



L-2011-240
10 CFR 52.3

June 29, 2011

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555-0001

Re: Florida Power & Light Company
Proposed Turkey Point Units 6 and 7
Docket Nos. 52-040 and 52-041
Submittal of Underground Injection Control Exploratory
Well Weekly Construction Summaries – #4, #5, and #6

Reference:

1. FPL Letter to NRC, L-2009-265 dated November 24, 2009, Revised Response to NRC Information Requests in COL Application Acceptance Review Letter

This letter provides the Underground Injection Control (UIC) Weekly Construction Summaries #4, dated June 3, 2011, #5 dated June 10, 2011 and #6, dated June 17, 2011 submitted to the Florida Department of Environmental Protection (FDEP) as required by Permit #0293962-001-UC and discussed in FPL's Revised Response to NRC Information Requests in COL Application Acceptance Review Letter (Reference 1).

If you have any questions, or need additional information, please contact me at 561-691-7490.

Sincerely,

A handwritten signature in black ink, appearing to read 'W. Maher'.

William Maher
Senior Licensing Director – New Nuclear Projects

WDM/RFB

Enclosure 1: Florida Power & Light Company Turkey Point Units 6 & 7 Exploratory Well Project; Permit #0293962-001-UC
Weekly Construction Summary #4, dated June 3, 2011

Enclosure 2: Florida Power & Light Company Turkey Point Units 6 & 7 Exploratory Well Project; Permit #0293962-001-UC
Weekly Construction Summary #5, dated June 10, 2011

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Proposed Turkey Point Units 6 and 7
Docket Nos. 52-040 and 52-041
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Enclosure 3: Florida Power & Light Company Turkey Point Units 6 & 7 Exploratory
Well Project; Permit #0293962-001-UC
Weekly Construction Summary #6, dated June 17, 2011

cc:

PTN 6 & 7 Project Manager, AP1000 Projects Branch 1, USNRC DNRL/NRO
Regional Administrator, Region II, USNRC
Senior Resident Inspector, USNRC, Turkey Point Plant 3 & 4

Proposed Turkey Point Units 6 and 7
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Enclosure 1

Florida Power & Light Company Turkey Point Units 6 & 7
Exploratory Well Project; Permit #0293962-001-UC
Weekly Construction Summary #4 dated June 3, 2011

WEEKLY CONSTRUCTION SUMMARY



McNabb Hydrogeologic Consulting, Inc.

601 Heritage Drive, Suite 110
Jupiter, Florida 33458
Phone: 561-891-0763
Fax: 561-623-5469

June 3, 2011

MHCDEP-11-0231

Mr. Joseph May, P.G.
Florida Department of Environmental Protection
400 N. Congress Ave, Suite 200
West Palm Beach, FL 33401

**RE: Florida Power & Light Company Turkey Point Units 6 & 7 Exploratory Well
Project; Permit #0293962-001-UC
Weekly Construction Summary #4**

Dear Mr. May:

This is the fourth weekly construction summary for the above referenced project. The reporting period for this weekly construction summary began at 7:00 AM, Thursday, May 26, 2011 and ended at 7:00 AM, Thursday, June 2, 2011. Consultant and drilling contractor daily reports were prepared for this reporting period. Copies of the consultant and drilling contractor daily construction logs are attached.

During the previous reporting period, the drilling contractor (Layne Christensen Company) completed reaming the pilot hole using a 62 ½-inch diameter drill bit via the mud rotary drilling method to a depth of 259.8 feet below pad level (bpl). Caliper and gamma ray geophysical logs were performed on the reamed borehole by the end of the previous reporting period.

During this reporting period, the drilling contractor installed the 54-inch diameter steel casing to a depth of 255 feet bpl and cemented the casing in place in one cement stage. A total of 206 barrels of cement, 102 barrels of 12% bentonite blend cement and 104 barrels of neat cement, were used to cement the casing in place. A cementing stage sheet and cementing summary sheet of the cementing event is attached. The cement was allowed to cure for approximately 24 hours prior to drilling out the cement plug at the base of the 54-inch diameter casing using a 52 ½-inch diameter bit from a depth of 250 feet to 259 feet bpl. The drilling contractor then drilled the next phase of pilot hole using a 12 ¼-inch diameter drill bit via the mud rotary method from a depth of 259 feet to 1,090 feet bpl. The drilling contractor was conditioning the borehole in preparation for geophysical logging by the end of this reporting period. Deviation surveys were performed on the pilot hole at 90 foot intervals. A deviation survey summary sheet is attached.

There were no coring, packer testing, or exploratory well development activities. Salt or other materials were not used to suppress well flow and there were no construction related issues during the reporting period.


During the next reporting period, it is anticipated that the drilling contractor will perform geophysical logging on the pilot hole and begin to ream the pilot hole from the base of the 54-inch diameter casing using a 52 1/2-inch diameter bit.

In addition, sampling of the pad monitor wells began on April 21, 2011 and has been taking place on a weekly basis since the initial sampling. The pad monitor wells were most recently sampled on June 2, 2011. The most recent set of pad monitoring well sample results available is for samples collected on May 26, 2011. Sampling of the pad monitor wells around EW-1 will continue until drilling and testing of EW-1 has been completed. Copies of the pad monitor wells data summary sheets are attached.

Should you have any questions regarding the above weekly construction summary, please contact me at (561) 891-0763.

Sincerely,

McNabb Hydrogeologic Consulting, Inc.


6/3/11
David McNabb, P.G.

Attachments: Consultant Daily Construction Logs
Drilling Contractor Daily Construction Logs
Pad Monitor Well Summary Sheets
Lithologic Log
Deviation Survey Summary Sheet
Cementing Stage Sheet
Cementing Summary Sheet

Cc: George Heuler/FDEP-Tallahassee
Steve Anderson/SFWMD
Matthew Raffenberg/FPL
David Holtz/HCE

Joe Haberfeld/FDEP-Tallahassee
Ron Reese/USGS
David Paul/FGS



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Daily Construction Log

Date: May 26, 2011
Project: FPL Turkey Point EW
Contractor: Layne Christensen Company
Starting Depth: NA
Weather Day: Clear, hot
Weather Night:
Activity: 54" Diameter Casing Installation/Cementing

FDEP UIC Permit #: 0293962-001-UC
Well No.: EW-1
Bit Diameter: Not applicable
Ending Depth: NA
Recorded By: Sally Durall/Deborah Daigle

CONSTRUCTION ACTIVITIES

- 0700 The drilling contractor is preparing to install the 54-inch diameter steel, 0.375-inch wall thickness casing. The 54-inch diameter casing will be installed to 255 feet below pad level (bpl).
- 0750 The welders on site are Ellis Garrett, William Daniels, and Ed McCannon. The welder certifications for the three welders were previously submitted by the drilling contractor and accepted.
- 0830 The first casing joint has been picked up and is hanging in the derrick.
- 0930 The sampling personnel (Bevin) from Florida Spectrum Environmental Services, Inc. is on site to sample the pad monitor wells (PMWs).
- 1005 The drilling contractor picks up the second casing joint and it is hanging in the derrick over the first casing joint.
- 1010 The drilling contractor begins welding the first and second casing joints together.
- 1020 Florida Spectrum Environmental Services, Inc. begins collecting water levels from the PMWs prior to sampling. The recorded water levels are listed below:
- NE-EW PMW 10.76 feet below top of casing (TOC)
 - NW-EW PMW 10.73 feet below TOC
 - SW-EW PMW 11.20 feet below TOC
 - SE-EW PMW 10.47 feet below TOC
- 1025 Florida Spectrum Environmental Services, Inc. begins purging the PMWs beginning with NE-EW PMW.
- 1110 The second casing joint has been installed.
- 1115 The drilling contractor picks up the third casing joint. The drilling contractor begins to weld the second and third casing joints.
- 1220 The third casing joint has been installed.
- 1230 The drilling contractor picks up the fourth casing joint and begins to weld the third and fourth casing joints.
- 1245 Florida Spectrum Environmental Services, Inc. completes sampling the PMWs.
- 1315 The fourth casing joint has been installed.
- 1320 The drilling contractor picks up the fifth casing joint and begins to weld the fourth and fifth casing joints.



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- 1420 The fifth casing joint has been installed.
- 1430 The drilling contractor picks of the sixth (header) casing joint and begins to weld the fifth and sixth casing joints.
- 1550 The 54-inch diameter casing has been landed at 255 feet bpl. The drilling contractor makes adjustments to center and align the casing, prepare to weld the gussets, and to prepare for cementing.
- 1830 The drilling contractor is running 2-³/₈-inch diameter cement tubing on the inside of the casing in preparation for cementing the 54-inch diameter casing in place.
- 1900 The drilling contractor continues to run tubing.
- 1910 The base of the tubing is set to a depth of 253 feet bpl. The drilling contractor plans to pressure grout using a total of 265 barrels (127 barrels of 12% bentonite blend cement followed by 138 barrels of neat) of cement to bring the cement to surface.
- 1942 The drilling contractor begins a pre-flush using a total of 20 barrels of potable water.
- 1950 The drilling contractor begins stage #1 cementing.
- 2012 The drilling contractor switches over to neat cement after pumping 102 barrels of 12% bentonite blend cement.
- 2047 Cement returns are observed at the surface. Complete cementing stage #1 using a total of 206 barrels of cement (102 barrels of 12% bentonite blend cement followed by 104 barrels of neat). The final wellhead pressure is 64 psi during cementing. The 54-inch diameter casing will not be disturbed for approximately 24 hours to allow time for the cement to cure. The drilling contractor pulls the 2-³/₈-inch diameter cement tubing up approximately 60 feet.
- 2130 The drilling contractor will clean up the rig and prepare for the next phase of pilot hole drilling after the cement cures.



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Daily Construction Log

Date: May 27, 2011

Project: FPL Turkey Point EW

Contractor: Layne Christensen Company

Starting Depth: 250 feet bpl

Weather Day: Cloudy, hot

Weather Night: Cloudy, warm

Activity: Drilling Out Cement Plug

FDEP UIC Permit #: 0293962-001-UC

Well No.: EW-1

Bit Diameter: 52 ½ -inch

Ending Depth: 259 feet bpl

Recorded By: Sally Durall/Deborah Daigle

CONSTRUCTION ACTIVITIES

- 0710 The drilling contractor has just completed tripping the cement tubing out of the 54-inch diameter casing. The 54-inch diameter casing was cemented in place during the night shift. The top of cement inside the casing was tagged at a depth of 250 feet below pad level (bpl) using the cement tubing. The drilling contractor is currently performing general site maintenance and rigging up to begin drilling out the cement plug and pilot hole drilling.
- 1215 The drilling contractor continues rigging up for the next phase of pilot hole drilling.
- 1700 The drilling contractor is preparing to trip into the hole with a 52 ½ -inch diameter drill bit in order to drill out the cement plug.
- 1815 The drilling contractor connects the first drill collar to the bit, and continues to trip into the hole.
- 2130 The drilling contractor is continuing to trip into the hole.
- 2330 The drilling contractor has tripped into the hole and is preparing mud for drilling.
- 0300 The drilling contractor tags the top of cement at 250 feet bpl, and begins drilling through the cement plug.
- 0500 The drilling is continuing at 257 feet bpl.
- 0535 The drilling contractor has completed drilling out the cement plug at the base of the 54-inch diameter casing to 259 feet bpl and currently circulating the borehole clean.



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Daily Construction Log

Date: May 28, 2011
Project: FPL Turkey Point EW
Contractor: Layne Christensen Company
Starting Depth: 259 feet bpl
Weather Day: Cloudy, hot
Weather Night: Cloudy, warm
Activity: Pilot Hole Drilling

FDEP UIC Permit #: 0293962-001-UC
Well No.: EW-1
Bit Diameter: 12 ¼-inch
Ending Depth: 355 feet bpl
Recorded By: Sally Durall/Deborah Daigle

CONSTRUCTION ACTIVITIES

- 0700 The drilling contractor drilled out the cement plug at the base of the 54-inch diameter casing from a depth of 250 feet to 259 feet below pad level (bpl) using a 52 ½-inch diameter drilling bit during the night shift. The drilling contractor is currently circulating the borehole clean to remove the cement cuttings from the mud.
- 0815 The drilling contractor begins to trip the 52 ½-inch diameter bit out of the borehole.
- 1100 The 52 ½-inch diameter bit is on the rig floor.
- 1230 The drilling contractor begins to trip the 12 ¼-inch diameter bit in the borehole.
- 1550 The 12 ¼-inch diameter drill bit is near the base of the 54-inch diameter casing and the drilling contractor is circulating mud.
- 1744 The drilling contractor begins drilling the pilot hole. Lithologic samples will be collected every 10 feet.
- 1850 Drilling the pilot hole at a depth of 264 feet bpl.
- 2149 Drilling the pilot hole at a depth of 280 feet bpl.
- 0000 Drilling the pilot hole at a depth of 300 feet bpl.
- 0330 Drilling the pilot hole at a depth of 345 feet bpl.
- 0430 Drilling the pilot hole at a depth of 352 feet bpl.
- 0500 Drilling the pilot hole at a depth of 354 feet bpl. The drilling contractor is circulating the hole and preparing to run a deviation survey at 345 feet bpl.
- 0550 The drilling contractor disconnects the drill pipe and trips the survey tool inside the drill pipe to 345 feet bpl.
- 0610 The deviation survey is complete and the drilling contractor trips the survey tool out of the drill pipe. The deviation survey result is approximately 0.25 degrees.
- 0630 The drilling contractor makes a drill pipe connection and resumes drilling the pilot hole from a depth of 354 feet bpl.
- 0700 Drilling the pilot hole at a depth of 355 feet bpl.



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Daily Construction Log

Date: May 29, 2011
Project: FPL Turkey Point EW
Contractor: Layne Christensen Company
Starting Depth: 355 feet bpl
Weather Day: Clear, hot
Weather Night: Cloudy, warm
Activity: Pilot Hole Drilling

FDEP UIC Permit #: 0293962-001-UC
Well No.: EW-1
Bit Diameter: 12 1/4-inch
Ending Depth: 570 feet bpl
Recorded By: Sally Durall/Deborah Daigle

CONSTRUCTION ACTIVITIES

- 0700 The drilling contractor began drilling a pilot hole from the base of the 54-inch diameter casing during the night shift. The pilot hole is currently being drilled at a depth of 355 feet below pad level (bpl).
- 0840 Drilling the pilot hole at a depth of 366 feet bpl.
- 0945 Drilling the pilot hole at a depth of 377 feet bpl.
- 1050 Drilling the pilot hole at a depth of 388 feet bpl.
- 1115 Drilling the pilot hole at a depth of 394 feet bpl.
- 1200 The kelly is down at 399 feet bpl. The drilling contractor is circulating the borehole clean.
- 1225 The drilling contractor makes a drill pipe connection and resumes drilling the pilot hole from a depth of 399 feet bpl.
- 1340 Drilling the pilot hole at a depth of 411 feet bpl.
- 1445 Drilling the pilot hole at a depth of 423 feet bpl.
- 1505 Drilling the pilot hole at a depth of 426 feet bpl.
- 1605 Drilling the pilot hole at a depth of 436 feet bpl.
- 1635 The kelly is down at 444 feet bpl. The drilling contractor is circulating the borehole clean.
- 1650 The drilling contractor disconnects the drill pipe and trips the survey tool inside the drill pipe to 435 feet bpl.
- 1705 The deviation survey is complete and the drilling contractor trips the survey tool out of the drill pipe. The deviation survey result is approximately 0.4 degrees.
- 1715 The drilling contractor makes a drill pipe connection and resumes drilling the pilot hole from a depth of 444 feet bpl.
- 1800 Drilling the pilot hole at 450 feet bpl.
- 1925 Drilling the pilot hole at 467 feet bpl.
- 2235 Drilling the pilot hole at 480 feet bpl.
- 0300 Drilling the pilot hole at 535 feet bpl. The drilling contractor disconnects the drill pipe and trips the survey tool inside the drill pipe to 524 feet bpl.
- 0320 The deviation survey is complete and the drilling contractor trips the survey tool out of the drill pipe. The deviation survey result is approximately 0.4 degrees.



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- 0335 The drilling contractor makes a drill pipe connection and resumes drilling the pilot hole from a depth of 535 feet bpl.
- 0530 Drilling the pilot hole at 557 feet bpl.
- 0610 Drilling the pilot hole at 563 feet bpl.
- 0700 The pilot hole is currently being drilled at a depth of 570 feet bpl.



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Daily Construction Log

Date: May 30, 2011
Project: FPL Turkey Point EW
Contractor: Layne Christensen Company
Starting Depth: 570 feet bpl
Weather Day: Cloudy, Light Wind, Warm
Weather Night: Windy, Cool, Rain
Activity: Pilot Hole Drilling

FDEP UIC Permit #: 0293962-001-UC
Well No.: EW-1
Bit Diameter: 12 1/4-inch
Ending Depth: 786 feet bpl
Recorded By: Sally Durall/Deborah Daigle

CONSTRUCTION ACTIVITIES

- 0700 The pilot hole is currently being drilled at a depth of 570 feet below pad level (bpl).
- 0740 The kelly is down at 579 feet bpl. The drilling contractor is circulating the borehole clean.
- 0805 The drilling contractor makes a drill pipe connection and resumes drilling from 579 feet bpl.
- 0825 Drilling the pilot hole at a depth of 582 feet bpl.
- 0915 Drilling the pilot hole at a depth of 592 feet bpl.
- 0925 Drilling the pilot hole at a depth of 595 feet bpl.
- 0935 Drilling the pilot hole at a depth of 610 feet bpl.
- 1005 Drilling the pilot hole at a depth of 615 feet bpl.
- 1145 The kelly is down at 624 feet bpl. The drilling contractor is circulating the borehole clean.
- 1215 The drilling contractor disconnects the drill pipe and trips the survey tool inside the drill pipe to 614 feet bpl.
- 1230 The deviation survey is complete and the drilling contractor trips the survey tool out of the drill pipe. The deviation survey result is zero degrees from vertical.
- 1240 The drilling contractor makes a drill pipe connection and resumes drilling the pilot hole from a depth of 624 feet bpl.
- 1305 Drilling the pilot hole at a depth of 628 feet bpl.
- 1350 Drilling the pilot hole at a depth of 638 feet bpl.
- 1445 Drilling the pilot hole at a depth of 649 feet bpl.
- 1600 Drilling the pilot hole at a depth of 663 feet bpl.
- 1625 The kelly is down at 669 feet bpl. The drilling contractor is circulating the borehole clean.
- 1640 The drilling contractor makes a drill pipe connection and resumes drilling from 669 feet bpl.
- 1715 Drilling the pilot hole at a depth of 674 feet bpl.
- 1800 Drilling the pilot hole at a depth of 683 feet bpl.



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- 1900 Drilling the pilot hole at a depth of 692 feet bpl.
- 2130 The drilling contractor disconnects the drill pipe and trips the survey tool inside the drill pipe to 704 feet bpl.
- 2200 The deviation survey is complete and the drilling contractor trips the survey tool out of the drill pipe. The deviation survey result is approximately 0.2 degrees.
- 2205 The drilling contractor makes a drill pipe connection and resumes drilling the pilot hole from a depth of 714 feet bpl.
- 0100 Drilling the pilot hole at a depth of 739 feet bpl.
- 0400 Drilling the pilot hole at a depth of 763 feet bpl.
- 0530 Drilling the pilot hole at a depth of 772 feet bpl.
- 0645 Drilling the pilot hole at a depth of 783 feet bpl.
- 0700 Drilling the pilot hole at a depth of 786 feet bpl.



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Daily Construction Log

Date: May 31, 2011
Project: FPL Turkey Point EW
Contractor: Layne Christensen Company
Starting Depth: 786 feet bpl
Weather Day: Partly Cloudy, Hot
Weather Night: Clear, Warm
Activity: Pilot Hole Drilling

FDEP UIC Permit #: 0293962-001-UC
Well No.: EW-1
Bit Diameter: 12 1/4-inch
Ending Depth: 978 feet bpl
Recorded By: Sally Dural/Deborah Daigle

CONSTRUCTION ACTIVITIES

- 0700 The pilot hole is currently being drilled at a depth of 786 feet below pad level (bpl).
- 0800 The pilot hole is currently being drilled at a depth of 797 feet bpl.
- 0855 The kelly is down at a depth of 804 feet bpl. The drilling contractor is circulating the borehole clean.
- 0915 The drilling contractor disconnects the drill pipe and trips the survey tool inside the drill pipe to 794 feet bpl.
- 0930 The deviation survey is complete and the drilling contractor trips the survey tool out of the drill pipe. The deviation survey result is approximately 0.3 degrees.
- 0950 The drilling contractor makes a drill pipe connection and resumes drilling the pilot hole from a depth of 804 feet bpl.
- 1040 Drilling the pilot hole at a depth of 813 feet bpl.
- 1155 Drilling the pilot hole at a depth of 826 feet bpl.
- 1345 Drilling the pilot hole at a depth of 845 feet bpl.
- 1415 The kelly is down at a depth of 849 feet bpl. The drilling contractor is circulating the borehole clean.
- 1430 The drilling contractor makes a drill pipe connection and resumes drilling the pilot hole from a depth of 849 feet bpl.
- 1550 Drilling the pilot hole at a depth of 862 feet bpl.
- 1700 Drilling the pilot hole at a depth of 874 feet bpl.
- 1745 Drilling the pilot hole at a depth of 882 feet bpl.
- 1900 The drilling contractor is circulating the borehole in preparation for the deviation survey at 884 feet bpl. Hole depth is 895 feet bpl.
- 1916 The drilling contractor disconnects the drill pipe and trips the survey tool inside the drill pipe to a depth of 884 feet bpl.
- 1936 The deviation survey is complete and the drilling contractor trips the survey tool out of the drill pipe. The deviation survey result is approximately 0.3 degrees.
- 1941 The drilling contractor makes a drill pipe connection and resumes drilling the pilot hole from a depth of 894 feet bpl.
- 2100 Drilling the pilot hole at a depth of 900 feet bpl.



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- 2245 Drilling the pilot hole at a depth of 909 feet bpl.
- 2355 Drilling the pilot hole at a depth of 920 feet bpl.
- 0315 Drilling the pilot hole at a depth of 939 feet bpl.
- 0525 Drilling the pilot hole at a depth of 959 feet bpl.
- 0630 Drilling the pilot hole at a depth of 973 feet bpl.
- 0700 Drilling the pilot hole at a depth of 978 feet bpl.



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Daily Construction Log

Date: June 1, 2011
Project: FPL Turkey Point EW
Contractor: Layne Christensen Company
Starting Depth: 978 feet bpl
Weather Day: Partly Cloudy, Hot
Weather Night: Clear, Warm
Activity: Pilot Hole Drilling

FDEP UIC Permit #: 0293962-001-UC
Well No.: EW-1
Bit Diameter: 12 ¼-inch
Ending Depth: 1,090 feet bpl
Recorded By: Sally Durall/Deborah Daigle

CONSTRUCTION ACTIVITIES

- 0700 Drilling the pilot hole at a depth of 978 feet below pad level (bpl).
- 0805 The kelly is down at 984 feet bpl. The drilling contractor is circulating the borehole clean.
- 0830 The drilling contractor disconnects the drill pipe and trips the deviation survey tool inside the drill pipe to 974 feet bpl.
- 0850 The deviation survey is complete and the drilling contractor trips the survey tool out of the drill pipe. The deviation survey result is approximately 0.5 degrees.
- 0905 The drilling contractor makes a drill pipe connection and resumes drilling the pilot hole from a depth of 984 feet bpl.
- 1005 Drilling the pilot hole at 992 feet bpl.
- 1125 Drilling the pilot hole at a depth of 1,004 feet bpl.
- 1205 Drilling the pilot hole at a depth of 1,010 feet bpl.
- 1245 Drilling the pilot hole at a depth of 1,019 feet bpl.
- 1300 The drilling contractor is circulating the borehole at 1,020 feet bpl.
- 1340 Resume drilling the pilot hole from 1,020 feet bpl.
- 1435 The kelly is down at a depth of 1,029 feet bpl. The drilling contractor is circulating the borehole clean.
- 1510 The drilling contractor makes a drill pipe connection and resumes drilling from a depth of 1,029 feet bpl.
- 1620 Drilling the pilot hole at a depth of 1,042 feet bpl.
- 1745 Drilling the pilot hole at a depth of 1,060 feet bpl.
- 1900 Drilling the pilot hole at a depth of 1,070 feet bpl. Driller notes apparent change in material based on weight on bit (WOB).
- 2000 The drilling contractor disconnects the drill pipe and trips the survey tool inside the drill pipe to 1,064 feet bpl.
- 2013 The deviation survey is complete and the drilling contractor trips the survey tool out of the drill pipe. The deviation survey result is approximately 0.5 degrees.
- 2015 The drilling contractor makes a drill pipe connection and resumes drilling the pilot hole from a depth of 1,074 feet bpl.



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- 2215 Drilling pilot hole at depth of 1,090 feet bpl. The cuttings indicate limestone is currently being drilled. The last clay was observed in the drill cutting sample between the depths of 1,070 and 1,080 feet bpl. The pilot hole is completed at a depth of 1,090 feet bpl.
- 2230 The drilling contractor will circulate the borehole, and then will perform a wiper trip to condition the borehole in preparation for geophysical logging.
- 0020 The drilling contractor begins the first wiper trip out of the borehole.
- 0300 The drilling contractor continues wiper tripping.
- 0600 The drilling contractor has completed the first wiper trip out of the borehole and currently going back to the bottom of the borehole.

Project: Florida Power & Light Company
Miami-Dade County, Florida
Exploratory Well EW-1



**EW-1 Pad Monitoring Well Water Quality Data
Southeast Pad Monitoring Well
(SE-EW PMW)**

Date	Time (hours)	Depth to Water (ft. btoc)	Water Elevation (ft. NAVD 88)	Specific Conductance (umhos/cm)	Chloride (mg/L)	TDS (mg/L)	Temperature (degrees C)	Remarks
4/21/2011	1311	10.10	-1.51	81,600	30,200	57,800	29.9	Background Sampling
4/29/2011	1349	10.40	-1.81	86,700	33,100	55,000	30.4	
5/5/2011	1008	11.10	-2.51	83,000	29,500	54,700	29.9	
5/11/2011	1228	10.65	-2.06	78,200	30,100	52,600	30.1	
5/19/2011	1039	10.12	-1.53	75,200	30,000	51,100	29.8	
5/26/2011	1235	10.47	-1.88	73,890	31,200	53,800	29.9	

ft. btoc: feet below top of casing
TOC: Top of Casing
ft. NAVD 88: North American Vertical Datum of 1988
umhos/cm: micromhos per centimeter
mg/L: milligrams per liter
C: Celsius
Note: TOC elevation is: 8.59 feet NAVD 88

Project: Florida Power & Light Company
Miami-Dade County, Florida
Exploratory Well EW-1



**EW-1 Pad Monitoring Well Water Quality Data
Northeast Pad Monitoring Well
(NE-EW PMW)**

Date	Time (hours)	Depth to Water (ft. btoc)	Water Elevation (ft. NAVD 88)	Specific Conductance (umhos/cm)	Chloride (mg/L)	TDS (mg/L)	Temperature (degrees C)	Remarks
4/21/2011	1108	10.49	-1.61	78,700	32,200	57,000	29.8	Background Sampling
4/29/2011	1157	10.68	-1.80	80,400	29,900	53,800	30.4	
5/5/2011	1157	11.40	-2.52	81,400	27,500	52,350	31.2	
5/11/2011	1309	11.00	-2.12	76,800	31,600	51,200	29.7	
5/19/2011	0958	10.48	-1.60	72,600	35,600	51,200	29.5	
5/26/2011	1050	10.76	-1.88	71,360	29,500	52,900	29.7	

ft. btoc: feet below top of casing
TOC: Top of Casing
ft. NAVD 88: North American Vertical Datum of 1988
umhos/cm: micromhos per centimeter
mg/L: milligrams per liter
C: Celsius
Note: TOC elevation is: 8.88 feet NAVD 88

Project: Florida Power & Light Company
 Miami-Dade County, Florida
 Exploratory Well EW-1

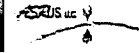


**EW-1 Pad Monitoring Well Water Quality Data
 Northwest Pad Monitoring Well
 (NW-EW PMW)**

Date	Time (hours)	Depth to Water (ft. btoc)	Water Elevation (ft. NAVD 88)	Specific Conductance (umhos/cm)	Chloride (mg/L)	TDS (mg/L)	Temperature (degrees C)	Remarks
4/21/2011	1221	10.50	-1.66	84,300	33,500	59,900	30.8	Background Sampling
4/29/2011	1120	10.65	-1.81	86,300	33,700	56,400	30.0	
5/5/2011	1051	11.40	-2.56	87,400	31,300	57,650	31.1	
5/11/2011	1034	12.40	-3.56	79,100	33,500	55,650	30.4	
5/19/2011	1113	13.90	-5.06	80,000	36,000	53,700	30.4	
5/26/2011	1125	10.73	-1.89	75,130	32,300	55,450	30.4	

ft. btoc: feet below top of casing
 TOC: Top of Casing
 ft. NAVD 88: North American Vertical Datum of 1988
 umhos/cm: micromhos per centimeter
 mg/L: milligrams per liter
 C: Celsius
 Note: TOC elevation is: 8.84 feet NAVD 88

Project: Florida Power & Light Company
 Miami-Dade County, Florida
 Exploratory Well EW-1



**EW-1 Pad Monitoring Well Water Quality Data
 Southwest Pad Monitoring Well
 (SW-EW PMW)**

Date	Time (hours)	Depth to Water (ft. btoc)	Water Elevation (ft. NAVD 88)	Specific Conductance (umhos/cm)	Chloride (mg/L)	TDS (mg/L)	Temperature (degrees C)	Remarks
4/21/2011	1414	10.50	-1.62	72,500	26,400	51,500	30.6	Background Sampling
4/29/2011	1025	10.60	-1.72	77,400	28,300	51,600	29.8	
5/5/2011	0930	11.85	-2.97	75,200	29,000	49,400	28.7	
5/11/2011	1124	16.40	-7.52	78,100	28,300	51,050	31.6	
5/19/2011	1202	15.95	-7.07	73,100	29,700	48,450	32.6	
5/26/2011	1155	11.20	-2.32	66,630	27,800	48,350	29.4	

ft. btoc: feet below top of casing
 TOC: Top of Casing
 ft. NAVD 88: North American Vertical Datum of 1988
 umhos/cm: micromhos per centimeter
 mg/L: milligrams per liter
 C: Celsius
 Note: TOC elevation is: 8.88 feet NAVD 88

MHC

Florida Power & Light Company
Turkey Point
Exploratory Well EW-1
Lithologic Description



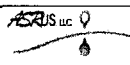
Date	Depth (ft. bpl)		Observer's Description
	From	To	
5/25/2011	250	260	Sand: light olive gray (5Y 5/2) fine grained, slightly clayey, phosphatic, trace shell fragments.
5/28/2011	260	270	Clayey sand: greenish gray (5GY 6/1) to dark greenish gray (5GY 4/1), fine grained, phosphatic, trace shell fragments.
5/28/2011	270	280	Clayey sand: greenish gray (5GY 6/1) to dark greenish gray (5GY 4/1), fine grained, slightly more clayey than above, phosphatic, trace shell fragments.
5/28/2011	280	290	Clayey sand: Same as above.
5/28/2011	290	300	Sand: medium gray (N5) to greenish gray (5GY 6/1), slightly clayey, fine grained, phosphatic, some shell fragments, rounded fine calcareous grains.
5/29/2011	300	310	Sand: same as above.
5/29/2011	310	320	Sand: same as above.
5/29/2011	320	330	Sand: medium light gray (N6), fine grained, shell fragments, some phosphate.
5/29/2011	330	340	Sand: same as above.
5/29/2011	340	350	Sand: medium gray (N5) to medium light gray (N6), slightly clayey, fine grained, shell fragments, some phosphate. Driller notes stiffer material at 345 feet.
5/29/2011	350	360	Sand: light olive gray (5Y 5/2), very fine grained, subrounded, well sorted, slightly phosphatic.
5/29/2011	360	370	Clayey Sand: grayish olive (10Y 4/2), very fine grained, slightly phosphatic, trace shell fragments <1mm.
5/29/2011	370	380	Clayey Sand: grayish olive green (5GY 3/2), very fine grained, slightly phosphatic, slightly plastic.
5/29/2011	380	390	Silty Clay: grayish olive green (5GY 3/2), soft, moderately plastic, trace phosphate grains.
5/29/2011	390	400	Silty Clay: same as above.
5/29/2011	400	410	Silty Clay: same as above.
5/29/2011	410	420	Clayey Sand: grayish olive (10Y 4/2), very fine grained, slightly phosphatic, trace phosphate grains.
5/29/2011	420	430	Clayey sand: Same as above.
5/29/2011	430	440	Sand: medium light gray (N6), fine grained, trace shell fragments, phosphatic.
5/29/2011	440	450	Sand: same as above.
5/29/2011	450	460	Sand: same as above.
5/29/2011	460	470	Clayey Sand: dark greenish gray (5GY 4/1), very fine grained, trace shell fragments, phosphatic.
5/29/2011	470	480	Sand: medium light gray (N6), fine grained, trace shell fragments, phosphatic.
5/29/2011	480	490	Limestone: very light gray (N8), sandy, shell fragments and fine grained calcareous nodules, phosphate grains
5/29/2011	490	500	Clayey sand: medium gray (N5), fine grained, some lithified sand fragments, some phosphate.
5/30/2011	500	510	Calcareous clay: medium light gray (N5), soft, sandy, trace shells and shell fragments, trace phosphate
5/30/2011	510	520	Limestone: yellowish gray (5Y 7/2), sandy, shell fragments, some phosphate, moderately indurated, low porosity.
5/30/2011	520	530	Limestone: same as above.
5/30/2011	530	540	Limestone: same as above.
5/30/2011	540	550	Limestone: same as above.
5/30/2011	550	560	Limestone: same as above.
5/30/2011	560	570	Limestone: same as above.


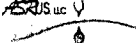
MHC

Florida Power & Light Company
Turkey Point
Exploratory Well EW-1
Lithologic Description



Date	Depth (ft. bpl)		Observer's Description
	From	To	
5/30/2011	570	580	Limestone, Sand, and Clay: Limestone, 40%, yellowish gray (5Y 7/2), sandy, shell fragments, slightly phosphatic, moderately indurated, low porosity; Sand, 40%, light olive gray (5Y 5/2), very fine grained, loosely consolidated, calcareous; Clay, 20%, grayish olive (10YR 4/2), very soft, moderately plastic, phosphatic.
5/30/2011	580	590	Limestone and Clay: Limestone, 60%, yellowish gray (5Y 7/2), micritic, calcareous, very low porosity and permeability; Clay, 40%, yellowish gray (5Y 7/2), calcareous; trace shell fragments.
5/30/2011	590	600	Limestone and Clay: same as above.
5/30/2011	600	610	Limestone: yellowish gray (5Y 7/2), micritic, calcareous, few shell fragments, very low porosity and permeability; trace clay.
5/30/2011	610	620	Limestone: same as above.
5/30/2011	620	630	Clay and Limestone: Clay, 70%, grayish olive (10YR 4/2) and yellowish gray (5Y 7/2), very soft, moderate plasticity; Limestone, 30%, yellowish gray (5Y 7/2), micritic, calcareous, few shell fragments, slightly phosphatic, moderately indurated, low porosity.
5/30/2011	630	640	Limestone and Shell Fragments: Limestone, 60%, yellowish gray (5Y 7/2), very fine grained to silt, calcareous, very low porosity; Shell Fragments, 40%, 3-22mm.
5/30/2011	640	650	Clay and Limestone: Clay, 80%, yellowish gray (5Y 7/2), very soft, moderate plasticity; Limestone, 20%, yellowish gray (5Y 7/2), micritic, shell fragments, slightly phosphatic, moderately indurated, very low porosity.
5/30/2011	650	660	Clay and Limestone: Clay, 60%, yellowish gray (5Y 7/2), very soft, moderate plasticity; Limestone, 20%, yellowish gray (5Y 7/2), micritic, shell fragments, slightly phosphatic, moderately indurated.
5/30/2011	660	670	Clay and Limestone: Same as above.
5/30/2011	670	680	Limestone: yellowish gray (5Y 7/2), fine grained, some shell fragments, phosphatic, moderately indurated.
5/30/2011	680	690	Limestone and Clay: Limestone 80%, same as above; Clay, 20%, yellowish gray (5Y 7/2), calcareous; trace shell fragments.
5/30/2011	690	700	Limestone: yellowish gray (5Y 7/2), fine grained, some shell fragment, phosphatic, moderately indurated.
5/30/2011	700	710	Limestone: same as above.
5/30/2011	710	720	Limestone: same as above.
5/31/2011	720	730	Clay and Limestone: Clay, 70%, yellowish gray (5Y 7/2), soft, calcareous, moderate plasticity; Limestone: 30%, yellowish gray (5Y 7/2), fine grained; trace phosphate grains.
5/31/2011	730	740	Clay and Limestone: same as above.
5/31/2011	740	750	Clay and Limestone: same as above.
5/31/2011	750	760	Clay and Limestone: same as above.
5/31/2011	760	770	Clay and Limestone: same as above, with trace fine moderate reddish brown (10R 4/6) grains.
5/31/2011	770	780	Clay: pale olive (10Y 6/2), moderately soft, plastic, slightly phosphatic; Trace limestone.
5/31/2011	780	790	Clay: same as above.
5/31/2011	790	800	Clay: same as above.
5/31/2011	800	810	Clay and Limestone: Clay, 50%, pale olive (10Y 6/2), soft, calcareous, medium plasticity; Limestone: 40%, yellowish gray (5Y 8/1), micritic, trace phosphate grains.
5/31/2011	810	820	Clay and Limestone: same as above.
5/31/2011	820	830	Limestone: yellowish gray (5Y 8/1), micritic, phosphatic, moderately indurated; Trace shell fragment.

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="background-color: black; color: white; padding: 2px 5px; font-weight: bold;">MHC</div> <div style="text-align: center;"> Florida Power & Light Company Turkey Point Exploratory Well EW-1 Lithologic Description </div> <div style="text-align: right;">  </div> </div>			
Date	Depth (ft. bpl)		Observer's Description
	From	To	
5/31/2011	830	840	Limestone and Shell Fragments: Limestone, 80%, yellowish gray (5Y 8/1) and very light gray (N8), fine grained, vuggy, moderate vuggy porosity; Shell Fragments, 20%, white (N9) and yellowish gray (5Y 8/1), <5mm.
5/31/2011	840	850	Limestone and Shell Fragments: same as above.
5/31/2011	850	860	Shell Fragments and Limestone: Shell Fragments, 70%, white (N9) and yellowish gray (5Y 8/1), between 3mm to 10mm in size; Limestone, 30%, yellowish gray (5Y 8/1) and very light gray (N8), fine grained, vuggy, moderate vuggy porosity.
5/31/2011	860	870	Limestone and Clay: Limestone: 70%, yellowish gray (5Y 8/1), fine to medium grained, slightly phosphatic; Clay, 30%, yellowish gray (5Y 8/1), soft, calcareous, low plasticity.
5/31/2011	870	880	Limestone: very light gray (N8) to yellowish gray (5Y 8/1), fine grained, trace fine quart sand, some shell fragments, trace phosphate.
5/31/2011	880	890	Limestone and Clay: Limestone: 70%, yellowish gray (5Y 7/2), fine to medium grained, slightly phosphatic; Clay, 30%, yellowish gray (5Y 7/2), soft, calcareous, moderate plasticity;
5/31/2011	890	900	Clay: yellowish gray (5Y 7/2), soft, low plasticity, poorly indurated limestone fragments (30%), trace shells and shell fragments, trace phosphate.
5/31/2011	900	910	Clay: yellowish gray (5Y 8/1), soft, low plasticity, trace poorly indurated limestone fragments, trace shells and shell fragments, trace phosphate.
6/1/2011	910	920	Clay: same as above.
6/1/2011	920	930	Clay: same as above, some large shell fragments (10 to 20 mm).
6/1/2011	930	940	Clay: yellowish gray (5Y 8/1), soft, low plasticity, some poorly indurated limestone fragments, trace shells and shell fragments, trace phosphate.
6/1/2011	940	950	Clay: same as above.
6/1/2011	950	960	Clay: yellowish gray (5Y 8/1), soft, low plasticity, phosphatic, trace shells and shell fragments.
6/1/2011	960	970	Clay: light olive gray (5Y 5/2), soft, low plasticity, phosphatic, trace shells and shell fragments.
6/1/2011	970	980	Clay, Limestone, and Shell: Clay, 70%, yellowish gray (5Y 8/1), moderately stiff, moderate plasticity, phosphatic; Limestone, 20%, yellowish gray (5Y 8/1), fine to medium grained, poorly indurated, phosphatic; Shell Fragments: 10%, white (N9) and very light gray (N8), 1 to 5mm in size.
6/1/2011	980	990	Clay, Limestone, and Shell: Clay, 60%, yellowish gray (5Y 8/1), moderately stiff, moderate plasticity, phosphatic; Limestone, 30%, yellowish gray (5Y 8/1), fine to medium grained, poorly indurated, phosphatic; Shell Fragments: 10%, white (N9) and very light gray (N8), 1 to 5mm in size.
6/1/2011	990	1,000	Clay: yellowish gray (5Y 8/1), stiff, plastic; Trace limestone fragments.
6/1/2011	1,000	1,010	Clay: same as above.
6/1/2011	1,010	1,020	Clay: grayish olive green (5GY 3/2), soft, moderately low plasticity.
6/1/2011	1,020	1,030	Clay: yellowish gray (5Y 8/1), moderately stiff, moderate plasticity; Trace limestone fragments.
6/1/2011	1,030	1,040	Clay and Limestone: Clay, 60%, yellowish gray (5Y 8/1), moderately soft, moderate plasticity, phosphatic; Limestone, 40%, yellowish gray (5Y 8/1), fine grained, shell intraclast, slightly phosphatic.
6/1/2011	1,040	1,050	Clay and Limestone: Clay, 50%, yellowish gray (5Y 8/1), moderately soft, moderate plasticity, phosphatic; Limestone, 50%, yellowish gray (5Y 8/1), fine grained, shell intraclast, moderately well cemented, phosphatic.
6/1/2011	1,050	1,060	Clay: light olive gray (5Y 5/2), soft, low plasticity, phosphatic.

 <div style="text-align: center;"> Florida Power & Light Company Turkey Point Exploratory Well EW-1 Lithologic Description </div> 			
Date	Depth (ft. bpl)		Observer's Description
	From	To	
6/1/2011	1,060	1,070	Limestone: yellowish gray (5Y 7/2), fine grained, poorly indurated, phosphatic.
6/1/2011	1,070	1,080	Limestone and Clay: Limestone 60%, predominantly pelecypod shell fragments, yellowish gray (5Y 8/1), up to 20 mm in size; Clay, 40%, yellowish gray (5Y 7/2), moderately plastic.
6/1/2011	1,080	1,090	Limestone: 90%, pelecypod shell fragments, yellowish gray (5Y 8/1), up to 20 mm in size; 10%, light olive gray (5Y 5/2), fine grained limestone fragments.
ft. bpl = feet below pad level			



Florida Power & Light Company
Turkey Point
Exploratory Well EW-1
Deviation Survey Summary



Pilot Hole			Reamed Hole		
Date	Depth (feet bpl)	Inclination (degrees)	Date	Depth (feet bpl)	Inclination (degrees)
5/13/2011	90	0.2	5/20/2011	90	0.5
5/14/2011	180	0.4	5/24/2011	180	0.4
5/29/2011	345	0.3			
5/29/2011	435	0.4			
5/30/2011	524	0.4			
5/30/2011	614	0.0			
5/30/2011	704	0.2			
5/31/2011	794	0.3			
5/31/2011	884	0.3			
6/1/2011	974	0.5			
6/1/2011	1,064	0.5			

bpl = below pad level

Florida Power & Light Company
Turkey Point
Exploratory Well EW-1
54-inch Diameter Casing - Stage #1



Cement Plan	Pressure Grout	<input checked="" type="checkbox"/>	Tremie	<input type="checkbox"/>			
	Amount of Cement (Barrels)	Plan	Actual	Base of the cement tubing		Top of cement	
		12%	127	102	253 feet bpl	NA feet bpl	
		6%	_____	_____			
		4%	_____	_____	Base of the Casing		
	Neat	138	104	255 feet bpl	Theoretical Fill		
Total	265	206			0 feet bpl		
% Cement Additive	NA	Type	NA	Calculated Differential Pressure		68 p.s.i.	

Date	Time	Total Pumped (Barrels)	Pumping Rate (Barrels/min.)	Cement Density (lbs/gal)	Wellhead Pressure (p.s.i.)	Comments
5/26/2011	1942					Pre-flush using 20 barrels of potable water.
	1950				0	Begin cement stage #1 using 12% bentonite blend cement.
	1957	25	4.4	12.4	4	
	2002	50	5	12.7	10	
	2007	75	5	12.6	16	
	2012	102	4	14	27.5	Switch over to neat cement at 102 barrels.
	2019	125	4	15.5	35	
	2026	152	2.8	15.6	46	The slow pumping rate is due to the sump pump not pumping fast enough to compensate for the amount of drilling fluid returns at the surface.
	2034	175	2.7	15.6	58	
	2041	196	2.7	15.6	64	
	2047	206				Cement returns are observed at the surface. Cement stage #1 is complete.

* 1 Barrel = 42 gallons

Florida Power & Light Company
Turkey Point
Exploratory Well EW-1
54-inch Diameter Cement Summary



Cementing Stage	Date	Depth of Hole (feet bpl)	Volume of Cement			Theoretical		Actual Interval Cemented (feet)	Actual / Theoretical Filled Interval (percent)	Type of cement (including additives)
			Planned (barrels)	Actual Pumped (barrels)	(cubic feet)	Depth (feet bpl)	Fill (feet)			
1	5/26/2011	259.8	265	206	1,156	0	259.8	259.8	100.0	Neat/12%
	Final tag:	0								
Total:				206.0	1,156					

"Tagged Bottom" refers to the top of cement that was tagged by the Contractor prior to the cementing stage.
"Theoretical Interval Cemented" is the theoretical linear feet of cement fill based on the volume of cement pumped for that stage (calculated using XY caliper log).
"Actual Interval Cemented" refers to the difference between "Tagged Bottom" depths.
"Actual/Theoretical Filled Interval" refers to the "Actual Interval Cemented" divided by the "Theoretical Interval Cemented" as a percentage.
"bpl" denotes below pad level.

Enclosure 2

Florida Power & Light Company Turkey Point Units 6 & 7
Exploratory Well Project; Permit #0293962-001-UC
Weekly Construction Summary #5 dated June 10, 2011

Note

Pages 33 through 61 were originally part
of single strip charts that have been
segmented to 8.5 by 11 pages for
processing

WEEKLY CONSTRUCTION SUMMARY



McNabb Hydrogeologic Consulting, Inc.

601 Heritage Drive, Suite 110
Jupiter, Florida 33458
Phone: 561-891-0763
Fax: 561-623-5469

June 10, 2011

MHCDEP-11-0238

Mr. Joseph May, P.G.
Florida Department of Environmental Protection
400 N. Congress Ave, Suite 200
West Palm Beach, FL 33401

**RE: Florida Power & Light Company Turkey Point Units 6 & 7 Exploratory Well
Project; Permit #0293962-001-UC
Weekly Construction Summary #5**

Dear Mr. May:

This is the fifth weekly construction summary for the above referenced project. The reporting period for this weekly construction summary began at 7:00 AM, Thursday, June 2, 2011 and ended at 7:00 AM, Thursday, June 9, 2011. Consultant and drilling contractor daily reports were prepared for this reporting period. Copies of the consultant and drilling contractor daily construction logs are attached.

During the previous reporting period, the drilling contractor installed the 54-inch diameter steel casing to a depth of 255 feet below pad level (bpl) and cemented the casing in place in one cement stage. The drilling contractor drilled out the cement plug and drilled the next phase of pilot hole using a 12 ¼-inch diameter drill bit via the mud rotary method from the base of the 54-inch diameter casing to a depth of 1,090 feet bpl. The drilling contractor was conditioning the borehole in preparation for geophysical logging at the end of the previous reporting period.

During this reporting period, the drilling contractor continued conditioning the borehole in preparation for geophysical logging. Upon completion of conditioning the pilot hole, the geophysical logging subcontractor performed caliper, gamma-ray, dual-induction, and spontaneous-potential geophysical logs on the pilot hole. Copies of the geophysical logs are attached. Based on the geophysical log and the lithologic data, a 44-inch diameter casing setting depth of 1,090 feet bpl was selected. The drilling contractor then began to ream the pilot hole using a 52 ½-inch diameter drill reaming bit. The interval from the base of the 54-inch diameter casing at 255 feet bpl to 437 feet bpl was reamed during this reporting period. Deviation surveys were performed on the reamed hole at 90 foot intervals. A deviation survey summary sheet is attached.

There were no coring, packer testing, exploratory well development, casing installations or cementing activities. Salt or other materials were not used to suppress well flow and there were no construction related issues during the reporting period.

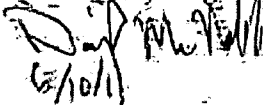
During the next reporting period, it is anticipated that the drilling contractor will continue reaming the pilot hole.

In addition, sampling of the pad monitor wells began on April 21, 2011 and has been taking place on a weekly basis since the initial sampling. The pad monitor wells were most recently sampled on June 9, 2011. The most recent set of pad monitoring well sample results available is for samples collected on June 2, 2011. Sampling of the pad monitor wells around EW-1 will continue until drilling and testing of EW-1 has been completed. Copies of the pad monitor wells data summary sheets are attached.

Should you have any questions regarding the above weekly construction summary, please contact me at (561) 891-0763.

Sincerely,

McNabb Hydrogeologic Consulting, Inc.



David McNabb, P.G.

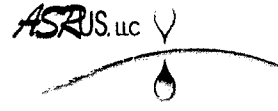
Attachments: Consultant Daily Construction Logs
Drilling Contractor Daily Construction Logs
Pad Monitor Well Summary Sheets
Deviation Survey Summary Sheet
Geophysical logs

CC: George Heuler/FDEP-Tallahassee
Steve Anderson/SFWMD
Matthew Raffenberg/FPL
David Holtz/HCE

Joe Habersfeld/FDEP-Tallahassee
Ron Reese/USGS
David Paul/FGS



McNabb Hydrogeologic Consulting, Inc.



Daily Construction Log

Date: June 2, 2011
Project: FPL Turkey Point EW
Contractor: Layne Christensen Company
Starting Depth: 1,090 feet bpl
Weather Day: Partly Cloudy, Hot
Weather Night: Trace Rain, warm
Activity: Pilot Hole Conditioning

FDEP UIC Permit #: 0293962-001-UC
Well No.: EW-1
Bit Diameter: 12 ¼-inch
Ending Depth: 1,090 feet bpl
Recorded By: Sally Durall/Mark McNeal

CONSTRUCTION ACTIVITIES

- 0700 The drilling contractor completed drilling the pilot hole to a depth of 1,090 feet below pad level (bpl) during the night shift and current conditioning the pilot hole by performing wiper trips in preparation of geophysical logging.
- 1010 Florida Spectrum Environmental Services, Inc. is on site to sample the pad monitor wells (PMWs) located around the EW-1 containment pad.
- 1400 The drilling contractor continues conditioning the borehole via wiper trips.
- 1715 The drilling bit is at the total depth of the pilot hole at a depth of 1,090 feet bpl and the drilling contractor is circulating the borehole clean.
- 2045 The drilling contractor is tripping out of the hole to make another wiper trip.
- 2230 The drill bit is up inside casing. The drilling contractor is circulating the borehole to condition the drilling mud.
- 0130 The drilling contractor is making a wiper trip with the pilot hole drill bit. They continue to remove material from the well as they prepare the pilot hole for geophysical logging. They plan to continue with borehole conditioning through the rest of the night shift and notify the logger in the morning.
- 0400 The drilling contractor is continuing to trip into well to condition the borehole.
- 0530 The drilling contractor continues to condition the pilot hole in preparation of geophysical logging. The logging subcontractor has been contacted and is expected to arrive at the drilling site early Friday afternoon.
- 0700 The drilling contractor continues to condition the pilot hole.



McNabb Hydrogeologic Consulting, Inc.



Daily Construction Log

Date: June 3, 2011
Project: FPL Turkey Point EW
Contractor: Layne Christensen Company
Starting Depth: 1,090 feet bpl
Weather Day: Partly Cloudy, Hot
Weather Night: Partly Cloudy, Breezy
Activity: Pilot Hole Conditioning

FDEP UIC Permit #: 0293962-001-UC
Well No.: EW-1
Bit Diameter: 12 ¼-inch
Ending Depth: 1,090 feet bpl
Recorded By: Sally Durall/Mark McNeal

CONSTRUCTION ACTIVITIES

- 0700 The drilling contractor continues to condition the pilot hole. The drilling bit is currently near the total depth of the borehole which will complete 2 full wiper trips. The drilling mud appears to be clear of drill cuttings.
- 0800 The geophysical logging subcontractor (MV Geophysical Survey, Inc.) is scheduled to arrive on site between 13:00 and 15:00 this afternoon. The drilling contractor plans to circulate at the bottom of the pilot hole until 11:00 this morning and then trip the drill pipe and 12 ¼-inch diameter bit out of the borehole.
- 1030 The drilling contractor is preparing to begin tripping the drill pipe and bit out of the borehole.
- 1105 The drilling contractor disconnects the drill pipe and trips the survey tool inside the drill pipe to 270 feet below pad level (bpl) to perform a deviation survey.
- 1125 The deviation survey is complete and the drilling contractor trips the survey tool out of the drill pipe. The deviation survey result is 0.5 degrees from vertical.
- 1240 The drilling contractor resumes tripping the drill pipe and drill bit out of the borehole.
- 1415 The drilling contractor has completed tripping out of the borehole and the 12 ¼-inch diameter drilling bit is on the rig floor.
- 1430 The geophysical logging subcontractor is on site to perform caliper, gamma-ray, dual-induction and spontaneous potential logging on the pilot hole.
- 1450 The geophysical logging subcontractor zeros the caliper and gamma-ray tool to pad level and trips the logging tool in the borehole.
- 1600 The logging tool is unable to pass a depth of 259 feet bpl. The drilling contractor is preparing to trip 3 stands of drill pipe (270 feet) inside the borehole to lead the logging tool to the top of the pilot hole at 259 feet bpl. The drill pipe will be set 11 feet above pad level to place the base of the drill pipe at 259 feet bpl (top of the pilot hole).
- 1630 The drill pipe sets down at approximately 259 feet bpl and will not advance.
- 1730 The attempts made by the drilling contractor to advance the drill pipe through the pilot hole were unsuccessful. The drilling contractor plans to trip the 12 ¼-



McNabb Hydrogeologic Consulting, Inc.



- diameter bit back inside the borehole to clear the obstruction and will run the drilling bit back to the bottom of the pilot hole.
- 2000 The drilling contractor is tripping into the well and continuing to condition the pilot hole by removing more solids from the well.
- 2200 Borehole conditioning is continuing by the drilling contractor. They are currently circulating the well at approximately 250 feet in depth. Sand, silt, and clay have been removed from the well which appears to have contributed to the blockage that occurred at this depth precluding logging of the hole.
- 0000 The drilling contractor is circulating the borehole at approximately 354 feet in depth. Sand, silt, and clay continue to be removed from the wellbore. They have been circulating at or around this depth for approximately 45 minutes.
- 0200 The drilling contractor is making another connection as they continue to trip into the hole slowly while they further condition the pilot hole in preparation for geophysical logging.
- 0400 The drilling contractor is circulating drilling mud at approximately 624 feet bpl. They continue to spend about one hour per stand (90 feet) to clean up the borehole.
- 0530 The drilling contractor has circulated and conditioned the borehole to 714 feet bpl (Kelly down) and is preparing to make a connection. As reported by the drilling contractor, the geophysical logging subcontractor was contacted at 02:00 to apprise him of status of borehole conditioning so logging can resume later today.
- 0620 The drill pipe connection has been completed (90 foot stand) and the drilling contractor resumes borehole circulation and conditioning by working the bit up and down the 90 foot interval to a depth of 804 feet bpl.
- 0700 The drilling contractor continues to clean and condition the borehole from 714 feet bpl to 804 feet bpl.



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Daily Construction Log

Date: June 4, 2011
Project: FPL Turkey Point EW
Contractor: Layne Christensen Company
Starting Depth: 1,090 feet bpl
Weather Day: Mostly Sunny, Hot, Windy
Weather Night: Mostly Clear, Warm, Windy
Activity: Pilot Hole Conditioning

FDEP UIC Permit #: 0293962-001-UC
Well No.: EW-1
Bit Diameter: 12 ¼-inch
Ending Depth: 1,090 feet bpl
Recorded By: Eric Meyer/Mark McNeal

CONSTRUCTION ACTIVITIES

- 0700 The drilling contractor continues to clean and condition the borehole from 714 feet below pad level (bpl) to 804 feet bpl in preparation for geophysical logging, which is expected to occur later today.
- 0800 The drilling contractor is making a drill pipe connection to continue cleaning and circulating the borehole from 804 to 894 feet bpl.
- 0830 The drilling contractor pulls the bit up to 804 feet and starts another pass through the interval to 894 feet bpl.
- 0910 The drilling contractor prepares to add 90 feet of drill pipe to continue cleaning and conditioning the borehole from 894 feet bpl to 984 feet bpl.
- 0956 The drilling contractor is making a connection to the last 90-foot stand of drill pipe; cleaning and conditioning of the borehole from 984 feet bpl to 1074 feet bpl.
- 1100 The drilling contractor is circulating the borehole with the drill bit positioned at 1,074 feet bpl; a 45-foot piece of drill pipe is being added to enable the borehole to be cleaned and conditioned to the drilled depth of 1,090 feet bpl. Upon reaching the bottom of the borehole at 1,090 feet bpl, the drilling contractor plans to pull the drill bit back to the bottom of the 54-inch casing at 255 feet bpl and stop circulation for about one hour to allow drill cuttings to settle back to bottom. Another trip to bottom to clean and condition the borehole is planned in preparation for geophysical logging.
- 1230 The drilling contractor is removing drill pipe from the well and stacking them on the drill rig floor.
- 1400 The drilling contractor has completed removal of the drill pipe from the pilot hole. The drilling rig remains idle as the drilling contractor allows cuttings and suspended solids to settle within the pilot hole.
- 1630 The drilling contractor resumes drilling circulation and pilot hole cleaning in the interval from 255 feet bpl to 309 feet bpl.
- 1900 The drilling contractor is making another connection. Seven 90-foot stands (630 feet) of drill pipe remain on the floor. This connection will concentrate on cleaning out the pilot hole from 399 feet to 489 feet bpl.



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- 2220 Four 90-foot stands (360 feet) of drill pipe remain on the floor. The drilling contractor is currently circulating the borehole at approximately 759 feet bpl.
- 0000 The drilling contractor is circulating mud in the well; with top-head drive down, the bit is positioned at 939 feet bpl. Two 90-foot stands (180 feet) of drill pipe remain on the floor.
- 0100 The drilling contractor is circulating mud in the well; with top-head drive down, the bit is positioned at 1,029 feet bpl. One 90-foot stand of drill pipe remains on the floor.
- 0230 The drilling contractor has been circulating the hole for about 45 minutes, sitting 1 foot off bottom at about 1,089 feet bpl. The bottom of the hole did not appear to have any noticeable amount of fill in the bottom when they tripped in to total depth. They will begin tripping out of the hole and up inside the casing soon.
- 0400 The drilling contractor is continuing to trip the drill pipe out of the well. Nine 90-foot stands (810 feet) of drill pipe are on the floor with the next stand being removed.
- 0500 The drilling contractor tripped all the way out of the hole and is now tripping back into the hole. The plan is to trip in one more time to total depth and trip out with the hope of logging at that time.
- 0600 The drilling contractor is circulating with the drill bit positioned at about 490 feet bpl and preparing to make a drill pipe connection to continue to cleaning the pilot hole to bottom.
- 0700 There are six 90-foot stands of drill pipe on the rig floor; the drilling contractor is cleaning the pilot hole from 489 feet bpl to 579 feet bpl.



McNabb Hydrogeologic Consulting, Inc.



Daily Construction Log

Date: June 5, 2011
Project: FPL Turkey Point EW
Contractor: Layne Christensen Company
Starting Depth: 1,090 feet bpl
Weather Day: Mostly Sun, Warm, Windy
Weather Night: Mainly Clear, Cool, Breezy
Activity: Pilot Hole Conditioning and Geophysical Logging

FDEP UIC Permit #: 0293962-001-UC
Well No.: EW-1
Bit Diameter: 12 ¼-inch
Ending Depth: 1,090 feet bpl
Recorded By: Eric Meyer/Mark McNeal

CONSTRUCTION ACTIVITIES

- 0700 There are six 90-foot stands of drill pipe on the rig floor; the drilling contractor is cleaning the pilot hole from 489 feet below pad level (bpl) to 579 feet bpl.
- 0800 The drilling contractor made a drill pipe connection to continue cleaning the pilot hole from 579 feet bpl to 669 feet bpl.
- 0840 The drilling contractor made a drill pipe connection to continue cleaning the pilot hole from 669 feet bpl to 759 feet bpl; four 90-foot stands of drill pipe remain on the rig floor.
- 0925 The drilling contractor made a drill pipe connection to continue cleaning the pilot hole from 759 feet bpl to 849 feet bpl; three 90-foot stands of drill pipe remain on the rig floor.
- 1000 The drilling contractor made a drill pipe connection to continue cleaning the pilot hole from 849 feet bpl to 939 feet bpl; two 90-foot stands of drill pipe remain on the rig floor.
- 1040 The drilling contractor made a drill pipe connection to continue cleaning the pilot hole from 939 feet bpl to 1,029 feet bpl; one 90-foot stand of drill pipe remains on the floor.
- 1110 The drilling contractor made a drill pipe connection to continue cleaning the pilot hole from 1,029 feet bpl to 1,090 feet bpl; no drill pipe remains on the rig floor.
- 1200 The drilling contractor has positioned the drill bit off bottom near the depth of 1,029 feet bpl and continues mud circulation to clean and condition the borehole for geophysical logging.
- 1350 The drilling contractor is removing the drill pipe from the pilot hole. Once the bit has been brought up into the 54-inch casing, the contractor will reenter the pilot hole to evaluate whether the ledge immediately below the casing and the accumulated cuttings have been removed.
- 1440 The drilling contractor has removed all drill pipe, collars and bit from the well. The contractor is preparing to run the open-ended drill collar back into the pilot hole in preparation for geophysical logging.



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- 1545 The drilling contractor lowered the two stands of drill collars and one stand of drill pipe without any loss of string weight; no ledge was observed. Provisions are being made to run the geophysical logs through the drill collars and drill pipe currently placed in the well; an additional 5 foot section of drill pipe was added which places the open end of the drill collars at a depth of about 262 feet bpl. The drilling contractor has advised MV Geophysical Survey, Inc. that they are prepared for geophysical logging.
- 1700 The drilling contractor reported that the geophysical logger is in transit. Upon the arrival and setup of the geophysical logger, the drilling contractor will raise the drill pipe to place the open end of the drill collars at a depth of 260 feet bpl; logging will be accomplished through the drill pipe and collars.
- 2100 The drilling contractor's geophysical logging subcontractor, MV Geophysical Survey, Inc. arrives at the site. The logger is preparing to run a caliper log of the pilot hole.
- 2200 The geophysical logging subcontractor has completed the 4-arm caliper log to the total depth of the well (measured at approximately 1,088 feet bpl) and is preparing to run the gamma ray logging tool into the well.
- 2330 The geophysical logging subcontractor has completed dual induction and spontaneous potential (SP) logging and is preparing the logs for printing field copies. The drilling contractor begins preparing the bottom hole assembly to begin reaming the hole to using a 52 ½-inch diameter reaming bit.
- 0430 The drilling contractor has lifted the final piece of the bottom hole assembly onto the floor of the drilling rig. Preparation of the reaming assembly is nearing completion.
- 0500 The bottom hole assembly is complete and hanging in the derrick. The drilling rig is off and the drilling contractor is cleaning up the work area on the rig floor.
- 0600 The drilling contractor is tripping the 52 ½-inch reaming bit and bottom hole assembly into the well to begin reaming the 12 ¼-inch diameter pilot hole.
- 0700 The drilling contractor is tripping the 52 ½-inch reaming bit and bottom hole assembly into the well to begin reaming the pilot hole.



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Daily Construction Log

Date: June 6, 2011
Project: FPL Turkey Point EW
Contractor: Layne Christensen Company
Starting Depth: 255 feet bpl
Weather Day: Mostly Sunny, Warm
Weather Night: Clear, Warm, Windy
Activity: Reaming

FDEP UIC Permit #: 0293962-001-UC
Well No.: EW-1
Bit Diameter: 52 ½-inch
Ending Depth: 309 feet bpl
Recorded By: Deborah Daigle/Sally Durall

CONSTRUCTION ACTIVITIES

- 0700 The drilling contractor is tripping the 52 ½-inch diameter reaming bit and bottom hole assembly into the well to begin reaming the pilot hole.
- 0745 The drilling contractor begins reaming the pilot hole at a depth of 255 feet below pad level (bpl).
- 1100 Reaming the pilot hole at a depth of 264 feet bpl.
- 1330 Reaming the pilot hole at a depth of 270 feet bpl.
- 1700 Reaming the pilot hole at a depth of 278 feet bpl.
- 1810 Reaming the pilot hole at a depth of 281 feet bpl.
- 1950 Reaming the pilot hole at a depth of 285 feet bpl.
- 2150 Reaming the pilot hole at a depth of 291 feet bpl.
- 2300 Reaming the pilot hole at a depth of 293 feet bpl.
- 0050 Reaming the pilot hole at a depth of 298 feet bpl.
- 0200 Reaming the pilot hole at a depth of 301 feet bpl.
- 0310 The kelly is down at a depth of 304 feet bpl. The drilling contractor is circulating the borehole clean.
- 0430 The drilling contractor disconnects the drill pipe and trips the survey tool inside the drill pipe to 270 feet bpl.
- 0445 The deviation survey is complete and the drilling contractor trips the survey tool out of the drill pipe. The deviation survey result is zero degrees from vertical.
- 0455 The drilling contractor makes a drill pipe connection and resumes drilling the pilot hole from a depth of 304 feet bpl.
- 0545 Reaming the pilot hole at a depth of 306 feet bpl.
- 0700 Reaming the pilot hole at a depth of 309 feet bpl.



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Daily Construction Log

Date: June 7, 2011
Project: FPL Turkey Point EW
Contractor: Layne Christensen Company
Starting Depth: 309 feet bpl
Weather Day: Mostly Sunny, Warm
Weather Night: Clear, Warm
Activity: Reaming

FDEP UIC Permit #: 0293962-001-UC
Well No.: EW-1
Bit Diameter: 52 ½-inch
Ending Depth: 379 feet bpl
Recorded By: Deborah Daigle/Sally Durall

CONSTRUCTION ACTIVITIES

0700 The drilling contractor made a drill pipe connection and is reaming the 52 ½ inch pilot hole at a depth of 309 feet below pad level (bpl).
0900 Reaming the pilot hole at a depth of 314 feet bpl.
1045 Reaming the pilot hole at a depth of 318 feet bpl.
1330 Reaming the pilot hole at a depth of 326 feet bpl.
1600 Reaming the pilot hole at a depth of 335 feet bpl.
1720 Reaming the pilot hole at a depth of 338 feet bpl.
1840 Reaming the pilot hole at a depth of 341 feet bpl.
2030 Reaming the pilot hole at a depth of 343 feet bpl.
2130 Reaming the pilot hole at a depth of 346 feet bpl.
2305 Reaming the pilot hole at a depth of 350 feet bpl.
0030 Reaming the pilot hole at a depth of 354 feet bpl.
0150 Reaming the pilot hole at a depth of 360 feet bpl.
0335 Reaming the pilot hole at a depth of 367 feet bpl.
0450 Reaming the pilot hole at a depth of 372 feet bpl.
0600 Reaming the pilot hole at a depth of 376 feet bpl.
0700 Reaming the pilot hole at a depth of 379 feet bpl.



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Daily Construction Log

Date: June 8, 2011
Project: FPL Turkey Point EW
Contractor: Layne Christensen Company
Starting Depth: 379 feet bpl
Weather Day: Mostly Sunny, Warm
Weather Night: Clear, Warm
Activity: Reaming

FDEP UIC Permit #: 0293962-001-UC
Well No.: EW-1
Bit Diameter: 52 1/2-inch
Ending Depth: 437 feet bpl
Recorded By: Deborah Daigle/Sally Durall

CONSTRUCTION ACTIVITIES

- 0700 The drilling contractor is reaming the pilot hole at a depth of 379 feet below pad level (bpl).
- 0930 Reaming the pilot hole at a depth of 382 feet bpl.
- 1045 Reaming the pilot hole at a depth of 385 feet bpl.
- 1230 Reaming the pilot hole at a depth of 388 feet bpl.
- 1430 The kelly is down at a depth of 395 feet bpl. The drilling contractor is circulating the borehole clean.
- 1520 The drilling contractor disconnects the drill pipe and trips the survey tool inside the drill pipe to 360 feet bpl.
- 1545 The deviation survey is complete and the drilling contractor trips the survey tool out of the drill pipe. The deviation survey result is 0.1 degrees from vertical.
- 1600 The drilling contractor makes a drill pipe connection and resumes drilling the pilot hole from a depth of 395 feet bpl.
- 1745 Reaming the pilot hole at a depth of 398 feet bpl.
- 1825 Reaming the pilot hole at a depth of 400 feet bpl.
- 2000 Reaming the pilot hole at a depth of 406 feet bpl.
- 2145 Reaming the pilot hole at a depth of 412 feet bpl.
- 2315 Reaming the pilot hole at a depth of 417 feet bpl.
- 0100 Reaming the pilot hole at a depth of 421 feet bpl.
- 0215 Reaming the pilot hole at a depth of 424 feet bpl.
- 0320 Reaming the pilot hole at a depth of 427 feet bpl.
- 0435 Reaming the pilot hole at a depth of 430 feet bpl.
- 0540 Reaming the pilot hole at a depth of 433 feet bpl.
- 0700 Reaming the pilot hole at a depth of 437 feet bpl.

Project: Florida Power & Light Company Miami-Dade County, Florida Exploratory Well EW-1								 
EW-1 Pad Monitoring Well Water Quality Data Southeast Pad Monitoring Well (SE-EW PMW)								
Date	Time (hours)	Depth to Water (ft. btoc)	Water Elevation (ft. NAVD 88)	Specific Conductance (umhos/cm)	Chloride (mg/L)	TDS (mg/L)	Temperature (degrees C)	Remarks
4/21/2011	1311	10.10	-1.51	81,600	30,200	57,800	29.9	Background Sampling
4/29/2011	1349	10.40	-1.81	86,700	33,100	55,000	30.4	
5/5/2011	1008	11.10	-2.51	83,000	29,500	54,700	29.9	
5/11/2011	1228	10.65	-2.06	78,200	30,100	52,600	30.1	
5/19/2011	1039	10.12	-1.53	75,200	30,000	51,100	29.8	
5/26/2011	1235	10.47	-1.88	73,890	31,200	53,800	29.9	
6/2/2011	1056	10.50	-1.91	74,200	29,400	57,400	29.6	
ft. btoc: feet below top of casing TOC: Top of Casing ft. NAVD 88: North American Vertical Datum of 1988 umhos/cm: micromhos per centimeter mg/L: milligrams per liter C: Celsius Note: TOC elevation is: 8.59 feet NAVD 88								





Project: Florida Power & Light Company
 Miami-Dade County, Florida
 Exploratory Well EW-1

**EW-1 Pad Monitoring Well Water Quality Data
 Northeast Pad Monitoring Well
 (NE-EW PMW)**

Date	Time (hours)	Depth to Water (ft. btoc)	Water Elevation (ft. NAVD 88)	Specific Conductance (umhos/cm)	Chloride (mg/L)	TDS (mg/L)	Temperature (degrees C)	Remarks
4/21/2011	1108	10.49	-1.61	78,700	32,200	57,000	29.8	Background Sampling
4/29/2011	1157	10.68	-1.80	80,400	29,900	53,800	30.4	
5/5/2011	1157	11.40	-2.52	81,400	27,500	52,350	31.2	
5/11/2011	1309	11.00	-2.12	76,800	31,600	51,200	29.7	
5/19/2011	0958	10.48	-1.60	72,600	35,600	51,200	29.5	
5/26/2011	1050	10.76	-1.88	71,360	29,500	52,900	29.7	
6/2/2011	1134	10.78	-1.90	71,700	29,000	55,700	29.6	

ft. btoc: feet below top of casing
 TOC: Top of Casing
 ft. NAVD 88: North American Vertical Datum of 1988
 umhos/cm: micromhos per centimeter
 mg/L: milligrams per liter
 C: Celsius
 Note: TOC elevation is: 8.88 feet NAVD 88

Project:		Florida Power & Light Company Miami-Dade County, Florida Exploratory Well EW-1						 	
EW-1 Pad Monitoring Well Water Quality Data Northwest Pad Monitoring Well (NW-EW PMW)									
Date	Time (hours)	Depth to Water (ft. btoc)	Water Elevation (ft. NAVD 88)	Specific Conductance (umhos/cm)	Chloride (mg/L)	TDS (mg/L)	Temperature (degrees C)	Remarks	
4/21/2011	1221	10.50	-1.66	84,300	33,500	59,900	30.8	Background Sampling	
4/29/2011	1120	10.65	-1.81	86,300	33,700	56,400	30.0		
5/5/2011	1051	11.40	-2.56	87,400	31,300	57,650	31.1		
5/11/2011	1034	12.40	-3.56	79,100	33,500	55,650	30.4		
5/19/2011	1113	13.90	-5.06	80,000	36,000	53,700	30.4		
5/26/2011	1125	10.73	-1.89	75,130	32,300	55,450	30.4		
6/2/2011	1215	10.75	-1.91	75,900	30,700	59,500	30.3		
ft. btoc: feet below top of casing TOC: Top of Casing ft. NAVD 88: North American Vertical Datum of 1988 umhos/cm: micromhos per centimeter mg/L: milligrams per liter C: Celsius Note: TOC elevation is: 8.84 feet NAVD 88									

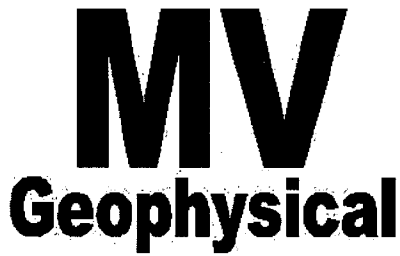
Project: Florida Power & Light Company
 Miami-Dade County, Florida
 Exploratory Well EW-1



**EW-1 Pad Monitoring Well Water Quality Data
 Southwest Pad Monitoring Well
 (SW-EW PMW)**

Date	Time (hours)	Depth to Water (ft. btoc)	Water Elevation (ft. NAVD 88)	Specific Conductance (umhos/cm)	Chloride (mg/L)	TDS (mg/L)	Temperature (degrees C)	Remarks
4/21/2011	1414	10.50	-1.62	72,500	26,400	51,500	30.6	Background Sampling
4/29/2011	1025	10.60	-1.72	77,400	28,300	51,600	29.8	
5/5/2011	0930	11.85	-2.97	75,200	29,000	49,400	28.7	
5/11/2011	1124	16.40	-7.52	78,100	28,300	51,050	31.6	
5/19/2011	1202	15.95	-7.07	73,100	29,700	48,450	32.6	
5/26/2011	1155	11.20	-2.32	66,630	27,800	48,350	29.4	
6/2/2011	1035	11.25	-2.37	68,500	26,000	52,600	29.4	

ft. btoc: feet below top of casing
 TOC: Top of Casing
 ft. NAVD 88: North American Vertical Datum of 1988
 umhos/cm: micromhos per centimeter
 mg/L: milligrams per liter
 C: Celsius
 Note: TOC elevation is: 8.88 feet NAVD 88



X-Y CALIPER GAMMA RAY LOG

Proposed Turkey Point Units 6 and 7
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Company Layne Christensen Company Well Turkey Point EW-1 Field Florida City County Miami-Dade State/Prv Florida	Company Layne Christensen Company Well Turkey Point EW-1 Field Florida City County Miami-Dade State/Prv Florida	
	Location FPL Turkey Point Power Plant LAT: 25 25' 19" N LONG: 80 20' 08" W McNabb Hydrogeologic, Inc.	Other Services XY/GR DIL/SP
	Permanent Datum Pad Level Elevation Log Measured From Pad Level Drilling Measured From Pad Level	Elevation K.B. D.F. G.L.

Date	5-JUN-2011
Run Number	THREE-B
Depth Driller	1090'
Depth Logger	1088'
Bottom Logged Interval	1088'
Top Log Interval	SURFACE
Open Hole Size	12.25"
Type Fluid	MUD
Density / Viscosity	NA/NA
Max. Recorded Temp.	NA
Estimated Cement Top	SURFACE
Time Well Ready	21:00 6/5/2011
Time Logger on Bottom	21:15 6/5/2011
Equipment Number	MVGS-1
Location	Ft. Myers
Recorded By	S.Miller/C.Miller
Witnessed By	M.McNeal (MHC) K.Greuel (LCC)

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	12.25"	SURFACE	255'				
TWO	62.5"	SURFACE	259'				

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	64"	0.375" WT	SURFACE	33'
Prot. String	54"	0.375" WT	SURFACE	255'
Production String				
Liner				LTP1.db
Invoice No.	2011090	P.O. #:	8fld/las/pdf	* FINAL PRINT *

^^^ Here 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.

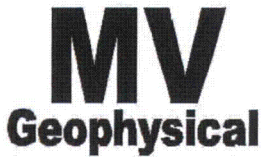
Comments

Proposed Turkey Point Units 6 and 7
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MAXIMUM Caliper Arm Extensions: 33"

BOREHOLE VOLUMES IN CUBIC FEET

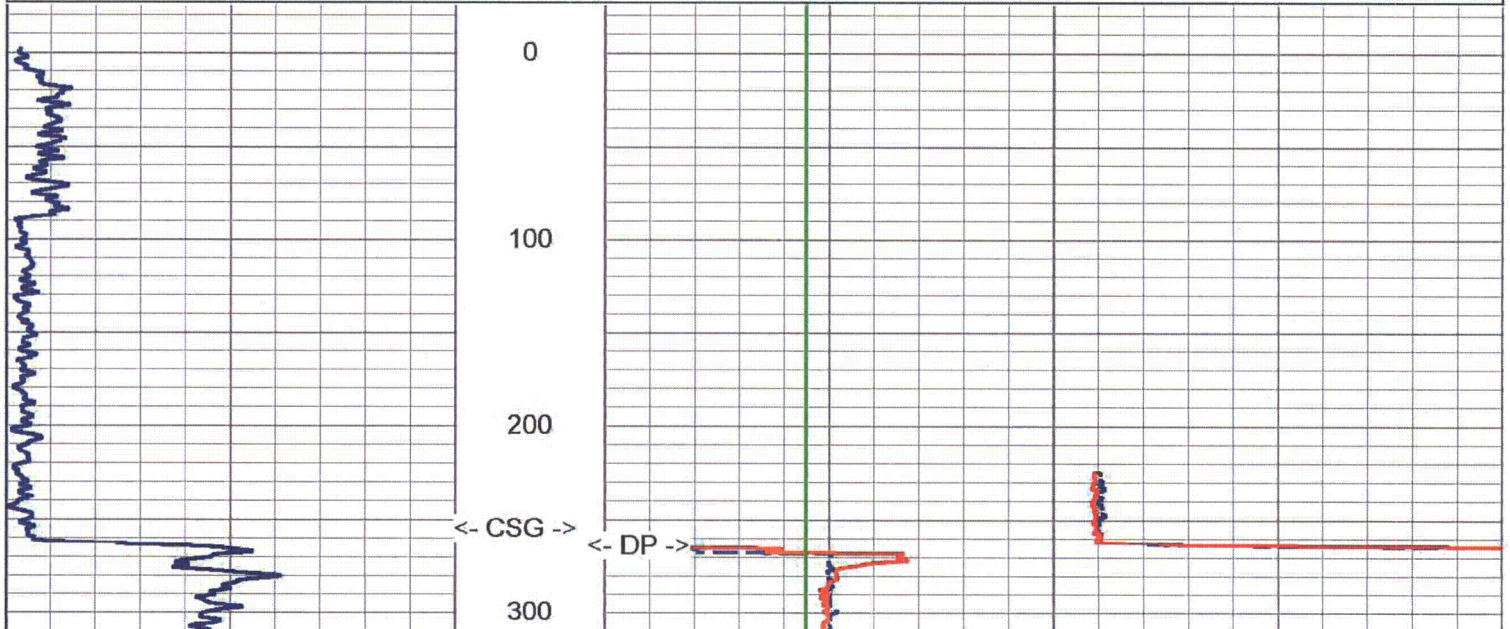
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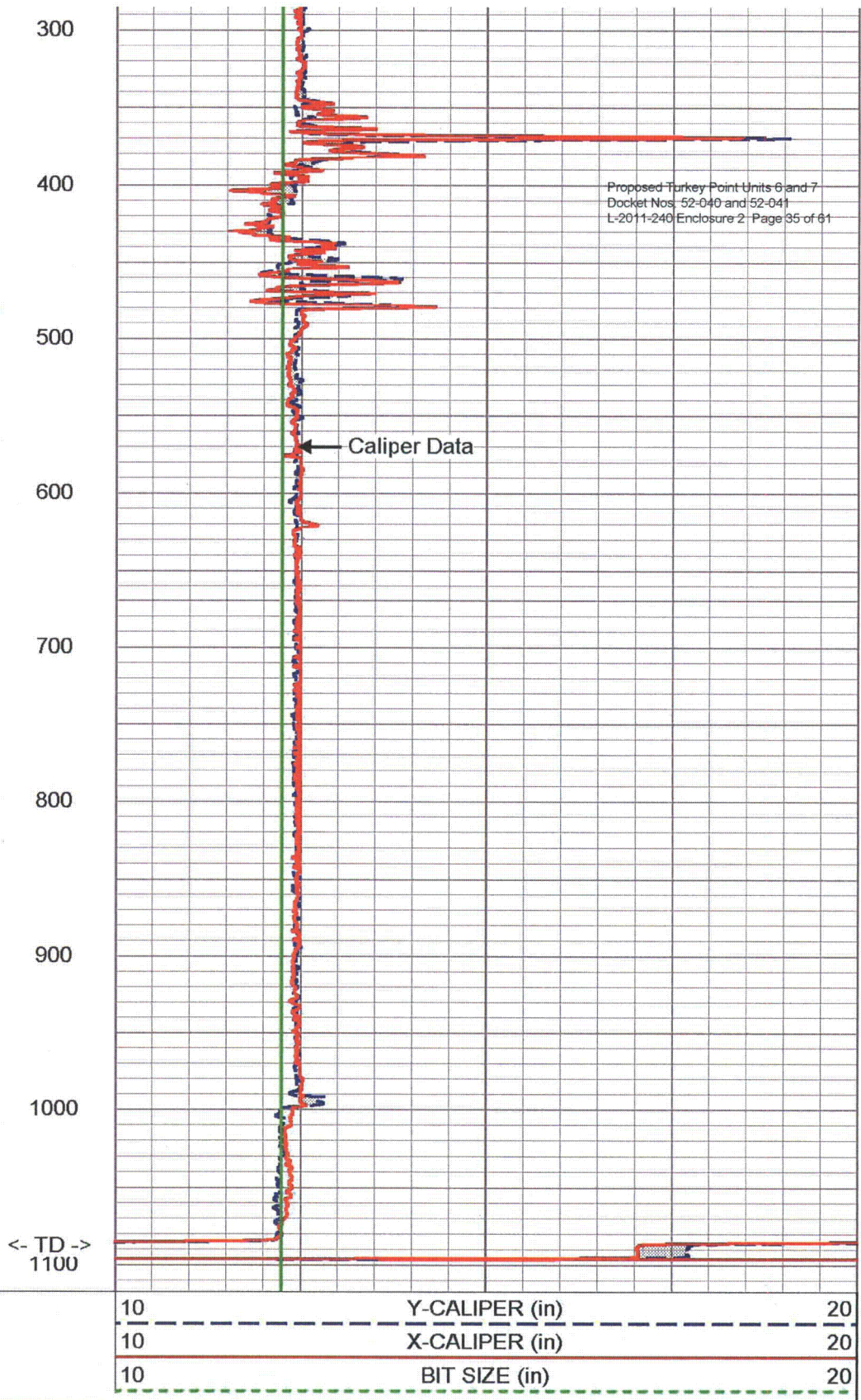
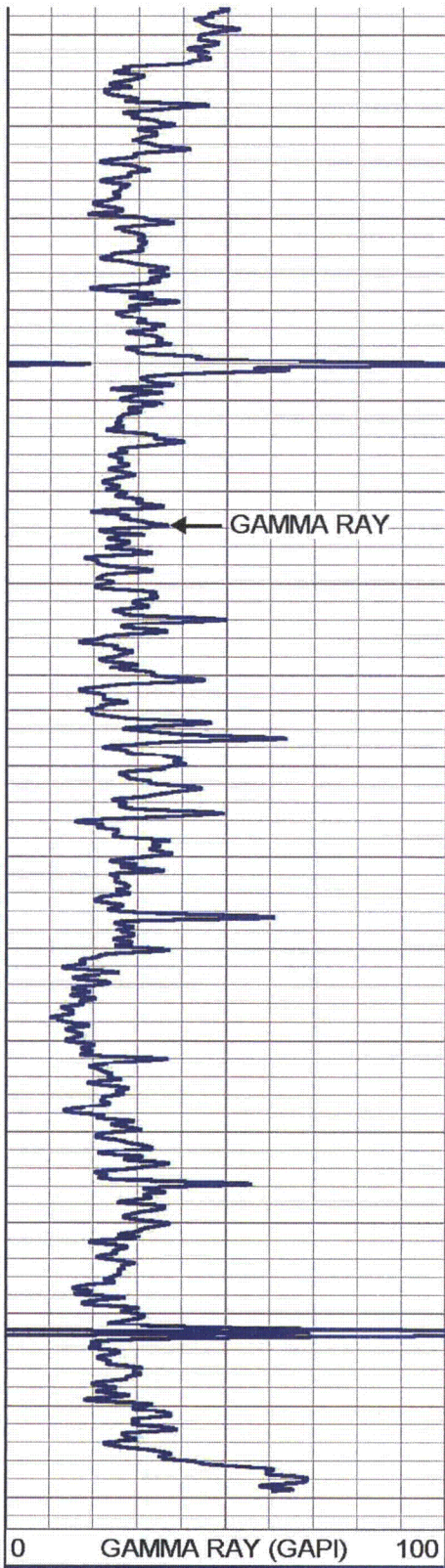


MAIN PASS

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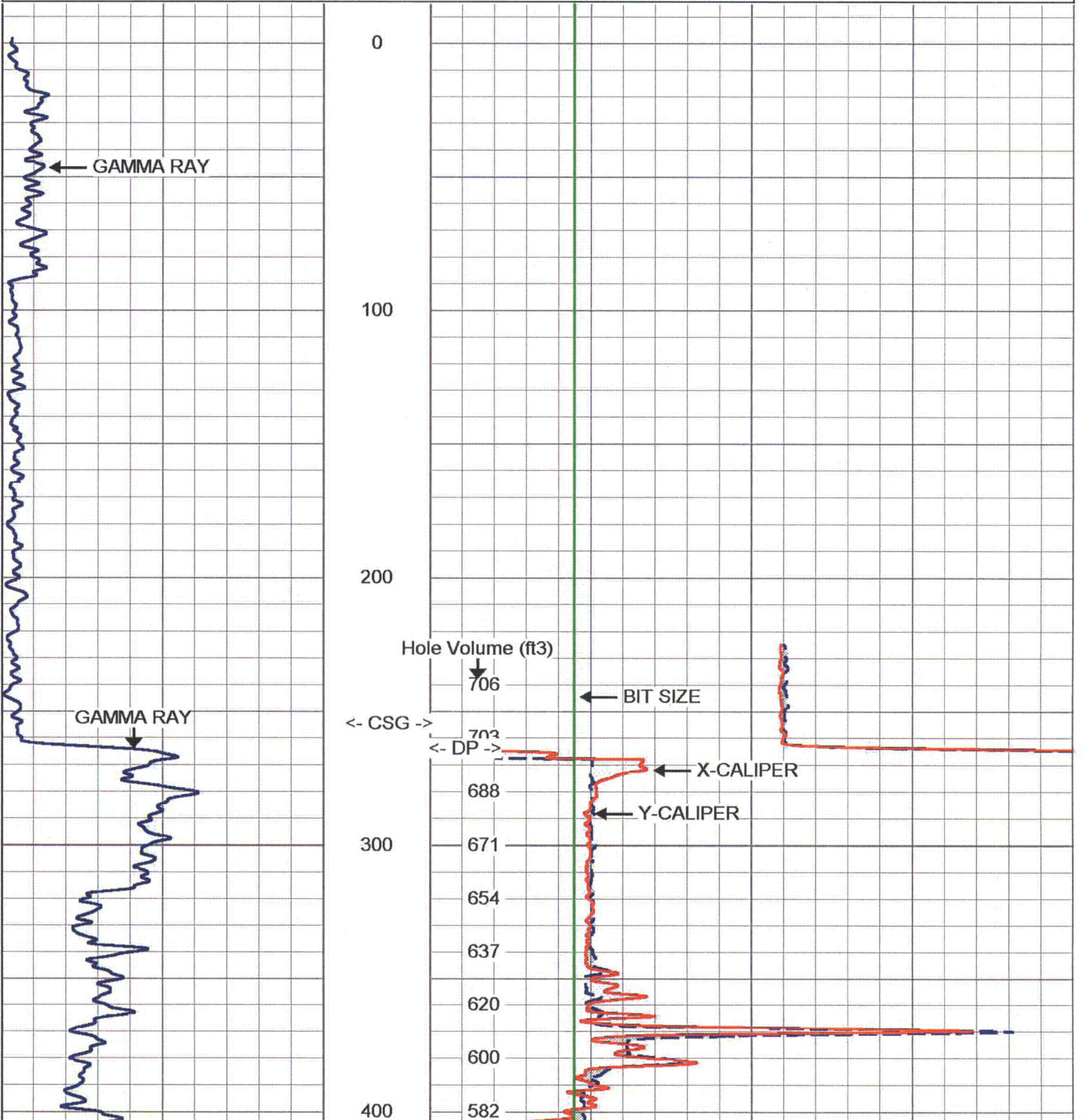
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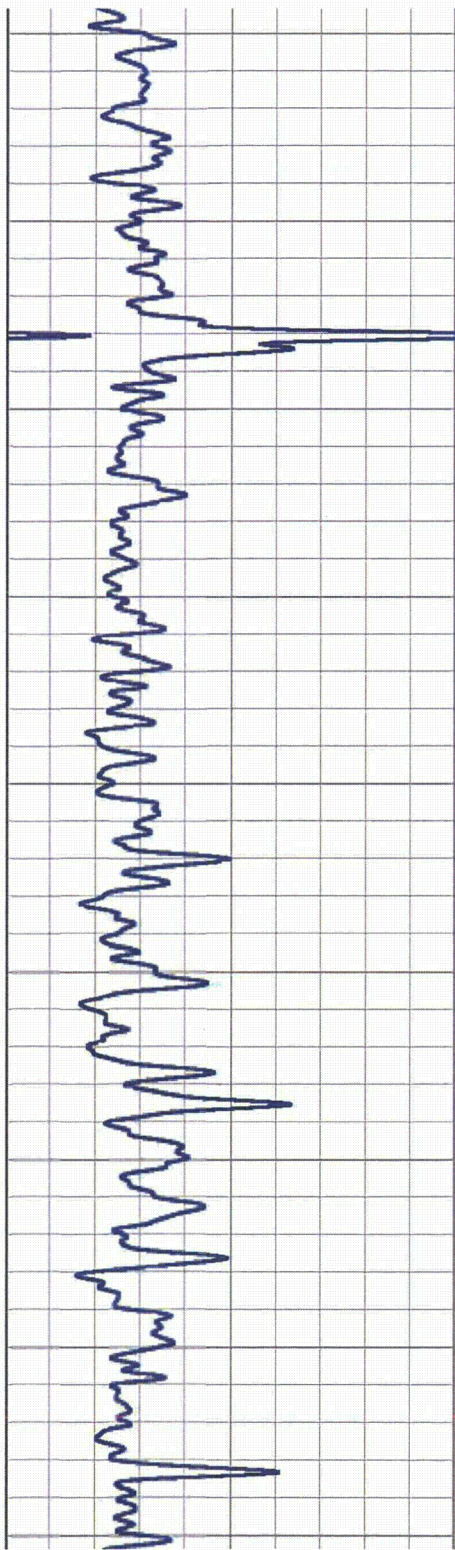
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Proposed Turkey Point Units 6 and 7
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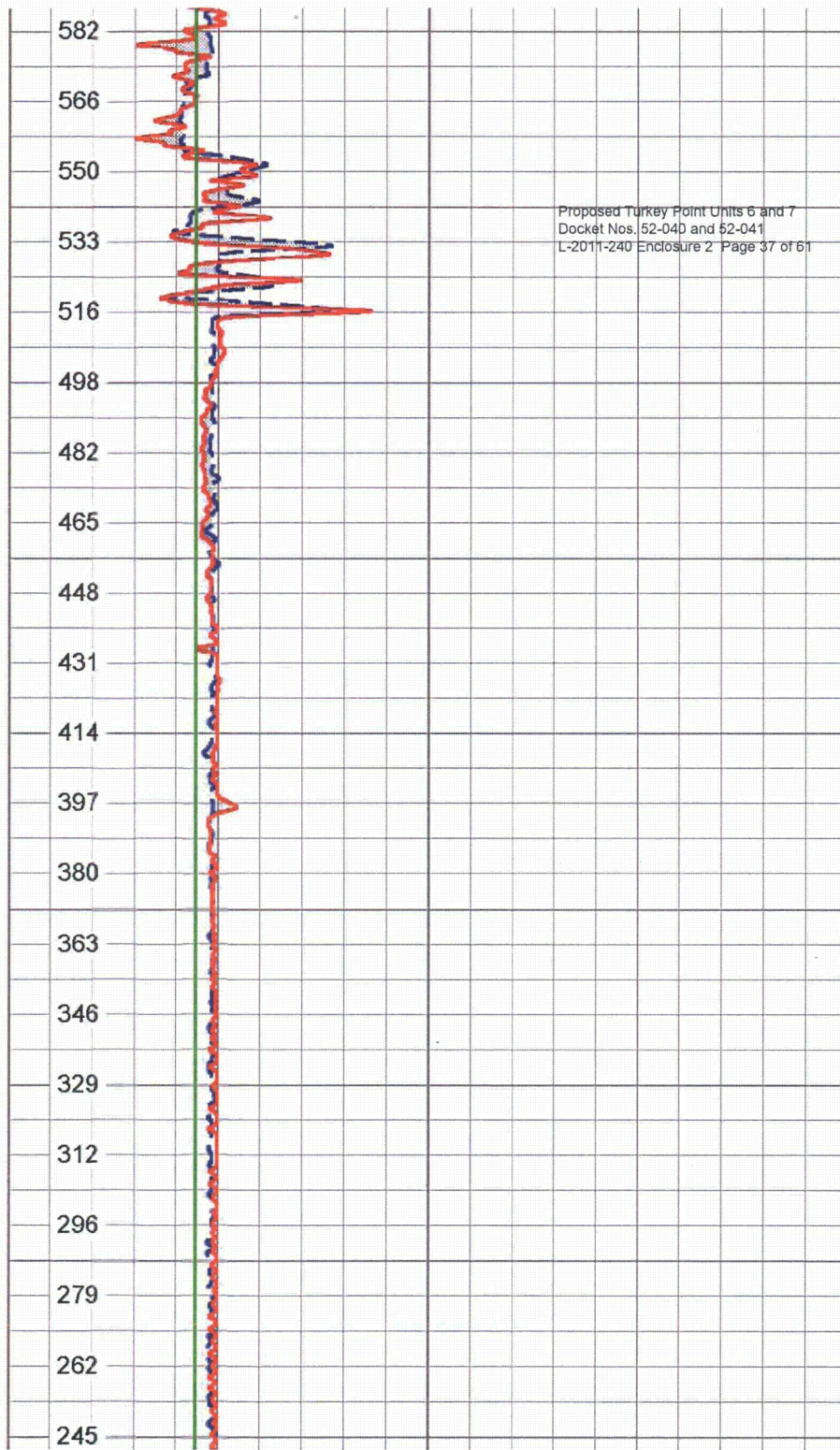
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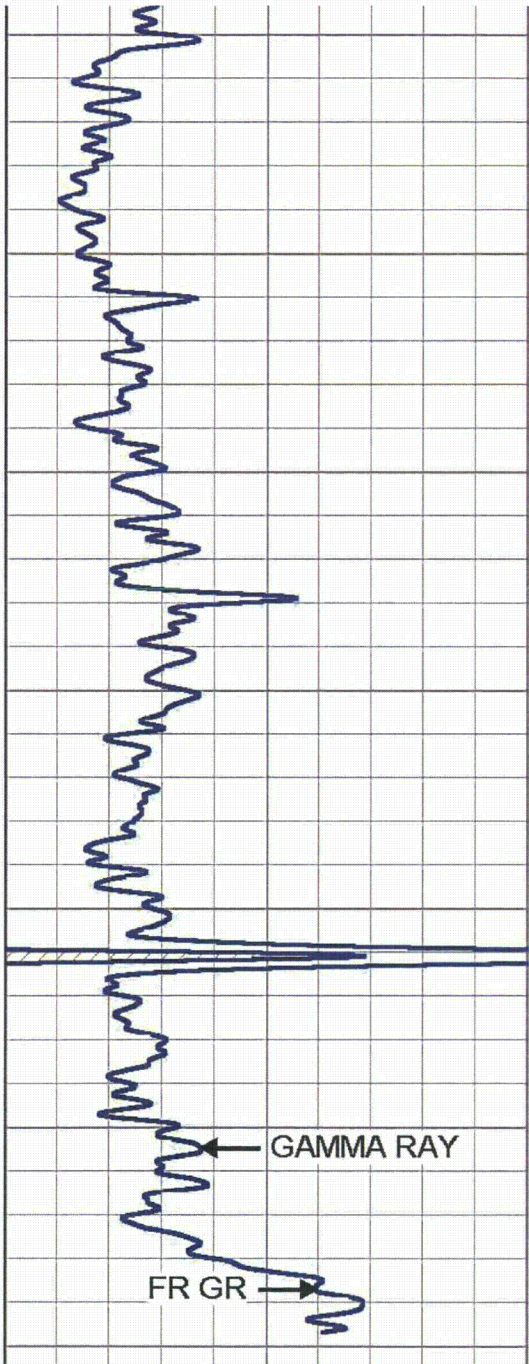
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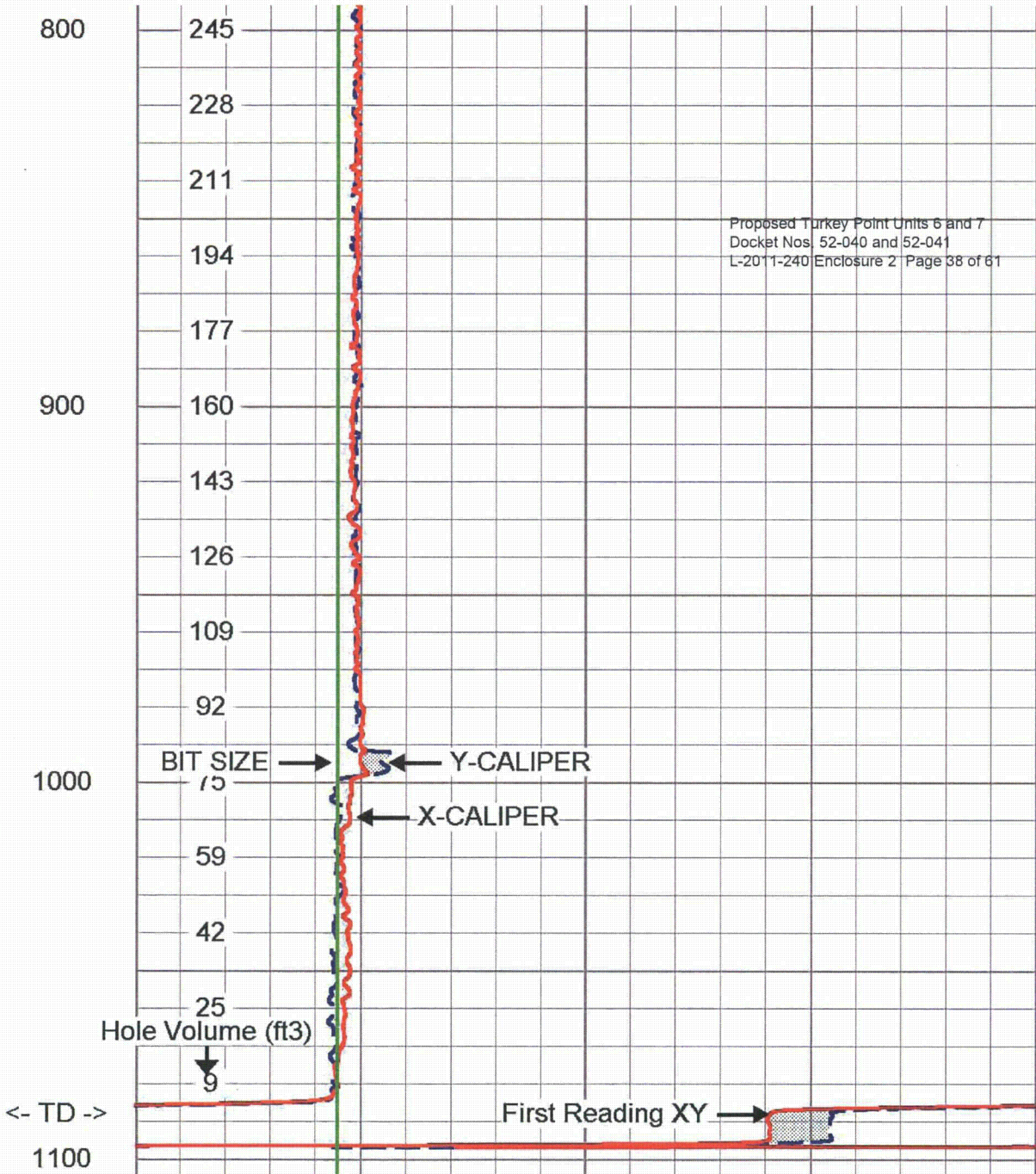
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0 GAMMA RAY (GAPI) 100



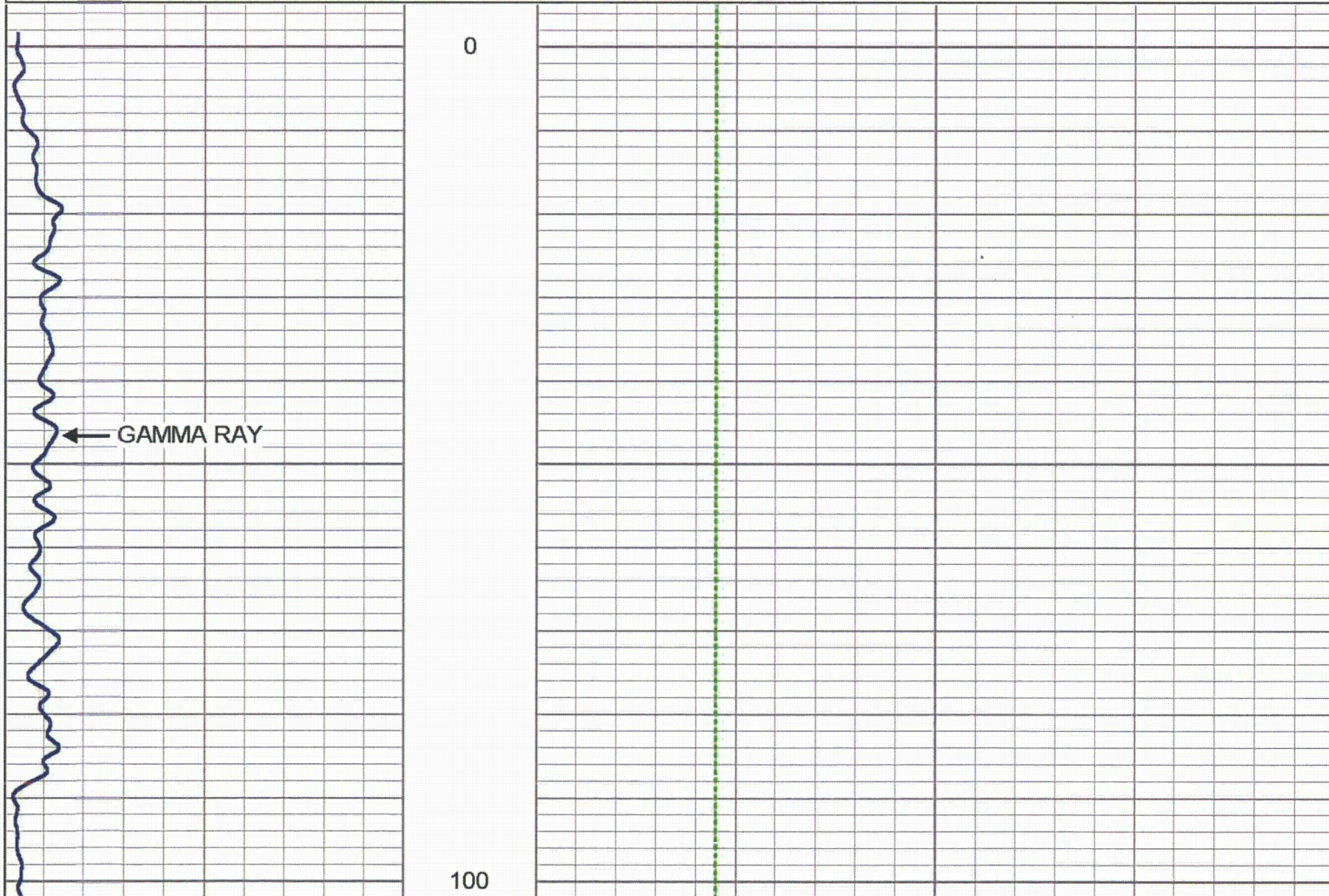
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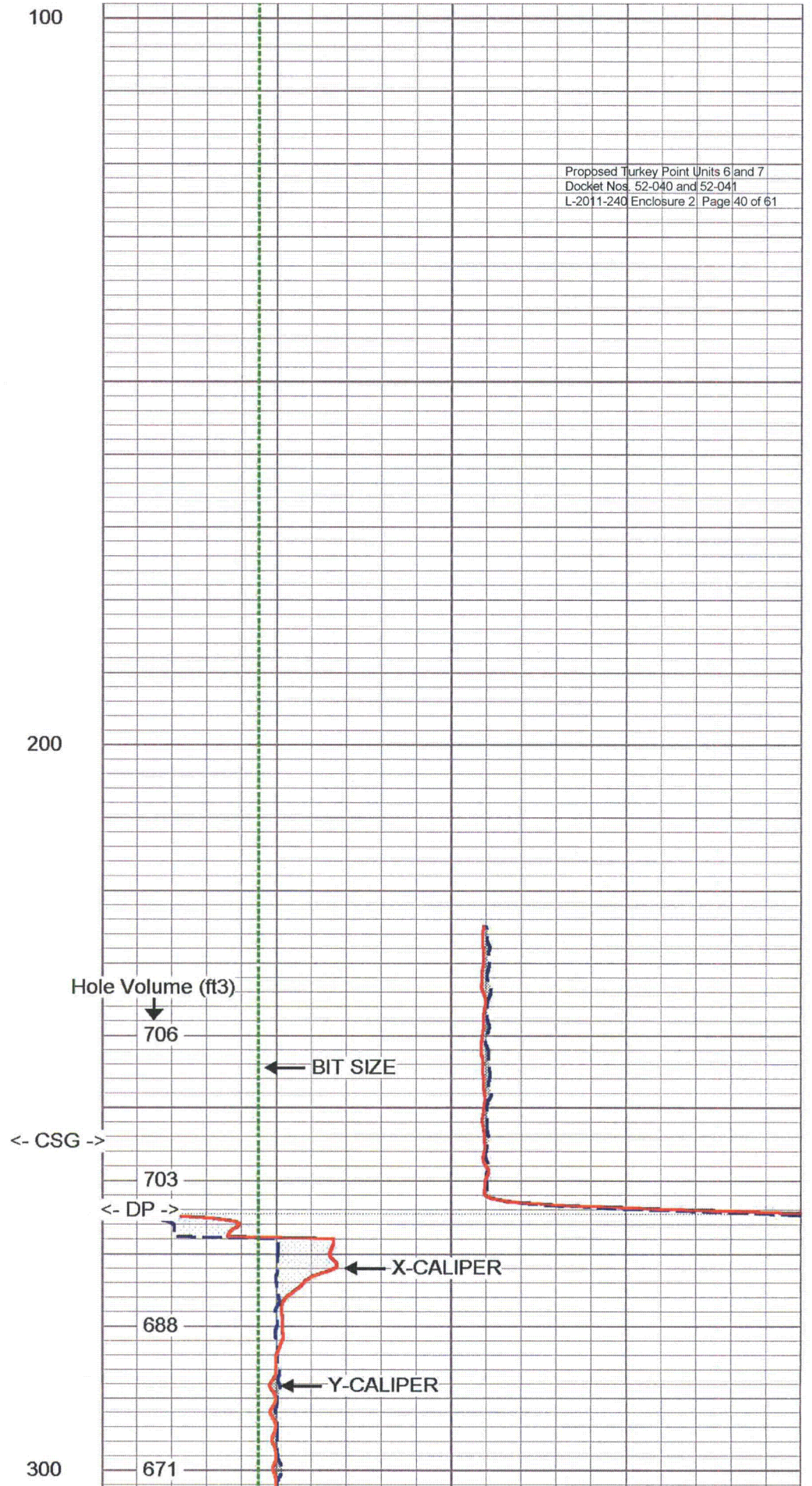
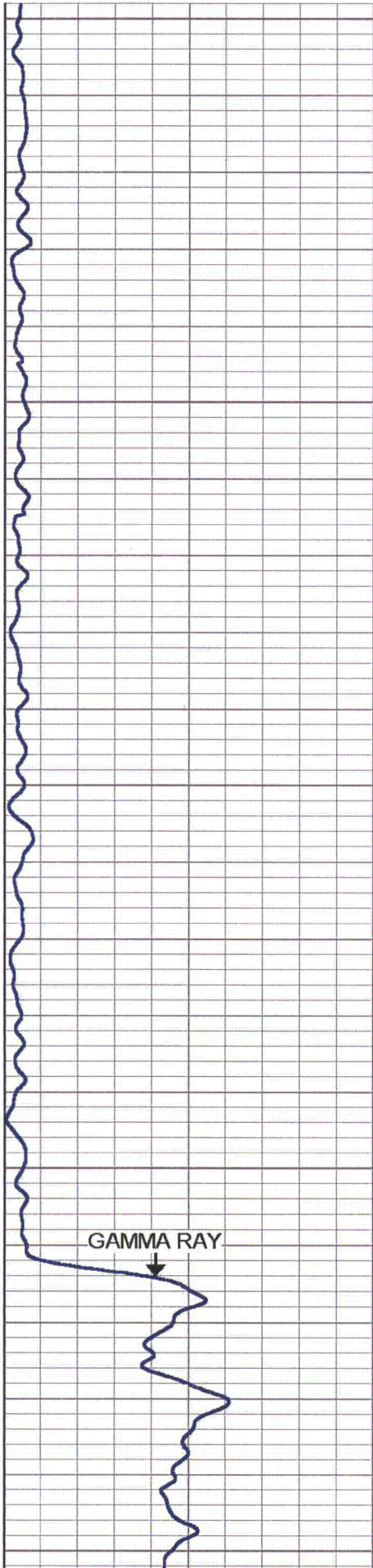
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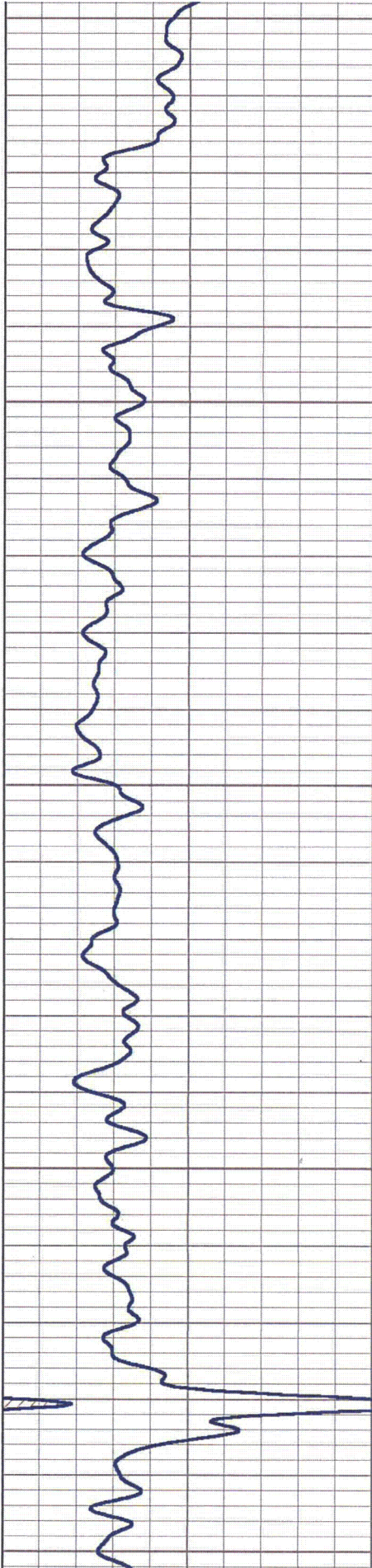
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 Charted by: Depth in Feet scaled 1:240

Proposed Turkey Point Units 6 and 7
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			10	X-CALIPER (in)	20
			10	BIT SIZE (in)	20



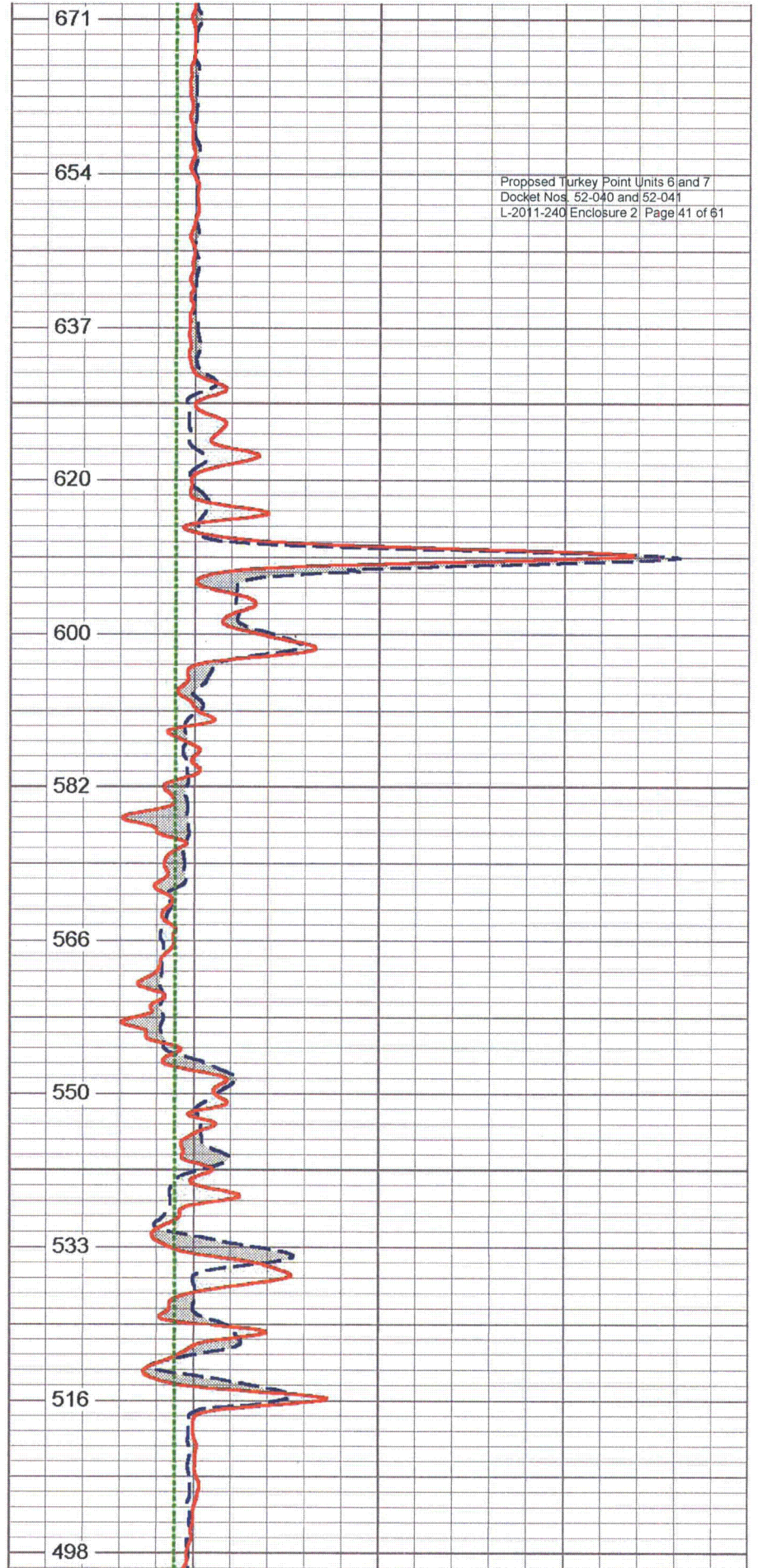




300

400

500



671

654

637

620

600

582

566

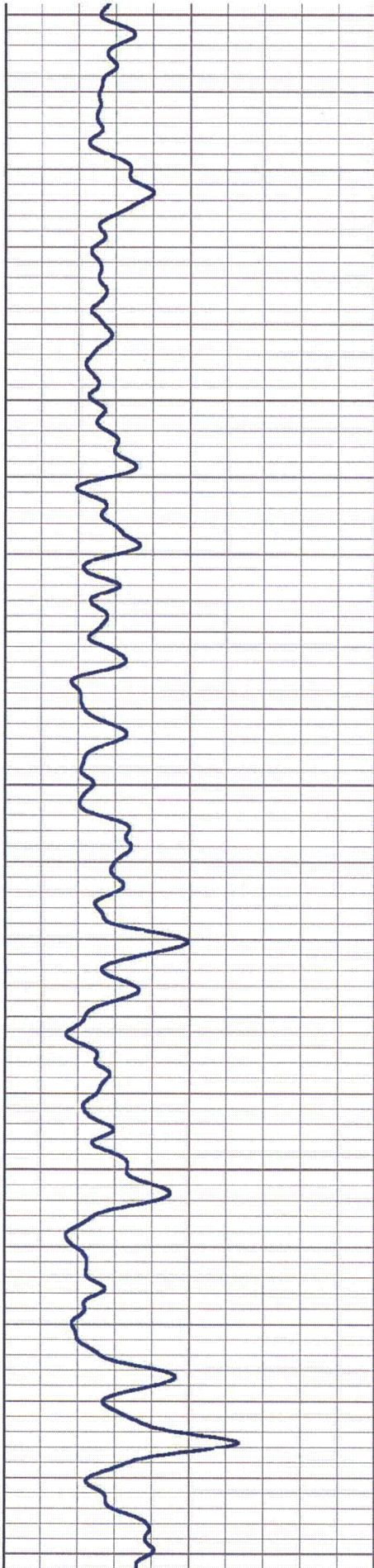
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533

516

498

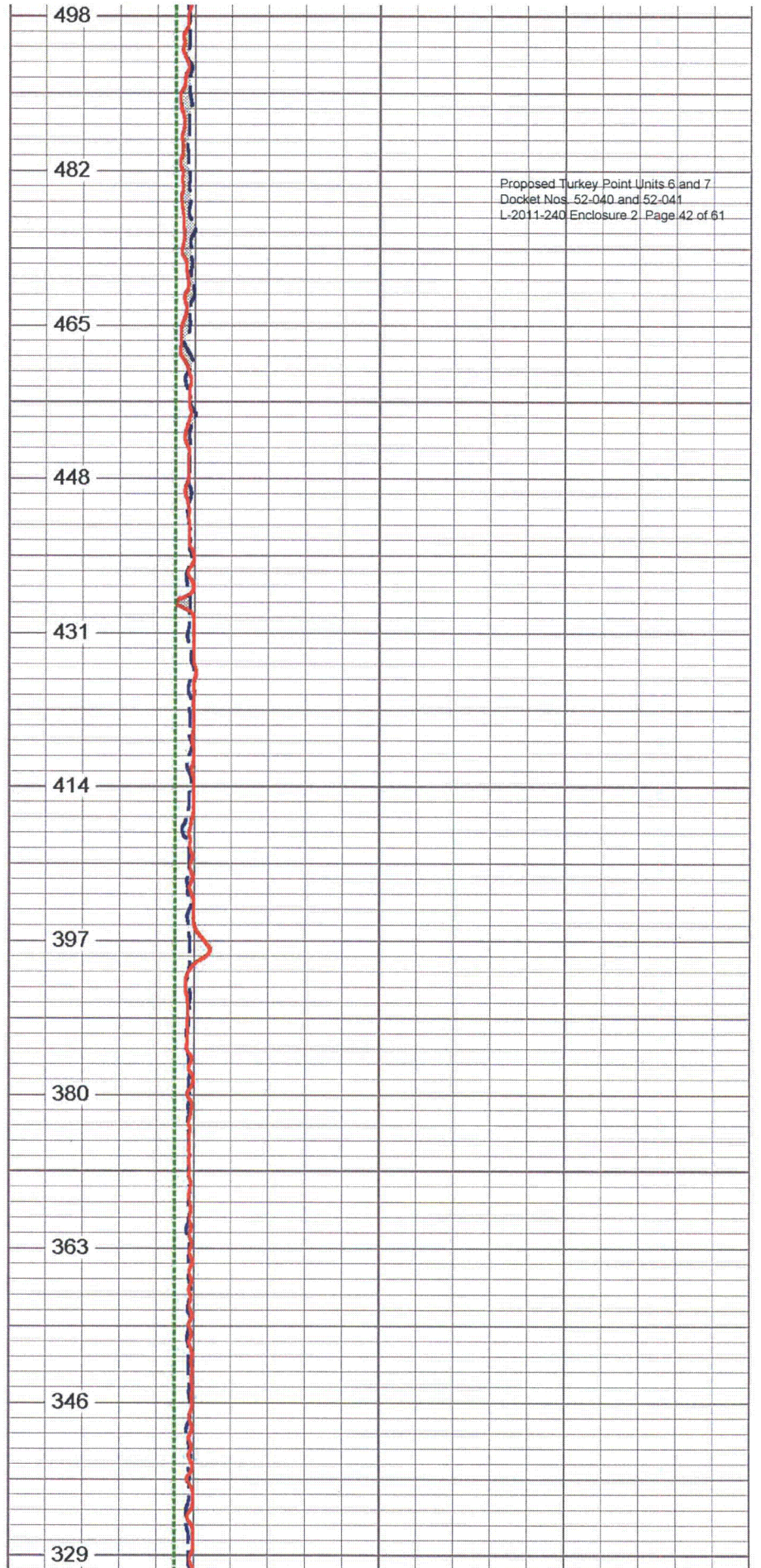
Proposed Turkey Point Units 6 and 7
Docket Nos. 52-040 and 52-041
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500

600

700



498

482

465

448

431

414

397

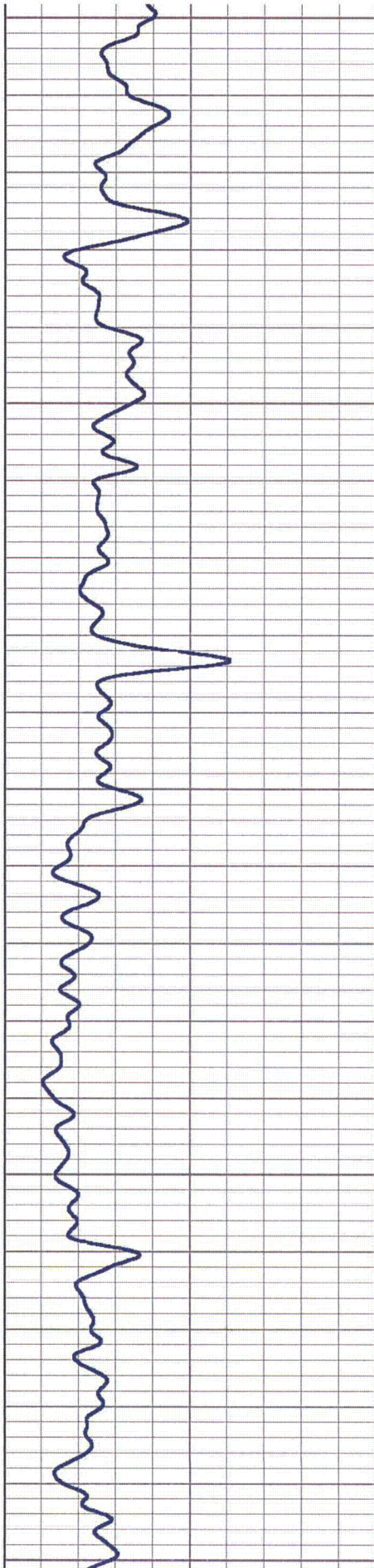
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363

346

329

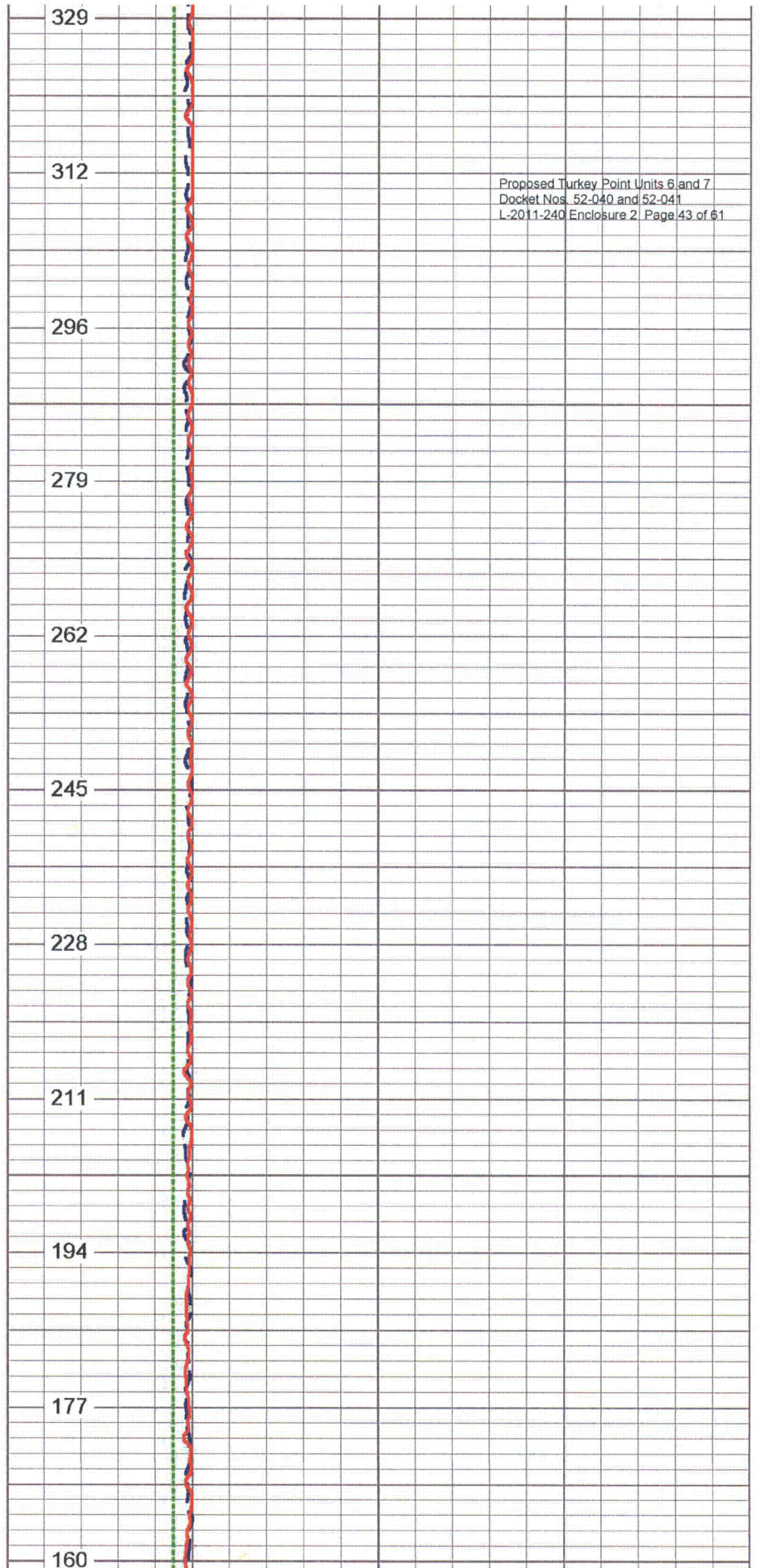
Proposed Turkey Point Units 6 and 7
Docket Nos. 52-040 and 52-041
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700

800

900



329

312

296

279

262

245

228

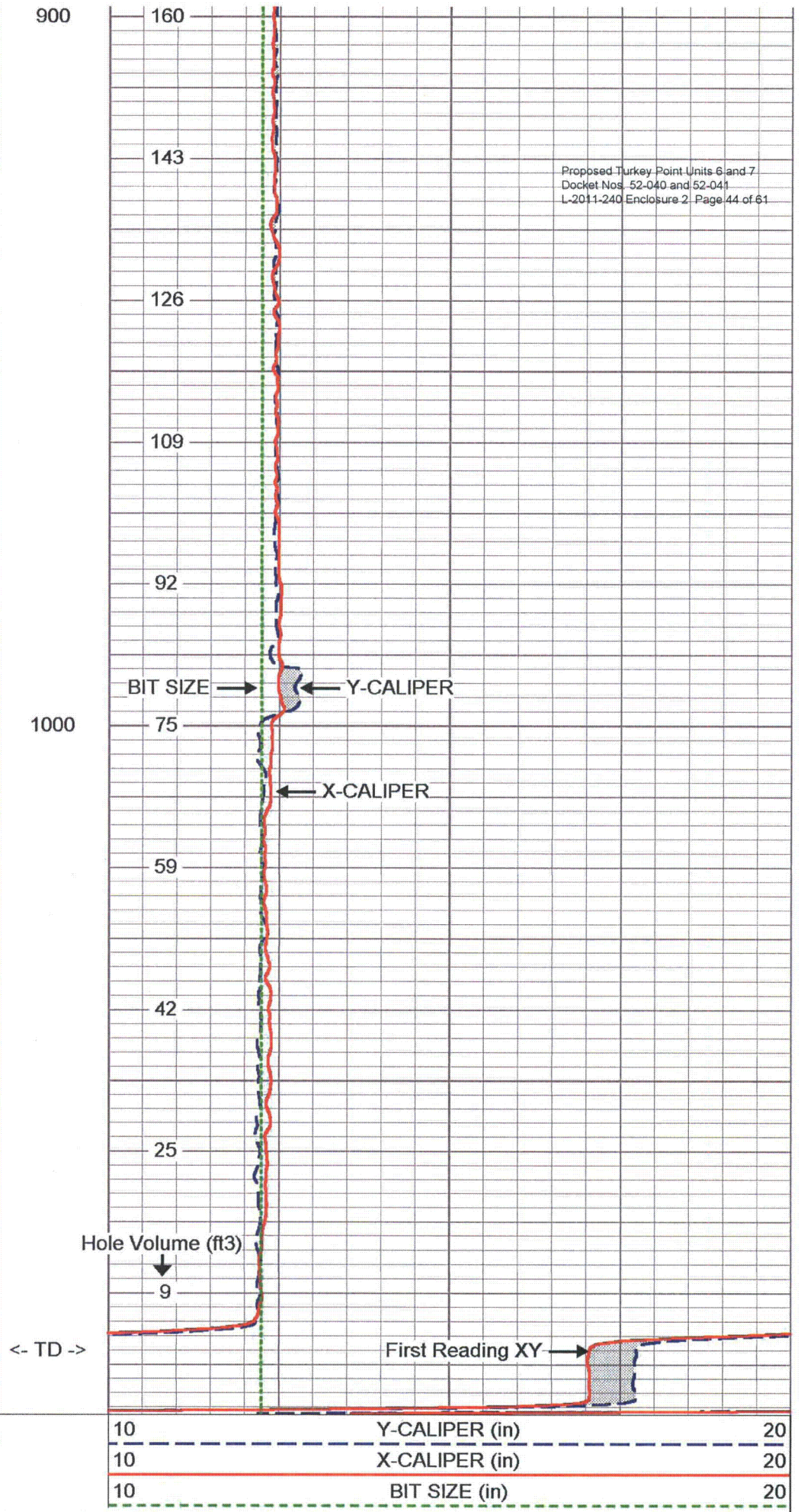
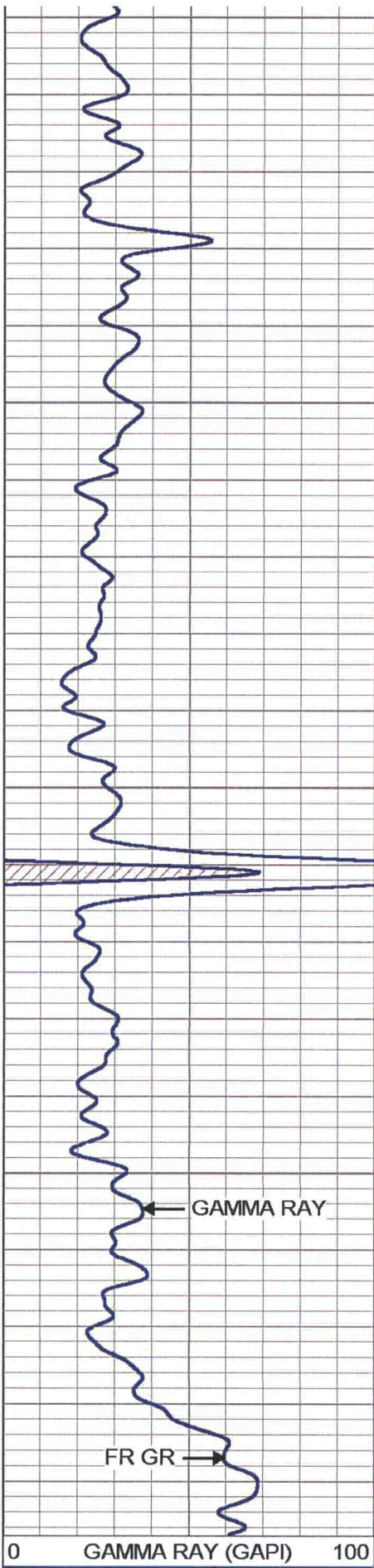
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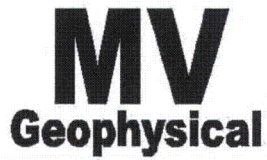
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177

160

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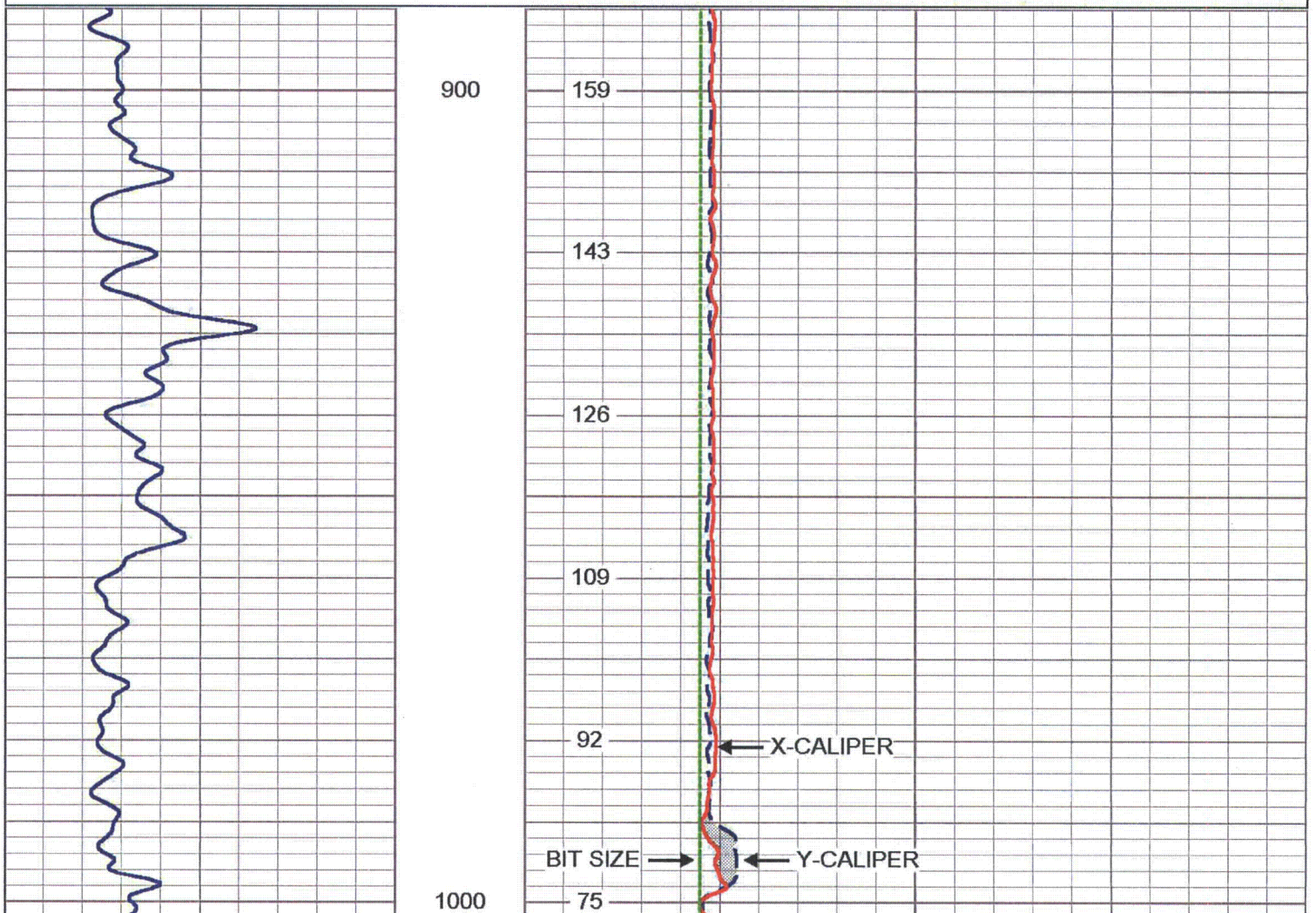


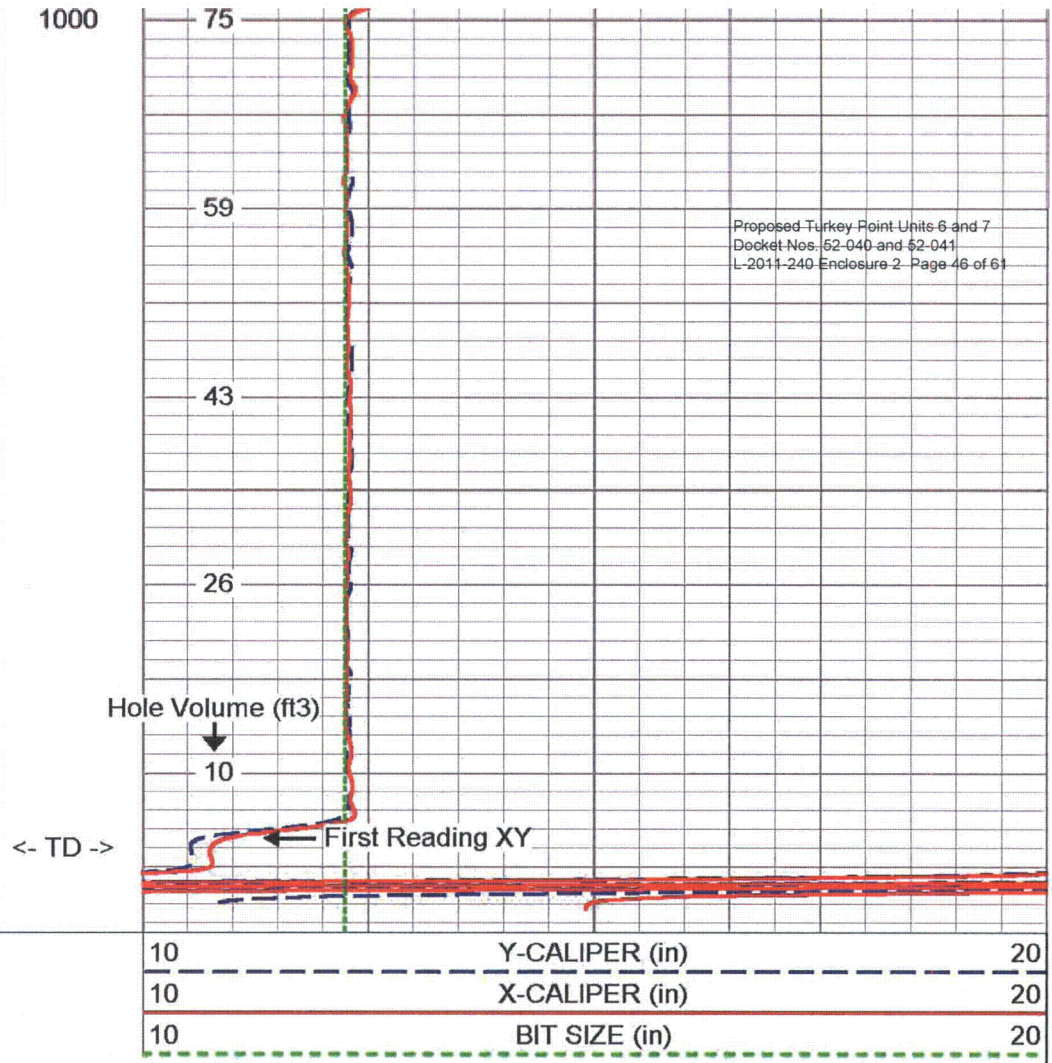
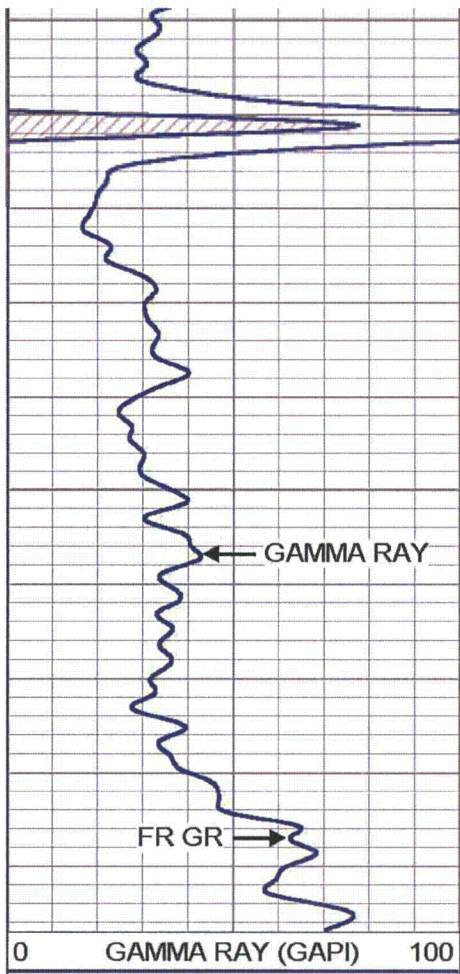
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Charted by: Depth in Feet scaled 1:240

Proposed Turkey Point Units 6 and 7
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0	GAMMA RAY (GAPI)	100	10	Y-CALIPER (in)	20
			10	X-CALIPER (in)	20
			10	BIT SIZE (in)	20





Proposed Turkey Point Units 6 and 7
 Docket Nos. 52-040 and 52-041
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XY Caliper Calibration Report

Serial Number: 01L
 Tool Model: XYCL
 Performed: Wed May 25 06:04:21 2011

Small Ring: 66.25 in
 Large Ring: 72 in

	X Caliper	Y Caliper	
Reading with Small Ring:	1089	988	cps
Reading with Large Ring:	1133.6	1073.7	cps

Gain: 0.128924
 Offset: -74.1481

Gamma Ray Calibration Report

Serial Number: 01
 Tool Model: GROH
 Performed: Wed May 25 05:53:44 2011

Calibrator Value: 120 GAPI

Background Reading: 13.485 cps
 Calibrator Reading: 130.515 cps

Sensitivity: 1.02538 GAPI/cps

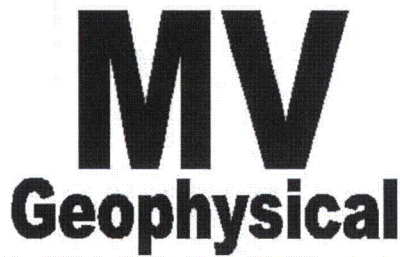
GR-GROH (01)
40.00 lb 3.50 in OD 2.75 ft

GR 5.00 ft

XYC-XYCS (01S)
110.00 lb 3.50 in OD 6.60 ft

XCAL 0.50 ft
YCAL 0.50 ft

Dataset: run3/pass2
Total Length: 9.35 ft
Total Weight: 150.00 lb
O.D.: 3.50 in



DUAL INDUCTION LL3 / SP LOG

Proposed Turkey Point Units 6 and 7
Docket Nos. 52-040 and 52-041
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Company Layne Christensen Company
 Well Turkey Point EW-1
 Field Florida City
 County Miami-Dade
 State/Prv Florida

Company **Layne Christensen Company**
 Well **Turkey Point EW-1**
 Field **Florida City**
 County **Miami-Dade** State/Prv **Florida**

Location		Other Services
FPL Turkey Point Power Plant LAT: 25 25' 19" N LONG: 80 20' 08" W McNabb Hydrogeologic, Inc.		XY/GR DIL/SP
Permanent Datum Pad Level Elevation Log Measured From Pad Level Drilling Measured From Pad Level		Elevation K.B. D.F. G.L.

Date	5-JUN-2011	
Run Number	THREE-B	
Depth Driller	1090'	
Depth Logger	1088'	
Bottom Logged Interval	1086'	
Top Log Interval	266'	
Open Hole Size	12.25"	
Type Fluid	MUD	
Density / Viscosity	NA/NA	
Max. Recorded Temp.	NA	
Estimated Cement Top	SURFACE	
Time Well Ready	21:00 6/5/2011	
Time Logger on Bottom	23:00 6/5/2011	
Equipment Number	MVGS-1	
Location	Ft. Myers	
Recorded By	S.Miller/C.Miller	
Witnessed By	M.McNeal (ASRus)	K.Greuel (LCC)

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	12.25"	SURFACE	255'				
TWO	62.5"	SURFACE	259'				

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	64"	0.375" WT	SURFACE	33'
Prof. String	54"	0.375" WT	SURFACE	255'
Production String				
Liner				LTP1.db
Invoice No.	2011090	P.O. #:	8fld/las/pdf	* 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

Proposed Turkey Point Units 6 and 7
 Docket Nos. 52-040 and 52-041
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Rm=8.534 ohm-m @ 85.9 degF

Drill Pipe set to 266'

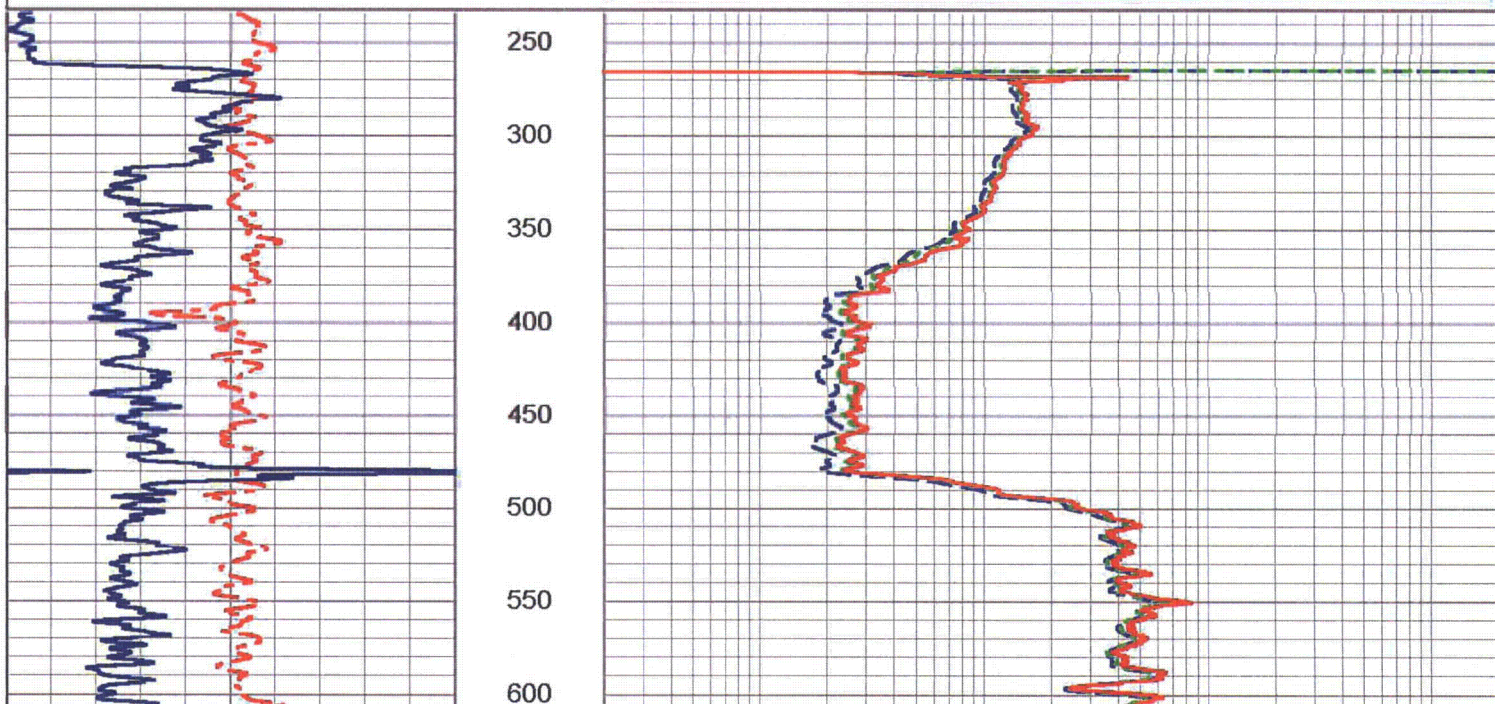
MV
Geophysical

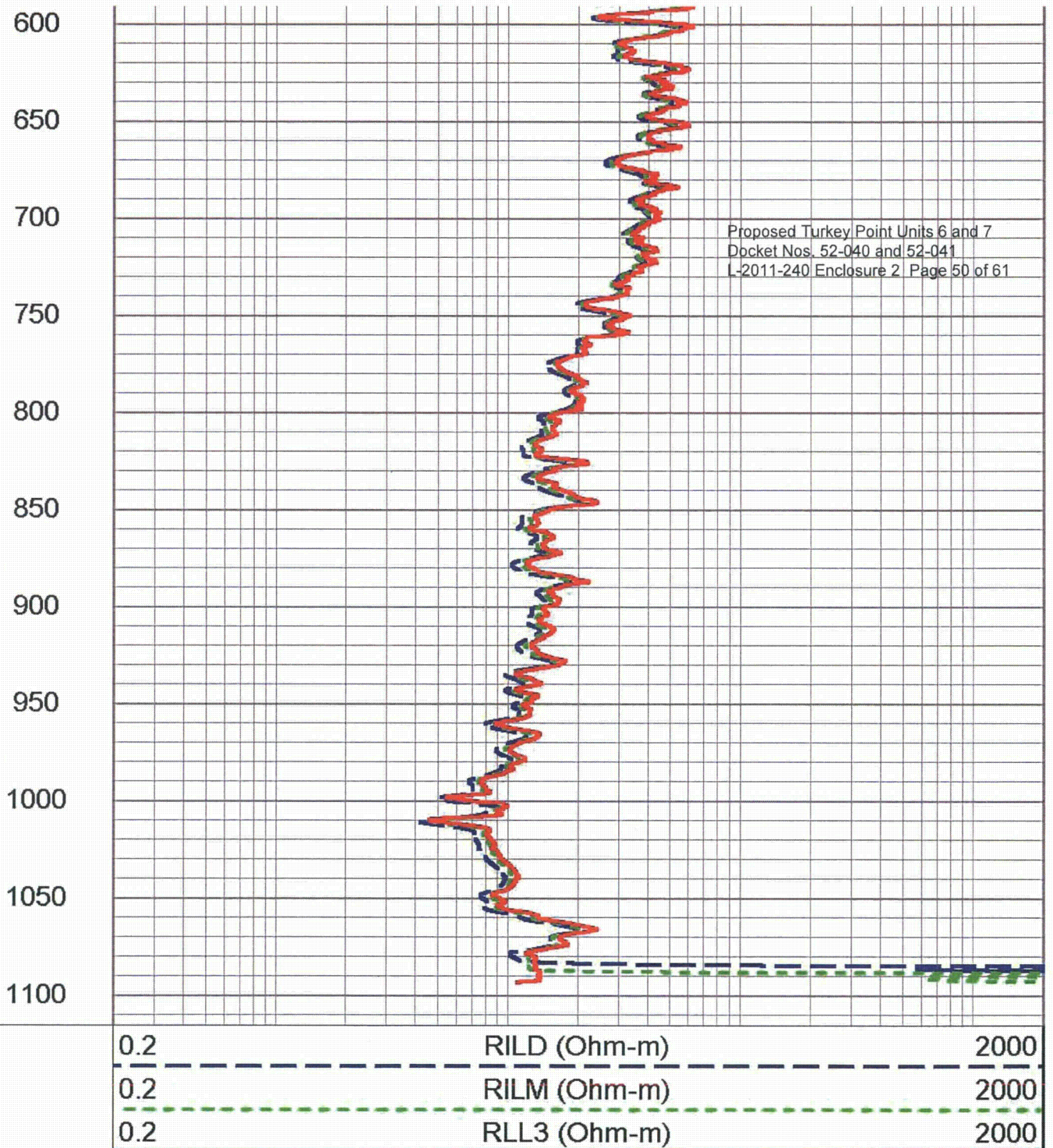
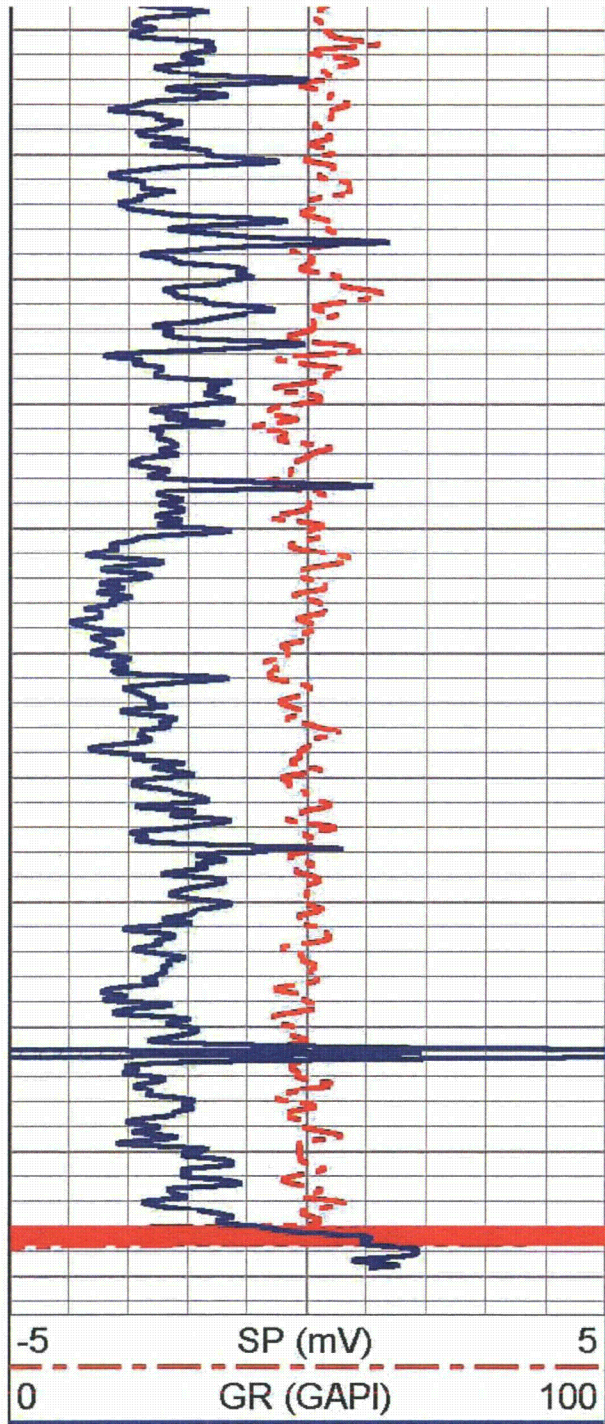
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 0 GR (GAPI) 100

0.2 RILD (Ohm-m) 2000
 0.2 RILM (Ohm-m) 2000
 0.2 RLL3 (Ohm-m) 2000



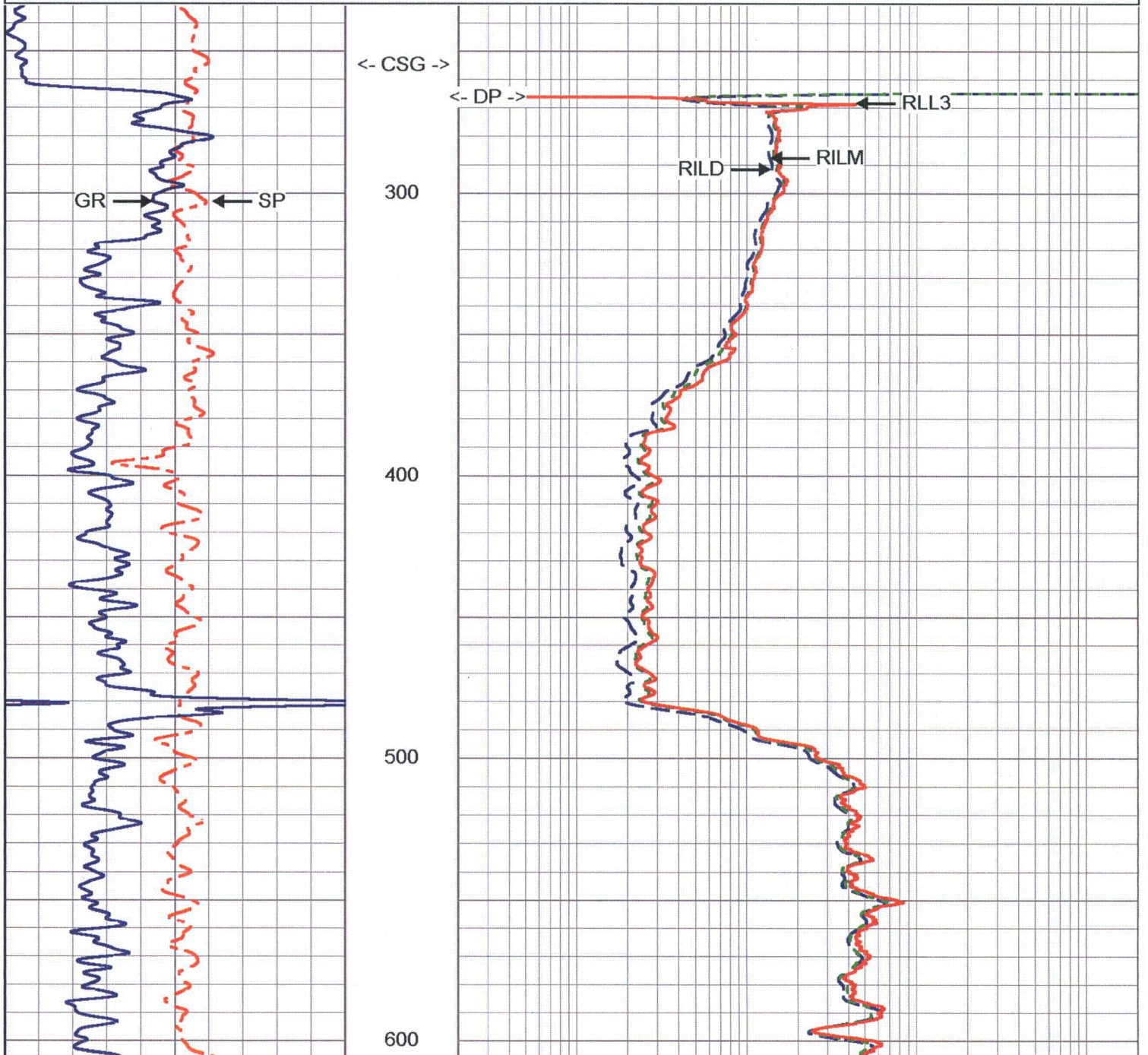


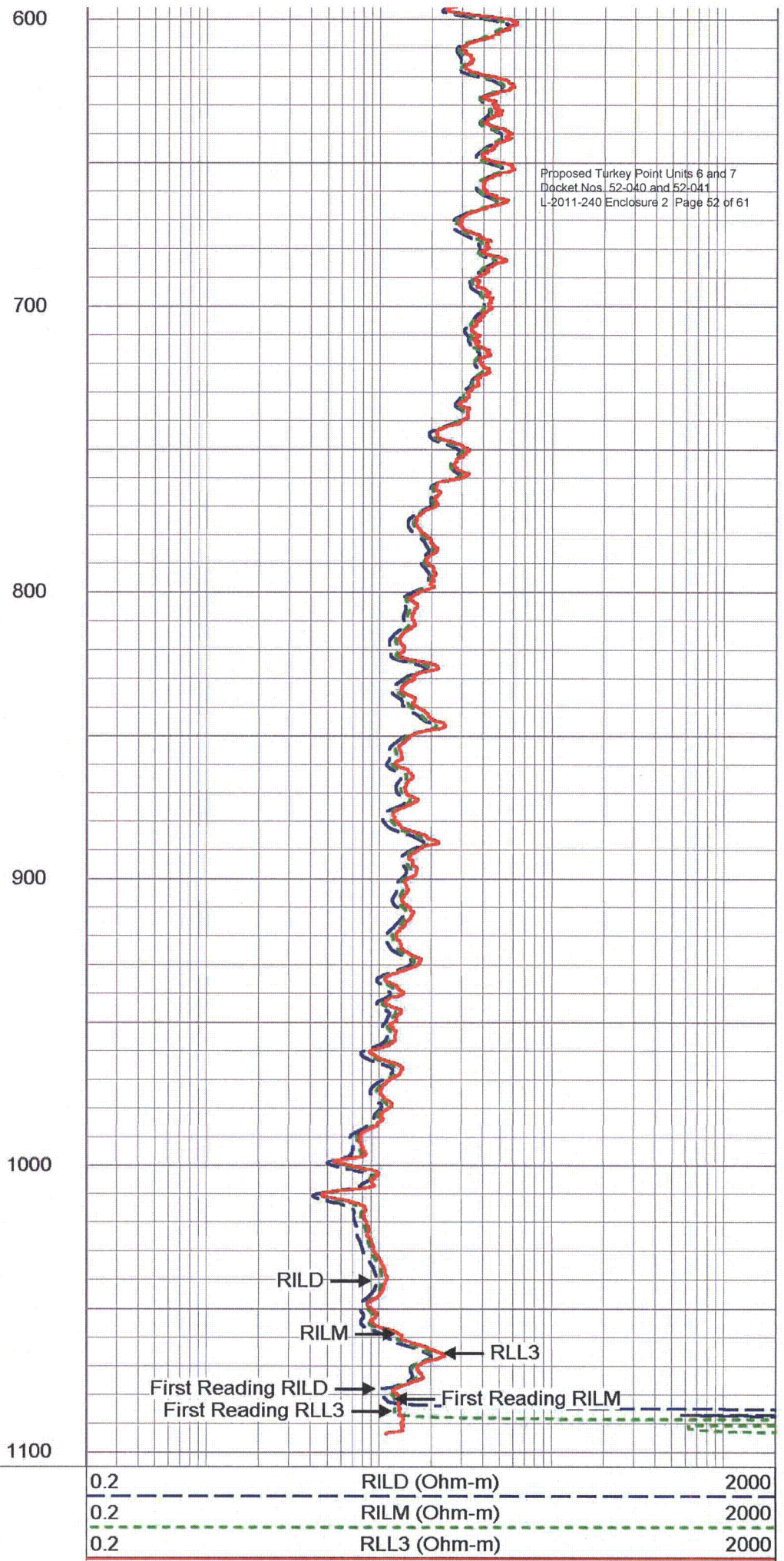
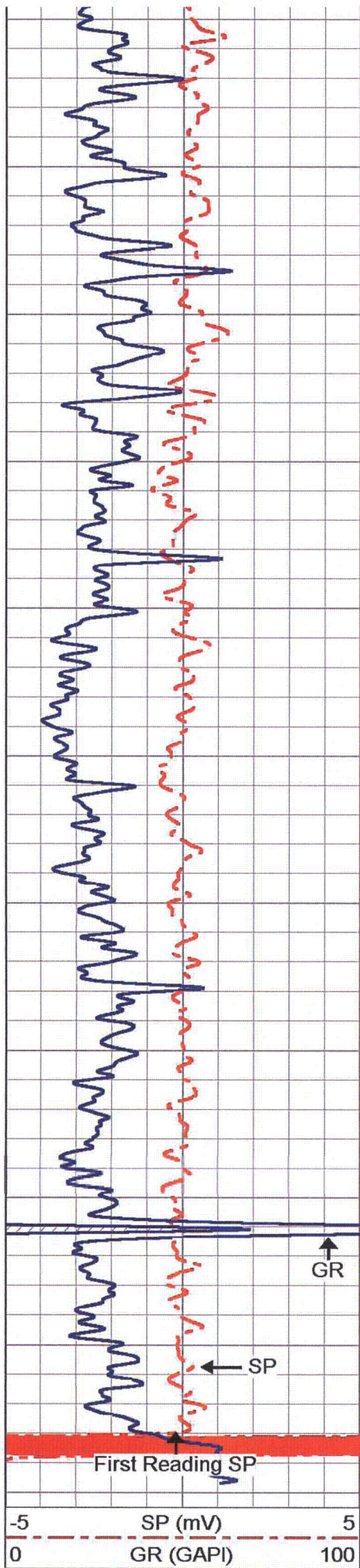
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Proposed Turkey Point Units 6 and 7
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-5	SP (mV)	5
0	GR (GAPI)	100

0.2	RILD (Ohm-m)	2000
0.2	RILM (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000



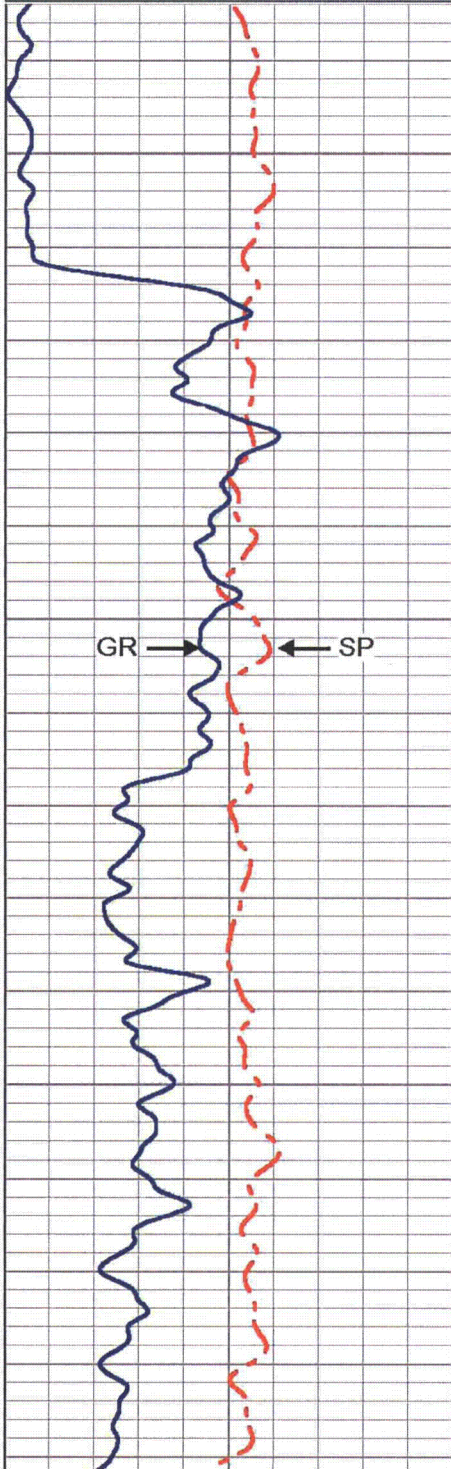


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Proposed Turkey Point Units 6 and 7
 Docket Nos. 52-040 and 52-041
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-5	SP (mV)	5
0	GR (GAPI)	100

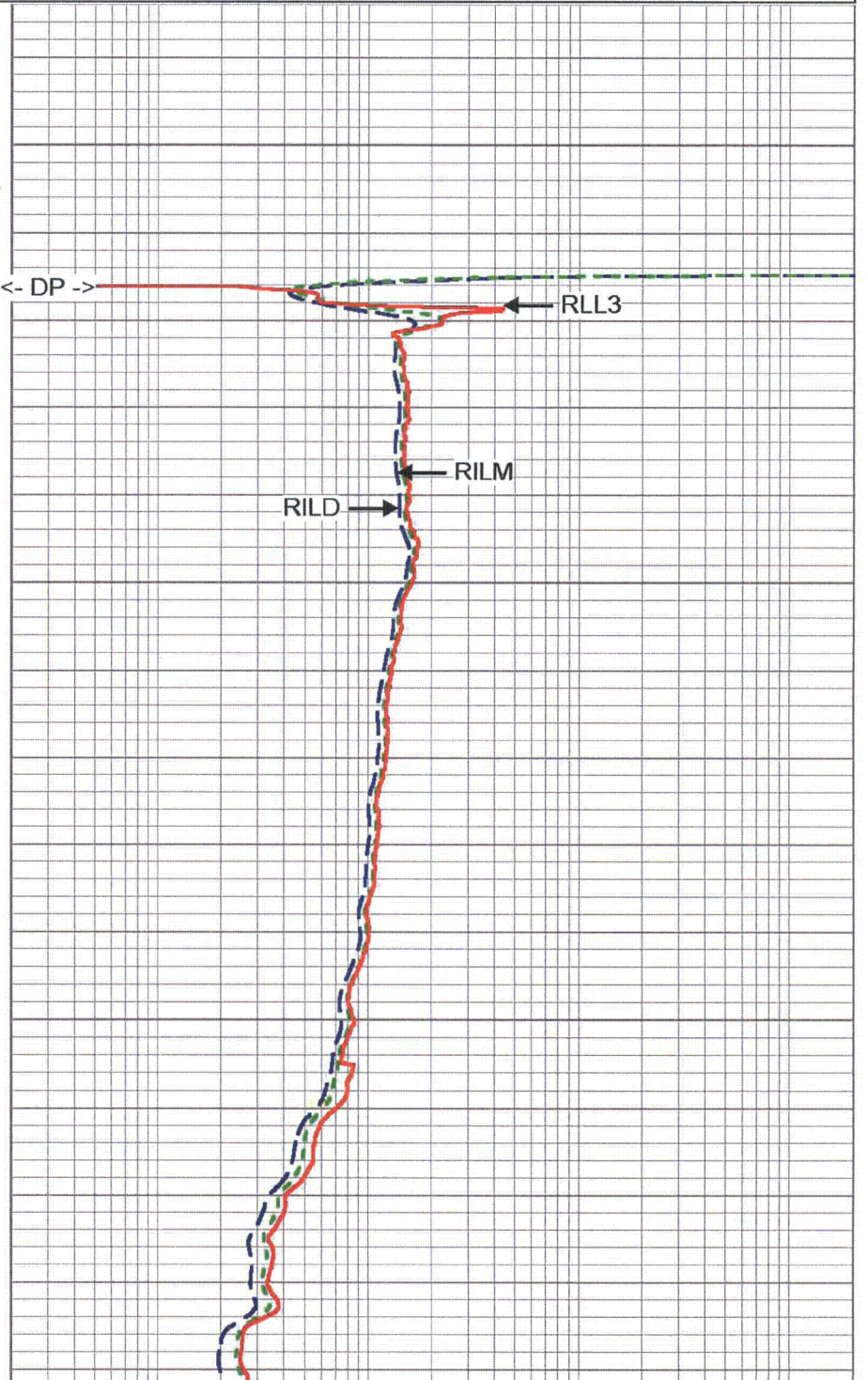
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0.2	RILM (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000



<- CSG ->

<- DP ->

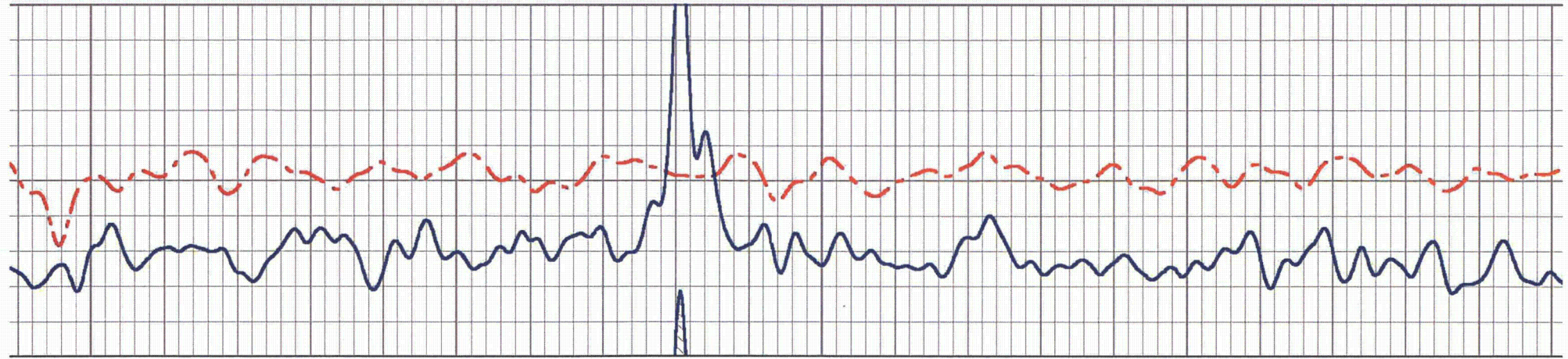
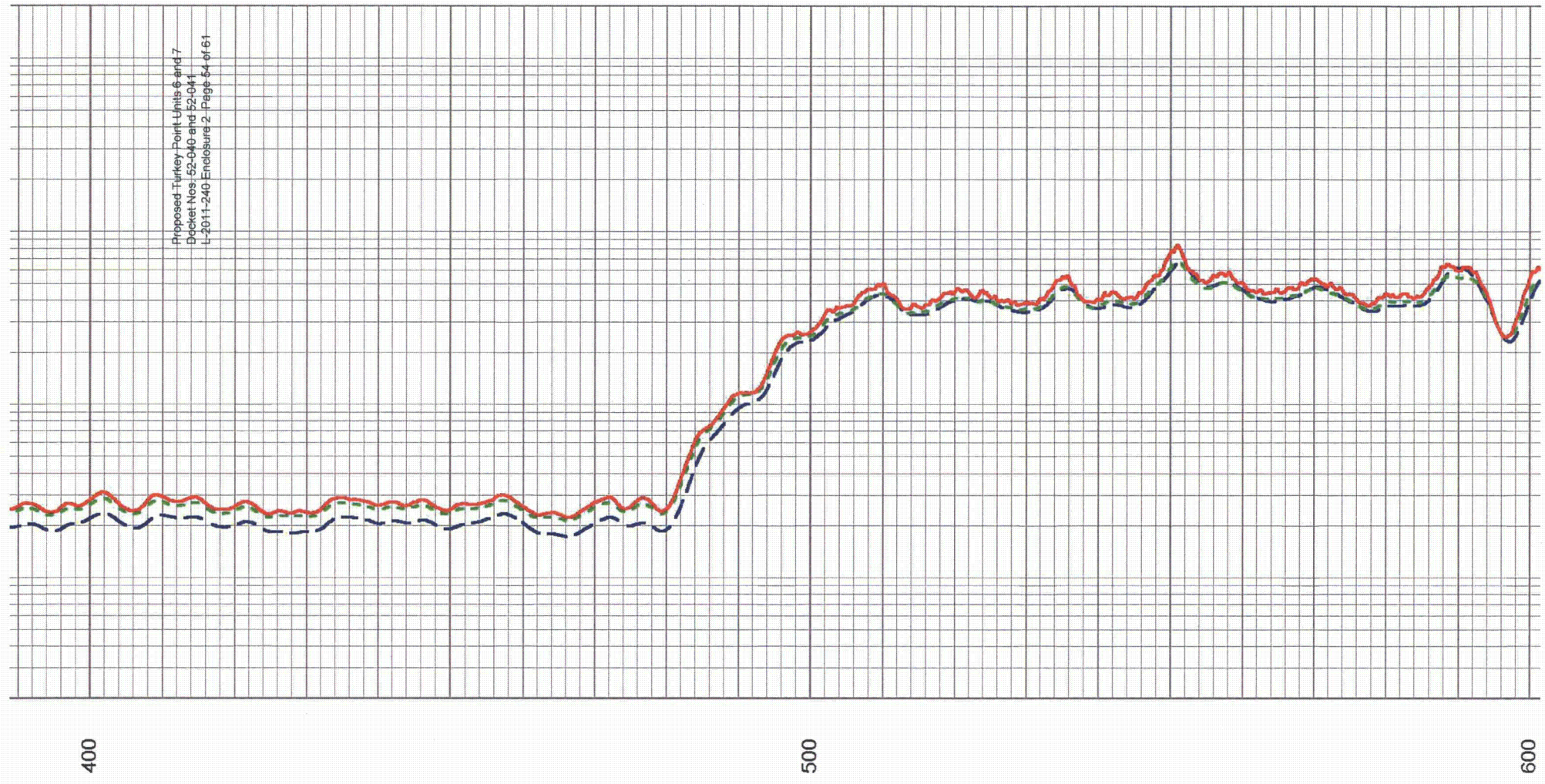
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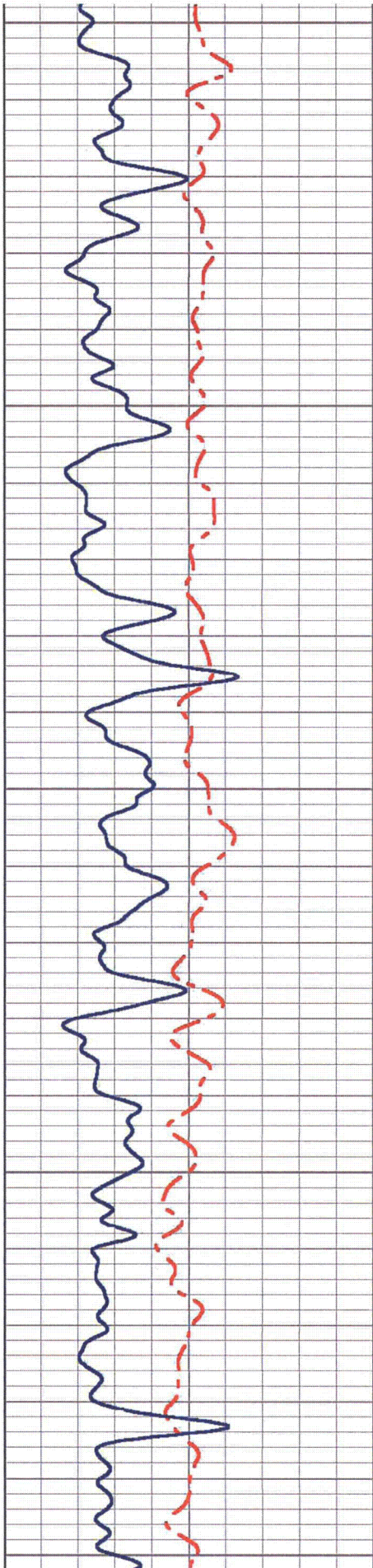


RLL3

RILM

RILD

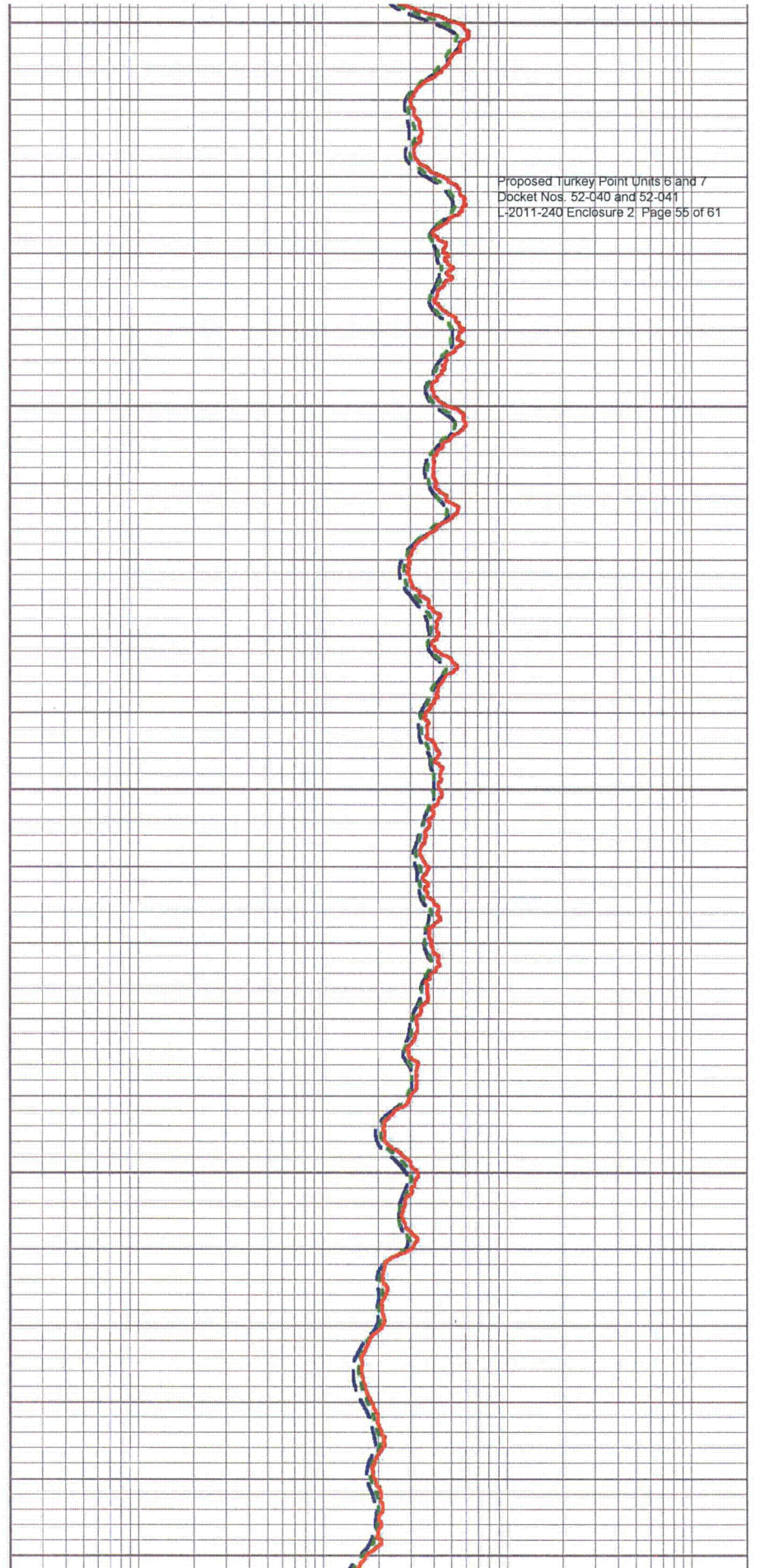




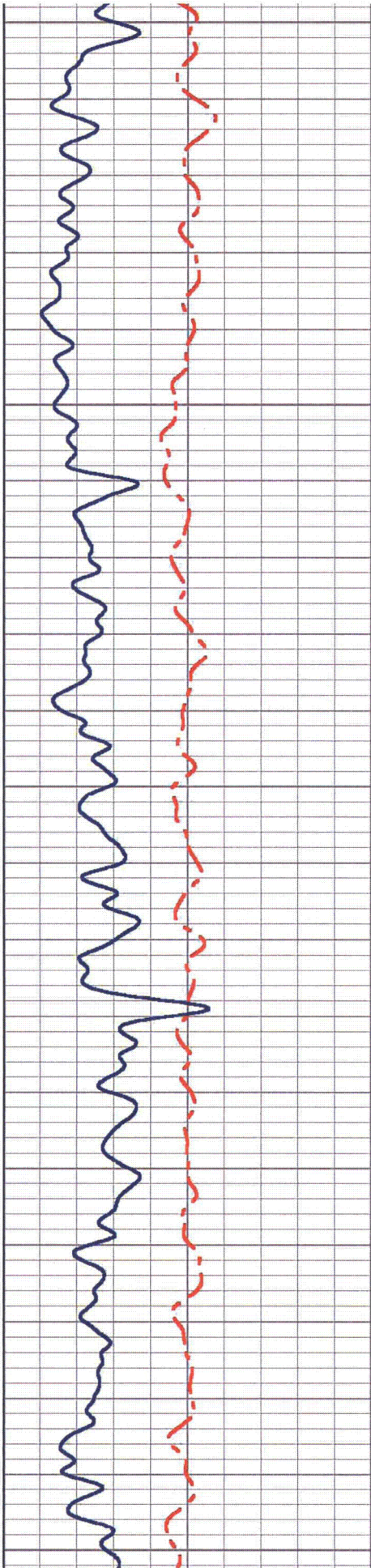
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700

800



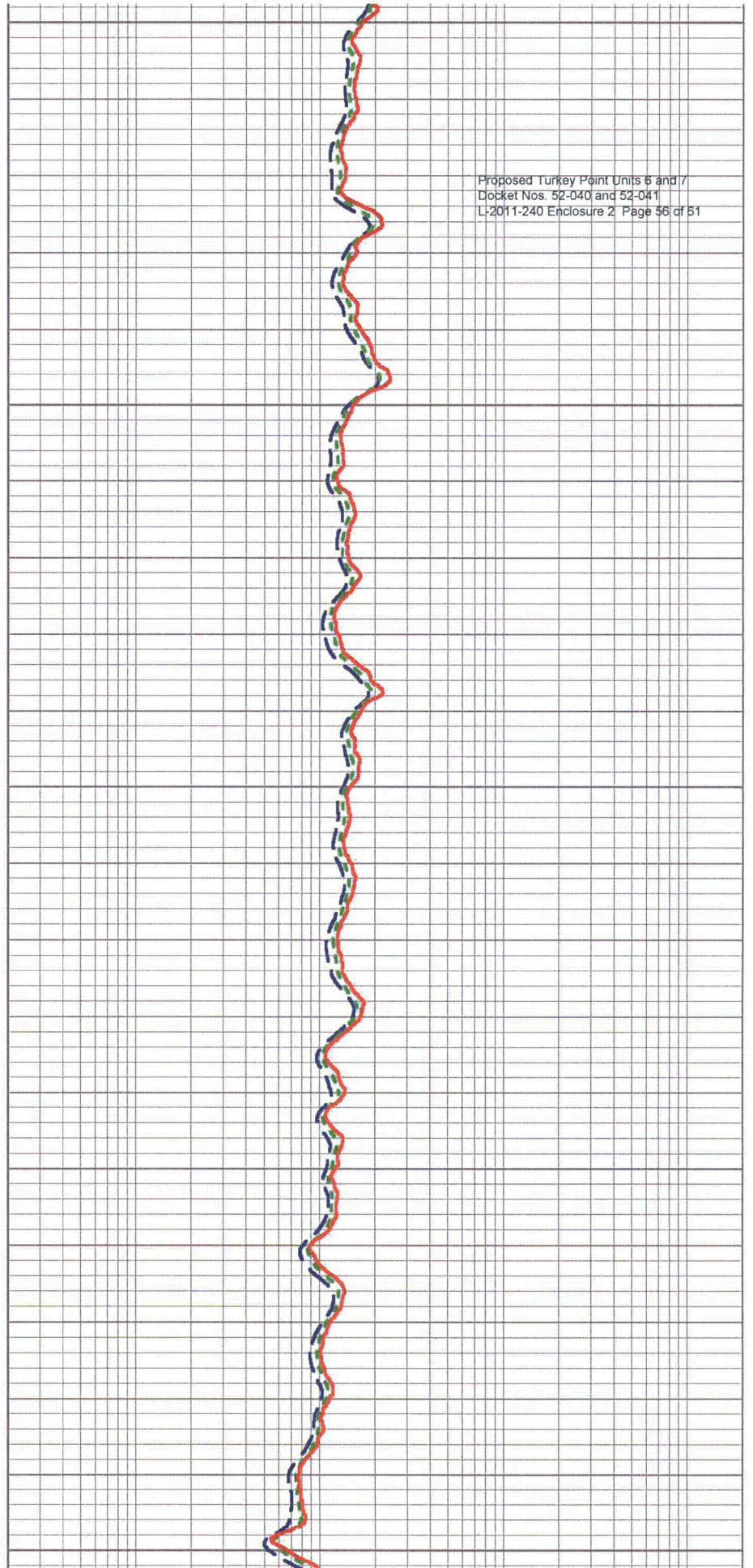
Proposed Turkey Point Units 6 and 7
Docket Nos. 52-040 and 52-041
L-2011-240 Enclosure 2 Page 55 of 61



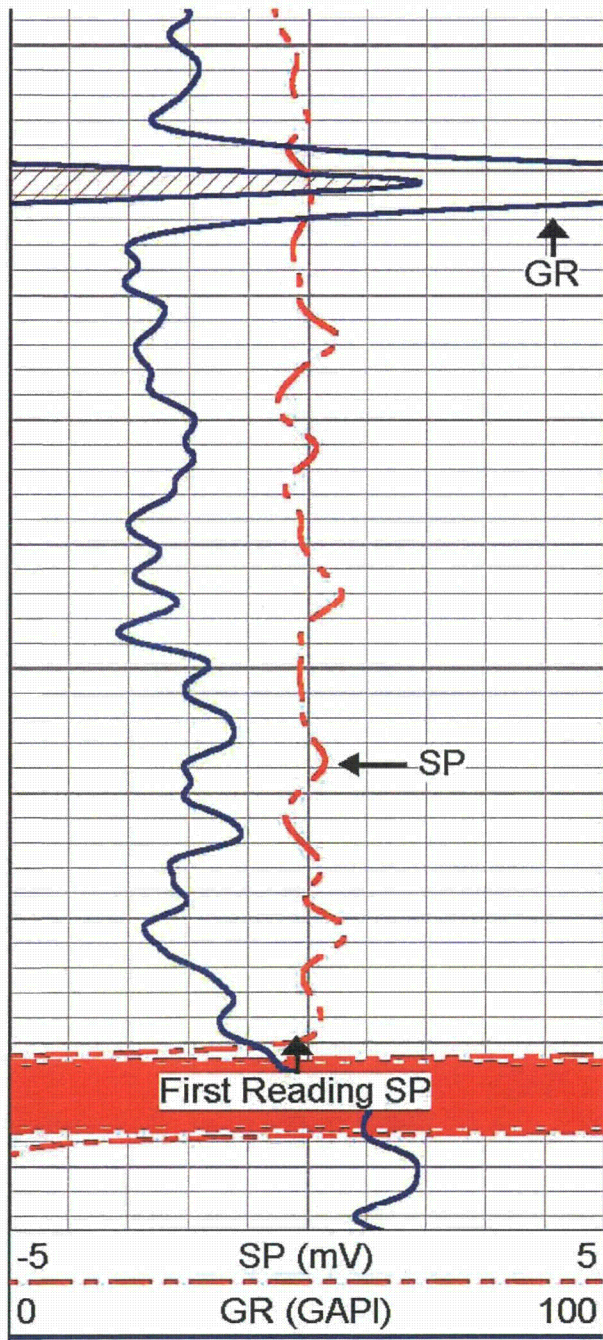
800

900

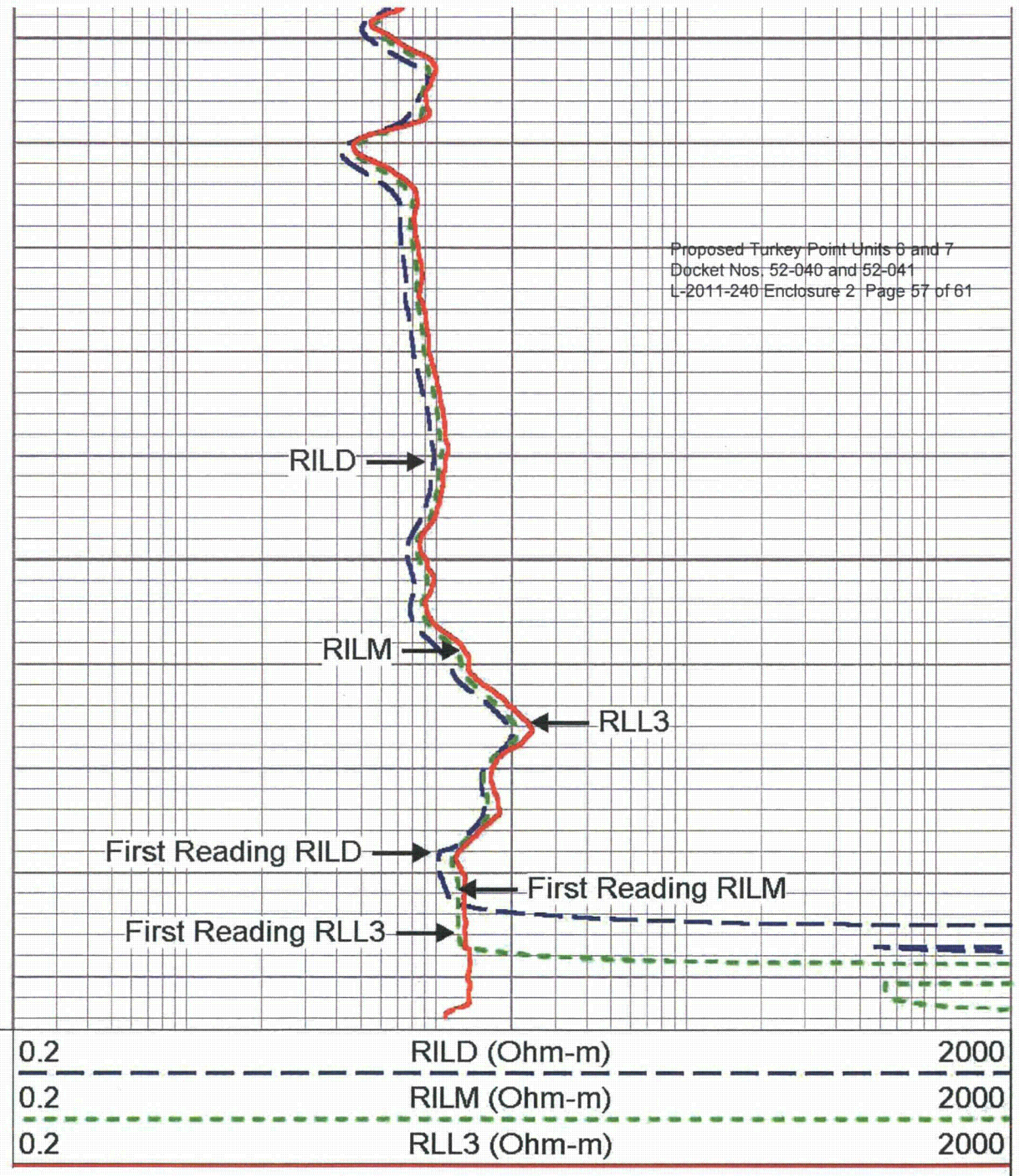
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Proposed Turkey Point Units 6 and 7
Docket Nos. 52-040 and 52-041
L:2011-240 Enclosure 2 Page 56 of 51



1000



Proposed Turkey Point Units 6 and 7
 Docket Nos: 52-040 and 52-041
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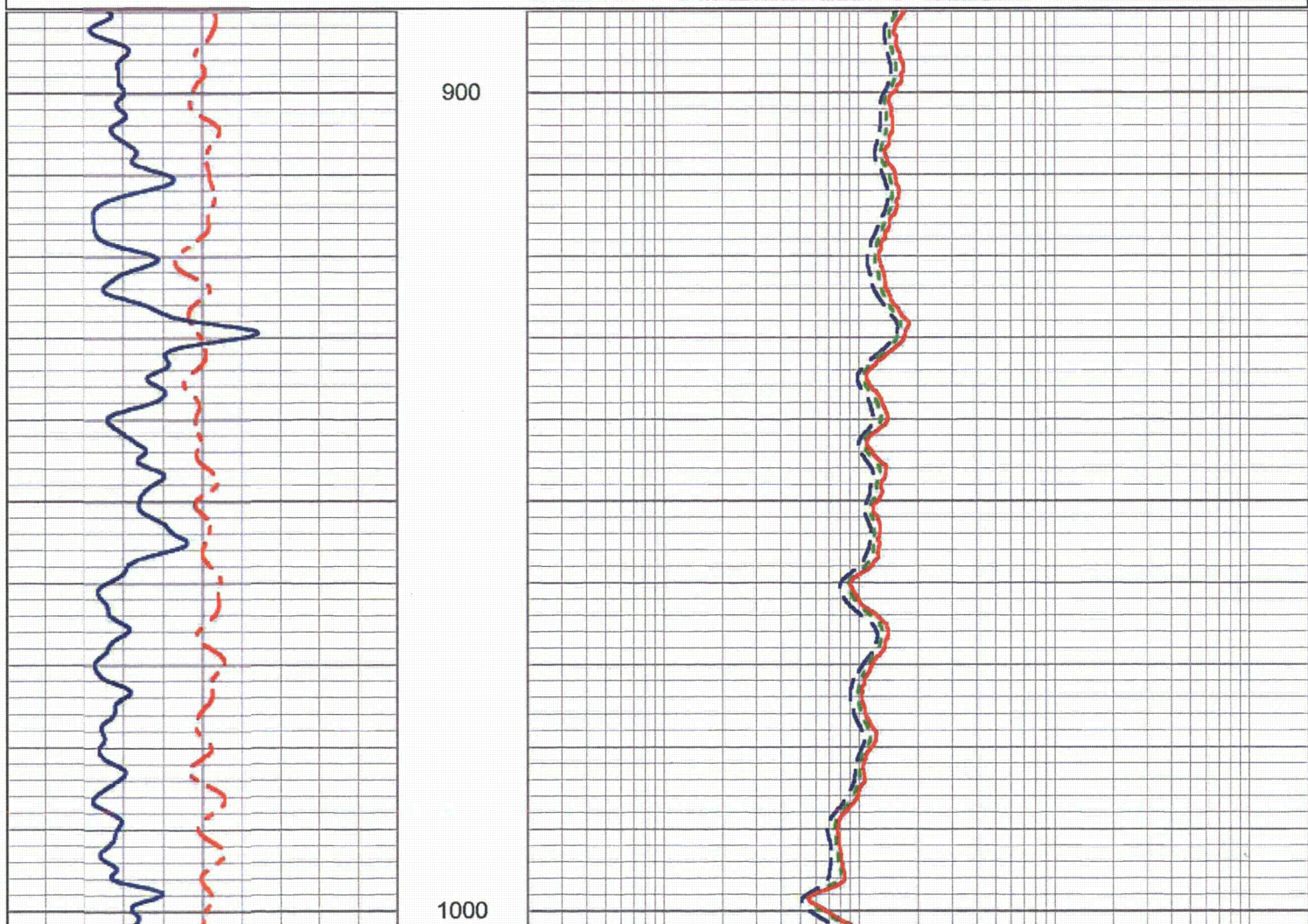
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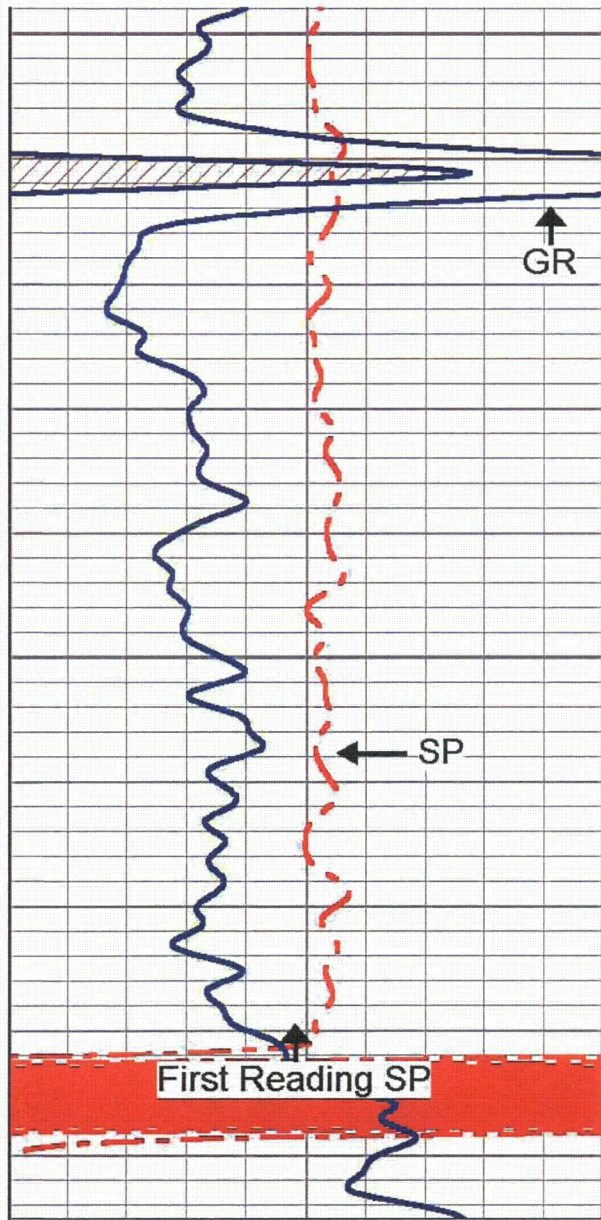
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Proposed Turkey Point Units 6 and 7
 Docket Nos. 52-040 and 52-041
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-5	SP (mV)	5
0	GR (GAPI)	100

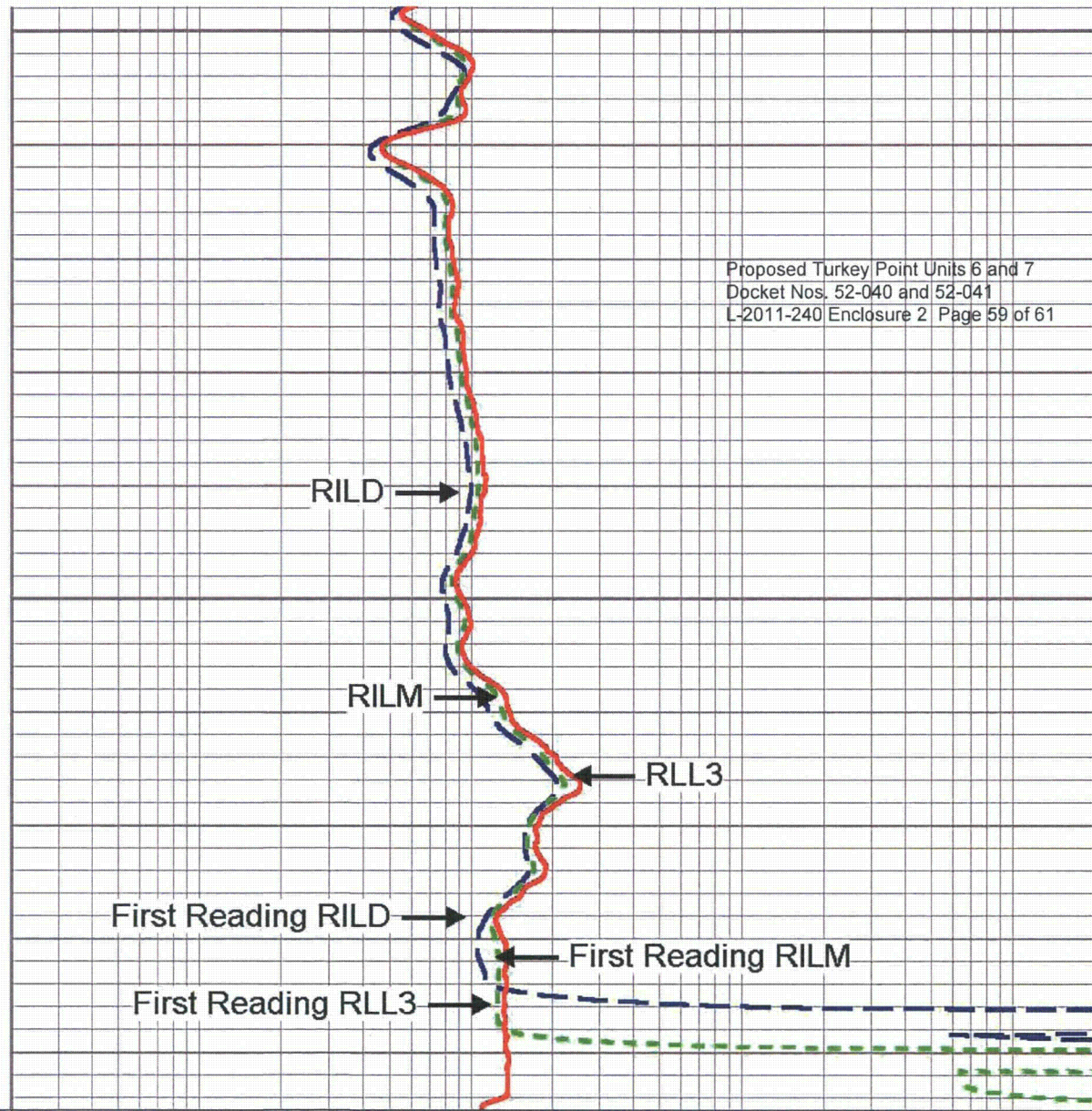
0.2	RILD (Ohm-m)	2000
0.2	RILM (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000





1000

Proposed Turkey Point Units 6 and 7
 Docket Nos. 52-040 and 52-041
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-5 5
 SP (mV)

0 100
 GR (GAPI)

0.2 2000
 RILD (Ohm-m)

0.2 2000
 RILM (Ohm-m)

0.2 2000
 RLL3 (Ohm-m)

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

Proposed Turkey Point Units 6 and 7
Docket Nos. 52-040 and 52-041
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Loop:	Readings			References			Results	
	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		Zero	Cal		m	b
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

Internal:	Readings			References			Results	
	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	-2.978

After Survey Verification

Internal:	Readings			Targets			Results	
	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

CILD 10.60 ft
SP 10.60 ft



DIL-R (5390)
345.00 lb 4.00 in OD 20.90 ft

CILM 6.80 ft



RL3 1.70 ft



Dataset: run3/pass8
Total Length: 20.90 ft
Total Weight: 345.00 lb
O.D. 4.00 in

Proposed Turkey Point Units 6 and 7
Docket Nos. 52-040 and 52-041
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Enclosure 3

Florida Power & Light Company Turkey Point Units 6 & 7
Exploratory Well Project; Permit #0293962-001-UC
Weekly Construction Summary #6 dated June 17, 2011

WEEKLY CONSTRUCTION SUMMARY



McNabb Hydrogeologic Consulting, Inc.

601 Heritage Drive, Suite 110
Jupiter, Florida 33458
Phone: 561-891-0763
Fax: 561-623-5469

June 17, 2011

MHCDEP-11-0256

Mr. Joseph May, P.G.
Florida Department of Environmental Protection
400 N. Congress Ave, Suite 200
West Palm Beach, FL 33401

**RE: Florida Power & Light Company Turkey Point Units 6 & 7 Exploratory Well
Project; Permit #0293962-001-UC
Weekly Construction Summary #6**

Dear Mr. May:

This is the sixth weekly construction summary for the above referenced project. The reporting period for this weekly construction summary began at 7:00 AM, Thursday, June 9, 2011 and ended at 7:00 AM, Thursday, June 16, 2011. Consultant and drilling contractor daily reports were prepared for this reporting period. Copies of the consultant and drilling contractor daily construction logs are attached.

During the previous reporting period, the drilling contractor continued conditioning the borehole in preparation for geophysical logging. Upon completion of conditioning the pilot hole, the geophysical logging subcontractor performed caliper, gamma-ray, dual-induction, and spontaneous-potential geophysical logs on the pilot hole. Based on the geophysical log and the lithologic data, a 44-inch diameter casing setting depth of 1,090 feet bpl was selected. The drilling contractor then began to ream the pilot hole using a 52 ½-inch diameter drill reaming bit. The interval from the base of the 54-inch diameter casing to 437 feet bpl was reamed during the previous reporting period.

During this reporting period, the drilling contractor continued reaming the pilot hole using a 52 ½-inch diameter drill reaming bit. The interval from 437 feet bpl to 902 feet bpl was reamed during this reporting period. Deviation surveys were performed on the reamed hole at 90 foot intervals. A deviation survey summary sheet is attached.

There were no coring, packer testing, exploratory well development, casing installations or cementing activities. Salt or other materials were not used to suppress well flow and there were no construction related issues during the reporting period.

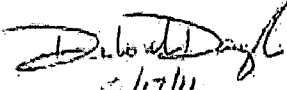
During the next reporting period, it is anticipated that the drilling contractor will continue reaming the pilot hole and perform geophysical logging. Setting of the 44-inch diameter casing will follow the geophysical logging.

In addition, sampling of the pad monitor wells began on April 21, 2011 and has been taking place on a weekly basis since the initial sampling. The pad monitor wells were most recently sampled on June 16, 2011. The most recent set of pad monitoring well sample results available is for samples collected on June 9, 2011. Sampling of the pad monitor wells around EW-1 will continue until drilling and testing of EW-1 has been completed. Copies of the pad monitor wells data summary sheets are attached.

Should you have any questions regarding the above weekly construction summary, please contact David McNabb at (561) 891-0763.

Sincerely,

McNabb Hydrogeologic Consulting, Inc.



Deborah Daigle, P.G.
ASRus, LLC

Attachments: Consultant Daily Construction Logs
Drilling Contractor Daily Construction Logs
Pad Monitor Well Summary Sheets
Deviation Survey Summary Sheet

Cc: George Heuler/FDEP-Tallahassee
Steve Anderson/SFWMD
Matthew Raffenberg/FPL
David Holtz/HCE

Joe Haberfeld/FDEP-Tallahassee
Ron Reese/USGS
David Paul/FGS



McNabb Hydrogeologic Consulting, Inc.



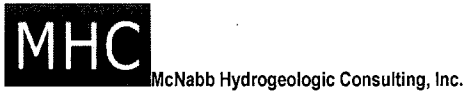
Daily Construction Log

Date: June 9, 2011
Project: FPL Turkey Point EW
Contractor: Layne Christensen Company
Starting Depth: 437 feet bpl
Weather Day: Mostly Sunny, Warm
Weather Night: Cloudy, Warm
Activity: Reaming

FDEP UIC Permit #: 0293962-001-UC
Well No.: EW-1
Bit Diameter: 52 1/2-inch
Ending Depth: 519 feet bpl
Recorded By: Deborah Daigle/Sally Durall

CONSTRUCTION ACTIVITIES

- 0700 The drilling contractor is reaming the pilot hole at a depth of 437 feet below pad level (bpl).
- 0830 Reaming the pilot hole at a depth of 442 feet bpl.
- 1030 Reaming the pilot hole at a depth of 450 feet bpl.
- 1130 Florida Spectrum Environmental Services, Inc. is on site to sample the pad monitor wells (PMWs) located around the EW-1 containment pad.
- 1300 Reaming the pilot hole at a depth of 462 feet bpl.
- 1400 Reaming the pilot hole at a depth of 467 feet bpl.
- 1530 Reaming the pilot hole at a depth of 476 feet bpl.
- 1700 Reaming the pilot hole at a depth of 483 feet bpl.
- 1800 The kelly is down at a depth of 484 feet bpl and the drilling contractor is circulating the borehole clean.
- 1935 The drilling contractor disconnects the drill pipe and trips the survey tool inside the drill pipe to 450 feet bpl.
- 1955 The deviation survey is complete and the drilling contractor trips the survey tool out of the drill pipe. The deviation survey result is 0.2 degrees from vertical.
- 2010 The drilling contractor makes a drill pipe connection and resumes drilling the pilot hole from a depth of 484 feet bpl.
- 2145 Reaming the pilot hole at a depth of 488 feet bpl.
- 2330 Reaming the pilot hole at a depth of 491 feet bpl.
- 0045 Reaming the pilot hole at a depth of 495 feet bpl.
- 0150 Reaming the pilot hole at a depth of 497 feet bpl.
- 0240 Reaming the pilot hole at a depth of 500 feet bpl.
- 0400 Reaming the pilot hole at a depth of 505 feet bpl.
- 0510 Reaming the pilot hole at a depth of 510 feet bpl.
- 0600 Reaming the pilot hole at a depth of 515 feet bpl.
- 0700 Reaming the pilot hole at a depth of 519 feet bpl.



Daily Construction Log

Date: June 10, 2011
Project: FPL Turkey Point EW
Contractor: Layne Christensen Company
Starting Depth: 519 feet bpl
Weather Day: Mostly Sun, Windy, Warm
Weather Night: Clear, Windy, Warm
Activity: Reaming

FDEP UIC Permit #: 0293962-001-UC
Well No.: EW-1
Bit Diameter: 52 1/2-inch
Ending Depth: 598 feet bpl
Recorded By: Eric Meyer/Sally Durall

CONSTRUCTION ACTIVITIES

- 0700 The drilling contractor is reaming the pilot hole at a depth of 519 feet below pad level (bpl).
- 0830 Reaming the pilot hole at a depth of 527 feet bpl.
- 0900 Reaming the pilot hole at a depth of 530 feet bpl.
- 1000 Reaming the pilot hole at a depth of 535 feet bpl.
- 1130 Reaming the pilot hole at a depth of 542 feet bpl.
- 1200 Reaming the pilot hole at a depth of 546 feet bpl.
- 1330 Reaming the pilot hole at a depth of 553 feet bpl.
- 1500 Reaming the pilot hole at a depth of 559 feet bpl.
- 1600 Reaming the pilot hole at a depth of 564 feet bpl.
- 1700 Reaming the pilot hole at a depth of 568 feet bpl.
- 1830 Reaming the pilot hole at a depth of 573 feet bpl.
- 1845 The top-head is down at depth of 574 feet bpl. The drilling contractor is circulating the borehole to clean.
- 1945 The drilling contractor disconnects the drill pipe and lowers the survey tool inside the drill pipe to 540 feet bpl.
- 2000 The deviation survey is complete and the drilling contractor removes the survey tool from the drill pipe. The deviation survey result is 0.3 degrees from vertical.
- 2010 The drilling contractor makes a drill pipe connection and resumes drilling the pilot hole from a depth of 574 feet bpl.
- 2115 Reaming the pilot hole at a depth of 577 feet bpl.
- 2230 Reaming the pilot hole at a depth of 583 feet bpl.
- 2330 Reaming the pilot hole at a depth of 585 feet bpl.
- 0040 Reaming the pilot hole at a depth of 588 feet bpl.
- 0200 Reaming the pilot hole at a depth of 591 feet bpl.
- 0315 Reaming the pilot hole at a depth of 594 feet bpl.
- 0430 Reaming the pilot hole at a depth of 597 feet bpl.
- 0535 Reaming the pilot hole at a depth of 598 feet bpl.
- 0700 Reaming the pilot hole at a depth of 598 feet bpl; circulating to condition the drilling mud.



McNabb Hydrogeologic Consulting, Inc.



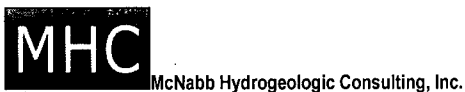
Daily Construction Log

Date: June 11, 2011
Project: FPL Turkey Point EW
Contractor: Layne Christensen Company
Starting Depth: 598 feet bpl
Weather Day: Smoke, Windy, Warm
Weather Night: Cloudy, Lt. Rain, Warm
Activity: Reaming

FDEP UIC Permit #: 0293962-001-UC
Well No.: EW-1
Bit Diameter: 52 ½-inch
Ending Depth: 621 feet bpl
Recorded By: Eric Meyer/Sally Durall

CONSTRUCTION ACTIVITIES

- 0700 The drilling contractor is reaming the pilot hole at a depth of 598 feet below pad level (bpl); circulating to condition the drilling mud.
- 0800 The drilling contractor is reaming the pilot hole at a depth of 600 feet bpl
- 1000 The drilling contractor is reaming the pilot hole at a depth of 603 feet bpl.
- 1100 The drilling contractor is reaming the pilot hole at a depth of 605 feet bpl.
- 1200 The drilling contractor is reaming the pilot hole at a depth of 607 feet bpl.
- 1400 The drilling contractor is reaming the pilot hole at a depth of 611 feet bpl.
- 1500 The drilling contractor is reaming the pilot hole at a depth of 612 feet bpl.
- 1600 The drilling contractor is reaming the pilot hole at a depth of 614 feet bpl.
- 1730 The drilling contractor is reaming the pilot hole at a depth of 616 feet bpl.
- 1800 The drilling contractor is reaming the pilot hole at a depth of 617 feet bpl.
- 1905 The drilling contractor has reamed the pilot hole to a depth of 618 feet bpl and is currently circulating the borehole clean. The drilling contractor plans to perform a wiper trip on the borehole from 618 feet bpl to the base of the 54-inch diameter casing (255 feet bpl).
- 2010 The drilling contractor begins performing a wiper trip to clean the borehole.
- 2300 The drill bit is inside the 54-inch diameter casing and the drilling contractor is circulating.
- 2335 The drilling contractor begins to trip the bottom-hole assembly (BHA) and the drill pipe back in the borehole.
- 0045 The drilling contractor has tripped back in to near the base of the borehole (618 feet bpl) and is circulating the borehole clean.
- 0145 The drilling contractor resumes reaming the pilot hole from 618 feet bpl.
- 0245 The drilling contractor is reaming the pilot hole at 619 feet bpl.
- 0415 The drilling contractor is reaming the pilot hole at 620 feet bpl.
- 0515 The drilling contractor is reaming the pilot hole at 621 feet bpl.
- 0600 The drilling contractor is reaming the pilot hole at 621 feet bpl and circulating to clean the drilling mud.
- 0700 The drilling contractor is reaming the pilot hole at 621 feet bpl.



Daily Construction Log

Date: June 12, 2011
Project: FPL Turkey Point EW
Contractor: Layne Christensen Company
Starting Depth: 621 feet bpl
Weather Day: Cloudy, Warm, Lt. Rain
Weather Night: Cloudy, Warm, Lt. Rain
Activity: Reaming

FDEP UIC Permit #: 0293962-001-UC
Well No.: EW-1
Bit Diameter: 52 ½-inch
Ending Depth: 675 feet bpl
Recorded By: Eric Meyer/Sally Durall

CONSTRUCTION ACTIVITIES

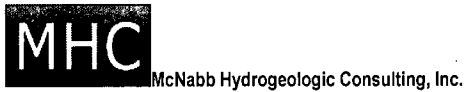
- 0700 The drilling contractor is reaming the pilot hole at a depth of 621 feet below pad level (bpl); circulating to condition the drilling mud.
- 0800 The drilling contractor is reaming the pilot hole at a depth of 623 feet bpl.
- 0900 The drilling contractor is reaming the pilot hole at a depth of 626 feet bpl; all 4 linear shakers on the mud pumping/cleaning system are in operation and producing rock cuttings; the mud level in the tank is approximately 5 feet above pad level.
- 1015 The drilling contractor is reaming the pilot hole at a depth of 629 feet bpl.
- 1100 The drilling contractor is reaming the pilot hole at a depth of 632 feet bpl.
- 1200 The drilling contractor is reaming the pilot hole at a depth of 635 feet bpl.
- 1315 The drilling contractor is reaming the pilot hole at a depth of 638 feet bpl.
- 1500 The drilling contractor is reaming the pilot hole at a depth of 643 feet bpl.
- 1600 The drilling contractor is reaming the pilot hole at a depth of 646 feet bpl.
- 1700 The drilling contractor is reaming the pilot hole at a depth of 649 feet bpl. The mud tank level is about 5 ½ feet above pad level; cuttings steady from the four linear shakers.
- 1810 The drilling contractor is reaming the pilot hole at a depth of 653 feet bpl.
- 1900 The drilling contractor is reaming the pilot hole at a depth of 654 feet bpl.
- 1955 The drilling contractor is reaming the pilot hole at a depth of 657 feet bpl.
- 2110 The drilling contractor is reaming the pilot hole at a depth of 660 feet bpl.
- 2215 The drilling contractor is reaming the pilot hole at a depth of 661 feet bpl.
- 2350 The kelly is down at a depth of 664 feet bpl and the drilling contractor is circulating the borehole clean.
- 0105 The drilling contractor disconnects the drill pipe and trips the survey tool inside the drill pipe to 630 feet bpl.
- 0125 The deviation survey is complete and the drilling contractor trips the survey tool out of the drill pipe. The deviation survey result is 0.5 degrees from vertical.
- 0135 The drilling contractor makes a drill pipe connection and resumes drilling the pilot hole from a depth of 664 feet bpl.
- 0250 The drilling contractor is reaming the pilot hole at a depth of 666 feet bpl.



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- 0430 The drilling contractor is reaming the pilot hole at a depth of 671 feet bpl.
- 0530 The drilling contractor is reaming the pilot hole at a depth of 674 feet bpl.
- 0600 The drilling contractor is reaming the pilot hole at a depth of 674 feet bpl.
- 0700 The drilling contractor is reaming the pilot hole at a depth of 675 feet bpl.



Daily Construction Log

Date: June 13, 2011
Project: FPL Turkey Point EW
Contractor: Layne Christensen Company
Starting Depth: 675 feet bpl
Weather Day: Mostly Sun, Warm
Weather Night: Partly Cloudy, Humid
Activity: Reaming

FDEP UIC Permit #: 0293962-001-UC
Well No.: EW-1
Bit Diameter: 52 1/2-inch
Ending Depth: 749 feet bpl
Recorded By: Eric Meyer/Sally Durall

CONSTRUCTION ACTIVITIES

- 0700 The drilling contractor is reaming the pilot hole at a depth of 675 feet below pad level (bpl).
- 0935 The drilling contractor is reaming the pilot hole at a depth of 681 feet bpl.
- 1130 The drilling contractor is reaming the pilot hole at a depth of 685 feet bpl.
- 1230 The drilling contractor is reaming the pilot hole at a depth of 689 feet bpl.
- 1330 The drilling contractor is reaming the pilot hole at a depth of 693 feet bpl.
- 1500 The drilling contractor is reaming the pilot hole at a depth of 696 feet bpl.
- 1730 The drilling contractor is reaming the pilot hole at a depth of 703 feet bpl.
- 1840 The drilling contractor is reaming the pilot hole at a depth of 706 feet bpl.
- 1940 The drilling contractor is reaming the pilot hole at a depth of 708 feet bpl.
- 2055 The drilling contractor is reaming the pilot hole at a depth of 713 feet bpl.
- 2230 The drilling contractor is reaming the pilot hole at a depth of 721 feet bpl.
- 2330 The drilling contractor is reaming the pilot hole at a depth of 724 feet bpl.
- 0050 The drilling contractor is reaming the pilot hole at a depth of 728 feet bpl.
- 0215 The drilling contractor is reaming the pilot hole at a depth of 735 feet bpl.
- 0330 The drilling contractor is reaming the pilot hole at a depth of 738 feet bpl.
- 0450 The drilling contractor is reaming the pilot hole at a depth of 743 feet bpl.
- 0600 The drilling contractor is reaming the pilot hole at a depth of 745 feet bpl.
- 0700 The drilling contractor is reaming the pilot hole at a depth of 749 feet bpl.



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Daily Construction Log

Date: June 14, 2011
Project: FPL Turkey Point EW
Contractor: Layne Christensen Company
Starting Depth: 749 feet bpl
Weather Day: Mostly Sun, Warm
Weather Night: Clear, Humid, Lt. Wind
Activity: Reaming

FDEP UIC Permit #: 0293962-001-UC
Well No.: EW-1
Bit Diameter: 52 1/2-inch
Ending Depth: 815 feet bpl
Recorded By: Deborah Daigle/Sally Durall

CONSTRUCTION ACTIVITIES

- 0700 The drilling contractor is reaming the pilot hole at a depth of 749 feet below pad level (bpl).
- 0815 Reaming the pilot hole at a depth of 753 feet bpl. The drilling contractor is circulating the borehole to clean.
- 0842 The drilling contractor disconnects the drill pipe and lowers the survey tool inside the drill pipe to 720 feet bpl.
- 0850 The deviation survey is complete and the drilling contractor removes the survey tool from the drill pipe. The deviation survey result is 0.4 degrees from vertical.
- 0900 The drilling contractor makes a drill pipe connection and resumes drilling the pilot hole from a depth of 753 feet bpl.
- 1000 Reaming the pilot hole at a depth of 755 feet bpl.
- 1130 Reaming the pilot hole at a depth of 761 feet bpl.
- 1300 Reaming the pilot hole at a depth of 764 feet bpl.
- 1430 Reaming the pilot hole at a depth of 767 feet bpl.
- 1600 Reaming the pilot hole at a depth of 769 feet bpl.
- 1730 Reaming the pilot hole at a depth of 773 feet bpl.
- 1900 Reaming the pilot hole at a depth of 774 feet bpl.
- 2030 Reaming the pilot hole at a depth of 777 feet bpl.
- 2215 Reaming the pilot hole at a depth of 780 feet bpl.
- 2345 Reaming the pilot hole at a depth of 784 feet bpl.
- 0100 Reaming the pilot hole at a depth of 791 feet bpl.
- 0220 Reaming the pilot hole at a depth of 798 feet bpl.
- 0320 Reaming the pilot hole at a depth of 803 feet bpl.
- 0450 Reaming the pilot hole at a depth of 809 feet bpl.
- 0600 Reaming the pilot hole at a depth of 811 feet bpl.
- 0700 Reaming the pilot hole at a depth of 815 feet bpl.



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Daily Construction Log

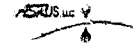
Date: June 15, 2011
Project: FPL Turkey Point EW
Contractor: Layne Christensen Company
Starting Depth: 815 feet bpl
Weather Day: Mostly Sun, Warm
Weather Night: Clear, Lt. Wind
Activity: Reaming

FDEP UIC Permit #: 0293962-001-UC
Well No.: EW-1
Bit Diameter: 52 ½-inch
Ending Depth: 902 feet bpl
Recorded By: Deborah Daigle/Sally Durall

CONSTRUCTION ACTIVITIES

- 0700 The drilling contractor is reaming the pilot hole at a depth of 815 feet below pad level (bpl).
- 0830 Reaming the pilot hole at a depth of 821 feet bpl.
- 0930 Reaming the pilot hole at a depth of 825 feet bpl.
- 1100 Reaming the pilot hole at a depth of 831 feet bpl.
- 1230 Reaming the pilot hole at a depth of 837 feet bpl.
- 1330 Reaming the pilot hole at a depth of 841 feet bpl.
- 1430 Reaming the pilot hole at a depth of 843 feet bpl. The drilling contractor is circulating the borehole to clean.
- 1514 The drilling contractor disconnects the drill pipe and lowers the survey tool inside the drill pipe to 810 feet bpl.
- 1530 The deviation survey is complete and the drilling contractor removes the survey tool from the drill pipe. The deviation survey result is 0.4 degrees from vertical.
- 1540 The drilling contractor makes a drill pipe connection and resumes drilling the pilot hole from a depth of 843 feet bpl.
- 1700 Reaming the pilot hole at a depth of 849 feet bpl.
- 1800 Reaming the pilot hole at a depth of 852 feet bpl.
- 1900 Reaming the pilot hole at a depth of 854 feet bpl.
- 2040 Reaming the pilot hole at a depth of 859 feet bpl.
- 2155 Reaming the pilot hole at a depth of 865 feet bpl.
- 2300 Reaming the pilot hole at a depth of 870 feet bpl.
- 0020 Reaming the pilot hole at a depth of 876 feet bpl.
- 0135 Reaming the pilot hole at a depth of 882 feet bpl.
- 0255 Reaming the pilot hole at a depth of 888 feet bpl.
- 0400 Reaming the pilot hole at a depth of 892 feet bpl.
- 0515 Reaming the pilot hole at a depth of 897 feet bpl.
- 0700 Reaming the pilot hole at a depth of 902 feet bpl.

Project: Florida Power & Light Company Miami-Dade County, Florida Exploratory Well EW-1								 
EW-1 Pad Monitoring Well Water Quality Data Southeast Pad Monitoring Well (SE-EW PMW)								
Date	Time (hours)	Depth to Water (ft. btoc)	Water Elevation (ft. NAVD 88)	Specific Conductance (umhos/cm)	Chloride (mg/L)	TDS (mg/L)	Temperature (degrees C)	Remarks
4/21/2011	1311	10.10	-1.51	81,600	30,200	57,800	29.9	Background Sampling
4/29/2011	1349	10.40	-1.81	86,700	33,100	55,000	30.4	
5/5/2011	1008	11.10	-2.51	83,000	29,500	54,700	29.9	
5/11/2011	1228	10.65	-2.06	78,200	30,100	52,600	30.1	
5/19/2011	1039	10.12	-1.53	75,200	30,000	51,100	29.8	
5/26/2011	1235	10.47	-1.88	73,890	31,200	53,800	29.9	
6/2/2011	1056	10.50	-1.91	74,200	29,400	57,400	29.6	
6/9/2011	1210	10.32	-1.73	72,200	32,100	51,000	29.6	
ft. btoc: feet below top of casing TOC: Top of Casing ft. NAVD 88: North American Vertical Datum of 1988 umhos/cm: micromhos per centimeter mg/L: milligrams per liter C: Celsius Note: TOC elevation is: 8.59 feet NAVD 88								



Project: Florida Power & Light Company
Miami-Dade County, Florida
Exploratory Well EW-1

**EW-1 Pad Monitoring Well Water Quality Data
Northeast Pad Monitoring Well
(NE-EW PMW)**

Date	Time (hours)	Depth to Water (ft. btoc)	Water Elevation (ft. NAVD 88)	Specific Conductance (umhos/cm)	Chloride (mg/L)	TDS (mg/L)	Temperature (degrees C)	Remarks
4/21/2011	1108	10.49	-1.61	78,700	32,200	57,000	29.8	Background Sampling
4/29/2011	1157	10.68	-1.80	80,400	29,900	53,800	30.4	
5/5/2011	1157	11.40	-2.52	81,400	27,500	52,350	31.2	
5/11/2011	1309	11.00	-2.12	76,800	31,600	51,200	29.7	
5/19/2011	0958	10.48	-1.60	72,600	35,600	51,200	29.5	
5/26/2011	1050	10.76	-1.88	71,360	29,500	52,900	29.7	
6/2/2011	1134	10.78	-1.90	71,700	29,000	55,700	29.6	
6/9/2011	1128	10.61	-1.73	69,700	32,300	50,650	29.3	

ft. btoc: feet below top of casing
TOC: Top of Casing
ft. NAVD 88: North American Vertical Datum of 1988
umhos/cm: micromhos per centimeter
mg/L: milligrams per liter
C: Celsius
Note: TOC elevation is: 8.88 feet NAVD 88



Project: Florida Power & Light Company
Miami-Dade County, Florida
Exploratory Well EW-1



**EW-1 Pad Monitoring Well Water Quality Data
Northwest Pad Monitoring Well
(NW-EW PMW)**

Date	Time (hours)	Depth to Water (ft. btoc)	Water Elevation (ft. NAVD 88)	Specific Conductance (umhos/cm)	Chloride (mg/L)	TDS (mg/L)	Temperature (degrees C)	Remarks
4/21/2011	1221	10.50	-1.66	84,300	33,500	59,900	30.8	Background Sampling
4/29/2011	1120	10.65	-1.81	86,300	33,700	56,400	30.0	
5/5/2011	1051	11.40	-2.56	87,400	31,300	57,650	31.1	
5/11/2011	1034	12.40	-3.56	79,100	33,500	55,650	30.4	
5/19/2011	1113	13.90	-5.06	80,000	36,000	53,700	30.4	
5/26/2011	1125	10.73	-1.89	75,130	32,300	55,450	30.4	
6/2/2011	1215	10.75	-1.91	75,900	30,700	59,500	30.3	
6/9/2011	1248	10.60	-1.76	73,100	32,200	51,950	29.9	

ft. btoc: feet below top of casing
TOC: Top of Casing
ft. NAVD 88: North American Vertical Datum of 1988
umhos/cm: micromhos per centimeter
mg/L: milligrams per liter
C: Celsius
Note: TOC elevation is: 8.84 feet NAVD 88

Project:		Florida Power & Light Company Miami-Dade County, Florida Exploratory Well EW-1						 	
EW-1 Pad Monitoring Well Water Quality Data Southwest Pad Monitoring Well (SW-EW PMW)									
Date	Time (hours)	Depth to Water (ft. btoc)	Water Elevation (ft. NAVD 88)	Specific Conductance (umhos/cm)	Chloride (mg/L)	TDS (mg/L)	Temperature (degrees C)	Remarks	
4/21/2011	1414	10.50	-1.62	72,500	26,400	51,500	30.6	Background Sampling	
4/29/2011	1025	10.60	-1.72	77,400	28,300	51,600	29.8		
5/5/2011	0930	11.85	-2.97	75,200	29,000	49,400	28.7		
5/11/2011	1124	16.40	-7.52	78,100	28,300	51,050	31.6		
5/19/2011	1202	15.95	-7.07	73,100	29,700	48,450	32.6		
5/26/2011	1155	11.20	-2.32	66,630	27,800	48,350	29.4		
6/2/2011	1035	11.25	-2.37	68,500	26,000	52,600	29.4		
6/9/2011	1319	11.05	-2.17	65,400	26,300	44,150	29.5		
ft. btoc: feet below top of casing TOC: Top of Casing ft. NAVD 88: North American Vertical Datum of 1988 umhos/cm: micromhos per centimeter mg/L: milligrams per liter C: Celsius Note: TOC elevation is: 8.88 feet NAVD 88									

