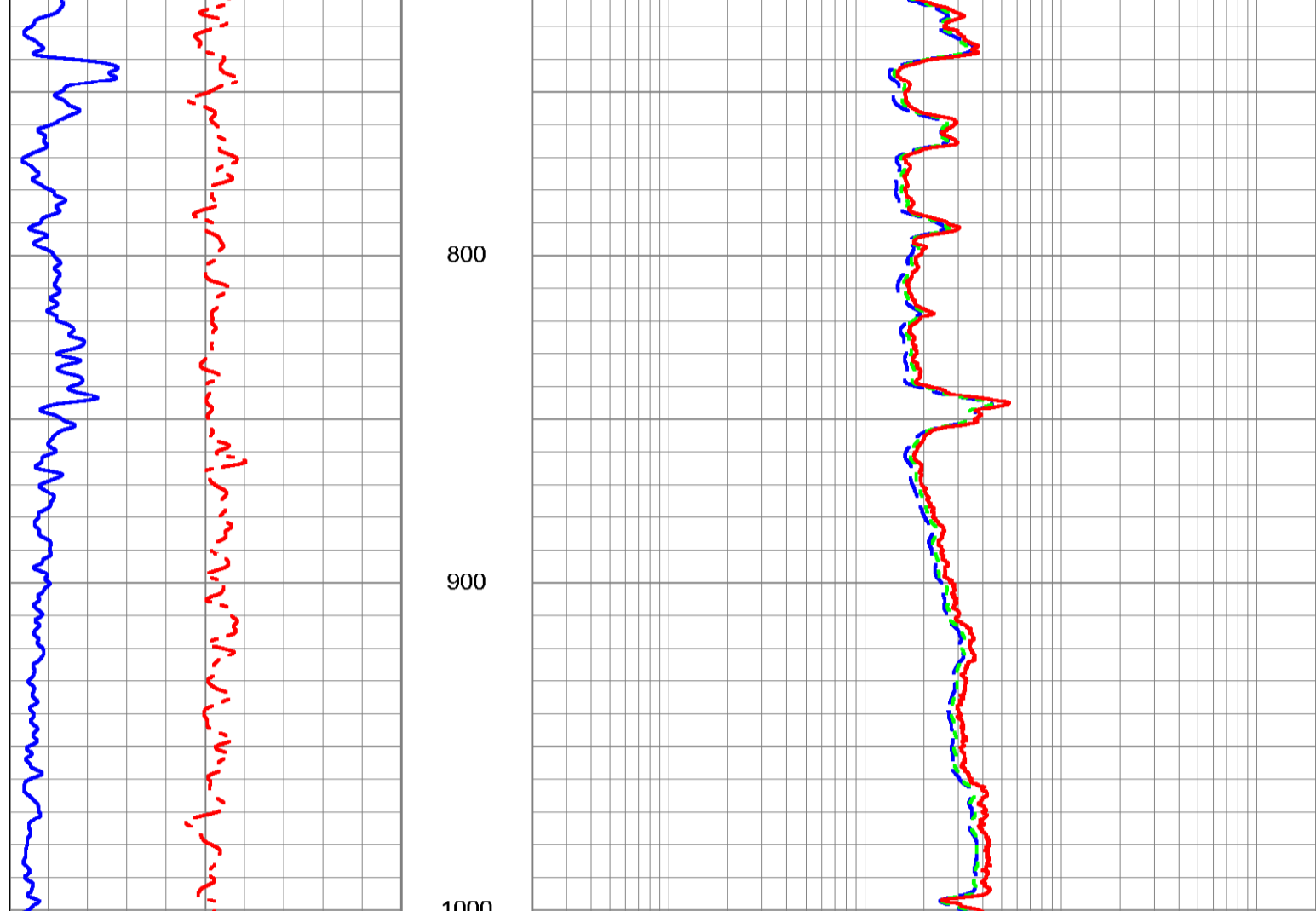
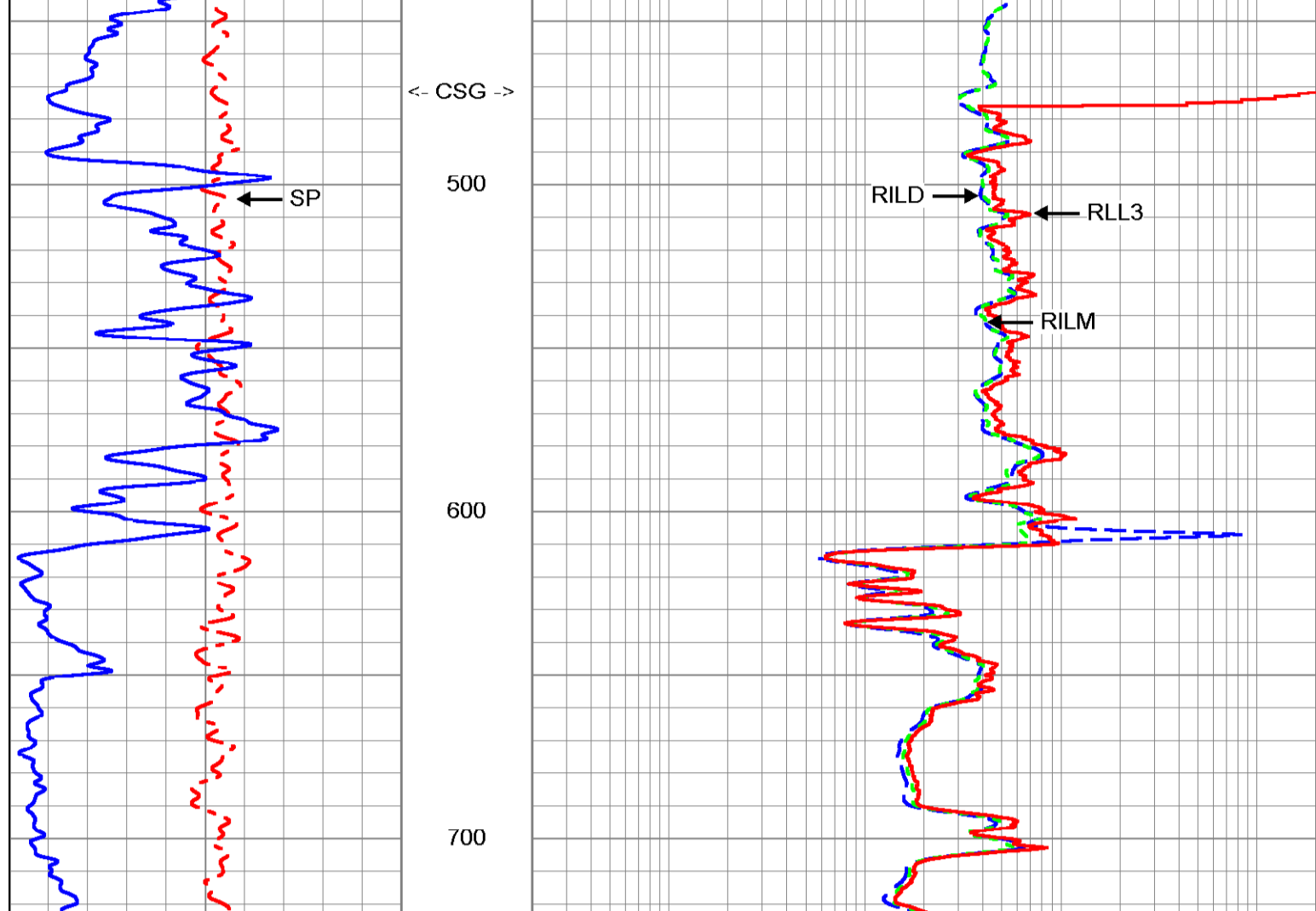
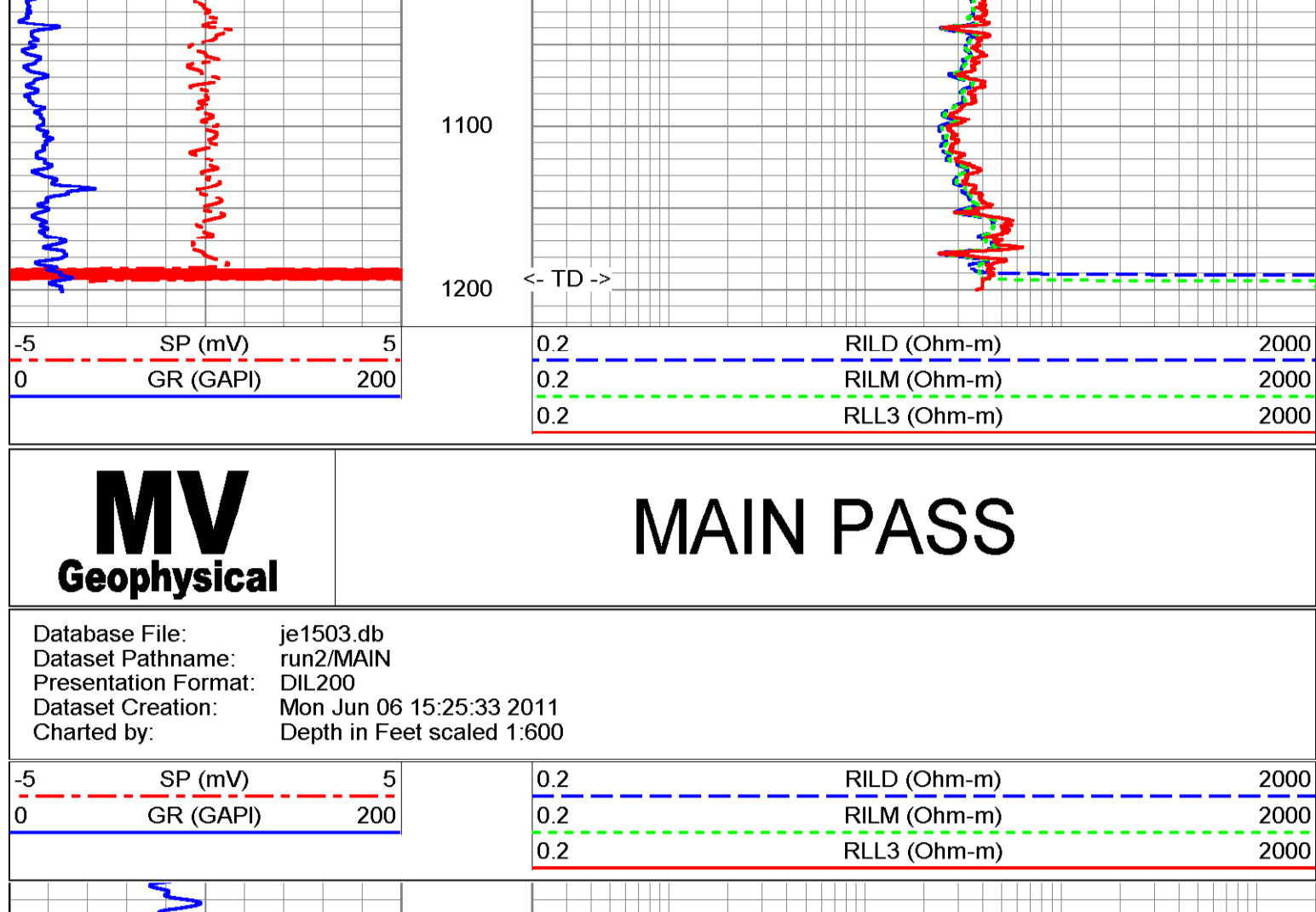
Company: Johnson Engineering, Inc.
 Well: JE1503
 Field: Babcock Ranch
 County: Charlotte
 State/Prv: Florida
 Location: CU/Babcock Ranch Test Well Project
 Coordinates: LAT: 26 55 29.6" N LONG: 81 41 28.7" W
 Elevation: 61' 11.59"
 Date: 6-JUN-2011
 Log Measured from: G.L.
 Drilling Measured from: G.L.
 Company: Johnson Engineering, Inc.
 Well: JE1503
 Field: Babcock Ranch
 County: Charlotte
 State/Prv: Florida
 Location: CU/Babcock Ranch Test Well Project
 Coordinates: LAT: 26 55 29.6" N LONG: 81 41 28.7" W
 Elevation: 61' 11.59"
 Date: 6-JUN-2011
 Log Measured from: G.L.
 Drilling Measured from: G.L.

<< Fold Here >>

All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or suffered by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

Rw=4.292 ohm-m @ 83.1 degF



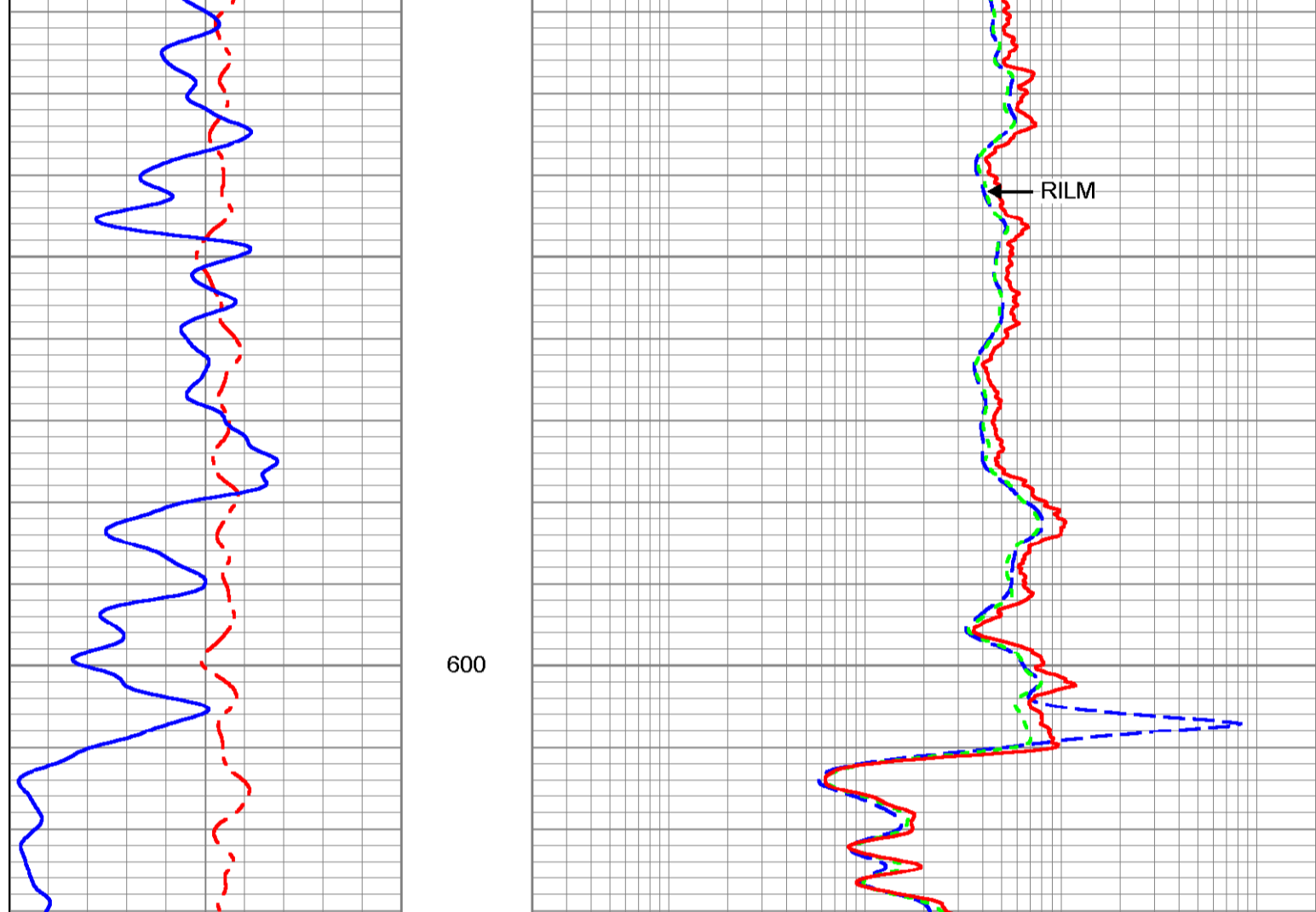
Dual Induction Calibration Report

Serial-Model: 5390-R
 Surface Cal Performed: Wed Apr 21 11:17:23 2010
 Downhole Cal Performed: Wed Apr 21 11:04:55 2010
 After Survey Verification Performed: Wed Apr 21 11:04:55 2010

| Surface Calibration | | References | | Results | |
|---------------------|----------|------------|---------|---------|---------|
| Loop: | Readings | Air | Loop | m | b |
| Deep | 0.050 | 0.000 | 400.000 | 672.269 | -33.613 |
| Medium | 0.018 | 0.000 | 464.000 | 647.120 | -11.545 |
| Internal: | Zero | Zero | Cal | m | b |
| Deep | 0.011 | 0.000 | 400.000 | 634.921 | -6.984 |
| Medium | 0.005 | 0.000 | 464.000 | 632.408 | -3.370 |

| Downhole Calibration | | References | | Results | |
|----------------------|----------|------------|---------|---------|--------|
| Internal: | Readings | Zero | Cal | m | b |
| Deep | -43.158 | -42.562 | 77.982 | 0.993 | 0.275 |
| Medium | -9.475 | -8.097 | 466.698 | 0.997 | 1.351 |
| Shallow | 2.516 | 494.500 | 2.000 | 197.709 | -2.980 |

| After Survey Verification | | Targets | | Results | |
|---------------------------|----------|---------|---------|---------|-------|
| Internal: | Readings | Zero | Cal | m' | b' |
| Deep | 0.000 | -43.158 | 78.288 | 0.993 | 0.275 |
| Medium | 0.000 | -9.475 | 466.701 | 0.997 | 1.351 |
| Shallow | 0.000 | 494.500 | 2.000 | 1.000 | 0.000 |



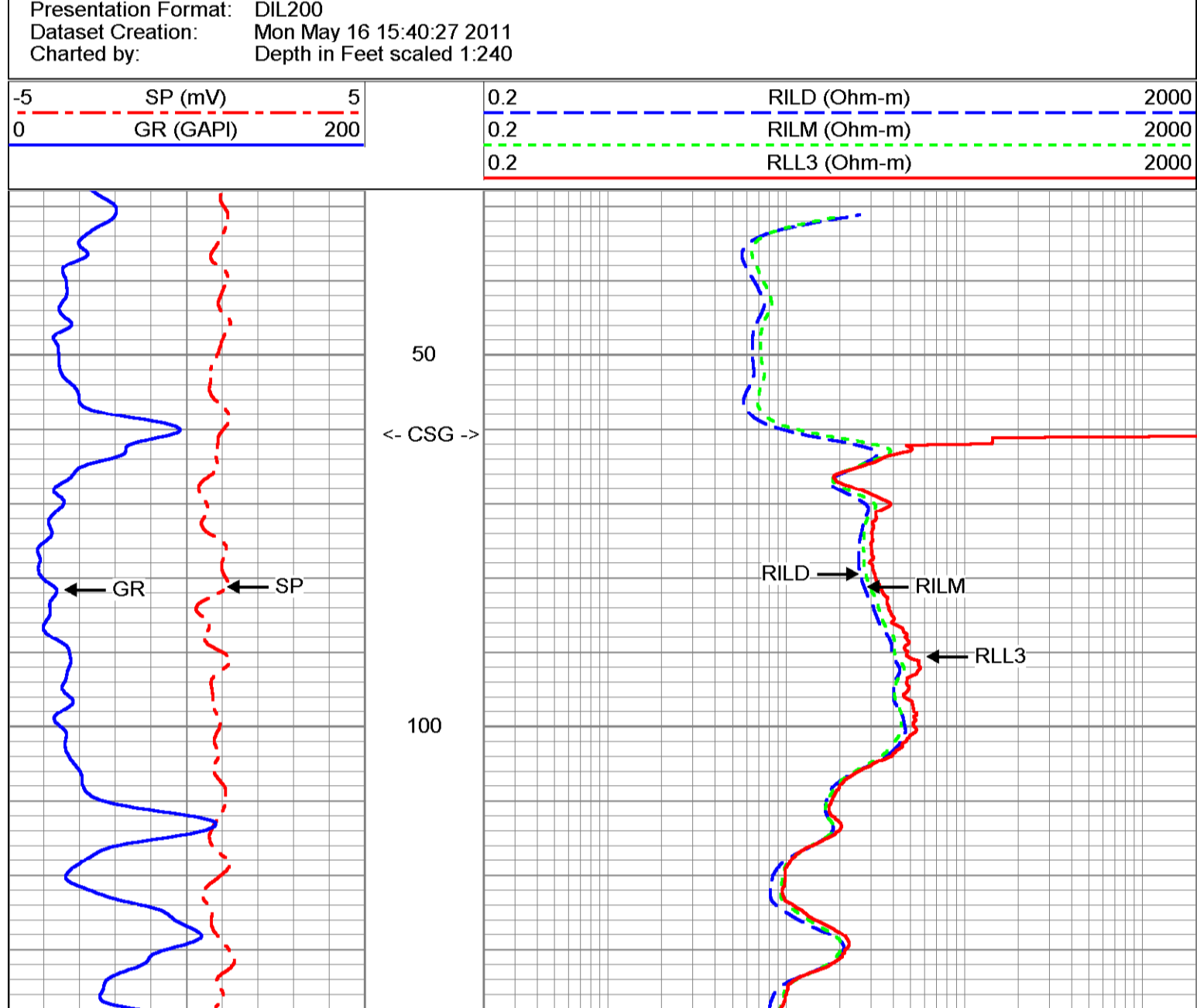
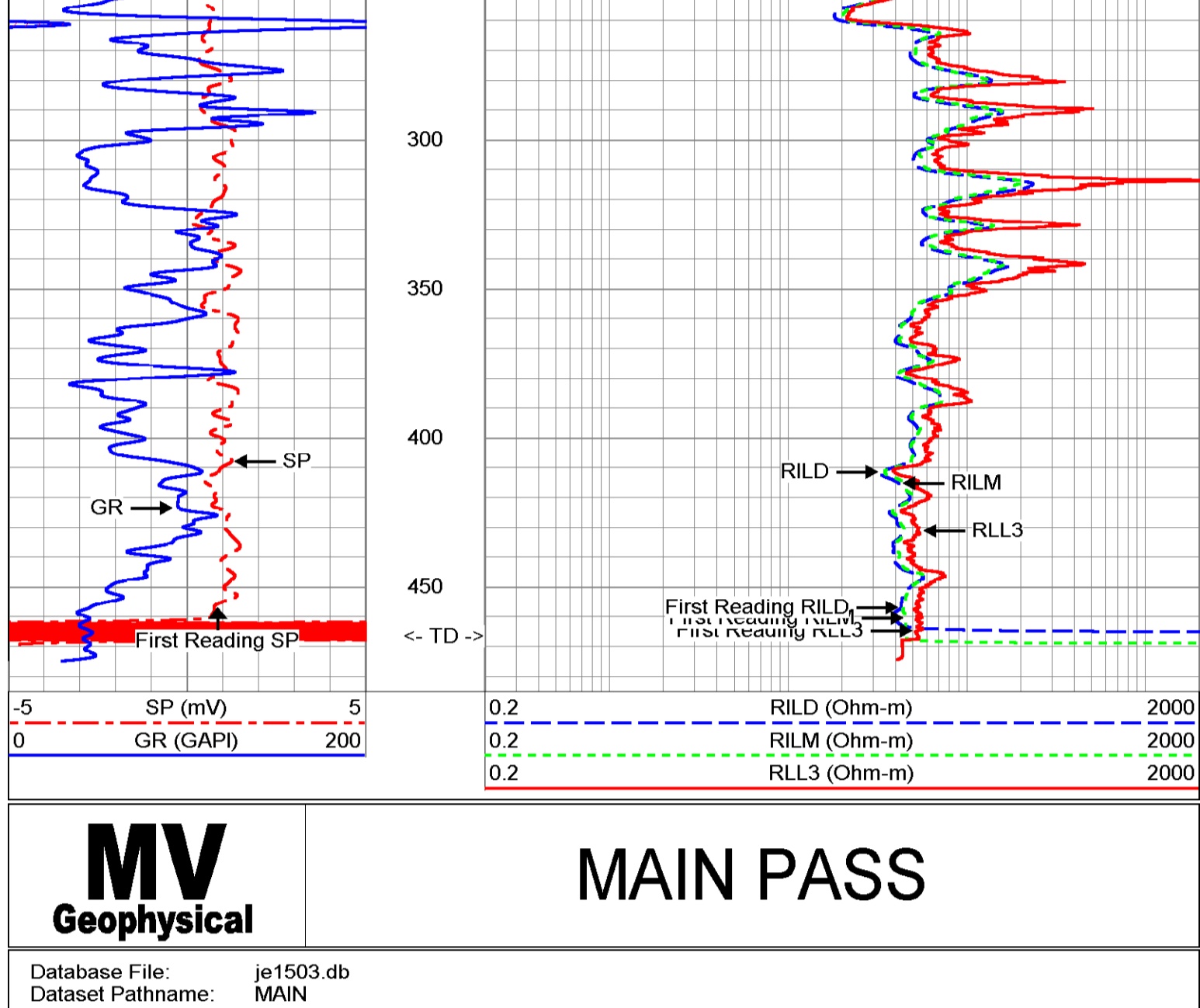
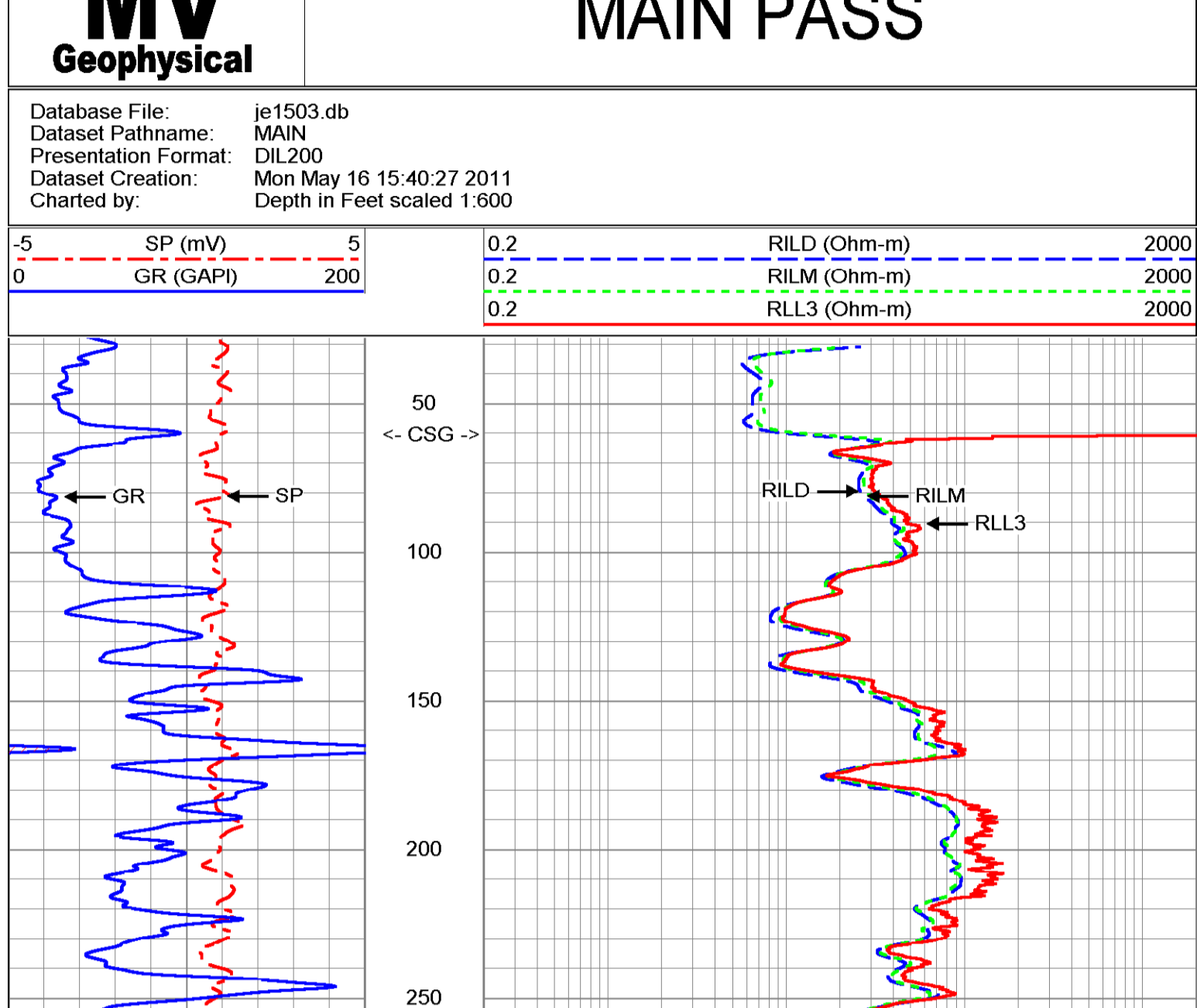
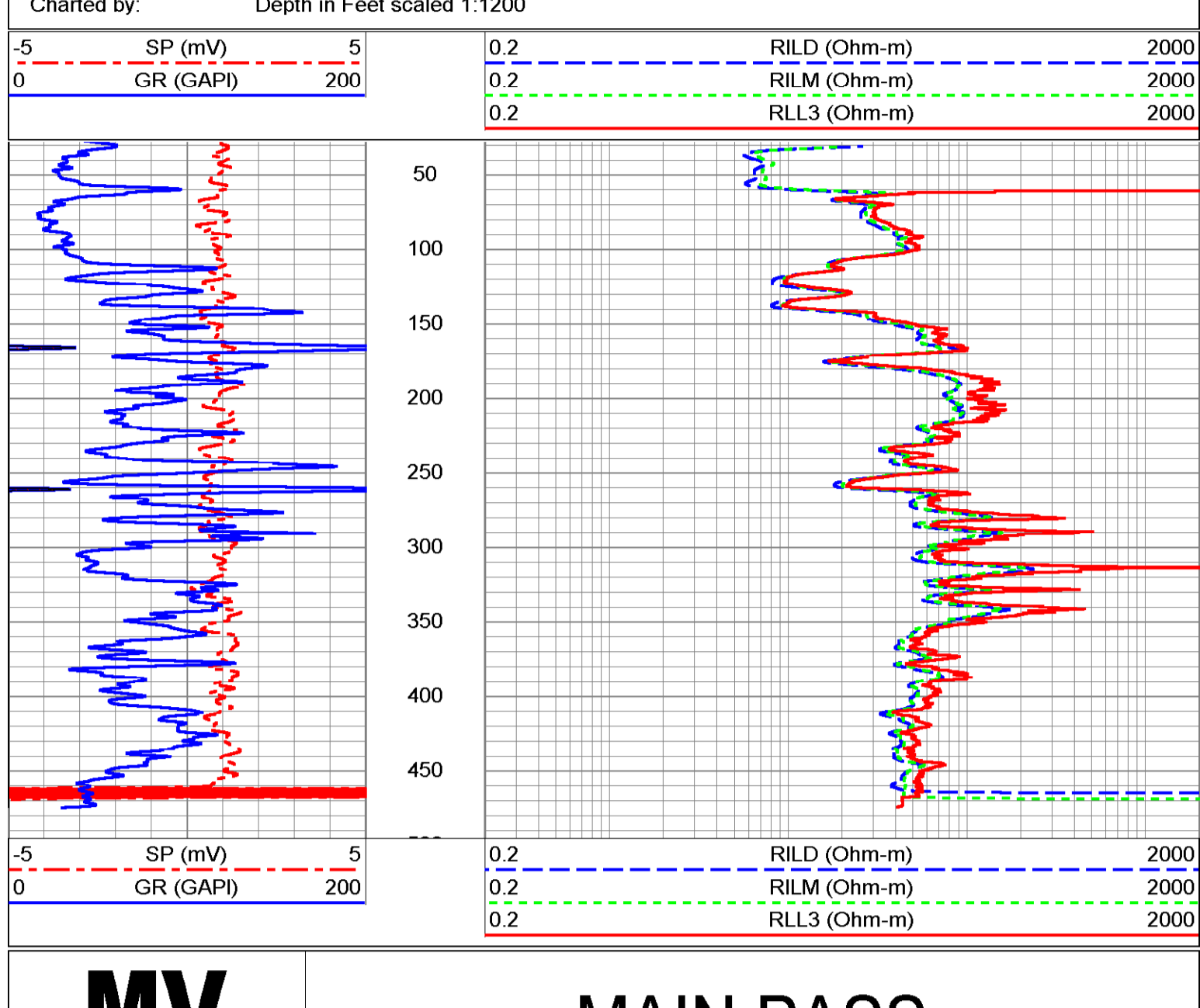
Company: Johnson Engineering, Inc.
 Well: JE1503
 Field: Babcock Ranch
 County: Charlotte
 State/Priv: Florida
 Location: CCU Babcock Ranch Test Well Project
 LAT: 26 55' 29.6" N LONG: 81 41' 28.7" W
 Sec: 11 T41S R26E
 Date: 16-MAY-2011
 Run Number: 016
 Date Logged: 16-MAY-2011
 Depth: 467'
 Bottom Logged Interval: 61'
 Open Hole Size: 9.625"
 Type Fluid: MWD
 Type Fluid Density: MWD
 Max Record Temp: MWD
 Estimated Cement Top: SL/SURFACE
 Time Log Ready: 13:15:51(6/20/11)
 Time Logger on Bottom: 14:30:51(6/20/11)
 Equipment Number: ELI 0055
 Recorder: S.M.H.W.C./M.H.R.
 Witnessed By: L.Howard (J.E.)
 Run Number: 016
 Log Date: 6/20/11
 Log Time: 9:35:51
 Log From: 410'
 Log To: 470'
 Log Size: 470'
 Log Weight: 470'
 Log Volume: 10' ID
 Log Surface: SURFACE
 Log Bottom: 61'
 Log Type: SURFACE
 Log Other: * FINAL PRINT *

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

Rm=5.254 ohm-m @ 75.0 degF



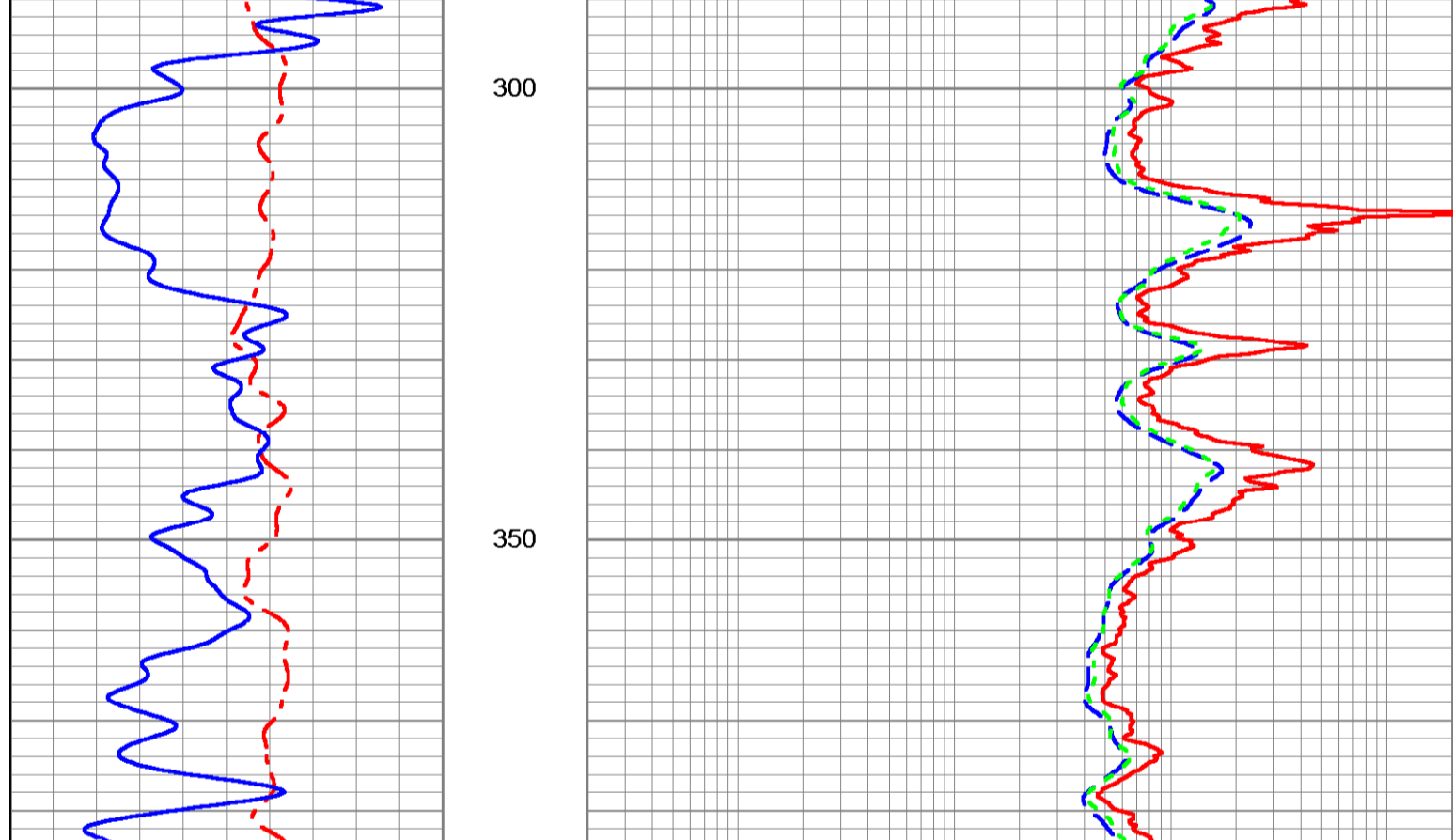
Dual Induction Calibration Report

Serial-Model: 5390-R
 Surface Cal Performed: Wed Apr 21 11:17:23 2010
 Downhole Cal Performed: Wed Apr 21 11:04:55 2010
 After Survey Verification Performed: Wed Apr 21 11:04:55 2010

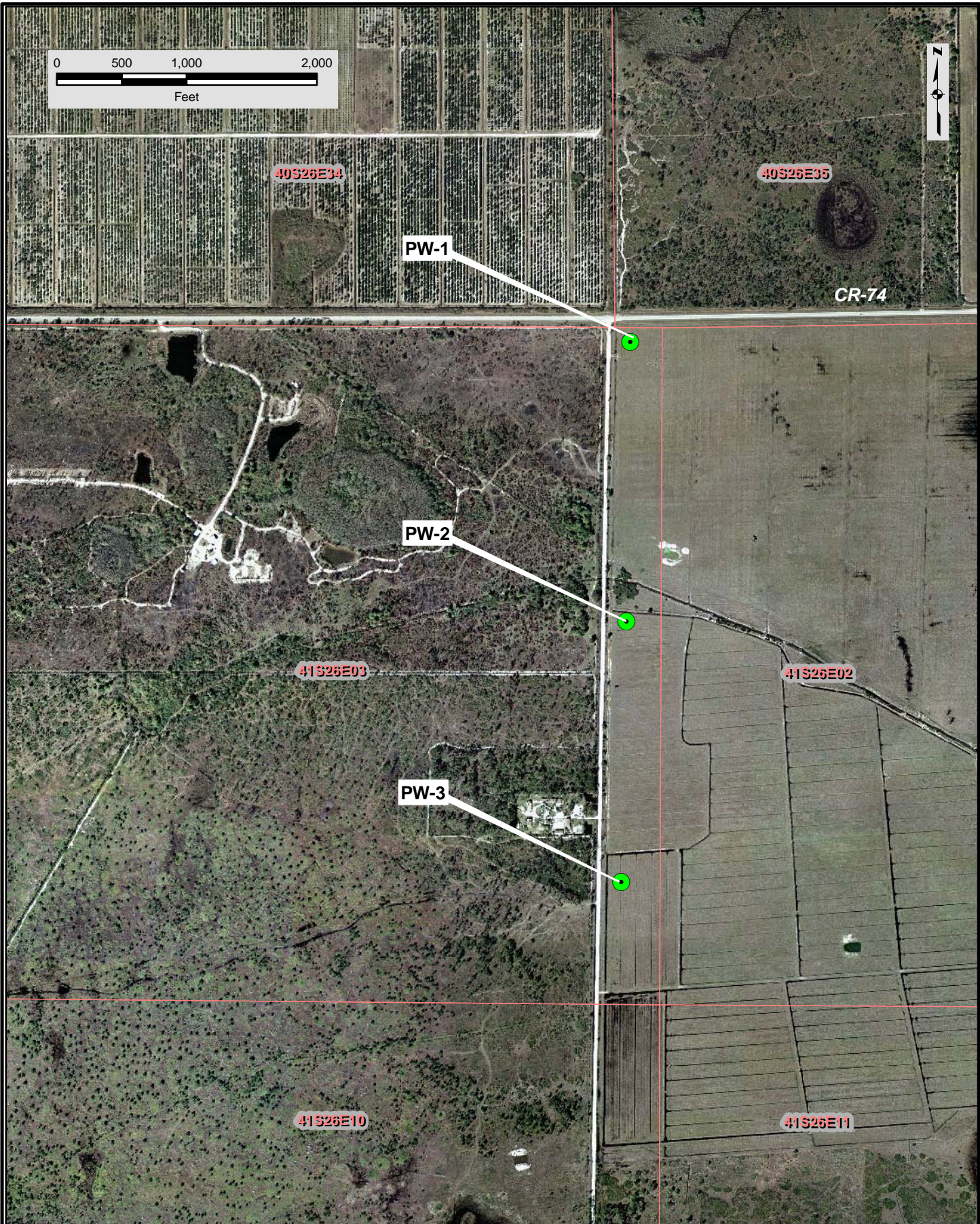
| Surface Calibration | | | | References | | | | Results | |
|---------------------|-------|-------|---|------------|---------|--------|---------|---------|--|
| Loop: | Air | Loop | | Air | Loop | | m | b | |
| Deep | 0.050 | 0.645 | V | 0.000 | 400.000 | mmho-m | 672.269 | -33.613 | |
| Medium | 0.018 | 0.735 | V | 0.000 | 464.000 | mmho-m | 647.120 | -11.545 | |
| Internal: | | | | Zero | | | | Cal | |
| Deep | 0.011 | 0.641 | V | 0.000 | 400.000 | mmho-m | 634.921 | -6.984 | |
| Medium | 0.005 | 0.739 | V | 0.000 | 464.000 | mmho-m | 632.408 | -3.370 | |

| Downhole Calibration | | | | References | | | | Results | |
|----------------------|---------|---------|--------|------------|---------|--------|---------|---------|--|
| Internal: | Zero | Cal | | Zero | Cal | | m | b | |
| Deep | -43.158 | 78.288 | mmho-m | -42.562 | 77.982 | mmho-m | 0.993 | 0.275 | |
| Medium | -9.475 | 466.701 | mmho-m | -8.097 | 466.698 | mmho-m | 0.997 | 1.351 | |
| Shallow | 2.516 | 0.025 | V | 494.500 | 2.000 | Ohm-m | 197.710 | -2.980 | |

| After Survey Verification | | | | Targets | | | | Results | |
|---------------------------|-------|-------|--------|---------|---------|--------|-------|---------|--|
| Internal: | Zero | Cal | | Zero | Cal | | m' | b' | |
| Deep | 0.000 | 0.000 | mmho-m | -43.158 | 78.288 | mmho-m | 0.993 | 0.275 | |
| Medium | 0.000 | 0.000 | mmho-m | -9.475 | 466.701 | mmho-m | 0.997 | 1.351 | |
| Shallow | 0.000 | 0.000 | Ohm-m | 494.500 | 2.000 | Ohm-m | 1.000 | 0.000 | |



Dataset: run1/pass7
 Total Length: 20.90 ft
 Total Weight: 345.00 lb
 O.D.: 4.00 in



JOHNSON
ENGINEERING

2122 JOHNSON STREET
P.O. BOX 1550
FORT MYERS, FLORIDA 33902-1550
PHONE (239) 334-0046
FAX (239) 334-3661
E.B. #642 & L.B. #642

Charlotte County Utilities
Babcock Ranch Upper Floridan Aquifer Wellfield

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

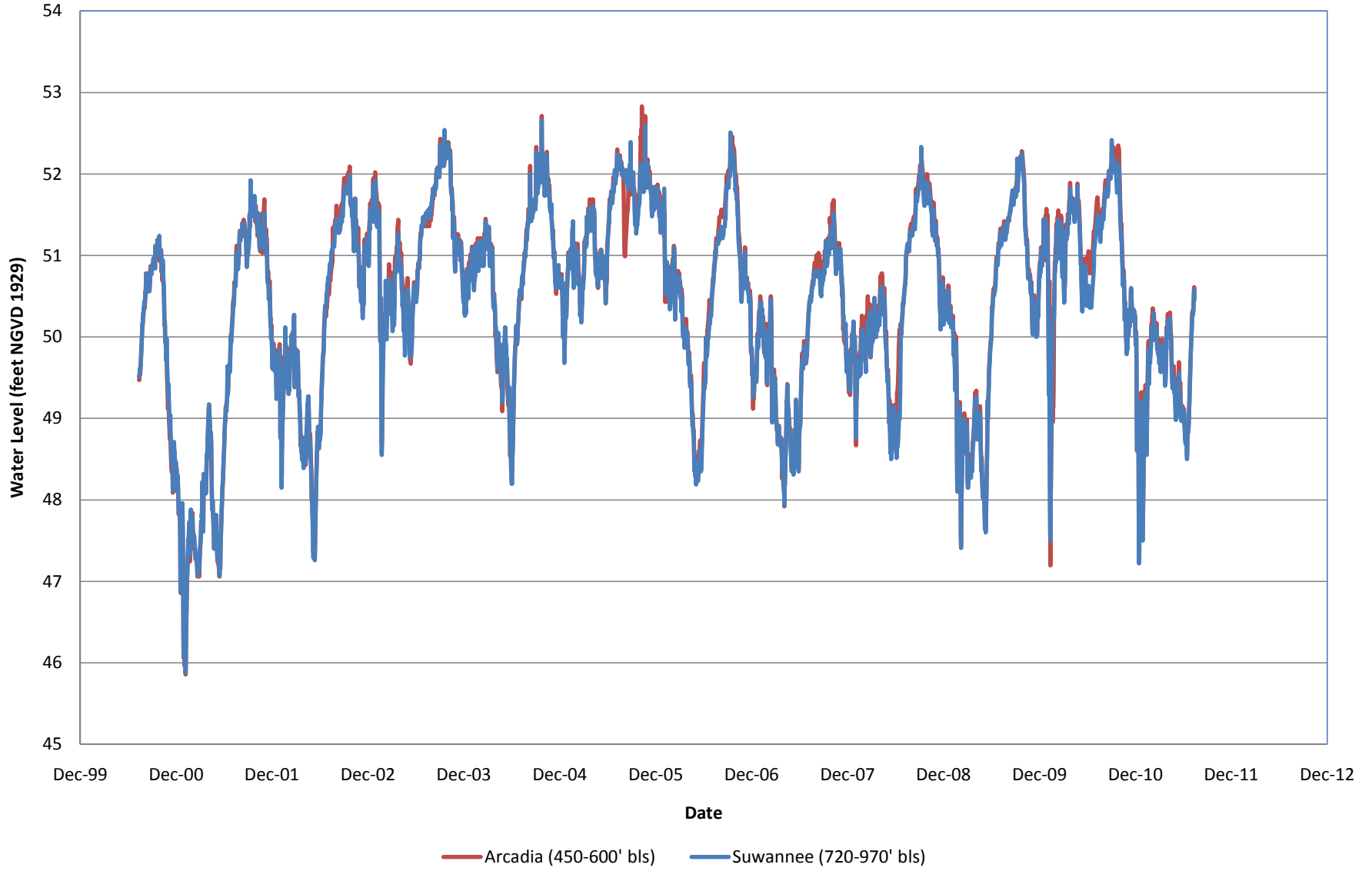
TABLE A Description of Wells

| | | | | |
|---|-------------------------------|-------------------------------|-------------------------------|--|
| Well Name or Number (SFWMD Facility ID #) | PW-1 | PW-2 | PW-3 | |
| Map Designation | PW-1 | PW-2 | PW-3 | |
| Existing or Proposed | Proposed | Proposed | Proposed | |
| Proposed Construction Date | 2015 | 2015 | 2015 | |
| Date Installed if Existing | | | | |
| Diameter (in) | 14 | 14 | 14 | |
| Total Depth (ft) | 900 | 900 | 900 | |
| Cased Depth (ft) | 660 | 660 | 660 | |
| Screened Interval (ft) | N/A | N/A | N/A | |
| Pumped or Flowing | Pumped | Pumped | Pumped | |
| Pump Type (see Instructions) | Line shaft turbine | Line shaft turbine | Line shaft turbine | |
| Pump Intake Depth (ft NGVD) | -100 | -100 | -100 | |
| Pump or Flow Capacity (GPM) | 1,500 | 1,500 | 1,500 | |
| Working Valve if Artesian (yes, no or not applicable) | Yes | Yes | Yes | |
| Status (see Instructions) | Secondary | Secondary | Secondary | |
| Purpose (see Instructions) | PWS | PWS | PWS | |
| Elevation of the Wellhead (ft NGVD - see Instructions) | 56 | 56 | 56 | |
| Water Use Accounting Method (see Instructions) | flowmeter | flowmeter | flowmeter | |
| Date Last Calibrated (ATTACH calibration report) | | | | |
| Planar Coordinates (if known - see Instructions) | 429590 E 949811 N | 429545 E 947662 N | 429488 E 945666 N | |
| Section / Township / Range | 3/41/26 | 3/41/26 | 3/41/26 | |

Upper Floridan Aquifer APT Water Levels



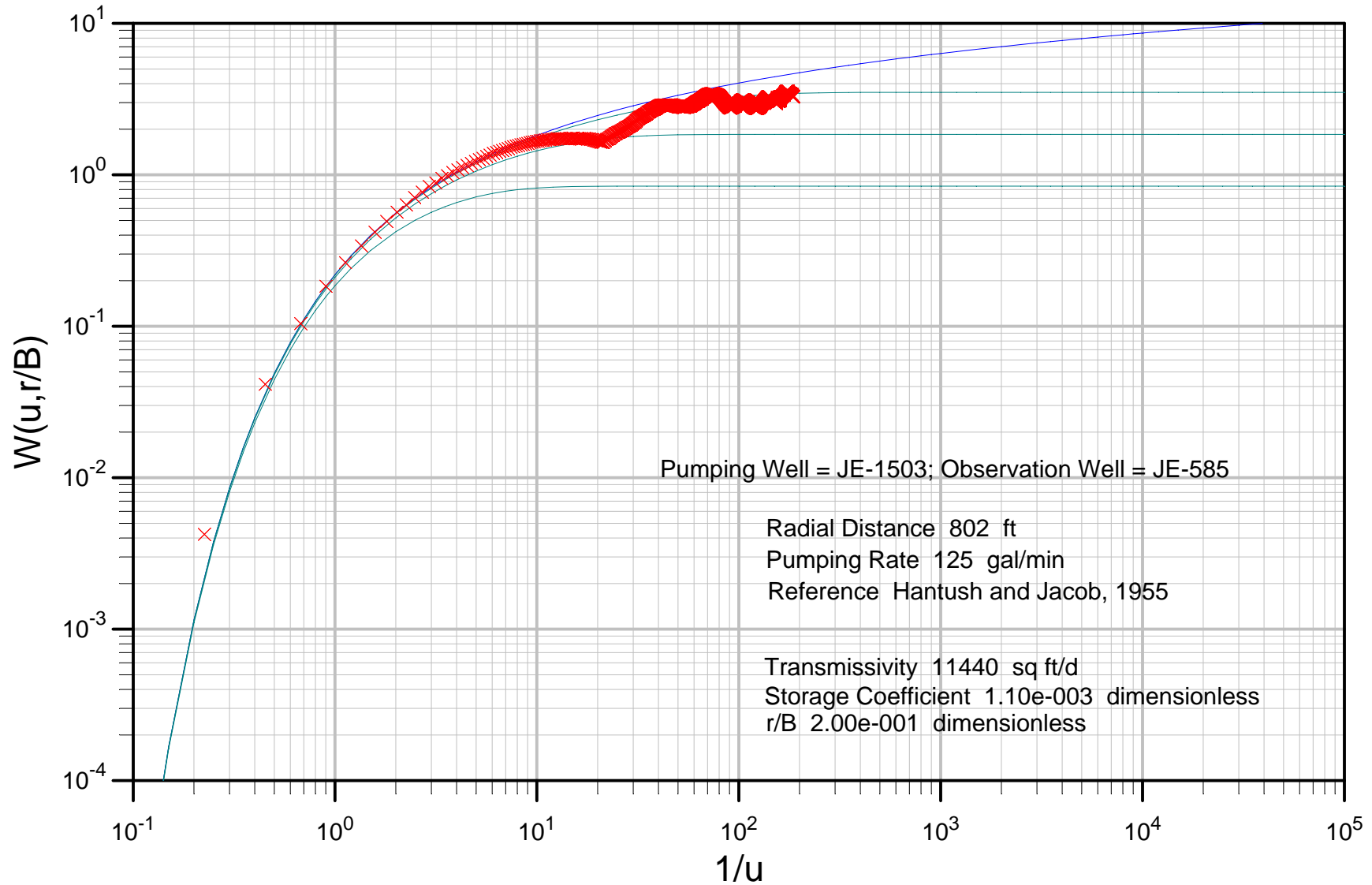
ROMP 5 Water Level

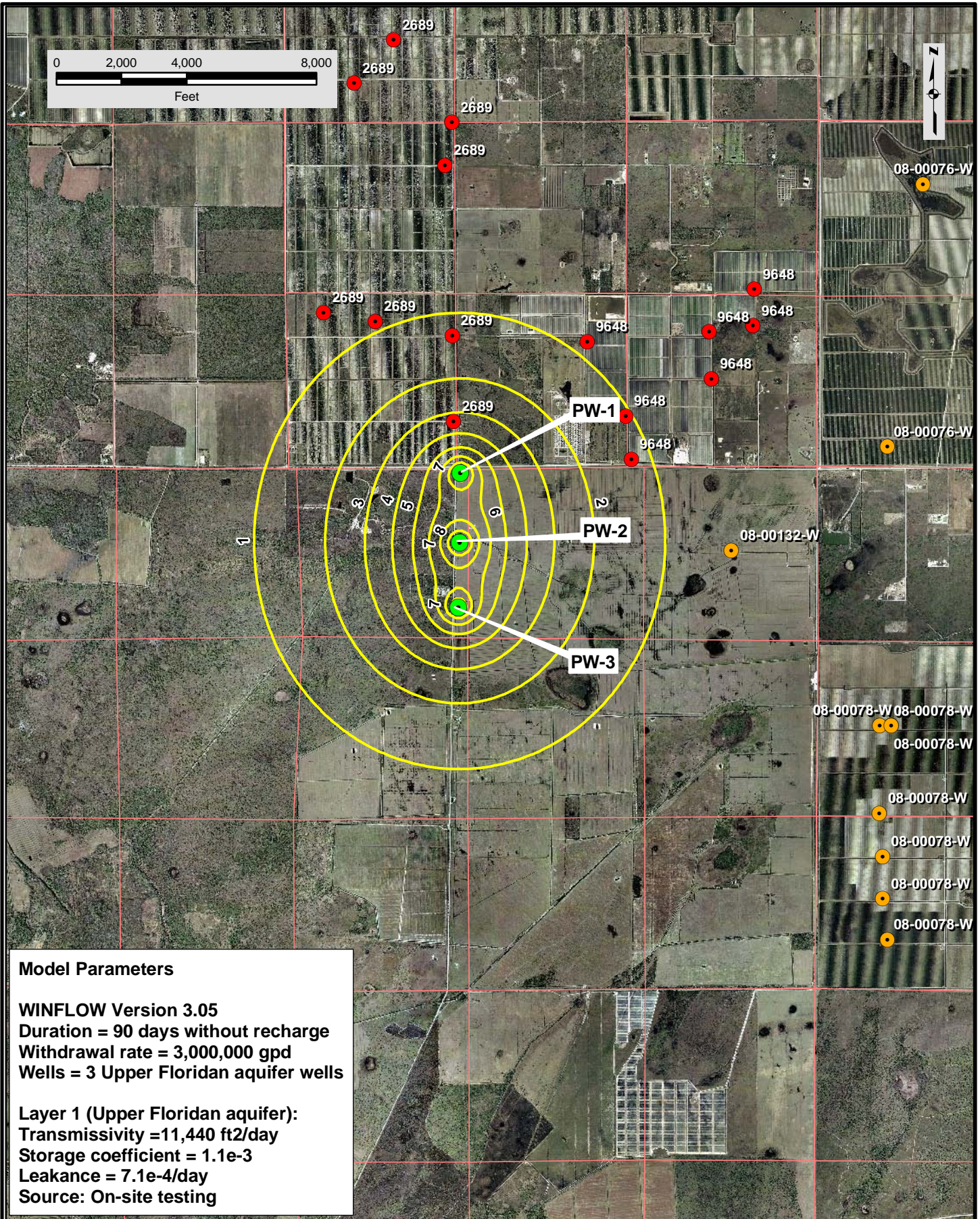


Charlotte County Utilities Upper Floridan Aquifer APT

JE-585: June 13-16, 2011

Hantush





Model Parameters

WINFLOW Version 3.05

Duration = 90 days without recharge

Withdrawal rate = 3,000,000 gpd

Wells = 3 Upper Floridan aquifer wells

Layer 1 (Upper Floridan aquifer):

Transmissivity = 11,440 ft²/day

Storage coefficient = 1.1e-3

Leakance = 7.1e-4/day

Source: On-site testing



2122 JOHNSON STREET
 P.O. BOX 1550
 FORT MYERS, FLORIDA 33902-1550
 PHONE (239) 334-0046
 FAX (239) 334-3661
 E.B. #642 & L.B. #642

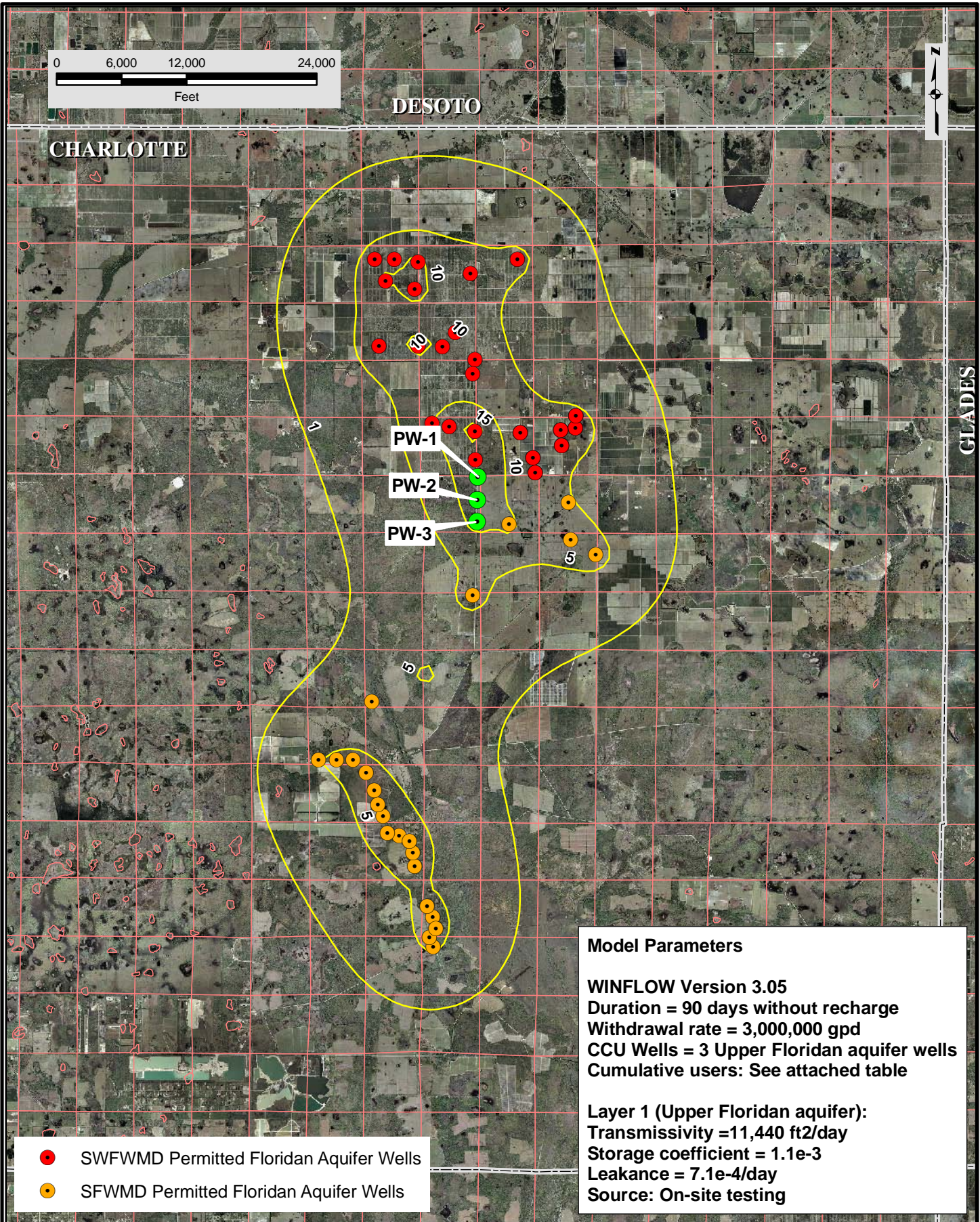
Upper Floridan Aquifer Drawdown



CHARLOTTE

DESOTO

GLADES



- SFWMD Permitted Floridan Aquifer Wells
- SFWMD Permitted Floridan Aquifer Wells

Model Parameters

WINFLOW Version 3.05
 Duration = 90 days without recharge
 Withdrawal rate = 3,000,000 gpd
 CCU Wells = 3 Upper Floridan aquifer wells
 Cumulative users: See attached table

Layer 1 (Upper Floridan aquifer):
 Transmissivity = 11,440 ft²/day
 Storage coefficient = 1.1e-3
 Leakance = 7.1e-4/day
 Source: On-site testing



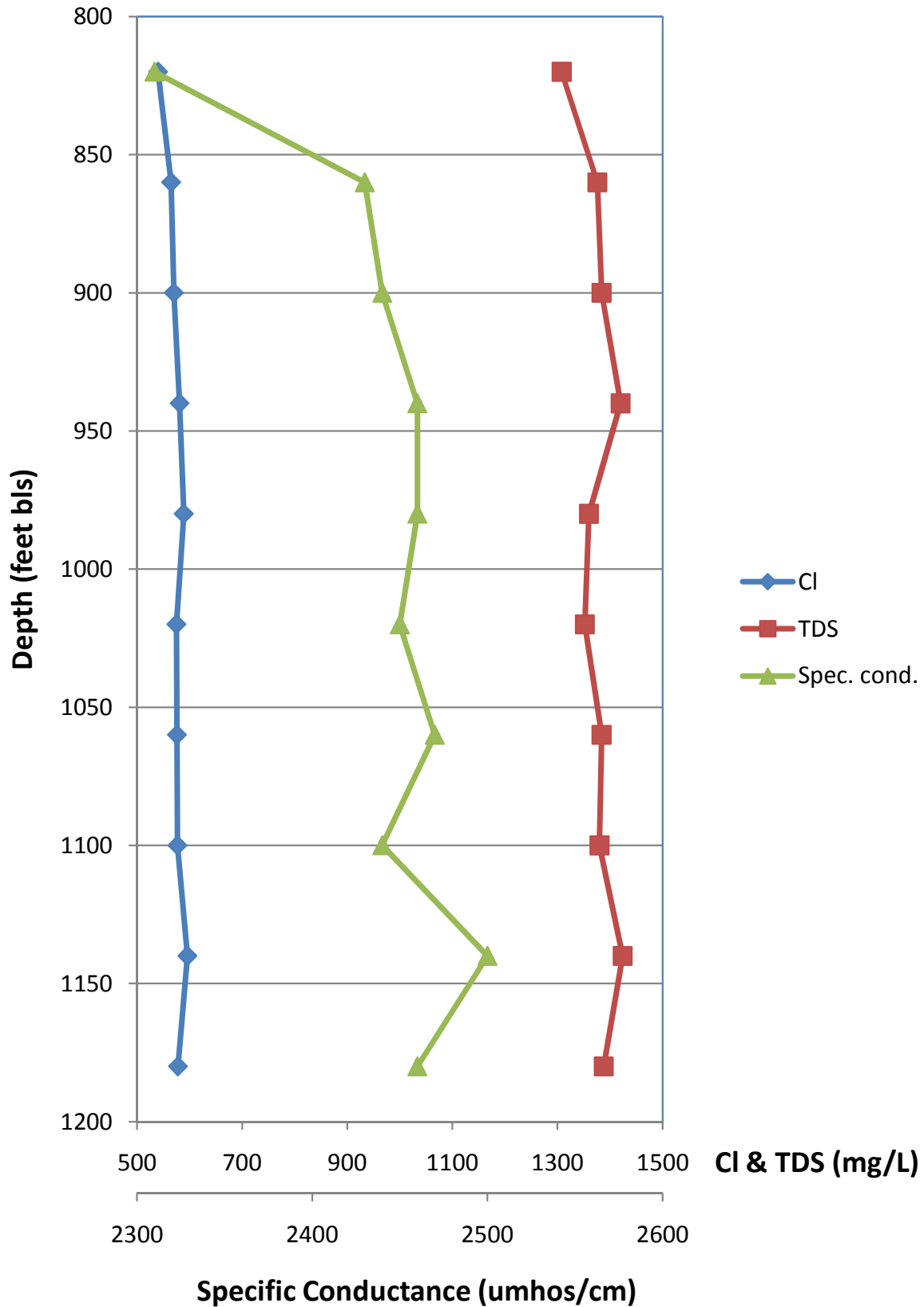
2122 JOHNSON STREET
 P.O. BOX 1550
 FORT MYERS, FLORIDA 33902-1550
 PHONE (239) 334-0046
 FAX (239) 334-3661
 E.B. #642 & L.B. #642

Cumulative Upper Floridan Aquifer Drawdown

Existing Legal Users of Upper Floridan Aquifer Included in Cumulative Impact Model

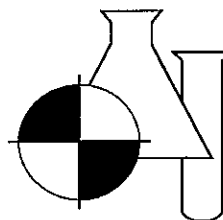
| Permit # | Project Name | Max Month Allocation (mgm) | Source |
|---------------|----------------------------------|----------------------------|---|
| <i>SFWMD</i> | | | |
| 08-00122-W | Town and Country Utilities | 205.1 | Upper Floridan aquifer (17 wells) |
| 08-00132-W | Babcock Ranch Preserve | 152.28 | Lower Hawthorn aquifer/FAS (6 wells) |
| <i>SWFWMD</i> | | | |
| 2689 | East Charlotte Drainage District | 397.92 | Intermediate (per SWFWMD; 17 wells varying rates) |
| 9648 | Lady Moon Farms | 51.67 | Intermediate (per SWFWMD; 6 wells) |

JE-1503 Water Quality Sampled During Drilling



BENCHMARK

EnviroAnalytical Inc.



NELAC Certification # E84167

ANALYTICAL TEST REPORT

THESE RESULTS MEET NELAC STANDARDS

Submission Number : 11060081

Johnson Engineering, Inc.
P.O. Box 1550
Fort Myers, Fl 33902

Project Name : BABCOCK RANCH SEPARATE WUP
Date Received : 06/02/2011
Time Received : 1445

Submission Number 11060081

Sample Number: 001 **Sample Description:** JE1503 980'
Sample Date: 05/27/2011 **Sample Method:** Grab
Sample Time: 0939

| Parameter | Result | Units | MDL | PQL | Procedure | Analysis | | Analyst |
|------------------------|--------|----------|-------|-------|-----------|------------|-------|---------|
| | | | | | | Date | Time | |
| CHLORIDE | 589 | MG/L | 0.353 | 1.412 | 300.0 | 06/06/2011 | 14:30 | RK |
| SULFATE | 239 | MG/L | 0.339 | 1.356 | 300.0 | 06/06/2011 | 14:30 | RK |
| SPECIFIC CONDUCTANCE | 2460 | UMHOS/CM | 1.24 | 4.96 | SM2510B | 06/03/2011 | 12:50 | RR |
| TOTAL DISSOLVED SOLIDS | 1360 | MG/L | 7.26 | 29.04 | SM2540C | 06/03/2011 | 09:00 | DM |

Submission Number 11060081

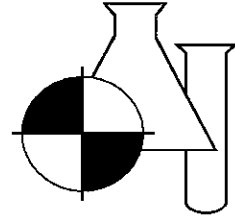
Sample Number: 002 **Sample Description:** JE1503 1020'
Sample Date: 05/27/2011 **Sample Method:** Grab
Sample Time: 1135

| Parameter | Result | Units | MDL | PQL | Procedure | Analysis | | Analyst |
|------------------------|--------|----------|-------|-------|-----------|------------|-------|---------|
| | | | | | | Date | Time | |
| CHLORIDE | 575 | MG/L | 0.353 | 1.412 | 300.0 | 06/06/2011 | 14:30 | RK |
| SULFATE | 234 | MG/L | 0.339 | 1.356 | 300.0 | 06/06/2011 | 14:30 | RK |
| SPECIFIC CONDUCTANCE | 2450 | UMHOS/CM | 1.24 | 4.96 | SM2510B | 06/03/2011 | 12:50 | RR |
| TOTAL DISSOLVED SOLIDS | 1352 | MG/L | 7.26 | 29.04 | SM2540C | 06/03/2011 | 09:00 | DM |

1711 12th Street East * Palmetto, FL 34221 * Phone (941) 723-9986 * Fax (941) 723-6061

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification # E84167

Submission Number 11060081

Sample Number: 003 Sample Description: JE1503 1060'
 Sample Date: 05/27/2011 Sample Method: Grab
 Sample Time: 1340

| Parameter | Result | Units | MDL | PQL | Procedure | Analysis | | Analyst |
|------------------------|--------|----------|-------|-------|-----------|------------|-------|---------|
| | | | | | | Date | Time | |
| CHLORIDE | 576 | MG/L | 0.353 | 1.412 | 300.0 | 06/06/2011 | 14:30 | RK |
| SULFATE | 234 | MG/L | 0.339 | 1.356 | 300.0 | 06/06/2011 | 14:30 | RK |
| SPECIFIC CONDUCTANCE | 2470 | UMHOS/CM | 1.24 | 4.96 | SM2510B | 06/03/2011 | 12:50 | RR |
| TOTAL DISSOLVED SOLIDS | 1384 | MG/L | 7.26 | 29.04 | SM2540C | 06/03/2011 | 09:00 | DM |

Submission Number 11060081

Sample Number: 004 Sample Description: JE1503 1100'
 Sample Date: 05/27/2011 Sample Method: Grab
 Sample Time: 1530

| Parameter | Result | Units | MDL | PQL | Procedure | Analysis | | Analyst |
|------------------------|--------|----------|-------|-------|-----------|------------|-------|---------|
| | | | | | | Date | Time | |
| CHLORIDE | 577 | MG/L | 0.353 | 1.412 | 300.0 | 06/06/2011 | 14:30 | RK |
| SULFATE | 233 | MG/L | 0.339 | 1.356 | 300.0 | 06/06/2011 | 14:30 | RK |
| SPECIFIC CONDUCTANCE | 2440 | UMHOS/CM | 1.24 | 4.96 | SM2510B | 06/03/2011 | 12:50 | RR |
| TOTAL DISSOLVED SOLIDS | 1380 | MG/L | 7.26 | 29.04 | SM2540C | 06/03/2011 | 09:00 | DM |

Submission Number 11060081

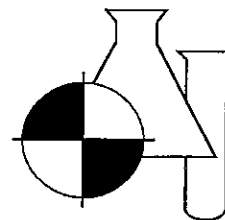
Sample Number: 005 Sample Description: JE1503 1140'
 Sample Date: 05/31/2011 Sample Method: Grab
 Sample Time: 1135

| Parameter | Result | Units | MDL | PQL | Procedure | Analysis | | Analyst |
|------------------------|--------|----------|-------|-------|-----------|------------|-------|---------|
| | | | | | | Date | Time | |
| CHLORIDE | 596 | MG/L | 0.353 | 1.412 | 300.0 | 06/06/2011 | 14:30 | RK |
| SULFATE | 235 | MG/L | 0.339 | 1.356 | 300.0 | 06/06/2011 | 14:30 | RK |
| SPECIFIC CONDUCTANCE | 2500 | UMHOS/CM | 1.24 | 4.96 | SM2510B | 06/03/2011 | 12:50 | RR |
| TOTAL DISSOLVED SOLIDS | 1424 | MG/L | 7.26 | 29.04 | SM2540C | 06/03/2011 | 09:00 | DM |

1711 12th Street East * Palmetto, FL 34221 * Phone (941) 723-9986 * Fax (941) 723-6061

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification # E84167

Submission Number 11060081

Sample Number: 006 Sample Description: JE1503 1180'
 Sample Date: 05/31/2011 Sample Method: Grab
 Sample Time: 1400

| Parameter | Result | Units | MDL | PQL | Procedure | Analysis | | Analyst |
|------------------------|--------|----------|-------|-------|-----------|------------|-------|---------|
| | | | | | | Date | Time | |
| CHLORIDE | 587 | MG/L | 0.353 | 1.412 | 300.0 | 06/06/2011 | 14:30 | RK |
| SULFATE | 236 | MG/L | 0.339 | 1.356 | 300.0 | 06/06/2011 | 14:30 | RK |
| SPECIFIC CONDUCTANCE | 2480 | UMHOS/CM | 1.24 | 4.96 | SM2510B | 06/03/2011 | 12:50 | RR |
| TOTAL DISSOLVED SOLIDS | 1424 | MG/L | 7.26 | 29.04 | SM2540C | 06/03/2011 | 09:00 | DM |

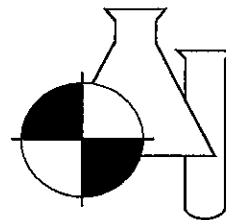
Submission Number 11060081

Sample Number: 007 Sample Description: JE1503 1200'
 Sample Date: 05/31/2011 Sample Method: Grab
 Sample Time: 1500

| Parameter | Result | Units | MDL | PQL | Procedure | Analysis | | Analyst |
|------------------------|--------|----------|-------|-------|-----------|------------|-------|---------|
| | | | | | | Date | Time | |
| CHLORIDE | 578 | MG/L | 0.353 | 1.412 | 300.0 | 06/06/2011 | 14:30 | RK |
| SULFATE | 232 | MG/L | 0.339 | 1.356 | 300.0 | 06/06/2011 | 14:30 | RK |
| SPECIFIC CONDUCTANCE | 2460 | UMHOS/CM | 1.24 | 4.96 | SM2510B | 06/03/2011 | 12:50 | RR |
| TOTAL DISSOLVED SOLIDS | 1388 | MG/L | 7.26 | 29.04 | SM2540C | 06/03/2011 | 09:00 | DM |

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification # E84167

Tulay Duokan
Dafe D. Dixon / Laboratory Director
Tulay Tanrisever / QC Officer
Jennifer Jordan / QC Officer

06/10/2011

Date

DATA QUALIFIERS THAT MAY APPLY:

A = Value reported is an average of two or more determinations.

B = Results based upon colony counts outside the ideal range.

H = Value based on field kit determination. Results may not be accurate.

I = Reported value is between the laboratory MDL and the PQL.

J = Estimated value.

J1 = Est. value surrogate recovery limits exceeded.

J2 = Est. value. No quality control criteria exists for component.

J3 = Est. value quality control criteria for precision or accuracy not met.

J4 = Est. value. Sample matrix interference suspected.

J5 = Est. value. Data questionable due to improper lab or field protocols

K = Off-scale low. Value is known to be < the value reported.

L = Off-scale high. Value is known to be > the value reported

NOTES:

PQL = 4xMDL.

MBAS calculated as LAS; molecular weight = 348.

X = Value exceed MCL.

For questions and comments regarding these results, please contact Bettina Beilfuss at (941) 723-9986

Results relate only to the samples.

N = Presumptive evidence of presence of material.

O = Sampled, but analysis lost or not performed.

Q = Sample held beyond accepted hold time.

T = Value reported is < MDL. Reported for informational purposes only and shall not be used in statistical analysis.

U = Analyte analyzed but not detected at the value indicated.

V = Analyte detected in sample and method blank.

Y = Analysis performed on an improperly preserved sample. Data may be inaccurate.

Z = Too many colonies were present (TNTC). The numeric value represents the filtration volume.

! = Data deviate from historically established concentration ranges.

? = Data rejected and should not be used. Some or all of QC data were outside criteria, and the Presence or absence of the analyte cannot be determined from the data.

* = Not reported due to interference.

NOTES:

Benchmark EnviroAnalytical, Inc
 1711 12th Street East
 Palmetto, FL 34221
 941-723-9986
 941-723-6061 Fax

Client Information: **Johnson Engineering**
 PO Box 1550
 Ft. Meyers, FL 33920
 239-461-2458 (Darren Howard)
 239-332-1573
 dhoward@johnsoneng.com

Project Name: **Babcock Ranch Separate WUP**
 Project Number: **20118669-001**

Laboratory Submission # **11060081**

| Sample Name | Sample Type/ Sample Matrix ² | Collection | | Container | | | Preservative ⁴ | Parameters for Analysis | Laboratory Sample # |
|--------------|--|------------|------|-----------|---------------------|-------------------|---------------------------|--|---------------------|
| | | Date | Time | Qty | Capacity | Type ³ | | | |
| JE1503 980' | G/GW | 5/27/11 | 939 | 1 | ½ Pint 500ML | P Tall | Plain | Cl SO ₄ (300.0) TDS (SM2540D) Specific Conductance (SM2510B) | 1 |
| JE1503 1020' | G/GW | 5/27/11 | 1135 | 1 | ½ Pint 500ML | P Tall | Plain | Cl SO ₄ (300.0) TDS (SM2540D) Specific Conductance (SM2510B) | 2 |
| JE1503 1060' | G/GW | 5/27/11 | 1340 | 1 | ½ Pint 500ML | P Tall | Plain | Cl SO ₄ (300.0) TDS (SM2540D) Specific Conductance (SM2510B) | 3 |
| JE1503 1100' | G/GW | 5/27/11 | 1530 | 1 | ½ Pint 1qt Squat | P | Plain | Cl SO ₄ (300.0) TDS (SM2540D) Specific Conductance (SM2510B) | 4 |
| | | | | 1 | ½ Pint | P | Plain | Cl SO ₄ (300.0) TDS (SM2540D) Specific Conductance (SM2510B) | |
| | | | | 1 | ½ Pint | P | Plain | Cl SO ₄ (300.0) TDS (SM2540D) Specific Conductance (SM2510B) | |

1 "Sample Type" is used to indicate whether the sample was a grab (G) or whether it was a composite (C).
 2 "Sample Matrix" is used to indicate whether the sample is being discharged to drinking water (DW), groundwater (GW), surface water (SW), fresh surface water (FSW), saline surface water (SSW), soil, sediment (SDMNT), or sludge (SLDG).
 3 "Container Type" is used to indicate whether the container is plastic (P) or glass (G).
 4 Sample must be refrigerated or stored in wet ice after collection. The temperature during storage should be less than or equal to 6°C (42.8°F).
 Under "Preservative," list any preservatives that were added to the sample container.

Instructions:
 1. Each bottle has a label identifying sample ID, premeasured preservative contained in the bottle, sample type, client ID, and parameters for analysis.
 2. The following information should be added to each bottle label after collection with permanent black ink: date and time of collection, sampler's name or initials, and any field number or ID.
 3. All bottles not containing preservative may be rinsed with appropriate sample prior to collection.
 4. The client is responsible for documentation of the sampling event. Please note special sampling events on the sample custody form.

Laboratory Sample Acceptability:
 pH <: 7 *7.8*
 BEA Temperature: *7.2*

| | Collected By: | Date | Time | Received By: | Date | Time |
|---|-------------------------|--------|------|-------------------------|--------|-------|
| 1 | <i>Darren Howard</i> | 6/2/11 | 820 | <i>[Signature]</i> | 6/2/11 | 16:20 |
| 2 | Relinquished By: | Date | Time | Received By: | Date | Time |
| 3 | <i>Melinda Marchant</i> | 6/2/11 | 1137 | <i>Melinda Marchant</i> | 6/2/11 | 1137 |
| 4 | Relinquished By: | Date | Time | Received By: | Date | Time |
| | <i>Wayne Ver Cammen</i> | 6-2-11 | 1215 | <i>Wayne Ver Cammen</i> | 6-2-11 | 1215 |
| | Relinquished By: | Date | Time | Received By: | Date | Time |
| | <i>Wayne Ver Cammen</i> | 6-2-11 | 1445 | <i>[Signature]</i> | 6/2/11 | 1445 |

5066

Benchmark EnviroAnalytical, Inc

1711 12th Street East
 Palmetto, Fl 34221
 941-723-9986
 941-723-6061 Fax

Client Information: **Johnson Engineering**
 PO Box 1550
 Ft. Meyers, Fl 33920
 239-461-2458 (Darren Howard)
 239-332-1573
 dhoward@johnsoneng.com

Project Name: **Babcock Ranch Separate WUP**
 Project Number: **20118669-001**

Laboratory Submission #

11060081

| Sample Name | Sample Type ¹ / Sample Matrix ² | Collection | | Container | | | Preservative ⁴ | Parameters for Analysis | Laboratory Sample # |
|--------------|---|------------|------|-----------|-----------------------|-------------------|---------------------------|--|---------------------|
| | | Date | Time | Qty | Capacity | Type ³ | | | |
| JE1503 1140' | G/GW | 5/31/11 | 1135 | 1 | ½ Pint 1qt Squat | P | Plain | Cl SO ₄ (300.0) TDS (SM2540D) Specific Conductance (SM2510B) | 5 • |
| JE1503 1180' | G/GW | 5/31/11 | 1400 | 1 | ½ Pint 1qt Squat | P | Plain | Cl SO ₄ (300.0) TDS (SM2540D) Specific Conductance (SM2510B) | 6 • |
| JE1503 1200' | G/GW | 5/31/11 | 1500 | 1 | ½ Pint 1000mL Tall | P | Plain | Cl SO ₄ (300.0) TDS (SM2540D) Specific Conductance (SM2510B) | 7 • |
| | | | | 1 | ½ Pint | P | Plain | Cl SO ₄ (300.0) TDS (SM2540D) Specific Conductance (SM2510B) | |
| | | | | 1 | ½ Pint | P | Plain | Cl SO ₄ (300.0) TDS (SM2540D) Specific Conductance (SM2510B) | |
| | | | | 1 | ½ Pint | P | Plain | Cl SO ₄ (300.0) TDS (SM2540D) Specific Conductance (SM2510B) | |

- 1 "Sample Type" is used to indicate whether the sample was a grab (G) or whether it was a composite (C).
 2 "Sample Matrix" is used to indicate whether the sample is being discharged to drinking water (DW), groundwater (GW), surface water (SW), fresh surface water (FSW), saline surface water (SSW), soil, sediment (SDMNT), or sludge (SLDG).
 3 "Container Type" is used to indicate whether the container is plastic (P) or glass (G).
 4 Sample must be refrigerated or stored in wet ice after collection. The temperature during storage should be less than or equal to 6°C (42.8°F). Under "Preservative," list any preservatives that were added to the sample container.

Instructions:

1. Each bottle has a label identifying sample ID, premeasured preservative contained in the bottle, sample type, client ID, and parameters for analysis.
 2. The following information should be added to each bottle label after collection with permanent black ink: date and time of collection, sampler's name or initials, and any field number or ID.
 3. All bottles not containing preservative may be rinsed with appropriate sample prior to collection.
 4. The client is responsible for documentation of the sampling event. Please note special sampling events on the sample custody form.

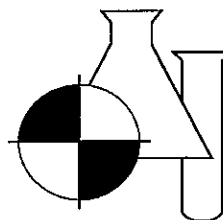
Laboratory Sample Acceptability:
 pH < 9 *9*
 BEA Temperature: *12*

| | | | | | | |
|---|--|---------------------|-------------------|--------------------------------------|---------------------|-------------------|
| 1 | Collected By: <i>Darren Howard</i> | Date: <i>6/2/11</i> | Time: <i>820</i> | Received By: <i>[Signature]</i> | Date: <i>6/2/11</i> | Time: <i>1057</i> |
| 2 | Relinquished By: <i>[Signature]</i> | Date: <i>6/2/11</i> | Time: <i>1127</i> | Received By: <i>Melinda Merchant</i> | Date: <i>6/2/11</i> | Time: <i>1127</i> |
| 3 | Relinquished By: <i>Melinda Merchant</i> | Date: <i>6/2/11</i> | Time: <i>1215</i> | Received By: <i>Wayne Cammen</i> | Date: <i>6-2-11</i> | Time: <i>1215</i> |
| 4 | Relinquished By: <i>Wayne Cammen</i> | Date: <i>6-2-11</i> | Time: <i>1445</i> | Received By: <i>[Signature]</i> | Date: <i>6/2/11</i> | Time: <i>1445</i> |

6
976

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification # E84167

ANALYTICAL TEST REPORT

THESE RESULTS MEET NELAC STANDARDS

Submission Number : 11060081

Johnson Engineering, Inc.
P.O. Box 1550
Fort Myers, Fl 33902

Project Name : BABCOCK RANCH SEPARATE WUP
Date Received : 06/02/2011
Time Received : 1445

Submission Number 11060081

Sample Number: 001 **Sample Description:** JE1503 980'
Sample Date: 05/27/2011 **Sample Method:** Grab
Sample Time: 0939

| Parameter | Result | Units | MDL | PQL | Procedure | Analysis | | Analyst |
|------------------------|--------|----------|-------|-------|-----------|------------|-------|---------|
| | | | | | | Date | Time | |
| CHLORIDE | 589 | MG/L | 0.353 | 1.412 | 300.0 | 06/06/2011 | 14:30 | RK |
| SULFATE | 239 | MG/L | 0.339 | 1.356 | 300.0 | 06/06/2011 | 14:30 | RK |
| SPECIFIC CONDUCTANCE | 2460 | UMHOS/CM | 1.24 | 4.96 | SM2510B | 06/03/2011 | 12:50 | RR |
| TOTAL DISSOLVED SOLIDS | 1360 | MG/L | 7.26 | 29.04 | SM2540C | 06/03/2011 | 09:00 | DM |

Submission Number 11060081

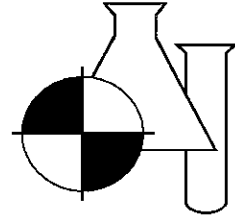
Sample Number: 002 **Sample Description:** JE1503 1020'
Sample Date: 05/27/2011 **Sample Method:** Grab
Sample Time: 1135

| Parameter | Result | Units | MDL | PQL | Procedure | Analysis | | Analyst |
|------------------------|--------|----------|-------|-------|-----------|------------|-------|---------|
| | | | | | | Date | Time | |
| CHLORIDE | 575 | MG/L | 0.353 | 1.412 | 300.0 | 06/06/2011 | 14:30 | RK |
| SULFATE | 234 | MG/L | 0.339 | 1.356 | 300.0 | 06/06/2011 | 14:30 | RK |
| SPECIFIC CONDUCTANCE | 2450 | UMHOS/CM | 1.24 | 4.96 | SM2510B | 06/03/2011 | 12:50 | RR |
| TOTAL DISSOLVED SOLIDS | 1352 | MG/L | 7.26 | 29.04 | SM2540C | 06/03/2011 | 09:00 | DM |

1711 12th Street East * Palmetto, FL 34221 * Phone (941) 723-9986 * Fax (941) 723-6061

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification # E84167

Submission Number 11060081

Sample Number: 003 Sample Description: JE1503 1060'
 Sample Date: 05/27/2011 Sample Method: Grab
 Sample Time: 1340

| Parameter | Result | Units | MDL | PQL | Procedure | Analysis | | Analyst |
|------------------------|--------|----------|-------|-------|-----------|------------|-------|---------|
| | | | | | | Date | Time | |
| CHLORIDE | 576 | MG/L | 0.353 | 1.412 | 300.0 | 06/06/2011 | 14:30 | RK |
| SULFATE | 234 | MG/L | 0.339 | 1.356 | 300.0 | 06/06/2011 | 14:30 | RK |
| SPECIFIC CONDUCTANCE | 2470 | UMHOS/CM | 1.24 | 4.96 | SM2510B | 06/03/2011 | 12:50 | RR |
| TOTAL DISSOLVED SOLIDS | 1384 | MG/L | 7.26 | 29.04 | SM2540C | 06/03/2011 | 09:00 | DM |

Submission Number 11060081

Sample Number: 004 Sample Description: JE1503 1100'
 Sample Date: 05/27/2011 Sample Method: Grab
 Sample Time: 1530

| Parameter | Result | Units | MDL | PQL | Procedure | Analysis | | Analyst |
|------------------------|--------|----------|-------|-------|-----------|------------|-------|---------|
| | | | | | | Date | Time | |
| CHLORIDE | 577 | MG/L | 0.353 | 1.412 | 300.0 | 06/06/2011 | 14:30 | RK |
| SULFATE | 233 | MG/L | 0.339 | 1.356 | 300.0 | 06/06/2011 | 14:30 | RK |
| SPECIFIC CONDUCTANCE | 2440 | UMHOS/CM | 1.24 | 4.96 | SM2510B | 06/03/2011 | 12:50 | RR |
| TOTAL DISSOLVED SOLIDS | 1380 | MG/L | 7.26 | 29.04 | SM2540C | 06/03/2011 | 09:00 | DM |

Submission Number 11060081

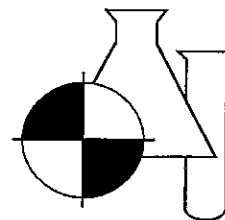
Sample Number: 005 Sample Description: JE1503 1140'
 Sample Date: 05/31/2011 Sample Method: Grab
 Sample Time: 1135

| Parameter | Result | Units | MDL | PQL | Procedure | Analysis | | Analyst |
|------------------------|--------|----------|-------|-------|-----------|------------|-------|---------|
| | | | | | | Date | Time | |
| CHLORIDE | 596 | MG/L | 0.353 | 1.412 | 300.0 | 06/06/2011 | 14:30 | RK |
| SULFATE | 235 | MG/L | 0.339 | 1.356 | 300.0 | 06/06/2011 | 14:30 | RK |
| SPECIFIC CONDUCTANCE | 2500 | UMHOS/CM | 1.24 | 4.96 | SM2510B | 06/03/2011 | 12:50 | RR |
| TOTAL DISSOLVED SOLIDS | 1424 | MG/L | 7.26 | 29.04 | SM2540C | 06/03/2011 | 09:00 | DM |

1711 12th Street East * Palmetto, FL 34221 * Phone (941) 723-9986 * Fax (941) 723-6061

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification # E84167

Submission Number 11060081

Sample Number: 006 Sample Description: JE1503 1180'
 Sample Date: 05/31/2011 Sample Method: Grab
 Sample Time: 1400

| Parameter | Result | Units | MDL | PQL | Procedure | Analysis | | Analyst |
|------------------------|--------|----------|-------|-------|-----------|------------|-------|---------|
| | | | | | | Date | Time | |
| CHLORIDE | 587 | MG/L | 0.353 | 1.412 | 300.0 | 06/06/2011 | 14:30 | RK |
| SULFATE | 236 | MG/L | 0.339 | 1.356 | 300.0 | 06/06/2011 | 14:30 | RK |
| SPECIFIC CONDUCTANCE | 2480 | UMHOS/CM | 1.24 | 4.96 | SM2510B | 06/03/2011 | 12:50 | RR |
| TOTAL DISSOLVED SOLIDS | 1424 | MG/L | 7.26 | 29.04 | SM2540C | 06/03/2011 | 09:00 | DM |

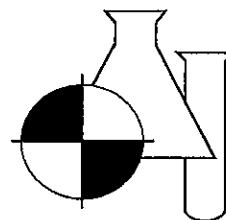
Submission Number 11060081

Sample Number: 007 Sample Description: JE1503 1200'
 Sample Date: 05/31/2011 Sample Method: Grab
 Sample Time: 1500

| Parameter | Result | Units | MDL | PQL | Procedure | Analysis | | Analyst |
|------------------------|--------|----------|-------|-------|-----------|------------|-------|---------|
| | | | | | | Date | Time | |
| CHLORIDE | 578 | MG/L | 0.353 | 1.412 | 300.0 | 06/06/2011 | 14:30 | RK |
| SULFATE | 232 | MG/L | 0.339 | 1.356 | 300.0 | 06/06/2011 | 14:30 | RK |
| SPECIFIC CONDUCTANCE | 2460 | UMHOS/CM | 1.24 | 4.96 | SM2510B | 06/03/2011 | 12:50 | RR |
| TOTAL DISSOLVED SOLIDS | 1388 | MG/L | 7.26 | 29.04 | SM2540C | 06/03/2011 | 09:00 | DM |

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification # E84167

Tulay Tanrisever

06/10/2011

Dafe D. Dixon / Laboratory Director

Date

Tulay Tanrisever/ QC Officer

Jennifer Jordan / QC Officer

DATA QUALIFIERS THAT MAY APPLY:

A = Value reported is an average of two or more determinations.

B = Results based upon colony counts outside the ideal range.

H = Value based on field kit determination. Results may not be accurate.

I = Reported value is between the laboratory MDL and the PQL.

J = Estimated value.

J1 = Est. value surrogate recovery limits exceeded.

J2 = Est. value. No quality control criteria exists for component.

J3 = Est. value quality control criteria for precision or accuracy not met.

J4 = Est. value. Sample matrix interference suspected.

J5 = Est. value. Data questionable due to improper lab or field protocols

K = Off-scale low. Value is known to be < the value reported.

L = Off-scale high. Value is known to be > the value reported

NOTES:

PQL = 4xMDL.

MBAS calculated as LAS; molecular weight = 348.

X = Value exceed MCL.

For questions and comments regarding these results, please contact Bettina Beilfuss at (941) 723-9986

Results relate only to the samples.

N = Presumptive evidence of presence of material.

O = Sampled, but analysis lost or not performed.

Q = Sample held beyond accepted hold time.

T = Value reported is < MDL. Reported for informational purposes only and shall not be used in statistical analysis.

U = Analyte analyzed but not detected at the value indicated.

V = Analyte detected in sample and method blank.

Y = Analysis performed on an improperly preserved sample. Data may be inaccurate.

Z = Too many colonies were present (TNTC). The numeric value represents the filtration volume.

! = Data deviate from historically established concentration ranges.

? = Data rejected and should not be used. Some or all of QC data were outside criteria, and the Presence or absence of the analyte cannot be determined from the data.

* = Not reported due to interference.

NOTES:

Benchmark EnviroAnalytical, Inc
 1711 12th Street East
 Palmetto, FL 34221
 941-723-9986
 941-723-6061 Fax

Client Information: **Johnson Engineering**
 PO Box 1550
 Ft. Meyers, FL 33920
 239-461-2458 (Darren Howard)
 239-332-1573
 dhoward@johnsoneng.com

Project Name: **Babcock Ranch Separate WUP**
 Project Number: **20118669-001**

Laboratory Submission # **11060081**

| Sample Name | Sample Type/ Sample Matrix ² | Collection | | Container | | | Preservative ⁴ | Parameters for Analysis | Laboratory Sample # |
|--------------|--|------------|------|-----------|---------------------|-------------------|---------------------------|--|---------------------|
| | | Date | Time | Qty | Capacity | Type ³ | | | |
| JE1503 980' | G/GW | 5/27/11 | 939 | 1 | ½ Pint 500ML | P Tall | Plain | Cl SO ₄ (300.0) TDS (SM2540D) Specific Conductance (SM2510B) | 1 |
| JE1503 1020' | G/GW | 5/27/11 | 1135 | 1 | ½ Pint 500ML | P Tall | Plain | Cl SO ₄ (300.0) TDS (SM2540D) Specific Conductance (SM2510B) | 2 |
| JE1503 1060' | G/GW | 5/27/11 | 1340 | 1 | ½ Pint 500ML | P Tall | Plain | Cl SO ₄ (300.0) TDS (SM2540D) Specific Conductance (SM2510B) | 3 |
| JE1503 1100' | G/GW | 5/27/11 | 1530 | 1 | ½ Pint 1qt Squat | P | Plain | Cl SO ₄ (300.0) TDS (SM2540D) Specific Conductance (SM2510B) | 4 |
| | | | | 1 | ½ Pint | P | Plain | Cl SO ₄ (300.0) TDS (SM2540D) Specific Conductance (SM2510B) | |
| | | | | 1 | ½ Pint | P | Plain | Cl SO ₄ (300.0) TDS (SM2540D) Specific Conductance (SM2510B) | |

1 "Sample Type" is used to indicate whether the sample was a grab (G) or whether it was a composite (C).
 2 "Sample Matrix" is used to indicate whether the sample is being discharged to drinking water (DW), groundwater (GW), surface water (SW), fresh surface water (FSW), saline surface water (SSW), soil, sediment (SDMNT), or sludge (SLDG).
 3 "Container Type" is used to indicate whether the container is plastic (P) or glass (G).
 4 Sample must be refrigerated or stored in wet ice after collection. The temperature during storage should be less than or equal to 6°C (42.8°F). Under "Preservative," list any preservatives that were added to the sample container.

Instructions:
 1. Each bottle has a label identifying sample ID, premeasured preservative contained in the bottle, sample type, client ID, and parameters for analysis.
 2. The following information should be added to each bottle label after collection with permanent black ink: date and time of collection, sampler's name or initials, and any field number or ID.
 3. All bottles not containing preservative may be rinsed with appropriate sample prior to collection.
 4. The client is responsible for documentation of the sampling event. Please note special sampling events on the sample custody form.

Laboratory Sample Acceptability:
 pH <: 7 *7.8*
 BEA Temperature: *7.2*

| | Collected By: | Date | Time | Received By: | Date | Time |
|---|-------------------------|--------|------|-------------------------|--------|-------|
| 1 | <i>Darren Howard</i> | 6/2/11 | 820 | <i>[Signature]</i> | 6/2/11 | 16:20 |
| 2 | Relinquished By: | Date | Time | Received By: | Date | Time |
| 3 | <i>Melinda Marchant</i> | 6/2/11 | 1137 | <i>Melinda Marchant</i> | 6/2/11 | 1137 |
| 4 | Relinquished By: | Date | Time | Received By: | Date | Time |
| | <i>Wayne Ver Cammen</i> | 6-2-11 | 1215 | <i>Wayne Ver Cammen</i> | 6-2-11 | 1215 |
| | Relinquished By: | Date | Time | Received By: | Date | Time |
| | <i>Wayne Ver Cammen</i> | 6-2-11 | 1445 | <i>[Signature]</i> | 6/2/11 | 1445 |

5066

Benchmark EnviroAnalytical, Inc

1711 12th Street East
 Palmetto, Fl 34221
 941-723-9986
 941-723-6061 Fax

Client Information: **Johnson Engineering**
 PO Box 1550
 Ft. Meyers, Fl 33920
 239-461-2458 (Darren Howard)
 239-332-1573
 dhoward@johnsoneng.com

Project Name: **Babcock Ranch Separate WUP**
 Project Number: **20118669-001**

Laboratory Submission #

11060081

| Sample Name | Sample Type ¹ / Sample Matrix ² | Collection | | Container | | | Preservative ⁴ | Parameters for Analysis | Laboratory Sample # |
|--------------|---|------------|------|-----------|-----------------------|-------------------|---------------------------|--|---------------------|
| | | Date | Time | Qty | Capacity | Type ³ | | | |
| JE1503 1140' | G/GW | 5/31/11 | 1135 | 1 | ½ Pint 1qt Squat | P | Plain | Cl SO ₄ (300.0) TDS (SM2540D) Specific Conductance (SM2510B) | 5 • |
| JE1503 1180' | G/GW | 5/31/11 | 1400 | 1 | ½ Pint 1qt Squat | P | Plain | Cl SO ₄ (300.0) TDS (SM2540D) Specific Conductance (SM2510B) | 6 • |
| JE1503 1200' | G/GW | 5/31/11 | 1500 | 1 | ½ Pint 1000mL Tall | P | Plain | Cl SO ₄ (300.0) TDS (SM2540D) Specific Conductance (SM2510B) | 7 • |
| | | | | 1 | ½ Pint | P | Plain | Cl SO ₄ (300.0) TDS (SM2540D) Specific Conductance (SM2510B) | |
| | | | | 1 | ½ Pint | P | Plain | Cl SO ₄ (300.0) TDS (SM2540D) Specific Conductance (SM2510B) | |
| | | | | 1 | ½ Pint | P | Plain | Cl SO ₄ (300.0) TDS (SM2540D) Specific Conductance (SM2510B) | |

- 1 "Sample Type" is used to indicate whether the sample was a grab (G) or whether it was a composite (C).
 2 "Sample Matrix" is used to indicate whether the sample is being discharged to drinking water (DW), groundwater (GW), surface water (SW), fresh surface water (FSW), saline surface water (SSW), soil, sediment (SDMNT), or sludge (SLDG).
 3 "Container Type" is used to indicate whether the container is plastic (P) or glass (G).
 4 Sample must be refrigerated or stored in wet ice after collection. The temperature during storage should be less than or equal to 6°C (42.8°F). Under "Preservative," list any preservatives that were added to the sample container.

Instructions:

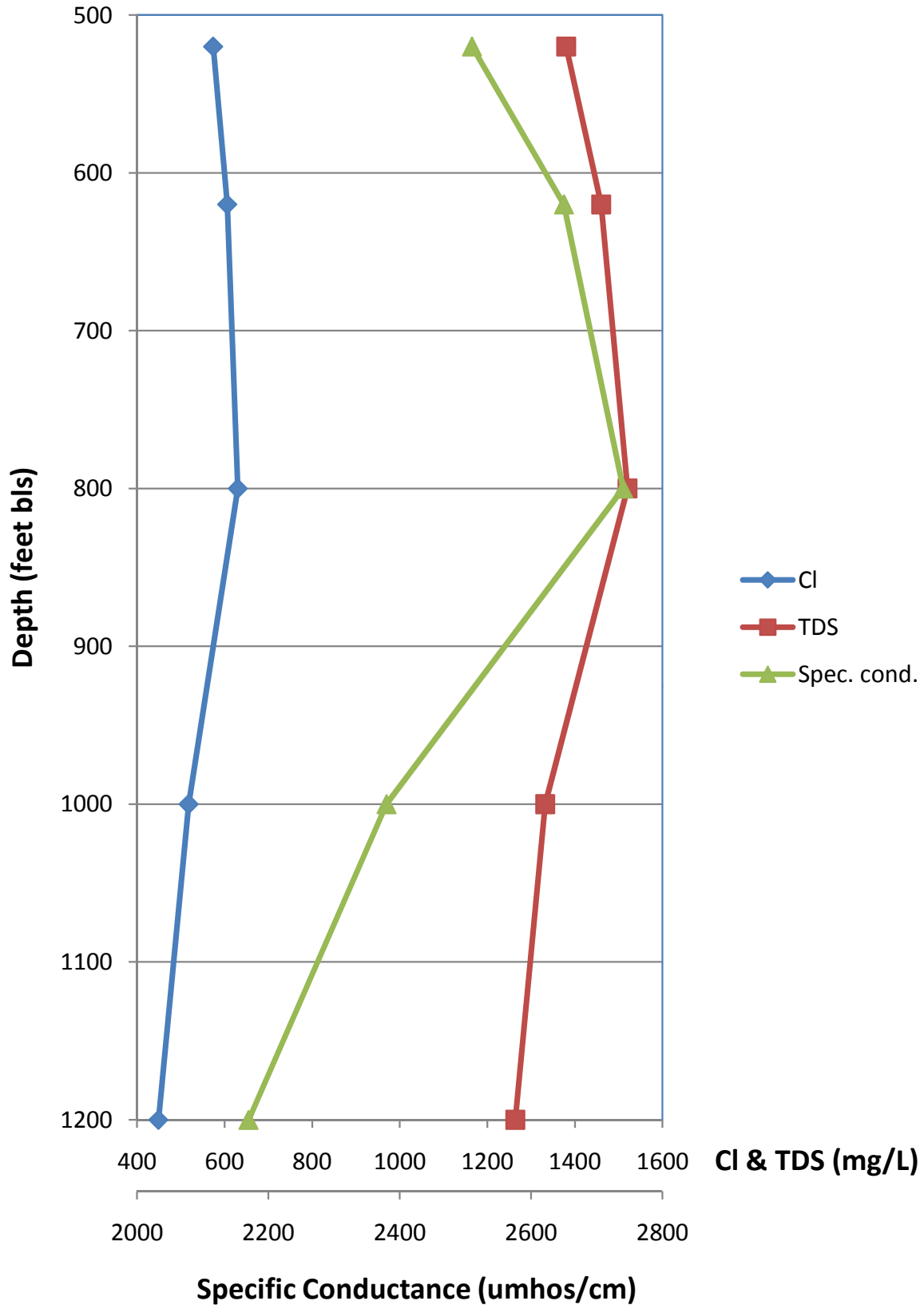
1. Each bottle has a label identifying sample ID, premeasured preservative contained in the bottle, sample type, client ID, and parameters for analysis.
 2. The following information should be added to each bottle label after collection with permanent black ink: date and time of collection, sampler's name or initials, and any field number or ID.
 3. All bottles not containing preservative may be rinsed with appropriate sample prior to collection.
 4. The client is responsible for documentation of the sampling event. Please note special sampling events on the sample custody form.

Laboratory Sample Acceptability:
 pH < 9 *9*
 BEA Temperature: *12*

| | | | | | | |
|---|--|---------------------|-------------------|--------------------------------------|---------------------|-------------------|
| 1 | Collected By: <i>Darren Howard</i> | Date: <i>6/2/11</i> | Time: <i>820</i> | Received By: <i>[Signature]</i> | Date: <i>6/2/11</i> | Time: <i>1057</i> |
| 2 | Relinquished By: <i>[Signature]</i> | Date: <i>6/2/11</i> | Time: <i>1127</i> | Received By: <i>Melinda Merchant</i> | Date: <i>6/2/11</i> | Time: <i>1127</i> |
| 3 | Relinquished By: <i>Melinda Merchant</i> | Date: <i>6/2/11</i> | Time: <i>1215</i> | Received By: <i>Wayne Cammen</i> | Date: <i>6-2-11</i> | Time: <i>1215</i> |
| 4 | Relinquished By: <i>Wayne Cammen</i> | Date: <i>6-2-11</i> | Time: <i>1445</i> | Received By: <i>[Signature]</i> | Date: <i>6/2/11</i> | Time: <i>1445</i> |

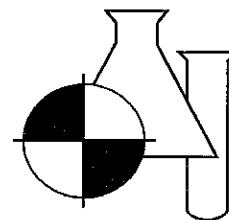
6
976

JE-1503 Water Quality Sampled by Bailer After Sustained Static Conditions



BENCHMARK

EnviroAnalytical Inc.



NELAC Certification # E84167

ANALYTICAL TEST REPORT

THESE RESULTS MEET NELAC STANDARDS

Submission Number : 11060232

Johnson Engineering, Inc.
P.O. Box 1550
Fort Myers, Fl 33902

Project Name : BABCOCK RANCH SEPARATE WUP
Date Received : 06/08/2011
Time Received : 1430

Submission Number 11060232

Sample Number: 001 **Sample Description:** JE1503 520'
Sample Date: 06/06/2011 **Sample Method:** Grab
Sample Time: 1130

| Parameter | Result | Units | MDL | PQL | Procedure | Analysis | | Analyst |
|------------------------|--------|----------|-------|-------|-----------|------------|-------|---------|
| | | | | | | Date | Time | |
| CHLORIDE | 574 | MG/L | 0.353 | 1.412 | 300.0 | 06/10/2011 | 17:00 | RK/CB |
| SULFATE | 204 | MG/L | 0.339 | 1.356 | 300.0 | 06/10/2011 | 17:00 | RK/CB |
| SPECIFIC CONDUCTANCE | 2510 | UMHOS/CM | 1.24 | 4.96 | SM2510B | 06/09/2011 | 10:56 | RR |
| TOTAL DISSOLVED SOLIDS | 1380 | MG/L | 7.26 | 29.04 | SM2540C | 06/10/2011 | 11:32 | DM |

Submission Number 11060232

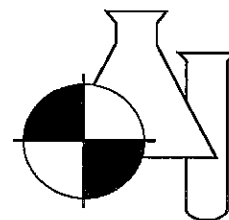
Sample Number: 002 **Sample Description:** JE1503 620'
Sample Date: 06/06/2011 **Sample Method:** Grab
Sample Time: 1200

| Parameter | Result | Units | MDL | PQL | Procedure | Analysis | | Analyst |
|------------------------|--------|----------|-------|-------|-----------|------------|-------|---------|
| | | | | | | Date | Time | |
| CHLORIDE | 606 | MG/L | 0.353 | 1.412 | 300.0 | 06/10/2011 | 17:00 | RK/CB |
| SULFATE | 218 | MG/L | 0.339 | 1.356 | 300.0 | 06/10/2011 | 17:00 | RK/CB |
| SPECIFIC CONDUCTANCE | 2650 | UMHOS/CM | 1.24 | 4.96 | SM2510B | 06/09/2011 | 10:56 | RR |
| TOTAL DISSOLVED SOLIDS | 1480 | MG/L | 7.26 | 29.04 | SM2540C | 06/10/2011 | 11:34 | DM |

1711 12th Street East * Palmetto, FL 34221 * Phone (941) 723-9986 * Fax (941) 723-6061

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification # E84167

Submission Number 11060232

Sample Number: 003 Sample Description: JE1503 800'
 Sample Date: 06/06/2011 Sample Method: Grab
 Sample Time: 1230

| Parameter | Result | Units | MDL | PQL | Procedure | Analysis | | Analyst |
|------------------------|--------|----------|-------|-------|-----------|------------|-------|---------|
| | | | | | | Date | Time | |
| CHLORIDE | 630 | MG/L | 0.353 | 1.412 | 300.0 | 06/10/2011 | 17:00 | RK/CB |
| SULFATE | 227 | MG/L | 0.339 | 1.356 | 300.0 | 06/10/2011 | 17:00 | RK/CB |
| SPECIFIC CONDUCTANCE | 2740 | UMHOS/CM | 1.24 | 4.96 | SM2510B | 06/09/2011 | 10:56 | RR |
| TOTAL DISSOLVED SOLIDS | 1520 | MG/L | 7.26 | 29.04 | SM2540C | 06/10/2011 | 11:36 | DM |

Submission Number 11060232

Sample Number: 004 Sample Description: JE1503 1000'
 Sample Date: 06/06/2011 Sample Method: Grab
 Sample Time: 1300

| Parameter | Result | Units | MDL | PQL | Procedure | Analysis | | Analyst |
|------------------------|--------|----------|-------|-------|-----------|------------|-------|---------|
| | | | | | | Date | Time | |
| CHLORIDE | 518 | MG/L | 0.353 | 1.412 | 300.0 | 06/10/2011 | 17:00 | RK/CB |
| SULFATE | 203 | MG/L | 0.339 | 1.356 | 300.0 | 06/10/2011 | 17:00 | RK/CB |
| SPECIFIC CONDUCTANCE | 2380 | UMHOS/CM | 1.24 | 4.96 | SM2510B | 06/09/2011 | 10:56 | RR |
| TOTAL DISSOLVED SOLIDS | 1332 | MG/L | 7.26 | 29.04 | SM2540C | 06/10/2011 | 11:37 | DM |

Submission Number 11060232

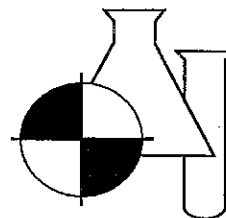
Sample Number: 005 Sample Description: JE1503 1200'
 Sample Date: 06/06/2011 Sample Method: Grab
 Sample Time: 1330

| Parameter | Result | Units | MDL | PQL | Procedure | Analysis | | Analyst |
|------------------------|--------|----------|-------|-------|-----------|------------|-------|---------|
| | | | | | | Date | Time | |
| CHLORIDE | 449 | MG/L | 0.353 | 1.412 | 300.0 | 06/10/2011 | 17:00 | RK/CB |
| SULFATE | 201 | MG/L | 0.339 | 1.356 | 300.0 | 06/10/2011 | 17:00 | RK/CB |
| SPECIFIC CONDUCTANCE | 2170 | UMHOS/CM | 1.24 | 4.96 | SM2510B | 06/09/2011 | 10:56 | RR |
| TOTAL DISSOLVED SOLIDS | 1264 | MG/L | 7.26 | 29.04 | SM2540C | 06/10/2011 | 11:38 | DM |

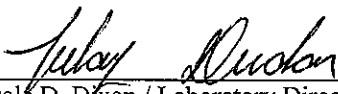
1711 12th Street East * Palmetto, FL 34221 * Phone (941) 723-9986 * Fax (941) 723-6061

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification # E84167


Dale D. Dixon / Laboratory Director
Tülay Tanrisever/ QC Officer
Jennifer Jordan / QC Officer

06/15/2011

Date

DATA QUALIFIERS THAT MAY APPLY:

A = Value reported is an average of two or more determinations.

B = Results based upon colony counts outside the ideal range.

H = Value based on field kit determination. Results may not be accurate.

I = Reported value is between the laboratory MDL and the PQL.

J = Estimated value.

J1 = Est. value surrogate recovery limits exceeded.

J2 = Est. value. No quality control criteria exists for component.

J3 = Est. value quality control criteria for precision or accuracy not met.

J4 = Est. value. Sample matrix interference suspected.

J5 = Est. value. Data questionable due to improper lab or field protocols

K = Off-scale low. Value is known to be < the value reported.

L = Off-scale high. Value is known to be > the value reported

NOTES:

PQL = 4xMDL.

MBAS calculated as LAS; molecular weight = 348.

X = Value exceed MCL.

For questions and comments regarding these results, please contact Bettina Beilfuss at (941) 723-9986

Results relate only to the samples.

N = Presumptive evidence of presence of material.

O = Sampled, but analysis lost or not performed.

Q = Sample held beyond accepted hold time.

T = Value reported is < MDL. Reported for informational purposes only and shall not be used in statistical analysis.

U = Analyte analyzed but not detected at the value indicated.

V = Analyte detected in sample and method blank.

Y = Analysis performed on an improperly preserved sample. Data may be inaccurate.

Z = Too many colonies were present (TNTC). The numeric value represents the filtration volume.

! = Data deviate from historically established concentration ranges.

? = Data rejected and should not be used. Some or all of QC data were outside criteria, and the Presence or absence of the analyte cannot be determined from the data.

* = Not reported due to interference.

NOTES:

Benchmark EnviroAnalytical, Inc

1711 12th Street East
 Palmetto, FL 34221
 941-723-9986
 941-723-6061 Fax

Client Information: **Johnson Engineering**
 PO Box 1550
 Ft. Meyers, FL 33920
 239-461-2458 (Darren Howard)
 239-332-1573
 dhoward@johnsoneng.com

Project Name: **Babcock Ranch Separate WUP**
 Project Number: **20118669-001**

Laboratory Submission #

11060232

| Sample Name | Sample Type ¹ / Sample Matrix ² | Collection | | Container | | | Preservative ⁴ | Parameters for Analysis | Laboratory Sample # |
|--------------|---|------------|------|-----------|--------------------|-------------------|---------------------------|--|---------------------|
| | | Date | Time | Qty | Capacity | Type ³ | | | |
| JE1503 520' | G/GW | 6/6/11 | 1130 | 1 | 1/2 Pint 500 ML | P | Plain | Cl SO ₄ (300.0) TDS (SM2540B) Specific Conductance (SM2510B) | 1 |
| JE1503 620' | G/GW | 6/6/11 | 1200 | 1 | 1/2 Pint 500 ML | P | Plain | Cl SO ₄ (300.0) TDS (SM2540B) Specific Conductance (SM2510B) | 2 |
| JE1503 800' | G/GW | 6/6/11 | 1230 | 1 | 1/2 Pint 500 ML | P | Plain | Cl SO ₄ (300.0) TDS (SM2540B) Specific Conductance (SM2510B) | 3 |
| JE1503 1000' | G/GW | 6/6/11 | 1300 | 1 | 1/2 Pint 500 ML | P | Plain | Cl SO ₄ (300.0) TDS (SM2540B) Specific Conductance (SM2510B) | 4 |
| JE1503 1200' | G/GW | 6/6/11 | 1330 | 1 | 1/2 Pint 500 ML | P | Plain | Cl SO ₄ (300.0) TDS (SM2540B) Specific Conductance (SM2510B) | 5 |
| | | | | 1 | 1/2 Pint | P | Plain | Cl SO ₄ (300.0) TDS (SM2540B) Specific Conductance (SM2510B) | |

1 "Sample Type" is used to indicate whether the sample was a grab (G) or whether it was a composite (C).
 2 "Sample Matrix" is used to indicate whether the sample is being discharged to drinking water (DW), groundwater (GW), surface water (SW), fresh surface water (FSW), saline surface water (SSW), soil, sediment (SDMNT), or sludge (SLDG).
 3 "Container Type" is used to indicate whether the container is plastic (P) or glass (G).
 4 Sample must be refrigerated or stored in wet ice after collection. The temperature during storage should be less than or equal to 6°C (42.8°F). Under "Preservative," list any preservatives that were added to the sample container.

* Method corrected on COC. JLD 6/15/11

Laboratory Sample Acceptability:
 pH < 7:
 BEA Temperature: 0.0

- Instructions:
 1. Each bottle has a label identifying sample ID, premeasured preservative contained in the bottle, sample type, client ID, and parameters for analysis.
 2. The following information should be added to each bottle label after collection with permanent black ink: date and time of collection, sampler's name or initials, and any field number or ID.
 3. All bottles not containing preservative may be rinsed with appropriate sample prior to collection.
 4. The client is responsible for documentation of the sampling event. Please note special sampling events on the sample custody form.

| | | | | | | |
|---|--|---------------------|-------------------|--------------------------------------|---------------------|--------------------|
| 1 | Collected By: <i>Darren Howard</i> | Date: <i>6/7/11</i> | Time: <i>1100</i> | Received By: <i>[Signature]</i> | Date: <i>6/8/11</i> | Time: <i>10:00</i> |
| 2 | Relinquished By: <i>[Signature]</i> | Date: <i>6-8-11</i> | Time: <i>1130</i> | Received By: <i>Wayne Ver Cammen</i> | Date: <i>6-8-11</i> | Time: <i>1130</i> |
| 3 | Relinquished By: <i>Wayne Ver Cammen</i> | Date: <i>6-8-11</i> | Time: <i>1430</i> | Received By: <i>[Signature]</i> | Date: <i>6/8/11</i> | Time: <i>1430</i> |
| 4 | Relinquished By: | Date: | Time: | Received By: | Date: | Time: |

4047