

Proposed Turkey Point Units 6 and 7  
Docket Nos. 52-040 and 52-041  
L-2012-273 Enclosure 1 Page 1 of 48

**Enclosure 1**

Florida Power & Light Company Turkey Point Units 6 & 7  
Exploratory Well Project; Permit #0293962-001-UC  
Weekly Construction Summary #58 dated June 15, 2012

## WEEKLY CONSTRUCTION SUMMARY



**McNabb Hydrogeologic Consulting, Inc.**

601 Heritage Drive, Suite 110  
Jupiter, Florida 33458  
Phone: 561-891-0763  
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June 15, 2012

MHCDEP-12-0235

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 #58**

Dear Mr. May:

This is the fifty-eighth weekly construction summary for the above referenced project. The reporting period for this weekly construction summary began at 7:00 AM, Thursday, June 7, 2012 and ended at 7:00 AM, Thursday, June 14, 2012. 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 backfilled the pilot hole over the interval from 1,854 to 1,905 feet below pad level (bpl) with gravel, backplugged the interval from 1,504 to 1,854 feet bpl with 12% bentonite blend cement, backfilled the interval from 1,443 to 1,504 feet bpl with gravel and then pumped a cement stage from a depth of 1,443 feet bpl. They were waiting on the cement to set in preparation for tagging the top of cement at the end of the reporting period. There were no activities at EW-1 during the previous reporting period.

During this reporting period the drilling contractor completed backplugging the DZMW-1 pilot hole to a depth of 1,153 feet bpl. The drilling contractor then used a 22-inch diameter drill bit to ream the interval from 1,105 to 1,453 feet bpl. They then attempted to perform caliper and gamma ray logging of the reamed hole, but found that kill material had fallen to the base of the hole. The drilling contractor then cleaned out the borehole, performed caliper and gamma ray logging and began installing the 16-inch diameter casing to a depth of approximately 1,450 feet bpl. Installation of the 16-inch diameter casing was not completed prior to the end of the reporting period. A copy of the 16-inch diameter casing installation summary sheet for the portion of casing installed during this reporting period is attached. Deviation surveys were performed on the reamed hole at 60-foot intervals. A copy of the deviation survey summary sheet, pilot hole backplug summary sheet and the geophysical logs performed during this reporting period is attached.

At EW-1, the compression of the Fiberglass Reinforced Pipe (RFP) injection tubing was released. Subsequent pressure monitoring of the EW-1 annulus indicated that the source of the pressure loss in the annulus has been eliminated.

There was no packer testing, well development or construction related issues at EW-1 and DZMW-1 during this reporting period.

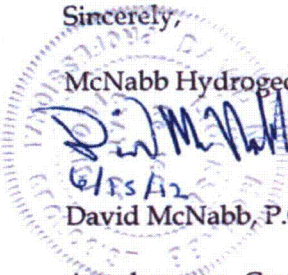
During the next reporting period, it is anticipated that the drilling contractor will complete installing and cementing the 16-inch diameter casing to a depth of approximately 1,450 feet bpl and begin drilling a hole below the base of the 16-inch diameter casing in preparation for installing the final casing of DZMW-1. At EW-1 it is anticipated that the annulus will undergo preliminary and final pressure testing.

In addition, sampling of the pad monitor wells around EW-1 and DZMW-1 began on April 21, 2011 and March 20, 2012, respectively, and has been taking place on a weekly basis since the initial samplings. The EW-1 pad monitor wells were most recently sampled on June 14, 2012. The DZMW-1 pad monitor wells were most recently sampled on June 15, 2012. The most recent set of EW-1 pad monitoring well sample results available are for samples collected on June 8, 2012. The most recent set of DZMW-1 pad monitoring well sample results available are for samples collected on June 8, 2012. Copies of the EW-1 and DZMW-1 pad monitor well water quality 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.



David McNabb, P.G.

Attachments: Consultant Daily Construction Log  
Layne Christensen Company-Drilling Shift Report  
EW-1 Pad Monitor Well Water Quality Data Summary Sheets  
DZMW-1 Pad Monitor Well Water Quality Data Summary Sheets  
DZMW-1 Pilot Hole Backplug Summary Sheet  
DZMW-1 Deviation Survey Summary Sheet  
DZMW-1 16-Inch Diameter Casing Installation Summary Sheet  
DZMW-1 Daily Kill Material Log  
DZMW-1 Geophysical Logs

Cc: George Heuler/FDEP-Tallahassee  
Emily Richardson/SFWMD  
Matthew Raffenberg/FPL  
David Holtz/HCE

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





McNabb Hydrogeologic Consulting, Inc.



## Daily Construction Log

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**Date:** June 7, 2012  
**Project:** FPL Turkey Point EW  
**Contractor:** Layne Christensen Company  
**Starting Depth:** NA  
**Weather Day:** Cloudy, Hot  
**Weather Night:** NA  
**Activity:** Backplugging DZMW-1 Pilot Hole, Setting Up at EW-1

**FDEP UIC Permit #:** 0293962-001-UC  
**Well No.:** DZMW-1 and EW-1  
**Bit Diameter:** NA  
**Ending Depth:** NA  
**Recorded By:** Sally Durall

### CONSTRUCTION ACTIVITIES

- 0700 The drilling contractor continues backplugging the DZMW-1 pilot hole with cement and gravel (within the monitor zones). Cement stage 4 was completed during the night shift which theoretically will bring the top of cement to 1,107 feet below pad level (bpl). The drilling contractor is currently preparing to tag the top of the cement using the 2 <sup>3</sup>/<sub>8</sub>-inch diameter tremie pipe.
- 0710 The top of cement stage 4 is tagged at the depth of 1,241 feet bpl. The drilling contractor is performing general site maintenance while waiting for dry cement delivery.
- 0900 The drilling contractor continues performing general site maintenance.
- 1100 The drilling contractor continues performing general site maintenance.
- 1230 The drilling contractor verifies the top of cement at the depth of 1,241 feet bpl, and prepares for stage 5 cementing. The cement plan is to pump 20 barrels of cement.
- 1310 Begin pumping stage 5 cement.
- 1320 Complete stage 5 cementing using 20 barrels of cement.
- 1400 The drilling contractor will be performing site maintenance while waiting on the cement to set up.
- 1800 The drilling contractor tags the top of stage 5 cement at the depth of 1,153 feet bpl. The backplugging of the pilot hole is complete.
- 0705 At EW-1, preparation is setting up for pumping a lost circulation material pill into the annulus at the base of the positive-seal packer. The drilling contractor begins to pump water into frac tank #1 which will be used to mix a 1% Baracor solution. The Baracor solution will be pumped in the annulus between the 24-inch diameter casing and the fiberglass reinforced pipe (FRP) injection tubing for the plan to seal off the packer which will be performed next week pending the Florida Department of Environmental Protection (FDEP) approval. There will be 5,500 gallons of potable water pumped to the frac tank. The beginning flowmeter reading is 475,760 gallons.
- 0745 The end flowmeter reading is 481,266 gallons. A total of 5,506 gallons of water was pumped. The additional 6 gallons of water makes up for the 40 feet of 2-inch diameter hose that leads from the flowmeter to the frac tank that does not flow to the tank.
- 0810 The drilling contractor begins to rig up for reaming the pilot hole from the base of the 24-inch diameter casing (1,102 feet bpl) to the depth of 1,450 feet bpl. The drilling contractor plans to begin reaming by tomorrow morning.



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## Daily Construction Log

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**Date:** June 8, 2012

**Project:** FPL Turkey Point EW

**Contractor:** Layne Christensen Company

**Starting Depth:** NA

**Weather Day:** NA

**Weather Night:** NA

**Activity:** Reaming

**FDEP UIC Permit #:** 0293962-001-UC

**Well No.:** DZMW-1

**Bit Diameter:** NA

**Ending Depth:** NA

**Recorded By:** David McNabb

### CONSTRUCTION ACTIVITIES

The drilling contractor completed backplugging the DZMW-1 pilot hole with cement and gravel (within the monitor zones) yesterday. They then killed the well and tripped in the 22-inch diameter reaming bit in preparation to begin reaming the backplugged pilot hole. Today the drilling contractor reamed the interval from 1,105 to 1,227 feet below pad level (bpl) and performed a deviation survey at a depth of 1,160 feet bpl with a result of 0.1 degrees from vertical.



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## Daily Construction Log

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**Date:** June 9, 2012

**Project:** FPL Turkey Point EW

**Contractor:** Layne Christensen Company

**Starting Depth:** 1,227 feet bpl

**Weather Day:** NA

**Weather Night:** NA

**Activity:** Reaming

**FDEP UIC Permit #:** 0293962-001-UC

**Well No.:** DZMW-1

**Bit Diameter:** 22-inch

**Ending Depth:** 1,363 feet bpl

**Recorded By:** David McNabb

### CONSTRUCTION ACTIVITIES

The drilling contractor reamed the backplugged DZMW-1 pilot hole over the interval from 1,105 to 1,227 feet below pad level (bpl) yesterday. Today the drilling contractor reamed the interval from 1,227 to 1,363 feet bpl and performed deviation surveys at depths of 1,220 and 1,280 feet bpl with results of 0.1 and 0.2 degrees from vertical, respectively.



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## Daily Construction Log

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**Date:** June 10, 2012

**Project:** FPL Turkey Point EW

**Contractor:** Layne Christensen Company

**Starting Depth:** 1,363 feet bpl

**Weather Day:** NA

**Weather Night:** NA

**Activity:** Reaming

**FDEP UIC Permit #:** 0293962-001-UC

**Well No.:** DZMW-1

**Bit Diameter:** 22-inch

**Ending Depth:** 1,453 feet bpl

**Recorded By:** David McNabb

### CONSTRUCTION ACTIVITIES

The drilling contractor reamed the backplugged DZMW-1 pilot hole over the interval from 1,227 to 1,363 feet below pad level (bpl) yesterday. Today the drilling contractor reamed the interval from 1,363 to 1,453 feet bpl and performed a deviation survey at a depth of 1,340 feet bpl with a result of 0.2 degrees from vertical. After completing reaming the hole to 1,453 feet bpl, the well was killed and the drill bit was tripped out of hole.





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## Daily Construction Log

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**Date:** June 11, 2012  
**Project:** FPL Turkey Point EW  
**Contractor:** Layne Christensen Company  
**Starting Depth:** 1,453 feet bpl  
**Weather Day:** Cloudy, Hot  
**Weather Night:** NA  
**Activity:** Geophysical Logging

**FDEP UIC Permit #:** 0293962-001-UC  
**Well No.:** DZMW-1  
**Bit Diameter:** NA  
**Ending Depth:** 1,453 feet bpl  
**Recorded By:** Marty Clasen

### CONSTRUCTION ACTIVITIES

- 0600 The drilling contractor completed reaming the DZMW-1 pilot hole with a 22-inch diameter bit to a depth of 1,453 feet below pad level (bpl) in preparation for geophysical logging and installation of the 16-inch diameter steel casing yesterday. The drilling contractor recently released the compression on the EW-1 Fiberglass Reinforced Pipe (FRP) injection tubing. It appears that the source of the pressure loss in the annulus of EW-1 has been eliminated. This will be confirmed via annular pressure monitoring during this week.
- 0615 The geophysical logging truck is onsite. A caliper and gamma ray log will be run on the reamed hole.
- 0700 The drilling contractor is mixing up a barite kill to have on hand during the casing installation in the event the water level gets near surface.
- 0900 The drilling contractor continues to prepare the barite kill.
- 0930 The drilling contractor pumped one foot of barite to kill the well and began to trip out the remaining drill pipe, collars, and drill bit from the hole.
- 1030 The drilling contractor continues to trip out the drill pipe collars, and drill bit from the hole.
- 1230 The drilling contractor has completed tripping out the drill pipe, collars, and drill bit.
- 1250 The drilling contractor ran the caliper/gamma ray tool from the bottom of the hole to 1,350 feet bpl. The bottom of the hole is filled with barite from approximately 1,450 feet to 1,400 feet bpl. This will need to be cleaned out and the hole will need to be re-logged prior to installing the 16-inch diameter casing.
- 1345 The drilling contractor will trip back into the hole with the 22-inch diameter bit to clean out the bottom of the hole.
- 1500 The drilling contractor is tripping into the hole with the 22-inch diameter bit.
- 1700 The drilling contractor continues to trip in the hole with the 22-inch diameter bit.



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## Daily Construction Log

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**Date:** June 12, 2012  
**Project:** FPL Turkey Point EW  
**Contractor:** Layne Christensen Company  
**Starting Depth:** 1,453 feet bpl  
**Weather Day:** Cloudy, Hot  
**Weather Night:** NA  
**Activity:** Cleaning out Borehole at DZMW-1, Annular Pressure Monitoring at EW-1

**FDEP UIC Permit #:** 0293962-001-UC  
**Well No.:** DZMW-1, EW-1  
**Bit Diameter:** 22-inch  
**Ending Depth:** 1,453 feet bpl  
**Recorded By:** Marty Clasen

### CONSTRUCTION ACTIVITIES

- 0600 Last night, the drilling contractor completed tripping into the hole at DZMW-1 with a 22-inch diameter bit to a depth of 1,453 feet below pad level (bpl) in preparation for geophysical logging and installation of the 16-inch diameter steel casing. The drilling contractor is currently cleaning out the barite at the bottom of the hole.
- 0700 The drilling contractor continues to clean out the barite in the bottom of the hole.
- 0830 The drilling contractor continues to clean out the barite in the bottom of the hole.
- 1030 The drilling contractor continues to clean out the barite in the bottom of the hole. The drilling contractor is preparing to monitor annular pressure at EW-1.
- 1140 The drilling contractor continues to clean out the barite in the bottom of the hole of DZMW-1.
- 1206 The drilling contractor continues to clean out the barite in the bottom of the hole of DZMW-1.
- 1238 The annular pressure in well EW-1 was bled down to zero psi. All of the annular fluid was contained in a 55-gallon drum. Approximately 54 gallons were bled off of the annulus.
- 1243 The drilling contractor begins pressuring up the annulus of well EW-1.
- 1305 The drilling contractor pressured up the annulus of well EW-1 to 155.0 psi and began monitoring pressure.
- 1405 After one hour, the annular pressure was measured as 152.0 psi, a 3 psi loss over one hour.
- 1505 After two hours, the annular pressure was measured as 151.0 psi, a 4 psi loss over two hours and a 1 psi loss over the second hour of monitoring.
- 1700 The drilling contractor continues to clean out the barite in the bottom of the DZMW-1 hole.
- 1800 The drilling contractor continues to clean out the barite in the bottom of the hole.





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## Daily Construction Log

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**Date:** June 13, 2012  
**Project:** FPL Turkey Point EW  
**Contractor:** Layne Christensen Company  
**Starting Depth:** 1,453 feet bpl  
**Weather Day:** Cloudy, Hot  
**Weather Night:** Partly Cloudy  
**Activity:** Geophysical Logging, Casing Installation DZMW-1

**FDEP UIC Permit #:** 0293962-001-UC  
**Well No.:** DZMW-1  
**Bit Diameter:** NA  
**Ending Depth:** 1,453 feet bpl  
**Recorded By:** Marty Clasen/Sally Durall

### CONSTRUCTION ACTIVITIES

- 0600 Last night, the drilling contractor completed cleaning out the barite at the bottom of the hole in the DZMW-1. The drilling contractor is currently tripping the drill bit out of the hole.
- 0800 The drilling contractor continues tripping out of hole with the 22-inch bit.
- 0910 The geophysical logger arrived onsite.
- 0950 The drilling contractor is preparing to mix a kill solution of barite.
- 1050 The drilling contractor begins performing caliper and gamma ray logging.
- 1130 The drilling contractor completed the caliper and gamma ray log and the hole is open to bit size to 1,450 feet bpl. The drilling contractor will prepare to begin installation of the 16-inch diameter steel casing.
- 1330 The drilling contractor pumped five feet of barite kill solution into the well.
- 1400 The drilling contractor begins installation of the 16-inch diameter steel casing at DZMW-1. The casing will be installed to a depth of 1,450 feet BPL. The welders are Ellis Combs, Eddie McCarron, and Dave Langford. The welder certifications for the welders were previously submitted by the drilling contractor and accepted. A total of 37 casing joints will be installed. Centralizers were welded five feet from the bottom of the casing.
- 1445 The drilling contractor has begun welding the first casing joint to the second casing joint.
- 1515 Centralizers were welded 50 feet from the bottom of the casing.
- 1530 The drilling contractor has installed the second casing joint.
- 1605 The drilling contractor has installed the third casing joint. Centralizers were welded 100 feet from the bottom of the casing.
- 1640 The drilling contractor has installed the fourth casing joint.
- 1705 The drilling contractor has installed the fifth casing joint. Centralizers were welded 200 feet from the bottom of the casing.
- 1740 The drilling contractor has installed the sixth casing joint.
- 1815 The drilling contractor has installed the seventh casing joint.
- 1845 The drilling contractor has installed the eighth casing joint.
- 1920 The drilling contractor has installed the ninth casing joint.
- 1955 The drilling contractor has installed the tenth casing joint.
- 2050 The drilling contractor has installed the eleventh casing joint.



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- 2135 The drilling contractor has installed the twelfth casing joint. Centralizers were welded 400 feet from the bottom of the casing.
- 2210 The drilling contractor has installed the thirteenth casing joint.
- 2245 The drilling contractor has installed the fourteenth casing joint.
- 2315 The drilling contractor has installed the fifteenth casing joint.
- 2350 The drilling contractor has installed the sixteenth casing joint. Centralizers were welded 600 feet from the bottom of the casing.
- 0020 The drilling contractor has installed the seventeenth casing joint.
- 0050 The drilling contractor has installed the eighteenth casing joint.
- 0120 The drilling contractor has installed the nineteenth casing joint.
- 0150 The drilling contractor has installed the twentieth casing joint.
- 0230 The drilling contractor has installed the twenty-first casing joint. Centralizers were welded 800 feet from the bottom of the casing.
- 0305 The drilling contractor has installed the twenty-second casing joint.
- 0340 The drilling contractor has installed the twenty-third casing joint.
- 0410 The drilling contractor has installed the twenty-fourth casing joint.
- 0435 The drilling contractor has installed the twenty-fifth casing joint.
- 0525 The drilling contractor has installed the twenty-sixth casing joint. Centralizers were welded 1,000 feet from the bottom of the casing.
- 0600 The drilling contractor has installed the twenty-seventh casing joint. After each casing joint from joint number five approximately 15 gallons of barite were added to the well. Approximately 330 gallons of barite were added.



## PAYROLL





## LAYNE CHRISTENSEN COMPANY - NON-DRILLING/SERVICE SHIFT REPORT

CLIENT

FPL

Proposed Turkey Point Units 6 and 7

DATE

06-07-2012

JOB #

4771-1405-10000

JOBSITE NAME

MW-1

Docket Nos. 52-040 and 52-041

THUR NIGHT

JOBSITE LOCATION

T.P.

## PERSONNEL EMPLOYED TODAY

Crew Assignment	Employee - Full Name	Per Diem? (X)	Onsite Hours	Offsite Hours	Total Hours
Miller	BOSIT GULOMOV	45	12		12
A.P.	ANDREY POPOV	45	12		12
V.M.	VICTOR MOISEYEV	45	12		12

## MATERIALS USED TODAY

Quantity	Description
	SAFETY MTG!
	T.O.H CEMENT TUBING!
	T.I.H D.P.
	HAND SAFETY! PPE! PINCH POINT
	H.I.R.A! LOADER SAFETY!

## EQUIPMENT DEPLOYED TODAY

Description	Unit #	Status
EDW-200	28605	w/k
1989 MACK	18000	S/B.
Dump TRUCK		
CEMENT UNIT	28145	S/B.
Working	WK	Mobilization
Standby	SB	Demobilization
Down in Shop	DS	Available in Yard
Down on Site	DN	Available on Job

## TIME OF ACTIVITY BY ITEM #

From	To	Circle One	Item #
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	

## DAILY ACCOUNTING OF ACTIVITIES BY ITEM #

Item #	Cost Code	Labor Activity	Hours
1	10000	Short Duration Job	
2	11100	Onsite Mob-Demo	
3	11150	Job Preparation	
4	11200	Safety Meetings	
5	0005	Training - Overhead	
6	0005	Whop - Overhead	
7	0007	Maintenance - Overhead	
8	11250	Training - Job Chargeable	
9	11300	Site Cleanup	
10	14300	Disinfection and Chlorination	
11	15050	Permanent Pump Install Well Head/Pileless	
12	15100	Furnish & Install Pump, Motor, Appurtenances	
13	15150	Furnish & Install Vault	
14	15200	Furnish & Install Discharge Piping	
15	15250	Furnish & Install Well Head Platform/Pad	
16	16050	Build & Treat Equipment Construct/Install Layout Bldg	
17	16100	Install Building	
18	16150	Concrete Work	
19	16200	Install Treatment Equipment	
20	16250	Install Misc. Equipment	
21	16300	Painting	
22	16350	Install Piping	
23	19050	Offsite Activities Mob/Demo	
24	19100	Whop	
25	19150	Administration	
26	19550	Other Activities Standby	
27	19600	Fishing for Lost/Broken Tooling	
28	19650	Change Order Activities	
29	88000	Equipment Repairs	
30	90170	Damages	
31	90200	Job Superintendent	
32	90210	Assistant Job Superintendent	
33	90270	Project Manager	
34	90230	Assistant Project Manager	
35	90240	Job Site Admin Assistant	
36	90250	Project Engineer	
37	90260	Foreman	
		Lunch	
		TOTAL HOURS	

## COMMENTS - EVENTS - CONDITIONS - CHANGES - OTHER INFORMATION

T.O.H CEMENT TUBING! KILL HOLE 3' KILL! T.I.H 22" BIT + 2- STABILIZER AND D.P. SITE CLEAN UP!

6-7-12

Client's Signature

Date

Supervisor's Signature

Date









## Layne CHRISTENSEN COMPANY - NON-DRILLING/SERVICE SHIFT REPORT

CLIENT

FPL

Proposed Turkey Point Units 6 and 7

DATE

6-8-2012

JOB #

11771-1405-10000

JOBSITE NAME

MW-1

Docket Nos. 52-040 and 52-041

FRT NIGHT

JOBSITE LOCATION

T.P.

PERSONNEL EMPLOYED TODAY

EQUIPMENT DEPLOYED TODAY

DAILY ACCOUNTING OF ACTIVITIES BY ITEM #

Crew Assignment	Employee - Full Name	Per Diem? (X)	Onsite Hours	Offsite Hours	Total Hours
DRILLER	BOSIT GULAMOV	45	13		13
M.R.	MICHAEL RAMIREZ	45	12		12
A.P.	ANDREY POPOV	45	13		13
V.M.	VICTOR MOISEYEV	45	13		13

Description	Unit #	Status
EDW-200	28605	W/K
1989 MACIL	18000	S/B
DUMP TRUCK		
CEMENT	28145	S/B
UNIT		
Working	WK	Mobilization
Standby	SB	Demobilization
Down in Shop	DS	Available in Yard
Down on Site	DN	Available on Job

Item #	Cost Code	Labor Activity	Hours
1	10000	Short Duration Job	
2	11100	Onsite Mobilization	
3	11150	Job Preparation	
4	11200	Safety Meetings	
5	0005	Training - Overhead	
6	0006	Shop - Overhead	
7	0007	Maintenance - Overhead	
8	11250	Training - Job Chargeable	
9	11300	Site Cleanup	
10	14300	Disinfection and Chlorination	
11	15050	Permanent Pump Install Well Head/Pitless	
12	15100	Furnish & Install Pump, Motor, Appurtenances	
13	15150	Furnish & Install Vault	
14	15200	Furnish & Install Discharge Piping	
15	15250	Furnish & Install Well Head Platform/Pad	
16	16050	Build & Treat Equipment Construct/Install Layout Dig	
17	16100	Install Duffing	
18	16150	Concrete Work	
19	16200	Install Treatment Equipment	
20	16250	Install Misc. Equipment	
21	16300	Painting	
22	16350	Install Piping	
23	19050	Offsite Activities Mobilization	
24	19100	Shop	
25	19150	Administration	
26	19250	Other Activities Standby	
27	19000	Fighting for Lost/Broken Tooling	
28	19650	Change Order Activities	
29	88000	Equipment Repairs	
30	90170	Damages	
31	90200	Job Superintendent	
32	90210	Assistant Job Superintendent	
33	90220	Project Manager	
34	90230	Assistant Project Manager	
35	90240	Job Site Admin Assistant	
36	90250	Project Engineer	
37	90260	Foreman	
		Lunch	
		TOTAL HOURS	

## MATERIALS USED TODAY

Quantity	Description
	SAFETY MTG!
	H.I.R.A.; PPE; HAND SAFETY;
	PINCH POINT; LOADER SAFETY;
	FALL-SLIP-TRIP;
	Dump truck (6)

## TIME OF ACTIVITY BY ITEM #

From	To	Circle One	Item #
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
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		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	

## COMMENTS - EVENTS - CONDITIONS - CHANGES - OTHER INFORMATION

Drill 22" BIT: FROM 1152' BPL - TO - 1220' BPL HOUSEKEEPING!
RUN SURVE @ .1 MAKE CORRECT: BACK DRILL FROM 1 - 1220' BPL -
TO - 1227' BPL

Layne

6-8-12

Client's Signature

Date

Supervisor's Signature

Date

PAYROLL











**LAYNE CHRISTENSEN COMPANY - NON-DRILLING/SERVICE SHIFT REPORT**

Proposed Turkey Point Units 6 and 7

Docket Nos. 52-040 and 52-041

L-2012-273 Enclosure 1 Page 19 of 48

DATE \_\_\_\_\_

6/10/12

3 Sun Day Sept

198

11771, 1405, 10000

**JOB SITE LOCATION**

DAILY ACCOUNTING OF ACTIVITIES BY ITEM #

**CLIENT**

FPL

**JOB SITE NAME**

mw-1

PERSONNEL EMPLOYED TODAY

EQUIPMENT DEPLOYED TODAY

Crew Assignment	Employee - Full Name	Per Diem? (X)	Onsite Hours	Offsite Hours	Total Hours
Driller	George Hays	45	12		12
SW	John Nieto	45	12		12
PR	Paul Vaughn	45	12		12
OF	Bob Keetham	45	12		12

### MATERIALS USED TODAY

Quantity	Description
	Safety Meeting
(1)	House Keeping
(2)	Rotating Equipment.
	Safety topic.
	Clean work area, slip, trips & falls HTRA, Hand Saws

Description		Unit #	Status
FDW 200			WK.
1989 MAC			S/B
Dump truck			
Cement Unit			S/B
Working	WK	Mobilization	MS
Standby	SB	Demobilization	DM
Down in Shop	DS	Available in Yard	AY
Down on Site	DN	Available on Job	AV

TIME OF ACTIVITY BY ITEM 8

[illegible]

Item #	Cost Code	Labor Activity	Hours
1	10000	Short Duration Job	
2	11100	Onsite Mob/Demob	
3	11150	Job Preparation	
4	11200	Safety Meetings	
5	0005	Training - Overhead	
6	0006	Shop - Overhead	
7	0007	Maintenance - Overhead	
8	11250	Training - Job Chargeable	
9	11300	Site Cleanup	
10	14300	Distillation and Charitation	
11	15050	Permanent Pump Install Well Head/Pile is	
12	15100	Furnish & install Pump, Motor, Appurtenances	
13	15150	Furnish & install Vault	
14	15200	Furnish & install Discharge Piping	
15	15250	Furnish & install Well Head Platform/Pad	
16	16050	Build & Treat Equipment Construct/install Layout Bldg	
17	16100	Install Building	
18	16130	Concrete Work	
19	16200	Install Treatment Equipment	
20	16230	Install Misc Equipment	
21	16300	Painting	
22	16350	Install Piping	
23	19050	Offsite Activities Mob/Demob	
24	19100	Shop	
25	19150	Administration	
26	19558	Other Activities Standby	
27	19500	Fishing for Lost/Broken Tooling	
28	19850	Change Order Activities	
29	88000	Equipment Repairs	
30	90170	Damages	
31	90200	Job Superintendence	
32	90210	Assist Job Superintendence	
33	90270	Project Manager	
34	90230	Assistant Project Manager	
35	90240	Job Site Admin Assistant	
36	90250	Project Engineer	
37	90260	Foreman	
		Lunch	
		<b>TOTAL HOURS</b>	

COMMENTS - EVENTS - CONDITIONS - CHANGES - OTHER INFORMATION

Continue to drill w/ 22" bit from 1363 bpl to 1400 bpl. run Survey ~~1442 bpl~~  
@ 1340 bpl .2 degrees. Make connection continue to drill from 1400 bpl to 1453 bpl  
get ready for casing run gridd line out plates and casing jacks.

**Inventory & Signature**  
DATE: \_\_\_\_\_

 ~~$\frac{a}{15n}$~~ 

## Client & Environment

10

*[Signature]*  
Samsuher's Mitten

4/2

RAYBOL I



**LAYNE CHRISTENSEN COMPANY - NON-DRILLING/SERVICE SHIFT REPORT**





## LAYNE CHRISTENSEN COMPANY - NON-DRILLING/SERVICE SHIFT REPORT

CLIENT FPL Proposed Turkey Point Units 6 and 7 DATE 6/11/12  
 JOBSITE NAME MW1 Docket Nos. 52-040 and 52-041  
 L-2012-273 Enclosure 1 Page 21 of 48

JOB # 11771.1405.10000  
 JOBSITE LOCATION Turkey Point  
 DAILY ACCOUNTING OF ACTIVITIES BY ITEM #

## PERSONNEL EMPLOYED TODAY

Crew Assignment	Employee - Full Name	Per Diem? (X)	Onsite Hours	Offsite Hours	Total Hours
Driller	George Hagg	45	12		12
Driller	Boszt Gulomov	45	8		8
JW	Swan Nieto	45	12		12
PR	Paul Vaughn.	45	12		12
RC	RAY CREEI	45	12		12
RD	RANDY Deye	45	12		12

## EQUIPMENT EMPLOYED TODAY

Description	Unit #	Status
FOW 200	28605	W/K
1989 mac	15000	S/B
Dump truck		
Cement Unit	25145	S/B
Working	WK	Mobilization
Standby	SD	Demobilization
Down in Shop	DS	Available in Yard
Down on Site	DN	Available on Job

## MATERIALS USED TODAY

Quantity	Description
	Safety topics/Meeting
	Using haws to break pipe
	Mixing Kill
	Safety topic
	Slips, trips & falls, Heat
	Stroke, Heat Stress.

## TIME OF ACTIVITY BY ITEM #

From	To	Circle One	Item #
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	

Item #	Cost Code	Labor Activity	Hours
1	10000	Short Duration Job	
2	11100	Onsite Mob Demob	
3	11150	Job Preparation	
4	11200	Safety Meetings	
5	0005	Training - Overhead	
6	0006	Shop - Overhead	
7	0007	Maintenance - Overhead	
8	11250	Training - Job Chargeable	
9	11300	Site Cleanup	
10	14300	Disinfection and Chlorination	
11	15050	Permanent Pump Install Well Head/Pileless	
12	15100	Furnish & Install Pump, Motor, Appurtenances	
13	15150	Furnish & Install Vaul	
14	15200	Furnish & Install Discharge Piping	
15	15250	Furnish & Install Well Head Platform/Pad	
16	16050	Build & Treat Equipment Construct/Install Layout Bldg	
17	16100	Install Building	
18	16150	Concrete Work	
19	16200	Install Treatment Equipment	
20	16250	Install Misc. Equipment	
21	16300	Painting	
22	16350	Install Piping	
23	19050	Offsite Activities Mob/Demob	
24	19100	Shop	
25	19150	Administration	
26	19550	Offsite Activities Standby	
27	19600	Fishing for Lost/Broken Tooling	
28	19650	Change Order Activities	
29	88000	Equipment Repairs	
30	90170	Damages	
31	90200	Job Superintendent	
32	90210	Assistant Job Superintendent	
33	90270	Project Manager	
34	90230	Assistant Project Manager	
35	90240	Jobsite Admin Assistant	
36	90250	Project Engineer	
37	90260	Foreman	
		Lunch	
		TOTAL HOURS	

## COMMENTS - EVENTS - CONDITIONS - CHANGES - OTHER INFORMATION

mix kill bring weight to a 10.1 and viscosity to 67, pump 1 foot down annulus pull caw 2 stabilizers. Log Caliber to match kill in well pull out caliber. Go back in with one stabilizer. Clean up hole.
---

6/11/12  
 Date

Client's Signature

Date

Supervisor's Signature

Date



LAYNE CHRISTENSEN COMPANY - NON-DRILLING/SERVICE SHIFT REPORT





## LAYNE CHRISTENSEN COMPANY - NON-DRILLING/SERVICE SHIFT REPORT

CLIENT FPL  
 JOBSITE NAME MW-1  
 PROPOSED TURKEY POINT UNITS 6 and 7  
 DOCKET NOS. 52-040 and 52-041  
 L-2012-273 Enclosure 1 Page 23 of 48

DATE 6/12/12  
Tuesday Day Shift  
 EQUIPMENT EMPLOYER TODAY

JOB # 11771.1405.10000  
 JOBSITE LOCATION Turkey Point  
 DATE & ACCUMULATED ACTIVITY BY I NAME

Crew Assignment	Employee - Full Name	Per Diem? (X)	Onsite Hours	Offsite Hours	Total Hours
Driller	George Haga	45	12		12
JNO	Juan Nieto	45	12		12
PV	Paul Vaughn	45	12		12
RC	Ray Creel	45	10		10
RD	Randy Daye	45	10		10

## MATERIALS USED TODAY

Date/Day	Description
	Safety meeting
	Slips, trips & falls
	Loader Safety
	Safety topic
	Hydration, Heat Stress, Heat Stroke, Hand Safety, Pinch Points

Description	Unit #	Status
FDW 200	28605	W/K
1989 Mac	18000	S/B
Dump truck		
Cement Unit	28145	S/B

Working	WK	Mobilization	MB
Standby	SB	Demobilization	DM
Down in Shop	DS	Available in Yard	AY
Down on Site	DN	Available on Job	AV

## TIME OF ACTIVITY BY ITEM #

From	To	Clock One	Item #
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	
		AM PM	

Item #	Cost Code	Labor Activity	Hours
1	10000	Short Duration Job	
2	11100	Onsite Mob/Demob	
3	11150	Job Preparation	
4	11200	Safety Meetings	
5	0005	Training - Overhead	
6	0006	Shop - Overhead	
7	0007	Maintenance - Overhead	
8	11250	Training - Job Chargeable	
9	11300	Rite Cleanup	
10	14300	Electrification and Chlorination	
11	15050	Permanent Pump Install Well Head/Pillbox	
12	18100	Furnish & Install Pump, Motor, Appurtenances	
13	15150	Furnish & Install Vault	
14	15200	Furnish & Install Discharge Piping	
15	15250	Furnish & Install Well Head Platform/Pad	
16	16050	Build & Treat Equipment, Construct/Install Layout Ditch	
17	16100	Install Building	
18	16150	Concrete Work	
19	16200	Install Treatment Equipment	
20	16250	Install Misc. Equipment	
21	16300	Painting	
22	16350	Install Piping	
23	19050	Offsite Activities Mob/Demob	
24	19100	Shop	
25	19150	Administration	
26	19550	Other Activities Standby	
27	19600	Filing for Lost/Broken Tooling	
28	20600	Change Order Activities	
29	89000	Equipment Repairs	
30	90170	Damages	
31	90200	Job Superintendent	
32	90210	Assistant Job Superintendent	
33	90270	Project Manager	
34	90230	Assistant Project Manager	
35	90240	Job Site Admin Assistant	
36	90250	Project Engineer	
37	90260	Foreman	
		Lunch	
TOTAL HOURS			

## COMMENTS - EVENTS - CONDITIONS - CHANGES - OTHER INFORMATION

Serge Air Compressor to clean hole. Repair road from one end of location to the other. Conduct preliminary pressure test on injection well. Organize and straighten yard. Police gate location.

Signature: [Signature] Date: 6/12/12 Signature: [Signature] Date: 6/12/12

PAYROLL







**LAYNE CHRISTENSEN COMPANY - NON-DRILLING/SERVICE SHIFT REPORT**

## CLIENT

**JOB SITE NAME**

### Proposed Turkey Point Units 6 and 7

Docket Nos. 52-040 and 52-041

U-2012-273 Enclosure 1 Page 25 of 48

DATE \_\_\_\_\_

6-13-2012

WED DAYS

**JOB #**

11771-1405-10000

**JOB SITE LOCATION**

T. P.

#### MANAGEMENT OF INTRACRANIAL HEMATOMAS

#### PERSONNEL EMPLOYED TODAY

### EQUIPMENT DEPLOYED TODAY

Crew Assignment	Employee - Full Name	Per Diem? (X)	Onsite Hours	Offsite Hours	Total Hours
DRILLER	BOSIT GULOMOV	45	13		13
DRILLER	GEORGE HAGA	45	12		12
A.P.	ANDREY POPOV	45	12		12
V.M.	VICTOR MOISEYEV	45	13		13
R.C.	RAY CUEI	45	\$2		\$2
R.D.	RANDY DAYE	45	\$2		\$2

### MATERIALS USED TODAY

Quantity	Description
	<u>SAFETY MTG:</u>
①	T.O.H. HAND SAFETY! PINCH POINT: DPE: H.I.R.A.
②	HEAT DISORDERS AND EFFECTS:

Description	Unit #	Status
EDW-200	28605	w/1
1989 MACIK	18000	s/1B
Dump Truck		
CEMENT	28145	s/12
UNIT		

Working	WK	Mobilization	MB
Standby	SB	Demobilization	DM
Down in Shop	DS	Available in Yard	AY
Down on Site	DN	Available on Job	AV

#### TIME OF ACTIVITY BY ITEM NUMBER

[illegible]

Item #	Cost Code	Labor Activity	Hours
1	10000	Short Duration Job	
2	11100	Onsite Mob/Demob	
3	11150	Job Preparation	
4	11200	Safety Meetings	
5	0005	Training - Overhead	
6	0006	Shop - Overhead	
7	0007	Maintenance - Overhead	
8	11250	Training - Job Chargeable	
9	11300	Site Cleanup	
10	14300	Disinfection and Chlorination	
11	15050	Permanent Pump Install Well Head/Pile is	
12	15100	Furnish & Install Pump, Motor, Appurtenances	
13	15150	Furnish & Install Vault	
14	15200	Furnish & Install Discharge Piping	
15	15250	Furnish & Install Well Head Platform/Pad	
16	16050	Build & Treat Equipment Construct/Install Layout Bldg	
17	16100	Install Building	
18	16350	Concrete Work	
19	16380	Install Treatment Equipment	
20	16390	Install Misc Equipment	
21	16300	Painting	
22	16350	Install Piping	
23	19050	Onsite Activities Mob/Demob	
24	19100	Shop	
25	19150	Administration	
26	19550	Other Activities Standby	
27	19600	Fishing for Lost/Broken Tooling	
28	19650	Change Order Activities	
29	88000	Equipment Repairs	
30	90170	Damages	
31	90200	Job Superintendent	
32	90210	Assistant Job Superintendent	
33	90220	Project Manager	
34	90230	Assistant Project Manager	
35	90240	Job Site Admin Assistant	
36	90250	Project Engineer	
37	90260	Foreman	
		Lunch	
		<b>TOTAL HOURS</b>	

COMMENTS - EVENTS - CONDITIONS - CHANGES - OTHER INFORMATION

T.O.H 22" B.T. Kill HOLE @ 5' Kill : RIG up CASING : Run CASING  
# 1 - TO - # 8 mix kill 3/4 per Pull.

Date \_\_\_\_\_

Client's Signature \_\_\_\_\_

Date:

\_\_\_\_\_  
Secondary Signature

20





Proposed Turkey Point Units 6 and 7  
Docket Nos. 52-040 and 52-041  
L-2012-273 Enclosure 1 Page 26 of 48

JOB # 11771.1405 - 10000

JOB SITE NAME MW-1

**JOB SITE LOCATION** Turkey Point

POSTMASTER: RETURN TO POST OFFICE BOX 10000, TAMPA, FL 33601

#### EQUIPMENT DEPLOYED TODAY

Description		Unit #	Status
FDW 200		28604	W/K
89 Mack Dump		18800	S/K
Cement Mixer		28114	S/B
Working	WB	Mobilization	MB
Standby	SB	Demobilization	DM
Down in Shop	DS	Available in Yard	AY
Down on Site	DM	Available on Job	AV

### MATERIALS USED TODAY

[illegible]

Item #	Cost Code	Labor Activity	Hours
1	10000	Short Duration Job	
2	11100	Onsite Mob/Demob	
3	11150	Job Preparation	
4	11200	Safety Meetings	
5	0005	Training - Overhead	
6	0006	Shop - Overhead	
7	0007	Maintenance - Overhead	
8	11250	Training - Job Changeable	
9	11300	Site Cleanup	
10	14300	Deinfection and Chlorination	
11	15050	Permanent Pump Install Well Head/Pileless	
12	15100	Furnish & Install Pump, Motor, Apparatuses	
13	15150	Furnish & Install Vault	
14	15200	Furnish & Install Discharge Piping	
15	15250	Furnish & Install Well Head Platform/Pad	
16	16050	Build & Treat Equipment Construct/Install Layout Bldg	
17	16100	Install Building	
18	16150	Concrete Work	
19	16200	Install Treatment Equipment	
20	16250	Install Misc. Equipment	
21	16300	Painting	
22	16350	Install Piping	
23	19050	Offsite Activities Mob/Demob	
24	19100	Shop	
25	19150	Administration	
26	19550	Other Activities Standby	
27	19600	Fishing for Lost/Broken Tooling	
28	19650	Change Order Activities	
29	88000	Equipment Repairs	
30	90170	Damages	
31	90200	Job Superintendent	
32	90210	Assistant Job Superintendent	
33	90220	Project Manager	
34	90230	Assistant Project Manager	
35	90240	Jobsite Admin Assistant	
36	90250	Project Engineer	
37	90260	Foreman	
		Lunch	
		<b>TOTAL HOURS</b>	

COMMENTS - EVENTS - CONDITIONS - CHANGES - OTHER INFORMATION

Run Casing #8 to #28. added 3/4 bag Kill.

Installer's Signature  
DATE

6/13/17

**Clayton's Standard**

**Letter**

### Supercritical Fluid Extraction

• **Draw**

## PAYROLL



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	
6/16/2011	0958	10.35	-1.47	69,300	33,000	53,450	29.5	
6/23/2011	1028	10.41	-1.53	69,400	30,600	55,600	29.5	
6/30/2011	0928	10.15	-1.27	70,300	27,600	51,950	29.2	
7/8/2011	1210	9.00	-0.12	72,570	30,100	54,150	29.9	
7/14/2011	1338	9.75	-0.87	76,400	27,200	54,550	29.9	
7/21/2011	1039	9.35	-0.47	72,200	32,600	49,760	29.7	
7/28/2011	1119	9.51	-0.63	71,600	30,200	54,250	29.7	
8/4/2011	1249	9.70	-0.82	64,400	31,500	53,850	27.5	
8/11/2011	1059	9.25	-0.37	73,900	29,500	57,150	29.6	
8/18/2011	1039	9.45	-0.57	71,900	29,400	54,850	30.0	
8/25/2011	1039	9.45	-0.57	69,800	31,300	55,550	29.7	
9/1/2011	1109	9.15	-0.27	71,700	29,500	56,300	29.9	
9/8/2011	1049	9.15	-0.27	70,700	31,400	49,800	30.3	
9/16/2011	1233	9.30	-0.42	5320*	1260*	2668*	27.8	
9/23/2011	1129	9.10	-0.22	72,900	31,200	52,750	30.1	
9/29/2011	1330	9.16	-0.28	11,500*	3,200*	7,010*	27.8	
10/6/2011	1119	9.30	-0.42	72,600	30,000	56,200	30.1	
10/13/2011	1058	10.15	-1.27	75,200	32,500	51,600	30.1	
10/20/2011	1049	8.40	0.48	68,400	29,100	57,450	29.9	
10/27/2011	1109	8.95	-0.07	80,200	27,700	54,950	30.0	
11/3/2011	1049	8.91	-0.03	80,200	31,100	55,700	29.9	
11/10/2011	0958	9.67	-0.79	75,500	28,700	59,600	30.0	
11/17/2011	1058	10.81	-1.93	68,400	34,900	57,500	30.1	
11/25/2011	0939	9.51	-0.63	69,300	26,500	52,750	30.0	
12/1/2011	1138	9.67	-0.79	66,000	29,800	55,200	29.8	
12/8/2011	1058	10.31	-1.43	63,800	30,100	57,050	27.5	
12/15/2011	1109	9.61	-0.73	75,400	28,300	53,700	30.0	
12/22/2011	1038	9.67	-0.79	69,300	29,500	51,800	30.7	
12/29/2011	0918	9.87	-0.99	76,900	30,800	51,300	29.7	
1/5/2012	1118	10.41	-1.53	70,400	28,100	52,200	29.5	
1/12/2012	1058	10.21	-1.33	75,200	28,200	50,900	29.9	
1/19/2012	0958	10.30	-1.42	75,200	27,700	49,300	29.8	
1/26/2012	1048	10.22	-1.34	72,300	29,400	55,300	30.0	
2/2/2012	1048	10.21	-1.33	71,300	28,400	50,700	29.9	
2/10/2012	1029	9.15	-0.27	71,400	30,400	52,400	30.0	
2/16/2012	1219	9.47	-0.59	72,300	27,000	53,300	29.9	
2/23/2012	1049	9.57	-0.69	72,300	29,600	55,100	30.1	
3/1/2012	1038	9.74	-0.86	72,300	31,500	50,100	30.0	
3/8/2012	1058	9.76	-0.88	72,200	31,600	53,100	29.3	
3/16/2012	1038	9.65	-0.77	72,100	34,900	53,100	29.9	
3/22/2012	1108	9.90	-1.02	72,400	30,800	48,700	29.8	
3/29/2012	0911	9.87	-0.99	72,500	29,100	48,600	29.2	
4/5/2012	1208	10.25	-1.37	71,600	29,200	50,800	30.0	
4/12/2012	1118	10.15	-1.27	71,500	32,000	52,700	30.1	
4/19/2012	1143	9.85	-0.97	72,000	34,000	54,500	30.3	
4/26/2012	1009	9.50	-0.62	72,100	36,000	54,200	29.7	
5/3/2012	1144	8.85	0.03	72,400	36,500	50,900	29.6	
5/10/2012	1109	9.42	-0.54	72,800	32,000	51,700	29.7	
5/17/2012	0959	9.05	-0.17	73,200	29,500	53,200	29.7	
5/24/2012	1229	8.65	0.23	72,200	28,900	51,900	29.6	
5/31/2012	1214	9.04	-0.16	72,800	30,900	51,200	29.9	
6/8/2012	1029	9.32	-0.44	72,800	30,700	50,900	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

\*Results appear to be anomalous and are suspected to be related to a sampling error. Countermeasures to prevent reoccurrence have been implemented.

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  
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	
6/16/2011	1035	10.00	-1.41	71,300	32,200	54,000	29.8	
6/23/2011	1109	10.10	-1.51	71,900	31,600	55,650	29.8	
6/30/2011	1009	9.85	-1.26	72,800	27,600	53,050	29.5	
7/8/2011	1138	9.12	-0.53	73,150	29,800	54,450	29.9	
7/14/2011	1414	9.48	-0.89	79,700	29,000	55,350	29.8	
7/21/2011	1119	9.36	-0.77	74,100	34,000	54,100	30.0	
7/28/2011	1229	9.55	-0.96	74,300	30,200	56,300	29.8	
8/4/2011	1224	9.50	-0.91	72,700	31,500	53,000	27.7	
8/11/2011	1209	9.37	-0.78	77,400	30,000	56,800	29.7	
8/18/2011	1149	9.45	-0.86	74,100	30,100	55,500	30.0	
8/25/2011	1149	9.38	-0.79	73,300	31,200	57,450	29.6	
9/1/2011	1224	9.10	-0.51	72,700	30,700	57,300	29.8	
9/8/2011	1159	9.21	-0.62	73,200	32,200	51,800	30.1	
9/16/2011	1303	9.40	-0.81	70,280	29,600	50,550	27.7	
9/23/2011	1239	9.20	-0.61	75,200	29,000	55,550	29.8	
9/29/2011	1300	9.10	-0.51	68,500	30,700	53,600	27.4	
10/6/2011	1229	9.25	-0.66	79,100	31,300	54,050	30.0	
10/13/2011	1209	9.95	-1.36	76,900	30,200	52,250	30.1	
10/20/2011	1200	8.60	-0.01	69,900	28,000	57,150	29.8	
10/27/2011	1218	8.81	-0.22	82,400	28,000	56,500	30.0	
11/3/2011	1159	9.56	-0.97	82,900	31,000	56,400	30.1	
11/10/2011	1109	9.96	-1.37	78,300	27,900	60,500	30.1	
11/17/2011	1208	10.90	-2.31	69,700	34,000	57,800	30.2	
11/25/2011	1049	9.36	-0.77	69,900	26,900	53,600	30.0	
12/1/2011	1248	10.85	-2.26	71,800	33,900	57,000	30.2	
12/8/2011	1209	9.87	-1.28	68,900	29,500	61,500	27.0	
12/15/2011	1219	9.53	-0.94	76,600	28,000	55,100	30.1	
12/22/2011	1149	9.65	-1.06	72,300	29,000	52,400	30.0	
12/29/2011	1029	9.96	-1.37	77,600	29,800	52,200	30.1	
1/5/2012	1229	10.31	-1.72	72,800	27,700	53,400	30.1	
1/12/2012	1204	10.10	-1.51	76,000	30,800	52,900	30.1	
1/19/2012	1139	10.38	-1.79	76,500	28,100	50,800	30.0	
1/26/2012	1229	10.18	-1.59	73,200	29,900	56,300	30.1	
2/2/2012	1229	10.23	-1.64	72,400	27,900	52,000	30.1	
2/10/2012	1209	9.21	-0.62	72,000	29,800	55,400	30.2	
2/16/2012	1359	9.45	-0.86	72,700	27,700	57,200	30.2	
2/23/2012	1229	9.48	-0.89	72,800	32,100	57,000	30.2	
3/1/2012	1219	9.61	-1.02	72,800	31,000	51,700	30.2	
3/8/2012	1244	9.81	-1.22	72,500	32,500	52,500	29.9	
3/16/2012	1219	9.61	-1.02	72,900	34,300	53,100	30.3	
3/22/2012	1249	9.87	-1.28	72,600	31,000	51,100	30.2	
3/29/2012	1054	9.97	-1.38	72,900	29,500	51,200	29.9	
4/5/2012	1341	10.05	-1.46	72,300	29,500	52,200	30.2	
4/12/2012	1259	9.98	-1.39	72,200	31,200	53,800	30.5	
4/19/2012	1244	9.90	-1.31	71,800	33,500	54,500	30.4	
4/26/2012	1144	9.61	-1.02	72,200	35,500	54,500	30.0	
5/3/2012	1249	8.97	-0.38	73,100	37,400	51,700	30.2	
5/10/2012	1242	9.32	-0.73	73,300	32,100	53,100	30.2	
5/17/2012	1134	9.10	-0.51	73,300	27,700	54,100	30.1	
5/24/2012	1404	8.75	-0.16	73,400	30,600	54,100	30.3	
5/31/2012	1343	9.10	-0.51	73,900	31,000	50,500	30.1	
6/8/2012	1202	9.30	-0.71	73,300	31,100	53,200	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: 8.59 feet NAVD 88



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



**EW-1 Pad Monitoring Well Water Quality Data  
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	72,500	32,200	51,950	29.9	
6/16/2011	1118	10.25	-1.41	72,500	31,500	54,550	30.0	
6/23/2011	1143	10.37	-1.53	73,300	31,600	57,750	30.3	
6/30/2011	1049	10.10	-1.26	75,700	27,400	54,300	30.0	
7/8/2011	1112	9.38	-0.54	74,100	30,700	53,950	30.3	
7/14/2011	1524	9.75	-0.91	79,900	27,600	56,350	30.3	
7/21/2011	1226	9.60	-0.76	76,200	32,600	54,500	29.7	
7/28/2011	1154	9.80	-0.96	74,900	32,200	57,050	30.5	
8/4/2011	1317	9.85	-1.01	78,000	30,500	59,300	28.7	
8/11/2011	1134	9.61	-0.77	77,600	31,100	58,150	30.4	
8/18/2011	1114	9.68	-0.84	73,100	30,000	55,350	30.6	
8/25/2011	1114	9.61	-0.77	72,300	31,800	56,950	30.0	
9/1/2011	1149	9.33	-0.49	71,900	29,300	56,000	30.4	
9/8/2011	1124	9.45	-0.61	73,800	30,100	52,300	30.5	
9/16/2011	1203	9.60	-0.76	67,200	23,400	51,650	28.2	
9/23/2011	1204	9.43	-0.59	73,800	30,800	54,450	30.4	
9/29/2011	1205	9.35	-0.51	68,700	27,500	50,800	27.6	
10/6/2011	1154	9.50	-0.66	78,400	30,000	56,550	30.2	
10/13/2011	1133	10.21	-1.37	75,800	29,300	50,500	30.2	
10/20/2011	1124	8.81	0.03	70,200	27,500	56,850	30.1	
10/27/2011	1143	10.39	-1.55	81,500	28,800	54,600	30.2	
11/3/2011	1123	10.50	-1.66	80,500	30,400	55,900	30.1	
11/10/2011	1033	10.37	-1.53	77,800	27,800	58,700	30.1	
11/17/2011	1133	10.71	-1.87	67,900	30,500	57,000	30.3	
11/25/2011	1014	9.58	-0.74	71,700	27,400	53,300	30.2	
12/1/2011	1214	9.80	-0.96	68,500	33,500	53,650	30.1	
12/8/2011	1133	10.37	-1.53	68,700	27,600	57,850	27.7	
12/15/2011	1144	9.75	-0.91	75,500	28,200	52,000	30.0	
12/22/2011	1114	9.87	-1.03	70,600	27,700	52,100	29.9	
12/29/2011	0954	9.97	-1.13	77,700	29,500	51,600	29.9	
1/5/2012	1153	10.52	-1.68	71,800	28,000	52,800	29.6	
1/12/2012	1133	10.35	-1.51	75,400	30,400	51,900	30.0	
1/19/2012	1033	10.42	-1.58	75,600	29,800	50,200	29.9	
1/26/2012	1123	10.35	-1.51	73,200	29,500	56,000	29.9	
2/2/2012	1123	10.35	-1.51	71,100	27,400	51,200	29.9	
2/10/2012	1104	9.38	-0.54	70,300	28,800	54,900	29.8	
2/16/2012	1254	9.67	-0.83	71,100	27,800	55,200	29.8	
2/23/2012	1124	9.67	-0.83	72,100	30,700	56,200	29.8	
3/1/2012	1114	9.91	-1.07	71,500	31,000	51,200	29.7	
3/8/2012	1139	9.62	-0.78	71,600	30,500	52,800	29.4	
3/16/2012	1114	9.85	-1.01	71,500	34,100	52,400	29.7	
3/22/2012	1144	10.10	-1.26	71,400	30,200	48,700	29.6	
3/29/2012	0949	9.93	-1.09	71,500	28,400	51,200	29.6	
4/5/2012	1241	10.09	-1.25	71,300	28,900	51,100	29.7	
4/12/2012	1154	10.00	-1.16	71,300	29,300	52,600	29.9	
4/19/2012	1109	9.97	-1.13	71,400	31,500	53,300	30.2	
4/26/2012	1042	9.68	-0.84	71,700	31,300	53,000	29.6	
5/3/2012	1109	9.00	-0.16	72,200	34,200	49,500	29.5	
5/10/2012	1142	9.35	-0.51	72,500	31,400	52,000	29.5	
5/17/2012	1032	9.10	-0.26	72,700	30,200	52,300	29.6	
5/24/2012	1302	8.75	0.09	72,600	30,300	52,800	29.5	
5/31/2012	1247	9.07	-0.23	73,100	32,100	48,800	29.6	
6/8/2012	1102	9.35	-0.51	71,800	30,300	52,200	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: 8.84 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	
6/16/2011	1154	10.75	-1.87	64,900	27,000	48,450	29.5	
6/23/2011	1214	10.85	-1.97	65,500	30,400	50,800	29.6	
6/30/2011	1119	10.60	-1.72	68,500	24,300	46,650	29.4	
7/8/2011	1045	9.85	-0.97	64,950	25,600	47,650	29.6	
7/14/2011	1445	10.22	-1.34	69,900	24,800	48,300	29.6	
7/21/2011	1154	10.10	-1.22	67,800	27,400	47,900	29.6	
7/28/2011	1259	10.26	-1.38	67,000	26,600	48,650	27.7	
8/4/2011	1157	10.30	-1.42	68,420	25,600	51,350	27.5	
8/11/2011	1243	9.21	-0.33	67,800	26,400	51,150	29.7	
8/18/2011	1219	10.15	-1.27	66,300	25,400	47,500	29.8	
8/25/2011	1219	10.31	-1.43	66,000	26,900	50,150	29.4	
9/1/2011	1254	9.87	-0.99	65,400	25,700	49,450	29.8	
9/8/2011	1229	9.97	-1.09	66,800	26,300	46,500	29.9	
9/16/2011	1329	10.10	-1.22	64,000	25,700	46,800	28.0	
9/23/2011	1309	9.95	-1.07	66,200	25,800	47,500	29.6	
9/29/2011	1230	9.80	-0.92	64,100	25,400	46,150	27.7	
10/6/2011	1259	9.97	-1.09	76,200	25,800	45,800	29.7	
10/13/2011	1239	10.67	-1.79	69,100	26,100	46,700	29.8	
10/20/2011	1229	9.31	-0.43	64,700	23,800	51,100	29.6	
10/27/2011	1249	10.87	-1.99	75,600	26,500	50,000	29.7	
11/3/2011	1229	10.93	-2.05	75,600	27,700	49,750	29.7	
11/10/2011	1139	10.91	-2.03	73,500	25,500	53,300	29.7	
11/17/2011	1238	11.41	-2.53	63,800	26,900	50,400	29.7	
11/25/2011	1119	10.05	-1.17	65,800	24,900	48,950	29.7	
12/1/2011	1323	11.42	-2.54	65,900	29,600	51,100	29.6	
12/8/2011	1239	10.98	-2.10	64,900	24,800	52,450	27.3	
12/15/2011	1247	10.27	-1.39	70,100	24,800	49,700	29.4	
12/22/2011	1219	10.27	-1.39	66,800	24,900	45,600	29.7	
12/29/2011	1059	10.67	-1.79	71,100	26,400	46,300	29.5	
1/5/2012	1259	11.03	-2.15	64,800	24,900	47,600	29.3	
1/12/2012	1234	10.87	-1.99	69,000	25,700	47,000	29.6	
1/19/2012	1104	11.00	-2.12	69,100	24,900	44,200	29.4	
1/26/2012	1154	10.85	-1.97	67,500	25,900	50,100	29.4	
2/2/2012	1154	10.97	-2.09	65,300	25,200	46,200	29.5	
2/10/2012	1134	9.91	-1.03	65,300	25,400	48,900	29.6	
2/16/2012	1324	10.15	-1.27	64,600	24,100	50,500	29.4	
2/23/2012	1154	10.24	-1.36	65,300	24,100	50,500	29.5	
3/1/2012	1144	10.27	-1.39	65,300	26,900	45,900	29.4	
3/8/2012	1209	10.31	-1.43	65,300	27,400	47,700	30.0	
3/16/2012	1144	10.35	-1.47	65,300	29,800	47,200	29.3	
3/22/2012	1214	10.61	-1.73	65,500	27,100	44,600	29.3	
3/29/2012	1019	10.18	-1.30	65,500	26,100	45,900	29.5	
4/5/2012	1309	10.72	-1.84	65,300	25,600	48,200	29.4	
4/12/2012	1224	10.60	-1.72	65,000	27,000	49,700	30.5	
4/19/2012	1211	10.65	-1.77	65,400	28,200	50,800	30.6	
4/26/2012	1109	10.32	-1.44	66,000	30,900	49,800	29.2	
5/3/2012	1214	9.70	-0.82	67,200	30,800	47,700	29.2	
5/10/2012	1209	10.02	-1.14	68,700	30,200	49,600	29.2	
5/17/2012	1100	9.85	-0.97	68,700	27,800	49,200	28.9	
5/24/2012	1330	9.47	-0.59	68,700	28,000	49,600	29.2	
5/31/2012	1314	9.91	-1.03	68,400	28,900	49,400	29.3	
6/8/2012	1129	10.10	-1.22	68,300	29,700	49,600	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






**DZMW-1 Pad Monitoring Well Water Quality Data**  
**Northeast Pad Monitoring Well**  
**(NE-DZMW 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
3/20/2012	0958	8.15	-1.08	73,100	33,300	52,200	30.1	Background Sampling
3/29/2012	1128	8.23	-1.16	73,000	29,600	51,400	30.1	
4/6/2012	0858	8.30	-1.23	72,200	28,800	51,200	30.1	
4/13/2012	1128	8.25	-1.18	72,300	33,900	53,100	30.2	
4/20/2012	1038	8.20	-1.13	72,000	34,700	54,500	30.1	
4/27/2012	0958	7.95	-0.88	72,100	37,300	55,100	29.8	
5/4/2012	1009	7.22	-0.15	72,400	29,900	51,100	29.8	
5/11/2012	1229	7.65	-0.58	72,300	34,700	53,000	30.0	
5/18/2012	1109	7.43	-0.36	73,500	37,600	51,100	30.3	
5/25/2012	1239	7.33	-0.26	73,900	34,300	54,100	30.1	
6/1/2012	1259	7.45	-0.38	74,000	33,300	51,300	29.9	
6/8/2012	1237	7.65	-0.58	73,600	31,700	52,100	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
Top of Casing Elevation:	7.07 feet NAVD 88

<b>Project:</b>		Florida Power & Light Company Miami-Dade County, Florida Dual-Zone Monitor Well DZMW-1							
<b>DZMW-1 Pad Monitoring Well Water Quality Data</b> <b>Southeast Pad Monitoring Well</b> <b>(SE-DZMW PMW)</b>									
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	
3/20/2012	1033	8.25	-1.08	72,700	33,900	50,500	30.1	Background Sampling	
3/29/2012	1303	8.33	-1.16	72,800	29,200	50,400	30.2		
4/6/2012	1028	8.30	-1.13	72,300	29,300	53,300	30.2		
4/13/2012	1303	8.32	-1.15	72,400	33,800	54,600	30.2		
4/20/2012	1213	8.28	-1.11	72,300	31,700	55,400	30.2		
4/27/2012	1133	8.10	-0.93	72,600	34,600	53,900	29.5		
5/4/2012	1141	7.40	-0.23	73,300	29,700	52,700	30.0		
5/11/2012	1403	7.67	-0.50	72,700	34,100	52,000	30.1		
5/18/2012	1240	7.58	-0.41	74,000	33,100	52,000	30.7		
5/25/2012	1415	7.43	-0.26	73,900	32,400	52,600	29.7		
6/1/2012	1119	7.50	-0.33	73,900	32,100	51,300	29.8		
6/8/2012	1408	7.72	-0.55	73,400	30,800	52,700	30.3		



Project: Florida Power & Light Company  
Miami-Dade County, Florida  
Dual-Zone Monitor Well DZMW-1



DZMW-1 Pad Monitoring Well Water Quality Data  
Southwest Pad Monitoring Well  
(SW-DZMW 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
3/20/2012	1137	8.34	-0.97	73,300	32,900	50,300	30.1	Background Sampling
3/29/2012	1229	8.38	-1.01	73,100	29,900	50,700	30.2	
4/6/2012	0954	8.50	-1.13	72,000	28,800	52,500	29.9	
4/13/2012	1227	8.52	-1.15	72,000	32,300	54,400	29.9	
4/20/2012	1139	8.45	-1.08	72,100	31,800	53,700	29.9	
4/27/2012	1101	8.25	-0.88	72,600	31,800	55,300	29.9	
5/4/2012	1108	7.60	-0.23	73,200	30,500	52,600	29.6	
5/11/2012	1331	7.95	-0.58	71,500	35,400	53,800	29.5	
5/18/2012	1208	7.82	-0.45	73,800	32,600	51,200	29.9	
5/25/2012	1343	7.68	-0.31	73,900	33,500	53,600	29.8	
6/1/2012	1151	7.71	-0.34	74,100	30,700	51,500	29.5	
6/8/2012	1336	7.97	-0.60	73,300	30,900	53,400	29.9	



[illegible]



**Florida Power & Light Company  
Turkey Point  
Dual-Zone Monitor Well DZMW-1  
Pilot Hole Cement and Gravel Summary**



Cementing Stage	Date	Base of the Cemented Interval (feet bpl)	Volume			Theoretical		Actual Interval Filled (feet)	Actual / Theoretical Filled Interval (percent)	Type of Material (including additives)
			Planned (barrels)	Actual (barrels)	Pumped (cubic feet)	Depth (feet bpl)	Fill (feet )			
Gravel (LZ)	6/4/2012	1905			44.0	1862	43	51	118.6	Gravel (66 5-gallon buckets)
Spot	6/4/2012	1854	3	3	16.8	1835	19	27	142.1	Neat
Stage #1	6/4/2012	1827	80	80	448.8	1553	274	193	70.4	12%
Stage #2	6/5/2012	1634	55	55	308.6	1510	124	101	81.5	12%
Stage #3	6/5/2012	1533	11	11	61.7	1505	28	29	103.6	12%
Gravel (UZ)	6/6/2012	1504			139.0	1445	59	61	103.4	Gravel (208 5-gallon buckets)
Spot	6/6/2012	1443	3	3	16.8	1438	5	4	80.0	Neat
Stage #4	6/6/2012	1439	140	140	785.4	1107	332	198	59.6	12%
Stage #5	6/7/2012	1241	20	20	112.2	1170	71	88	123.9	12%
	Final tag:	1153								
<b>Total:</b>			<b>312</b>	<b>312</b>	<b>1,933.3</b>					

"Theoretical Fill" 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 Filled" 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.







**Florida Power & Light Company**  
**Turkey Point**  
**Dual Zone Monitor Well DZMW-1**  
**Deviation Survey Summary**



Pilot Hole			Reamed Holes		
Date	Depth (feet bpl)	Inclination (degrees)	Date	Depth (feet bpl)	Inclination (degrees)
3/28/2012	90	0.6	4/1/2012	90	0.2
3/29/2012	180	0.2	4/2/2012	180	0.5
4/6/2012	270	0.1	4/18/2012	270	0.1
4/6/2012	360	0.3	4/18/2012	360	0.2
4/7/2012	450	0.3	4/18/2012	450	0.5
4/7/2012	540	0.5	4/18/2012	540	0.3
4/11/2012	630	0.4	4/26/2012	630	0.2
4/11/2012	720	0.3	4/27/2012	720	0.3
4/12/2012	810	0.4	4/27/2012	810	0.1
4/12/2012	900	0.1	4/27/2012	900	0.3
4/12/2012	990	0.3	4/27/2012	990	0.3
4/13/2012	1,070	0.1	4/27/2012	1,060	0.3
5/11/2012	1,160	0.2	6/8/2012	1,160	0.1
5/11/2012	1,250	0.3	6/9/2012	1,220	0.1
5/11/2012	1,340	0.2	6/9/2012	1,280	0.2
5/11/2012	1,430	0.3	6/10/2012	1,340	0.2
5/12/2012	1,520	0.3			
5/13/2012	1,610	0.5			
5/15/2012	1,700	0.3			
5/14/2012	1,760	0.4			
5/15/2012	1,820	0.4			
5/15/2012	1,880	0.5			
bpl = below pad level					



<p style="text-align: center;"> <b>Florida Power &amp; Light Company</b>  <b>Turkey Point</b>  <b>Dual-Zone Monitor Well DZMW-1</b>  <b>16-inch Diameter Casing Installation Summary</b> </p> <div style="text-align: right;">   </div>					
Date Installed	Time Installed	Joint #	Mill #	Length of Joint	Cumulative Length
6/13/2012	14:45	1	890802	43.77	43.77
6/13/2012	15:30	2	890802	39.22	82.99
6/13/2012	16:05	3	890802	39.23	122.22
6/13/2012	16:40	4	890802	40.33	162.55
6/13/2012	17:05	5	890802	39.24	201.79
6/13/2012	17:40	6	890802	39.27	241.06
6/13/2012	18:15	7	890802	39.22	280.28
6/13/2012	18:45	8	890802	39.24	319.52
6/13/2012	19:20	9	890802	39.27	358.79
6/13/2012	19:55	10	890802	39.25	398.04
6/13/2012	20:50	11	890802	39.25	437.29
6/13/2012	21:35	12	890802	39.26	476.55
6/13/2012	22:10	13	890802	39.23	515.78
6/13/2012	22:45	14	890802	39.23	555.01
6/13/2012	23:15	15	890802	39.24	594.25
6/13/2012	23:50	16	890802	39.27	633.52
6/14/2012	0:20	17	890802	39.25	672.77
6/14/2012	0:50	18	890802	39.26	712.03
6/14/2012	1:20	19	890802	39.22	751.25
6/14/2012	1:50	20	890802	39.26	790.51
6/14/2012	2:30	21	890802	39.25	829.76
6/14/2012	3:05	22	890802	39.24	869.00
6/14/2012	3:40	23	890802	39.23	908.23
6/14/2012	4:10	24	890802	39.28	947.51
6/14/2012	4:35	25	890802	39.24	986.75
6/14/2012	5:25	26	890802	39.24	1025.99
6/14/2012	6:00	27	890802	39.23	1065.22
		28	890802	39.21	1104.43
		29	890802	39.22	1143.65
		30	890802	39.22	1182.87
		31	890802	39.25	1222.12
		32	890802	39.25	1261.37
		33	890802	39.23	1300.60
		34	890802	39.27	1339.87
		35	890802	39.25	1379.12
		36	890802	39.23	1418.35
		37 (header)	890802	38.53	1456.88
<p>Length of header joint from the base of the lugs is 38.53 feet and 6.88 feet is above pad level. This will put 1,450 feet of casing below pad level.</p> <p>All lengths measured in feet.</p>					



<b>Florida Power &amp; Light Company</b> <b>Turkey Point</b> <b>Dual-Zone Monitor Well DZMW-1</b> <b>Daily Kill Material Log</b>			
Date	Depth (feet bpl)	Kill Used	Approximate Volume (gallons)
5/8/2012	1105	Bentonite /Barite	379
5/11/2012	1344	Bentonite /Barite	379
5/11/2012	1389	Bentonite /Barite	379
5/12/2012	1479	Bentonite /Barite	379
5/12/2012	1524	Bentonite /Barite	379
5/13/2012	1614	Bentonite /Barite	379
5/13/2012	1659	Bentonite /Barite	190
5/13/2012	1704	Bentonite /Barite	284
5/17/2012	1905	Bentonite /Barite	2,842
5/18/2012	1905	Bentonite /Barite	4,548
5/22/2012	1905	Bentonite /Barite	569
6/1/2012	1905	Bentonite /Barite	2,653
6/2/2012	1905	Bentonite /Barite	190
6/3/2012	1905	Bentonite /Barite	3600
6/7/2012	1153	Bentonite /Barite	3411
6/10/2012	1453	Bentonite /Barite	379
6/11/2012	1453	Bentonite /Barite	1137
6/13/2012	1453	Bentonite /Barite	5686
6/13/2012	1453	Bentonite /Barite	330
feet bpl = feet below pad level			





**GEOPHYSICAL LOGGING  
SERVICES**

# X-Y CALIPER GAMMA RAY LOG

Proposed Turkey Point Units 6 and 7  
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Country USA

Company FP&L

Well TURKEY POINT DZMW-1

Field FLORIDA CITY

County MIAMI-DADE

State FLORIDA

Country USA

Location:

API #:

Other Services

FPL TURKEY POINT POWER PLANT  
MCNABB HYDROGEOLOGIC CONSULTING, INC.

NONE

LAT: 25 25' 19" N LONG: 80 20' 08" W  
SEC TWP RGE

Elevation

Permanent Datum

PAD LEVEL

Elevation

Log Measured From

PAD LEVEL

Drilling Measured From

PAD LEVEL

K.B.  
D.F.  
G.L.

Date	13-JUN-2012		
Run Number	SIX		
Depth Driller	1453'		
Depth Logger	1453'		
Bottom Logged Interval	1453'		
Top Log Interval	CASING		
Open Hole Size	22"		
Type Fluid	WATER		
Density / Viscosity	NA		
Max. Recorded Temp.	NA		
Estimated Cement Top	NA		
Time Well Ready	1100		
Time Logger on Bottom	1100		
Equipment Number	GEO1		
Location	FT. MYERS		
Recorded By	J. CATHEY		
Witnessed By	M. CLASEN		

## Borehole Record

## Tubing Record

Run Number	Bit	From	To	Size	Weight	From	To
ONE	12.25"	CASING	250'	FIVE	12.25"	CASING	1900'
TWO	42"	CASING	258'	SIX	22"	CASING	1453'
THREE	12.25"	CASING	1110'				
FOUR	32.5"	CASING	1105'				

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	44"	.375" W.T.	SURFACE	36'
Prot. String	34"	.375" W.T.	SURFACE	255'
Production String	24"	.375" W.T.	SURFACE	1100'
Liner				



All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of an 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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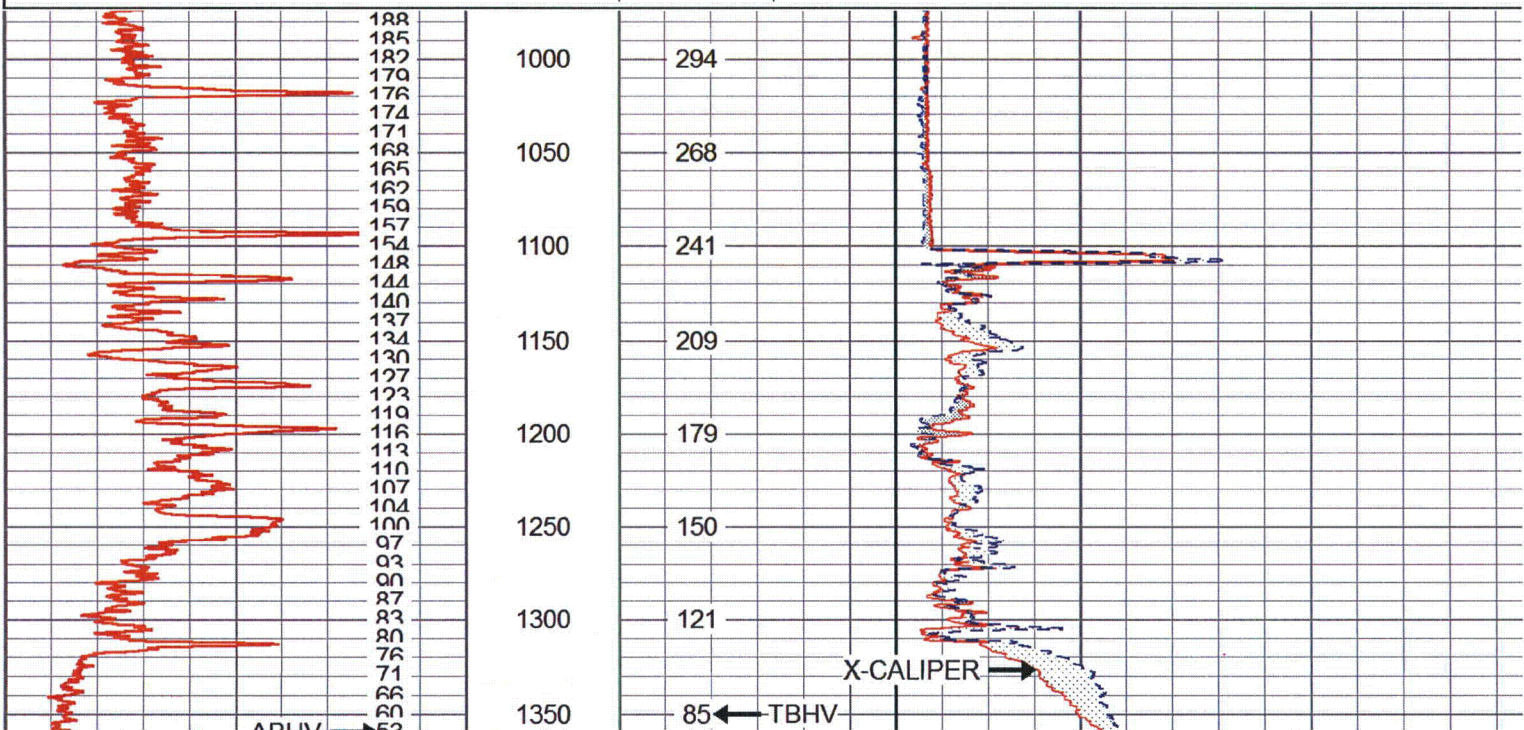
## ANNULAR BOREHOLE VOLUME IN BARRELS CALCULATED FOR 16" CASING



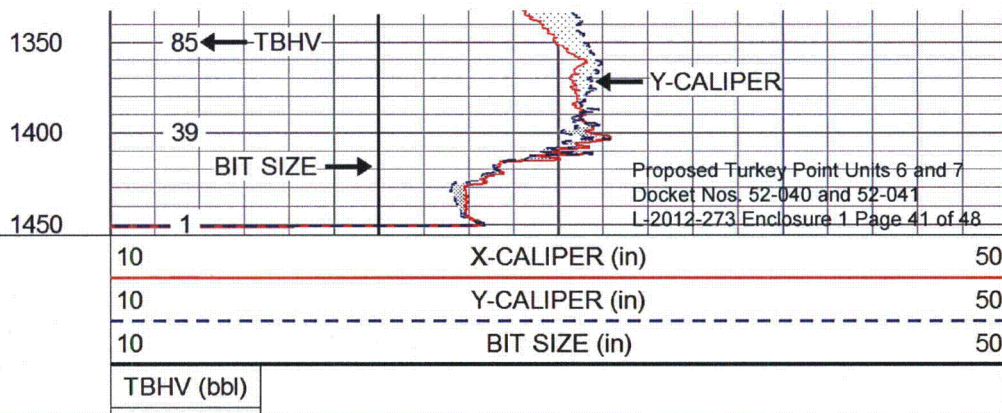
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Dataset Creation: Wed Jun 13 11:28:23 2012 by Calc SOC 111108  
Charted by: Depth in Feet scaled 1:1200

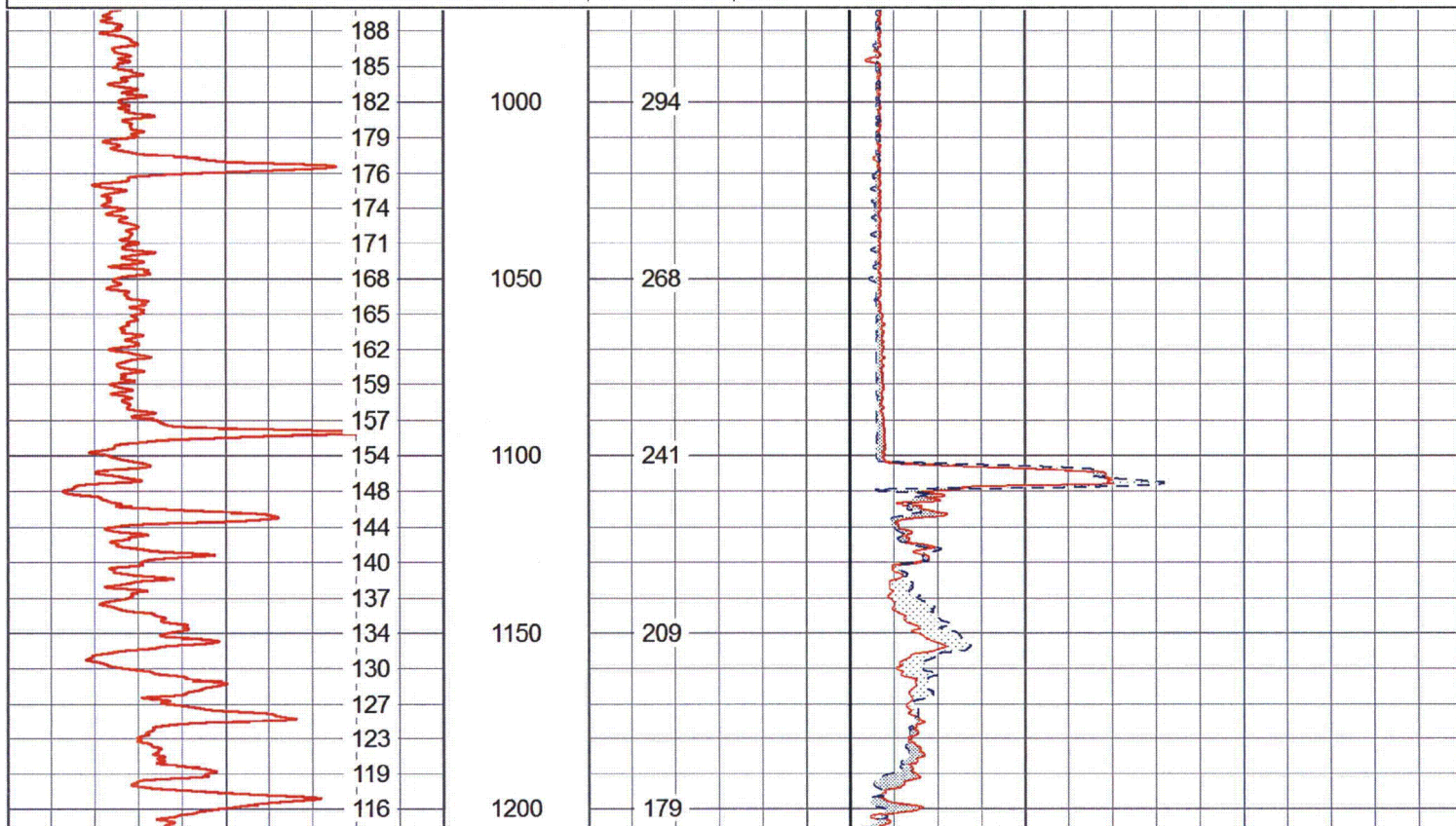
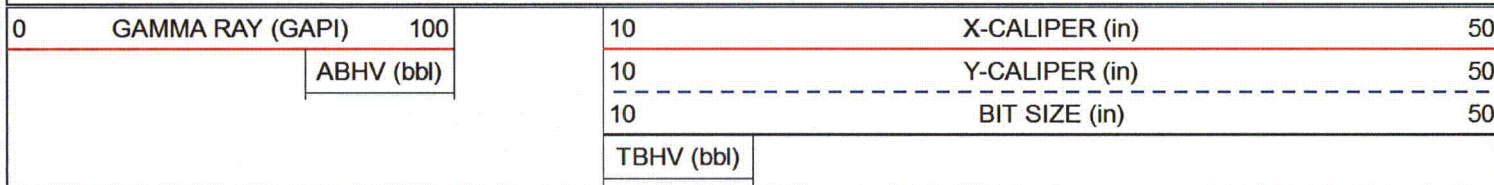
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			10	BIT SIZE (in)	5
			TBHV (bbl)		



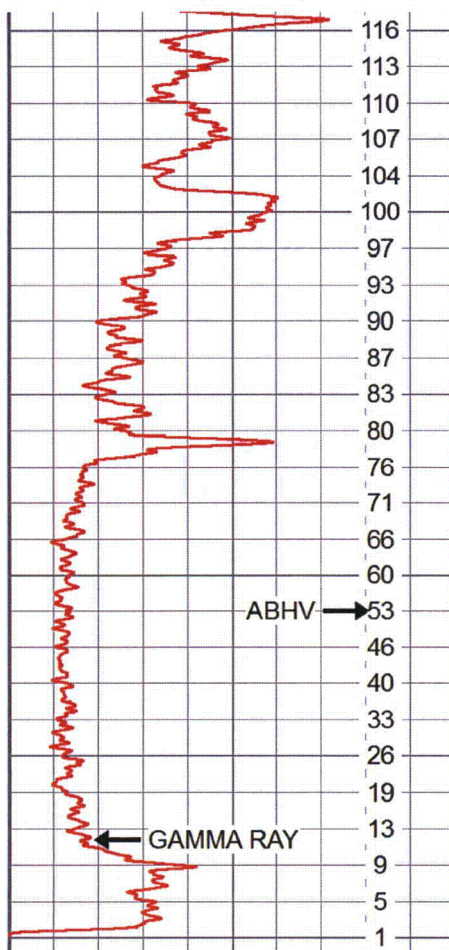




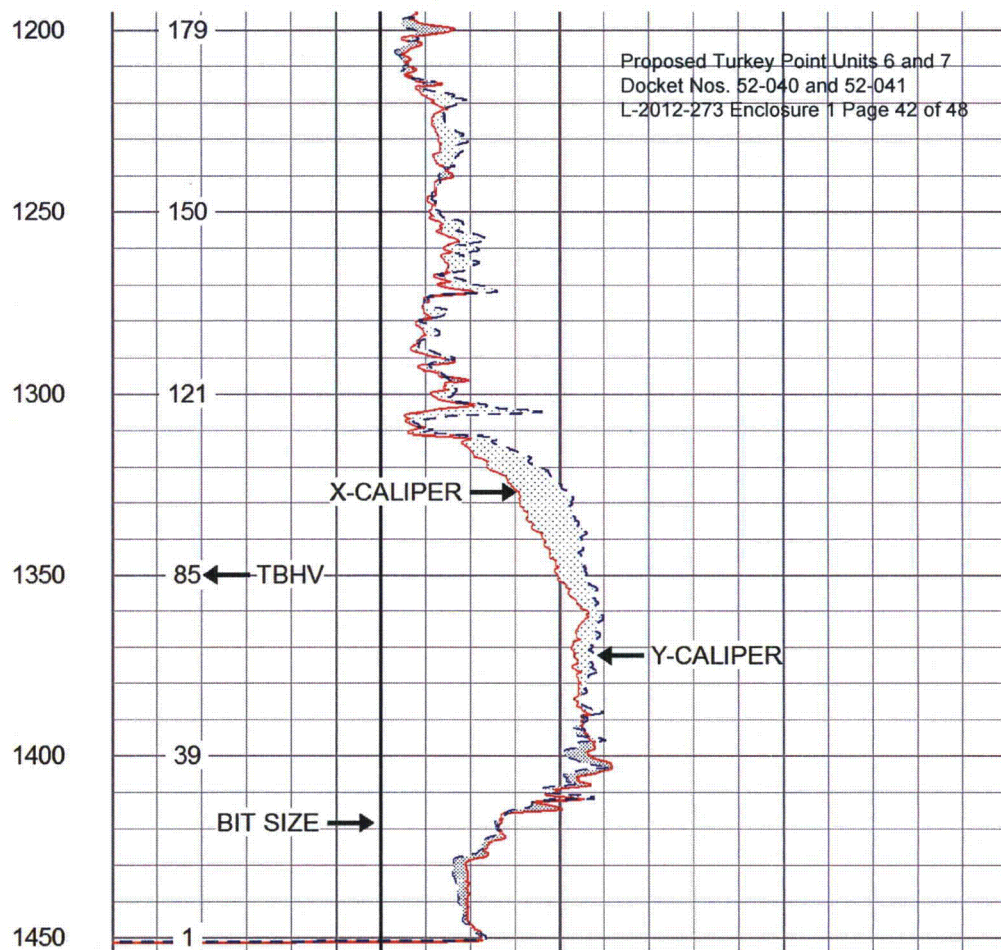
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Charted by: Depth in Feet scaled 1:600







0	GAMMA RAY (GAPI)	100
	ABHV (bbl)	



10	X-CALIPER (in)	50
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10	BIT SIZE (in)	50
	TBHV (bbl)	

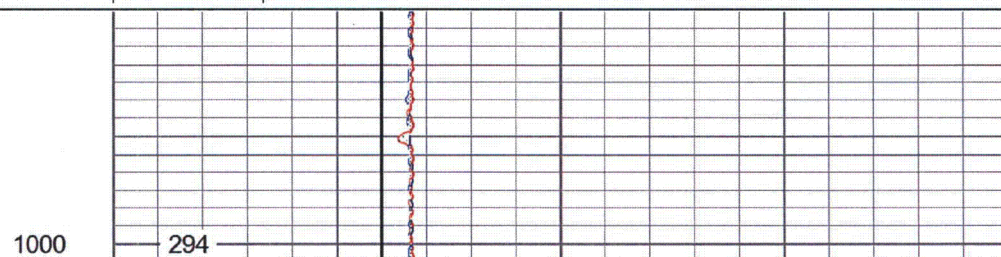
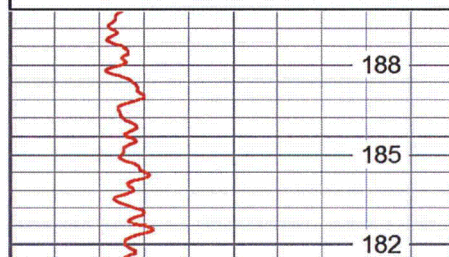


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 Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	100
	ABHV (bbl)	

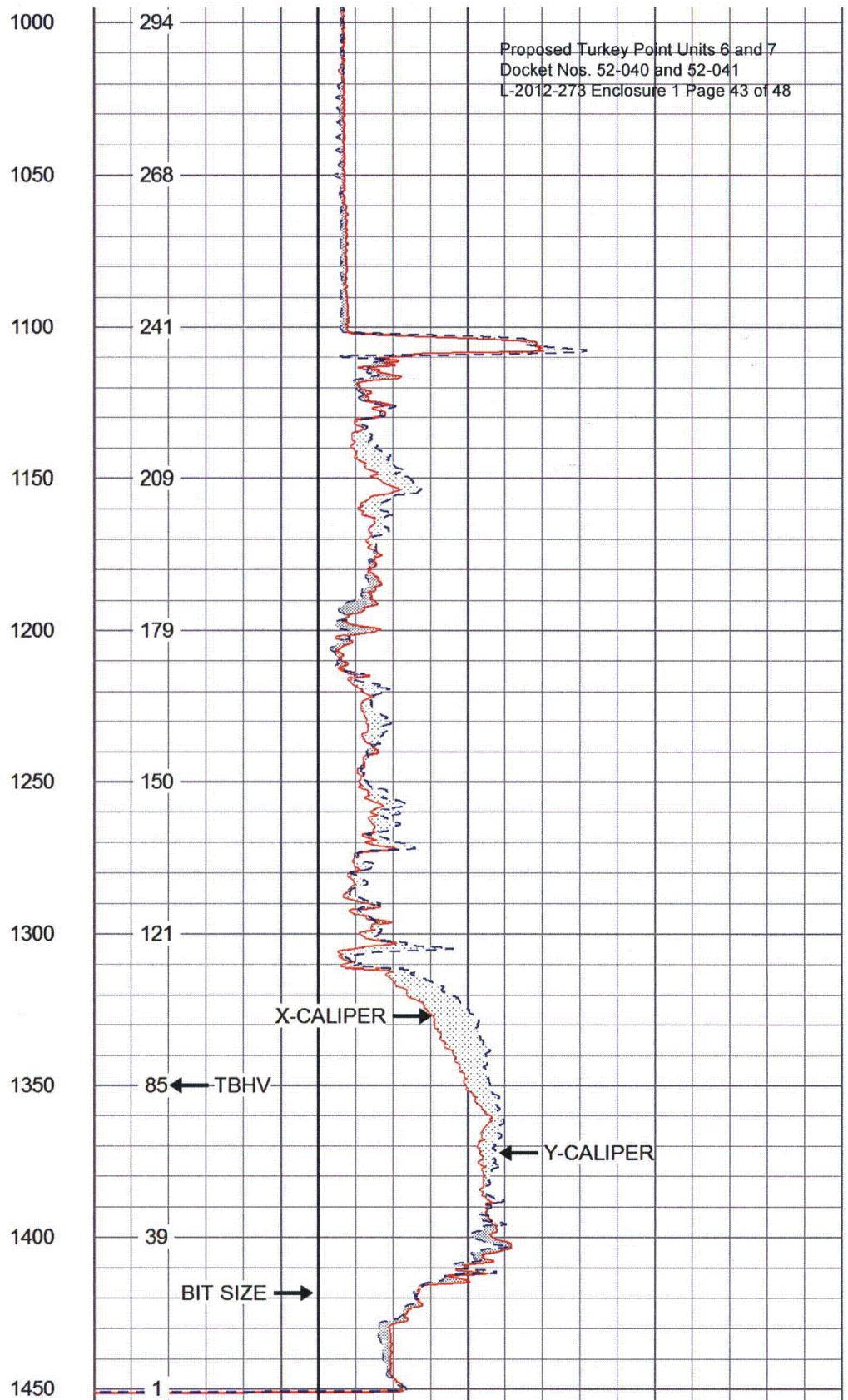
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10	BIT SIZE (in)	50
	TBHV (bbl)	







0	GAMMA RAY (GAPI)	100
	ABHV (bbl)	



10	X-CALIPER (in)	50
10	Y-CALIPER (in)	50
10	BIT SIZE (in)	50
	TBHV (bbl)	





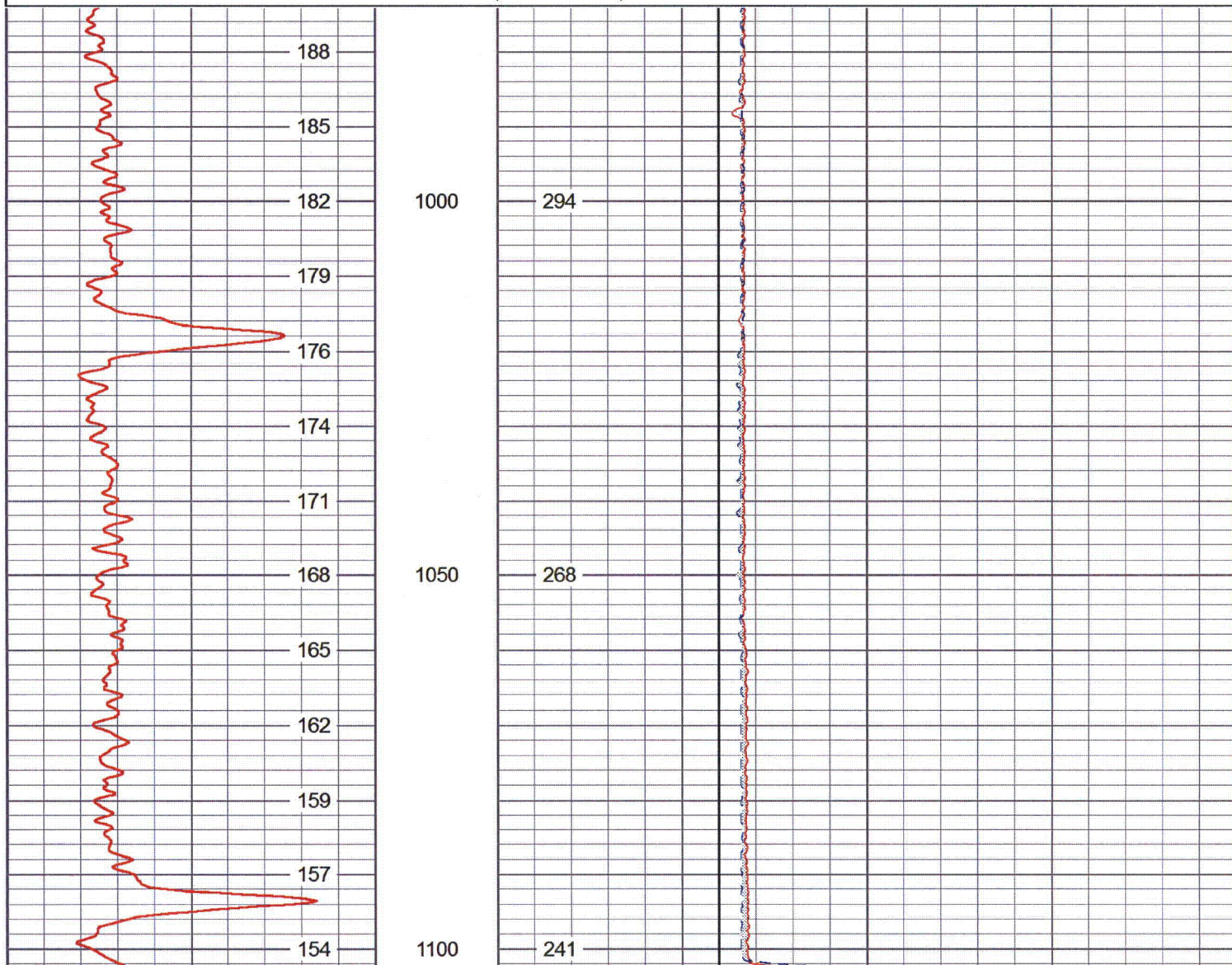
GEOPHYSICAL LOGGING  
SERVICES

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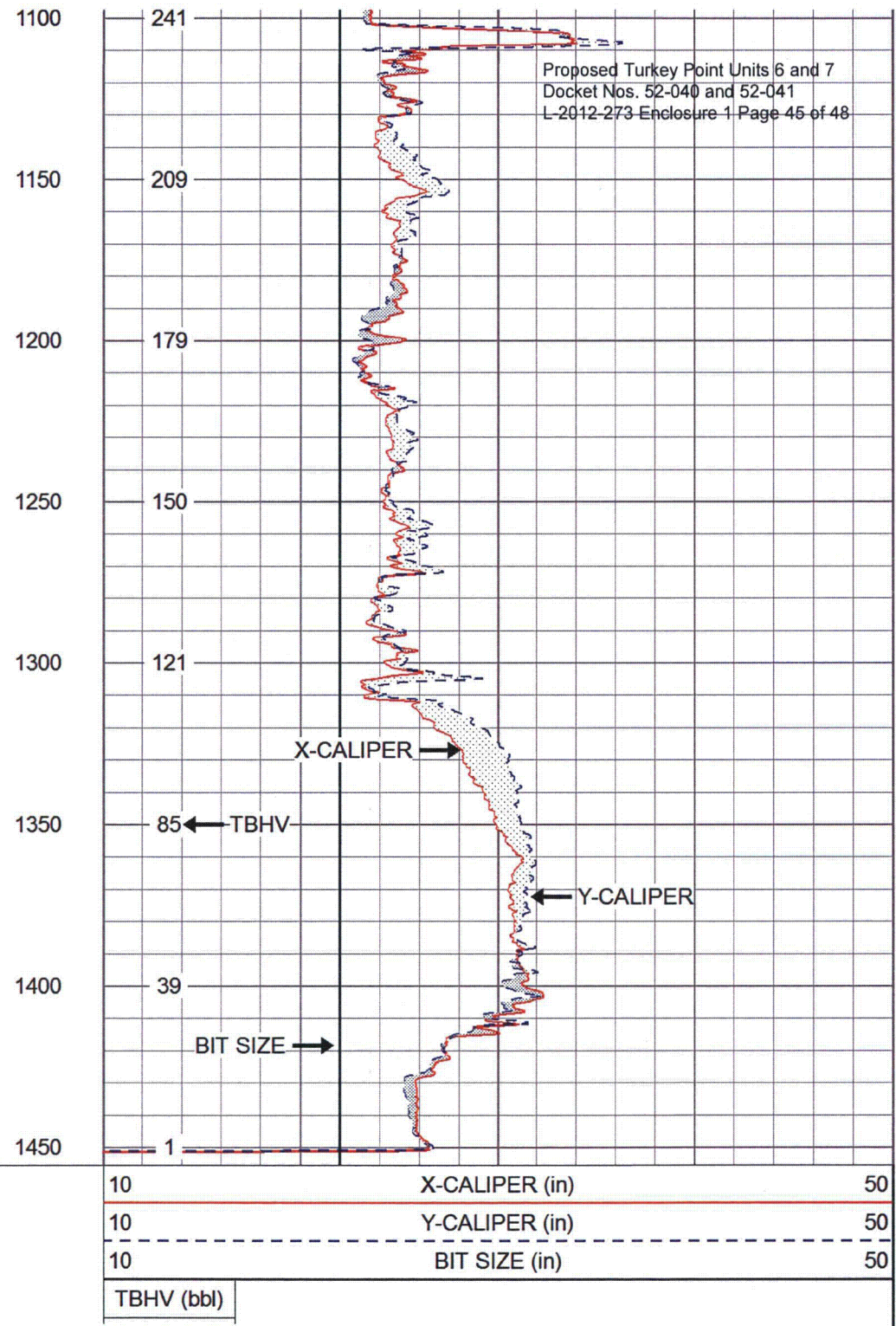
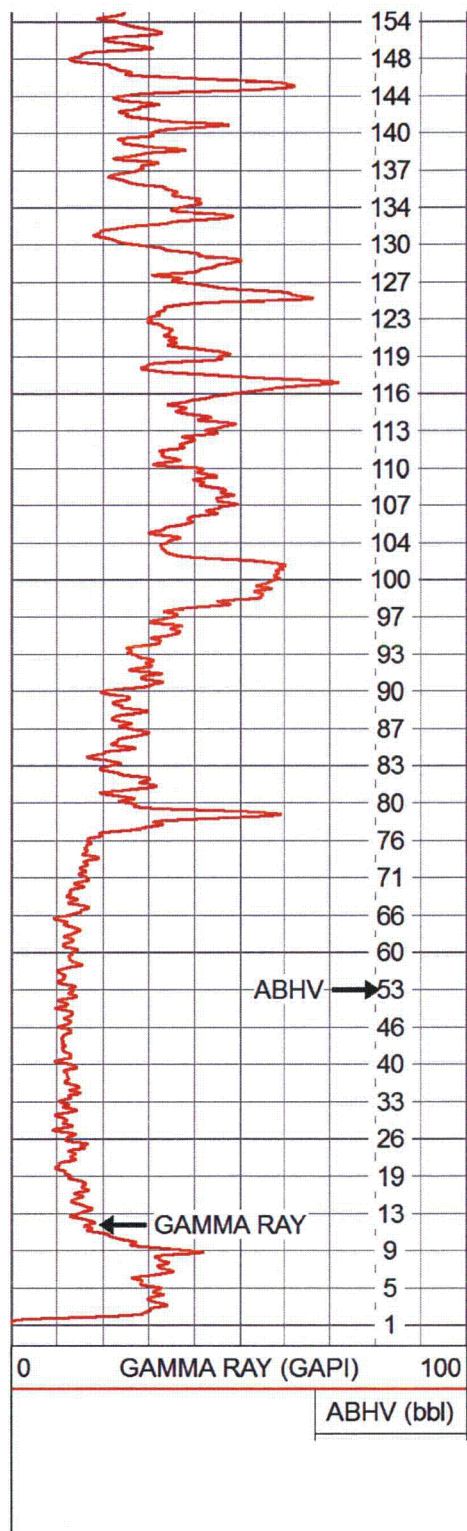
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Charted by: Depth in Feet scaled 1:240

Proposed Turkey Point Units 6 and 7  
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0	GAMMA RAY (GAPI)	100	10	X-CALIPER (in)	50
	ABHV (bbl)		10	Y-CALIPER (in)	50
			10	BIT SIZE (in)	50
			TBHV (bbl)		









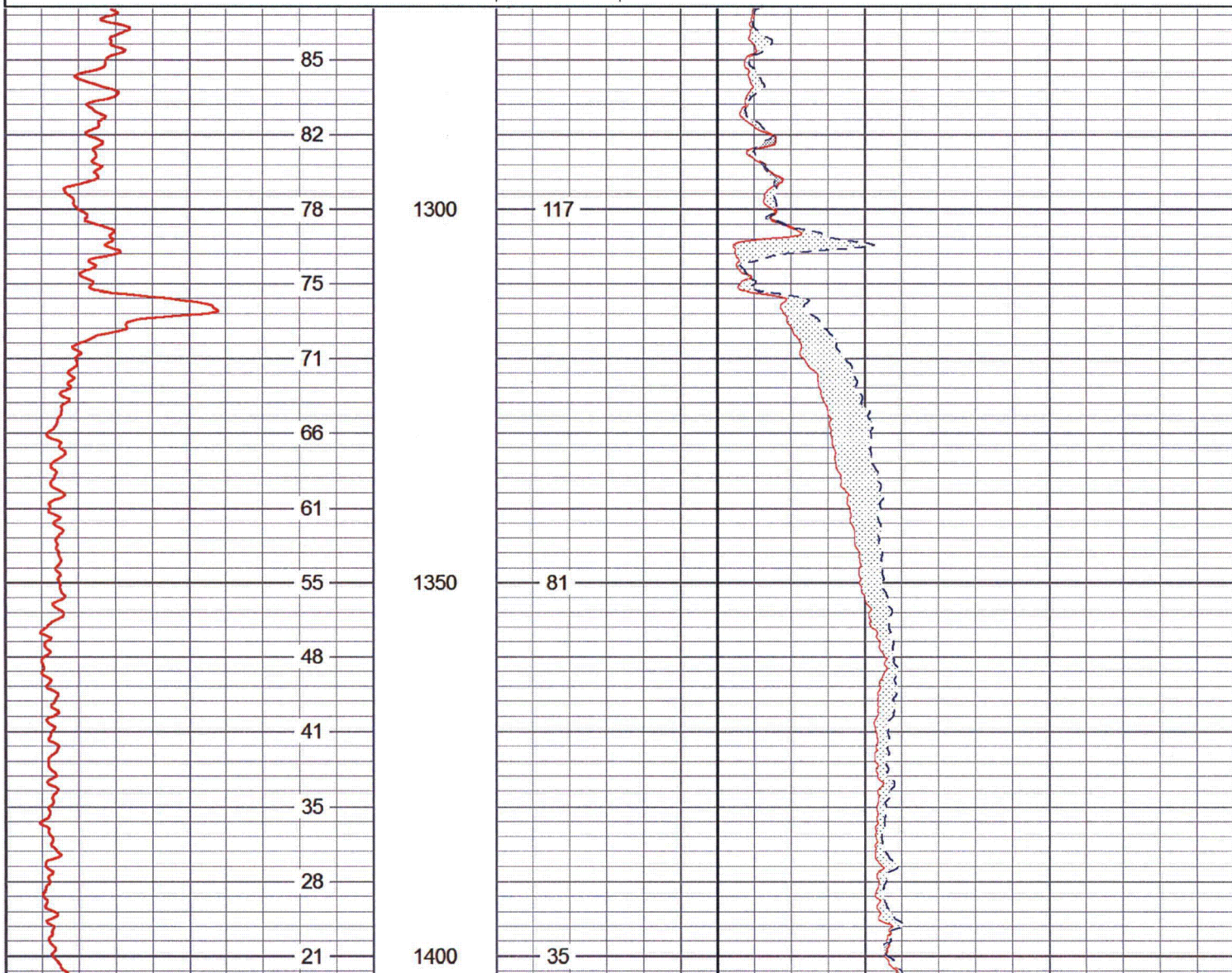


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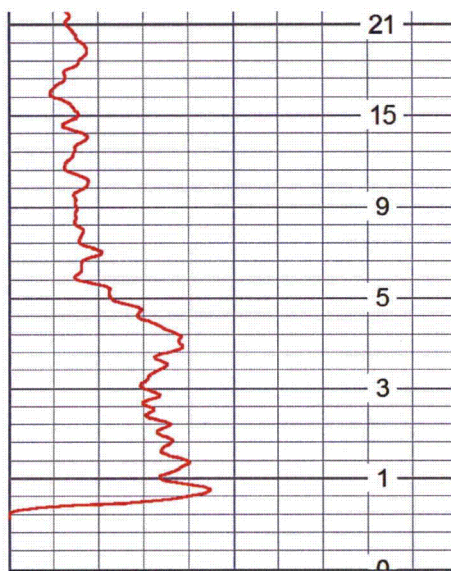
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0	GAMMA RAY (GAPI)	100	10	X-CALIPER (in)	50
	ABHV (bbl)		10	Y-CALIPER (in)	50
			10	BIT SIZE (in)	50
			TBHV (bbl)		

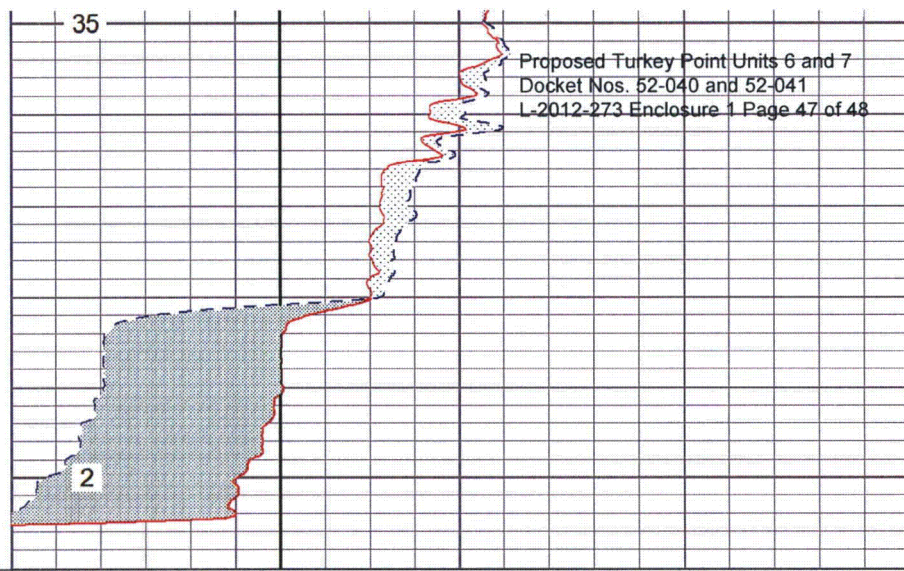






1400

1450



0 GAMMA RAY (GAPI) 100  
ABHV (bbl)

10 X-CALIPER (in) 50  
10 Y-CALIPER (in) 50  
10 BIT SIZE (in) 50  
TBHV (bbl)

#### Calibration Report

Database File: fpldzmw1.db  
Dataset Pathname: turkeypoi/well/run6/pass3  
Dataset Creation: Mon Jun 11 13:08:33 2012 by Log SOC 111108

#### XY Caliper Calibration Report

Serial Number/Model:  
Performed:

120117-GOI  
Mon Jun 11 12:42:49 2012

Ring			X Caliper		Y Caliper	
1:	16	in	414.21	cps	379.51	cps
2:	23.25	in	482.15	cps	454.32	cps
3:	28	in	537.71	cps	511.41	cps
4:	36	in	630.1	cps	608.91	cps
5:	44	in	728.4	cps	714.21	cps
6:	52	in	836.1	cps	826.1	cps

#### Gamma Ray Calibration Report

Serial Number: 120115  
Tool Model: PTS\_OH  
Performed: Sun Apr 29 06:31:49 2012

Calibrator Value: 400.0 GAPI

Background Reading: 284.0 cps  
Calibrator Reading: 2172.6 cps

Sensitivity: 0.3300 GAPI/cps



Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
GR	7.08		GR-PTS_OH (120115) Open Hole Gamma Ray	3.50	3.38	47.00
			XYC-GOI (120117) 4 Arm X-Y Caliper	6.25	3.25	45.00
YCAL	1.08					
XCAL	1.00					

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Dataset: fpldzmw1.db: turkeypoi/well/run6/pass3  
Total Length: 9.75 ft  
Total Weight: 92.00 lb  
O.D. 3.38 in