**MV Geophysical**

# X-Y CALIPER
# GAMMA RAY
# LOG

Company Florida Design Drilling Corp.
Well PW-1
Field Davie
County Broward
State/Prv Florida

| | | | |
|---|---|---|---|
| Company | Florida Design Drilling Corp. | | |
| Well | PW-1 | | |
| Field | Davie | | |
| County | Broward | State/Prv | Florida |

| | |
|---|---|
| Location<br>Production Wellfield Expansion<br>Town of Davie - UF Test Site<br>AECOM | Other Services<br>XY/GR<br>DIL,BHC<br>FLO,FCT |

| | | | |
|---|---|---|---|
| Permanent Datum | G.L. | Elevation | Elevation |
| Log Measured From | G.L. | | K.B. |
| Drilling Measured From | G.L. | | D.F.<br>G.L. |

| | | | |
|---|---|---|---|
| Date | 28-JUN-2012 | | |
| Run Number | FOUR | | |
| Depth Driller | 1576' | | |
| Depth Logger | 1576' | | |
| Bottom Logged Interval | 1576' | | |
| Top Log Interval | 820' | | |
| Open Hole Size | 14.75"/9.875" | | |
| Type Fluid | H2O | | |
| Density / Viscosity | na/na | | |
| Max. Recorded Temp. | see FCT log | | |
| Estimated Cement Top | SURFACE | | |
| Time Well Ready | 14:00 6/28/2012 | | |
| Time Logger on Bottom | 14:30 6/28/2012 | | |
| Equipment Number | MVGS-1 | | |
| Location | Ft. Myers | | |
| Recorded By | S.Miller/C.Miller | | |
| Witnessed By | S. English (AECOM) | B.Balmer (FDD) | Rossco (FDD) |

| Borehole Record | | | | Tubing Record | | | |
|---|---|---|---|---|---|---|---|
| Run Number | Bit | From | To | Size | Weight | From | To |
| ONE | 41" | 46' | 256' | FIVE | 9.875 | 1100' | 1576' |
| TWO | 11.875" | 255' | 1100' | | | | |
| THREE | 28" | 255' | 975' | | | | |
| FOUR | 15" | 972' | 1100' | | | | |

| Casing Record | Size | Wgt/Ft | Top | Bottom |
|---|---|---|---|---|
| Surface String | 42" | 0.375" WT | SURFACE | 46' |
| Prot. String | 30" | 0.375" WT | SURFACE | 255' |
| Production String | 16" FRP | 15.875" ID | SURFACE | 972' |
| Liner | | | | |
| Invoice No. | 2012135 | fddavie1.db | 8fld/4fld/.pdf/.las | * 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.

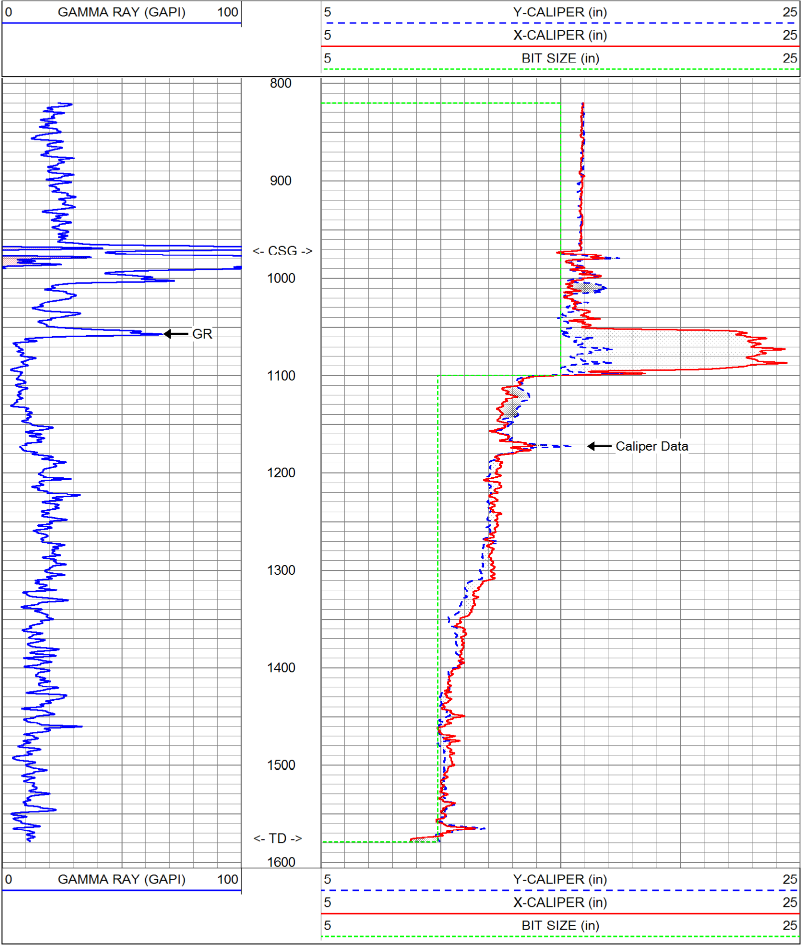
## Comments

X-Y Caliper Arm Extensions: 33"

**MV**
**Geophysical**

# MAIN PASS

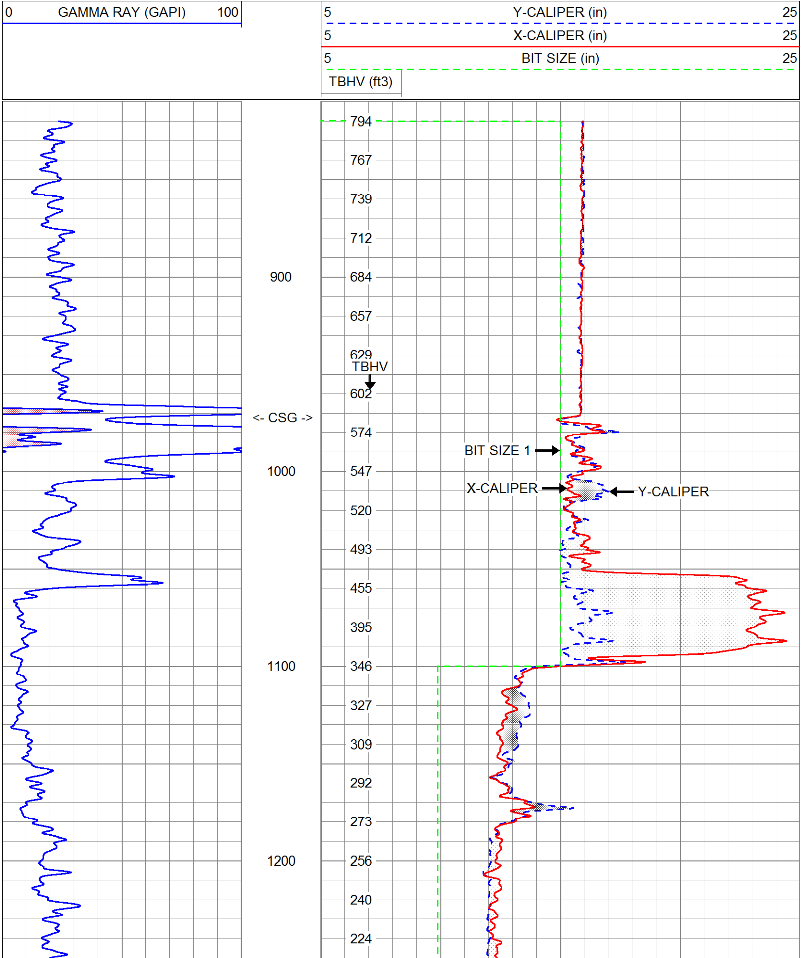
| | |
|---|---|
| Database File: | fddavie1.db |
| Dataset Pathname: | run4/MAIN |
| Presentation Format: | xy525-1 |
| Dataset Creation: | Thu Jun 28 15:35:59 2012 |
| Charted by: | Depth in Feet scaled 1:1200 |

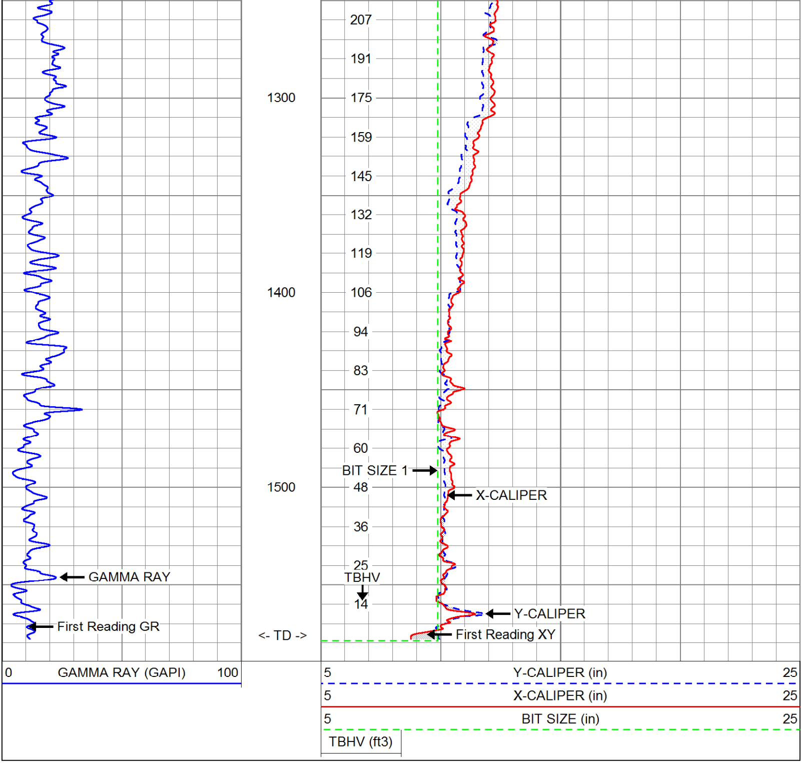


**MV Geophysical**

# MAIN PASS

Database File: fddavie1.db
Dataset Pathname: run4/MAIN
Presentation Format: xy525-5
Dataset Creation: Thu Jun 28 15:35:59 2012
Charted by: Depth in Feet scaled 1:600

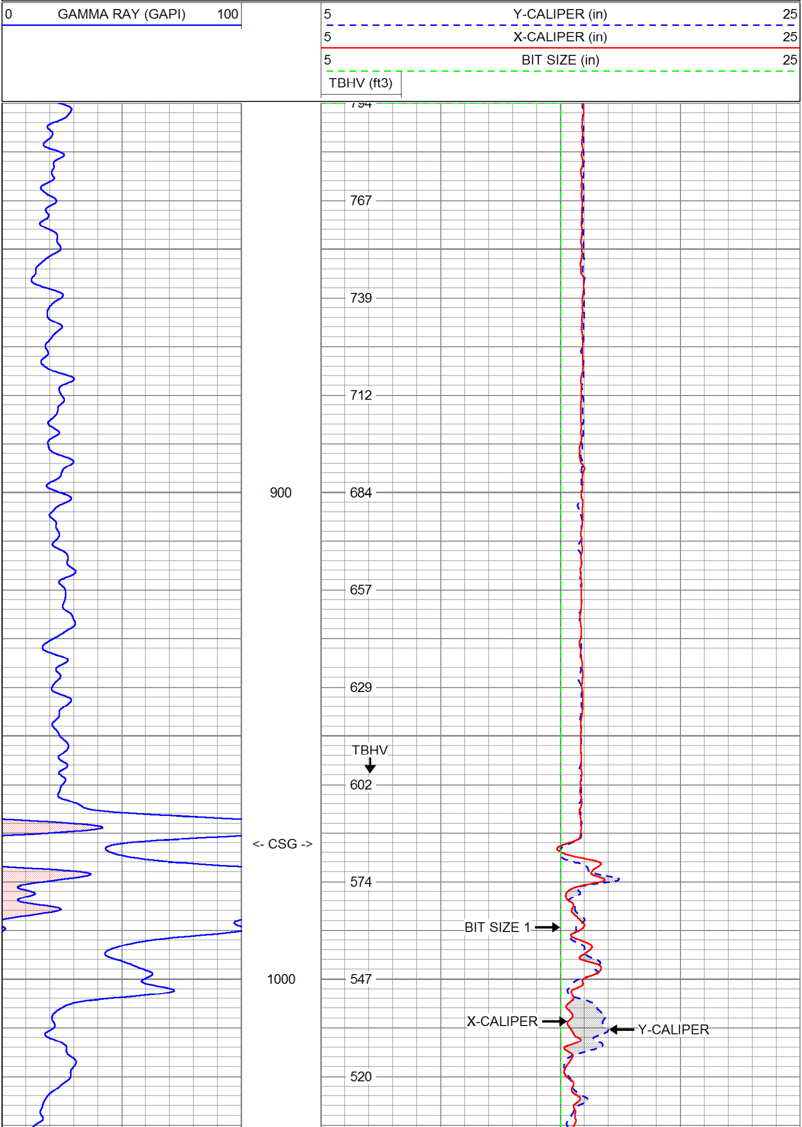


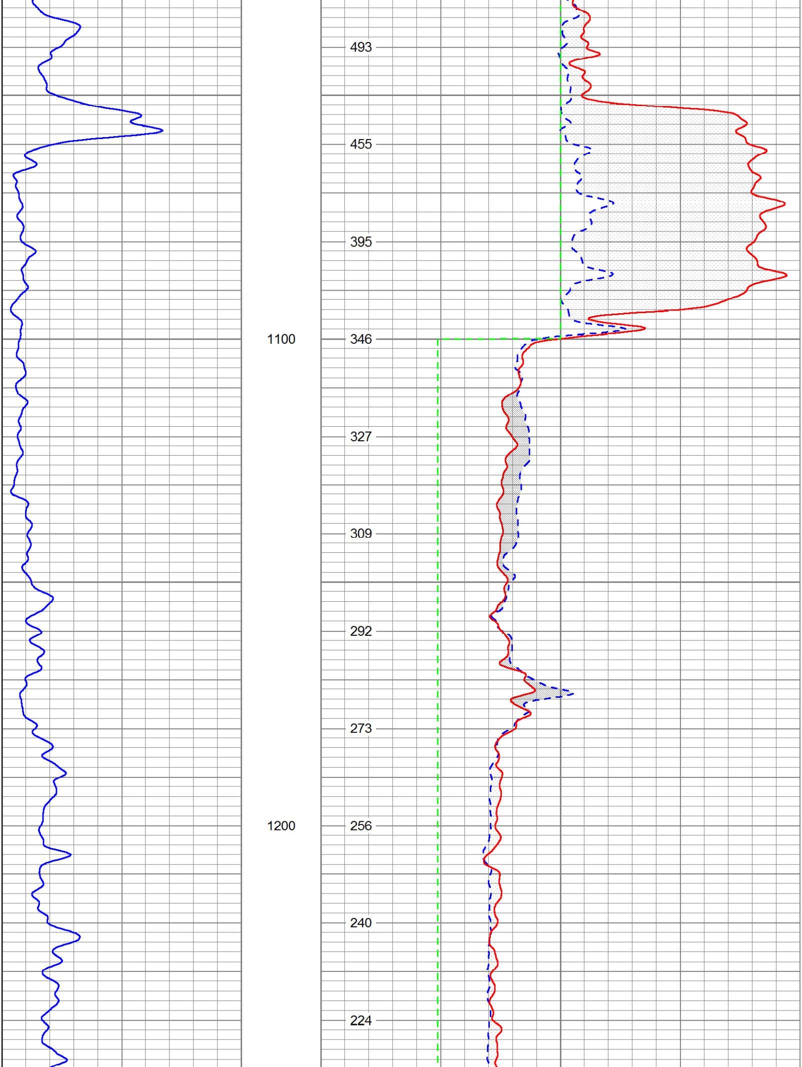


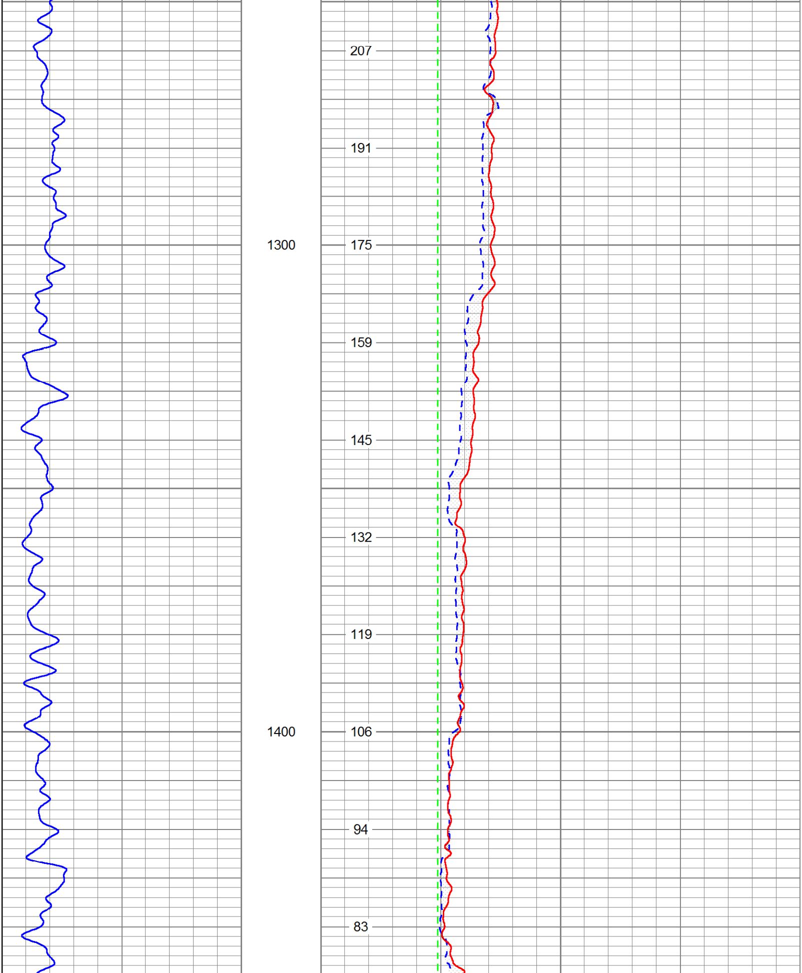
**MV**
**Geophysical**

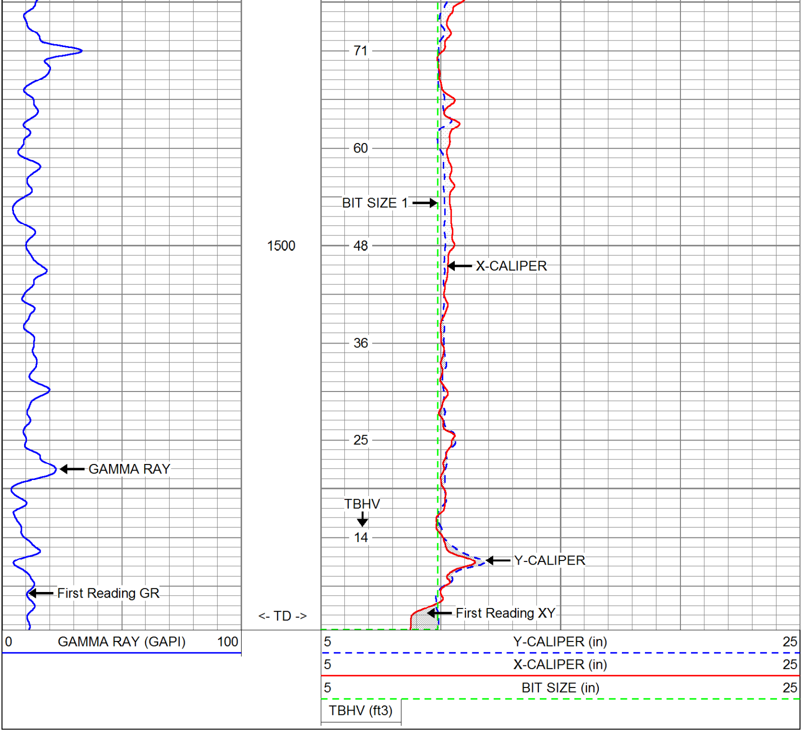
# MAIN PASS

Database File: fddavie1.db
Dataset Pathname: run4/MAIN
Presentation Format: xy525-5
Dataset Creation: Thu Jun 28 15:35:59 2012
Charted by: Depth in Feet scaled 1:240





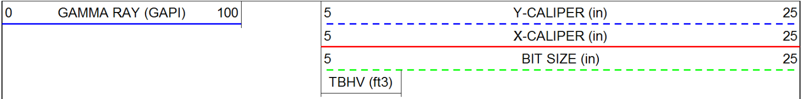


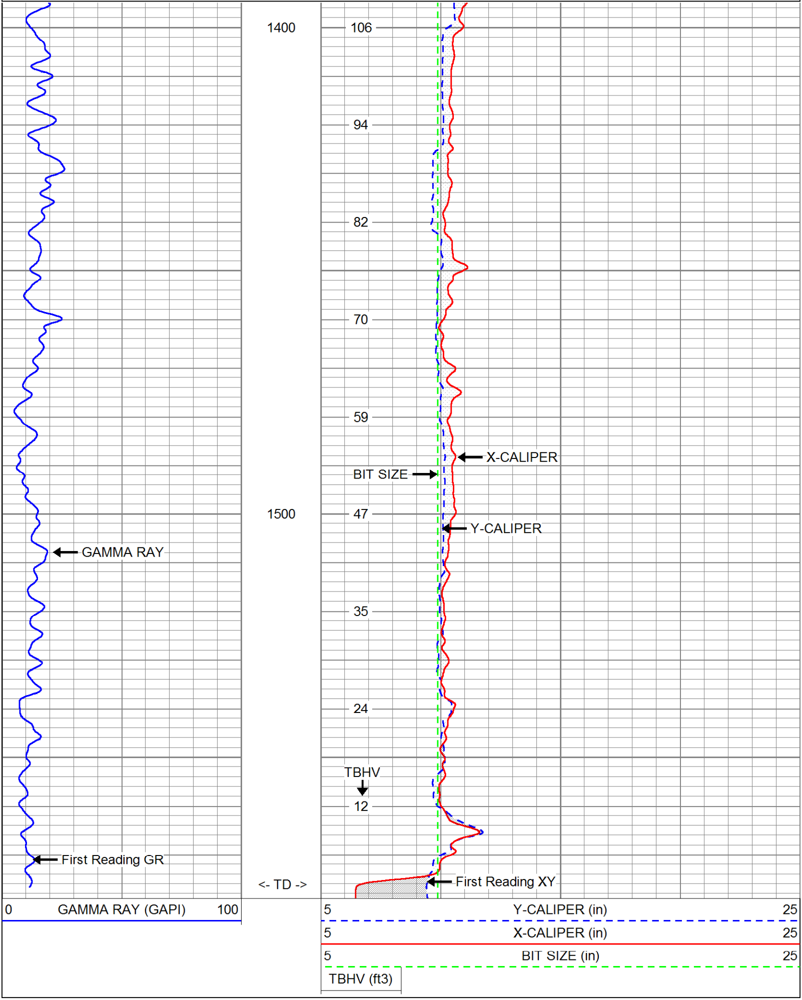


**MV Geophysical**

# REPEAT SECTION

| | |
|---|---|
| Database File: | fddavie1.db |
| Dataset Pathname: | run4/REPEAT |
| Presentation Format: | xy525-5 |
| Dataset Creation: | Thu Jun 28 14:59:49 2012 |
| Charted by: | Depth in Feet scaled 1:240 |





# Calibration Report

Database File: fddavie1.db
Dataset Pathname: run4/pass1
Dataset Creation: Thu Jun 28 14:38:03 2012 by Log VER_5.3

## XY Caliper Calibration Report

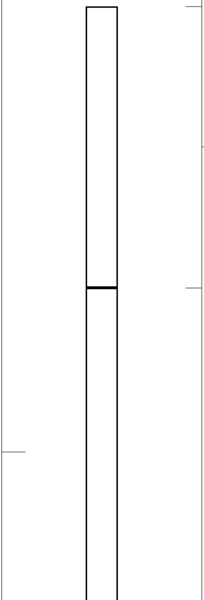
Serial Number: 01S
Tool Model: XYCS
Performed: Thu Jun 28 14:40:36 2012

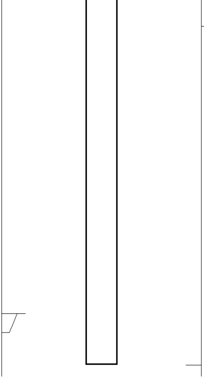
| | | | |
|---|---|---|---|
| Small Ring: | 9.875 | in | |
| Large Ring: | 33 | in | |
| | X Caliper | Y Caliper | |
| Reading with Small Ring: | 725 | 666 | cps |
| Reading with Large Ring: | 1133.3 | 1076 | cps |
| Gain: | 0.0566373 | 0.0564024 | |
| Offset: | -31.187 | -27.689 | |

## Gamma Ray Calibration Report

Serial Number: 01
Tool Model: GROH
Performed: Thu Jun 28 10:37:51 2012

| | | |
|---|---|---|
| Calibrator Value: | 120 | GAPI |
| Background Reading: | 12.988 | cps |
| Calibrator Reading: | 134.358 | cps |
| Sensitivity: | 0.988712 | GAPI/cps |

| Sensor | Offset (ft) | Schematic | Description | Len (ft) | OD (in) | Wt (lb) |
|---|---|---|---|---|---|---|
| GR | 5.00 |  | GR-GROH (01) | 2.75 | 3.50 | 40.00 |



| | | | | |
|---|---|---|---|---|
| | | XYC-XYCS (01S) | 6.60 | 3.50 | 110.00 |
| XCAL | 0.50 | | | | |
| YCAL | 0.50 | | | | |

Dataset: fddavie1.db: field/well/run4/pass1
Total Length: 9.35 ft
Total Weight: 150.00 lb
O.D. 3.50 in

**MV**
**Geophysical**

| | |
|---|---|
| Company | Florida Design Drilling Corp. |
| Well | PW-1 |
| Field | Davie |
| County | Broward |
| State | Florida |
| Country | USA |