

RIVER ROAD WASTEWATER TREATMENT PLANT Event Summary For 12/20/13

<u>Time</u>	<u>Event Name</u>	<u>State</u>
08:51:51	KHARRISON (On Host)	Logged-In
08:52:08	KHARRISON (On Host)	Logged-In
08:52:53	AIT-613 Turbidity changed by KHARRISON (On Host)	18.20 NTU
08:52:57	AITH-613-ALARM (HIGH TURBIDITY ALARM)	ALARM
08:53:08	KHARRISON (On Host)	Alarm Acknowledge
08:55:36	KHARRISON (On Host)	Logged-In
08:55:36	AITH-613-ALARM ACK changed by KHARRISON (On Host)	ACK. ALARM
08:56:28	KHARRISON (On Host)	Logged-In
08:56:28	AITH-613-ALARM ACK changed by KHARRISON (On Host)	ACK. ALARM
08:56:29	AITH-613-ALARM (HIGH TURBIDITY ALARM)	NORMAL
08:56:29	AIT-615 NH2CL changed by KHARRISON (On Host)	1.00 mg/L
08:56:59	AITL-615-ALARM (HIGH MONOCHLORIMINE ALARM)	ALARM
08:57:02	KHARRISON (On Host)	Alarm Acknowledge
08:57:21	KHARRISON (On Host)	Logged-In
08:57:51	AITL-615-ALARM ACK changed by KHARRISON (On Host)	ACK. ALARM
08:57:51	AITL-615-ALARM (HIGH MONOCHLORIMINE ALARM)	NORMAL
08:57:53	KHARRISON (On Host)	Alarm Acknowledge
08:57:59		

Completed Work Order Detail Report

Electronics

2/4/2014
Page 1 of 1

WO #	17631	Type	UnSch	Priority	5
Create Reason	Other	Created By	fhill	Created	2/4/2014
Equipment	AIT-611	CL2 Influent Analyzer	Scheduled	Printed	
Location	05	Chlorinator/Hydro Room	Delinquent	Scheduled	1/31/2014
Task	-Unlisted-		Completed	Delinquent	1/31/2014
			Shutdown	Completed	1/31/2014
			Startup		

Instructions

Configure chlorine influent analyzer output relay for low residual alarm to shut down the pump when residual falls to 0.00 mg/L.

Comments Configured relay C for normally closed condition and an inductive load. Advanced Electric technicians connected the wiring to the relay and supplied the circuit with 24VDC to another relay in the controller cabinet. Set the low alarm setpoint to 0.01 mg/L. Then simulated an alarm condition, which opened the circuit and shut the electric pump motor off. Restored the setpoint to 0.01 mg/L, with the actual residual above 4 mg/L, and the electric pump motor automatically restarted.

Meter And Gauge Readings

(None)

Work Order Part

(None)

Work Order Labor

Labor Class	Description	Labor Account No	Employee	Est. Hours	Actual Hours	Cost
ELEC 1	ELECTRONIC TECH I	(Unassigned)	JHANSEN	0	1	\$0.00
ELEC 2	ELECTRONIC TECH II	(Unassigned)	FHILL	0	1	\$0.00
Labor Total						\$0.00

Work Order Total

\$0.00

Report Totals

Downtime Hours	0.00	Part Cost	\$0.00
		Labor Cost	\$0.00
		Vendor Cost	\$0.00
		Total Cost	\$0.00

Completed Work Order Detail Report

Electronics

2/21/2014
Page 1 of 2

WO # 17659	Type Sched	Priority 5	Created 2/21/2014
Create Reason Other	Created By fhill		Printed
Equipment FIT-613 WTP Flow	Portable Doppler Flowmeter		Scheduled 2/21/2014
Location 06	CCB Area		Delinquent 2/21/2014
Task WTP-CAL	WTP Instrument Calibration		Completed 2/21/2014
			Shutdown

Instructions

Verify Greyline portable flowmeter signal calibration and compare to the portable flowmeter from Cypress WTP.

Comments

Calibration Data
20 mA: 8.744 MGD
4 mA: 0.00 MGD

Calibration Verification:

Current flow reading: 2.71 MGD @ 8.95 mA
16/8.744=1.8298x2.71=4.958+4=8.98 mA
0.11% difference

Mounted doppler flowmeter from Cypress and programmed:

min. flow: 0.0mgd
measurement: inches
pipewall: 1.125"
pipe od: 18"
20 mA: 8.744 mgd

Compared readings: RR meter Cypress meter

2.67mgd 2.76mgd
2.68mgd 2.64mgd
2.70mgd 2.72mgd
2.73mgd 2.72mgd

At 2.69 mgd, RR meter showed 8.92 mA.

16/8.744=1.8298x2.69=4.92+4=8.92 mA

At 2.75 mgd, Cypress meter showed 9.03 mA

16/8.744=1.8298x2.75=5.03+4=9.03 mA.

Meter And Gauge Readings

(None)

Work Order Part

(None)

Work Order Labor

Labor Class	Description	Labor Account No	Employee	Est. Hours	Actual Hours	Cost
ELEC 1	ELECTRONIC TECH I	(Unassigned)	JHANSEN	0	1.5	\$0.00
ELEC 2	ELECTRONIC TECH II	(Unassigned)	FHILL	0	1.5	\$0.00
Labor Total						\$0.00

Work Order Total

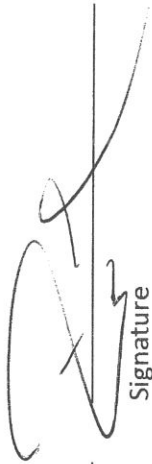
\$0.00

River Road Discharge Flow Verification

The Greyline flow meter being used to send flow information to the SCADA system at the River Road Waste Water Treatment Plant has been verified to be reading the correct flow on February 11, 2014. The verification meter being used was a Greyline Instruments Inc. model PTFM 1.0 A-1, serial number 56729 with sensor serial numbers 14A28932 and 14A28933. The calibration certificate for said Greyline instrument is attached to this document.

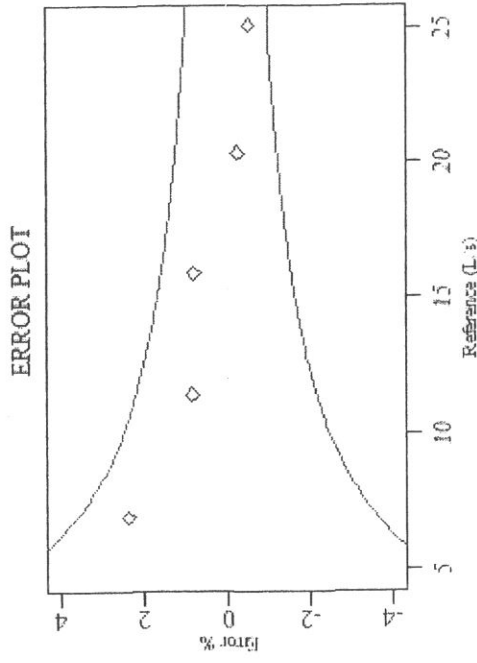
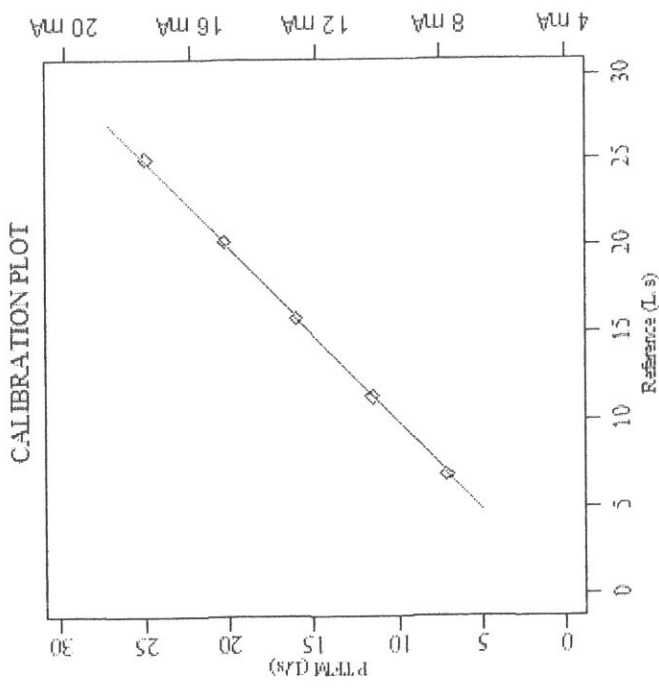
Greyline (River Road) Flow Reading: 2.7 Time: 14:44

Greyline PTFM 1.0 Flow Reading: 2.8 Time: 14:44
Luke Baker 
Name of Reader Signature

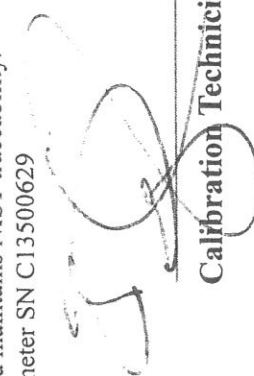
Rusty Fork 
Name of Reader Signature

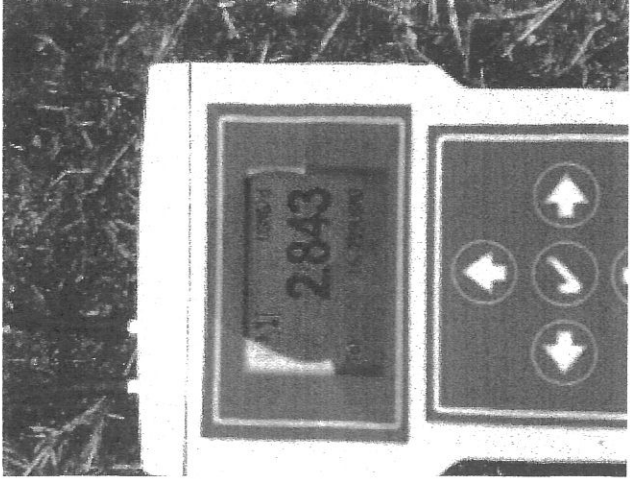
Model: PTFM 1.0 A-1**Manufacturer:** Greyline Instruments Inc.**SN:** 56729**Sensor:** SE16B**Calibration Date:** January 24, 2014**Sensor SNs:** 14A28932, 14A28933**Cal Constant:** 0.984**TEST CONDITIONS****Pipe Material:** PVC**Pipe OD:** 114.3 mm**Pipe Wall:** 6.35 mm**Water Temp:** 20.3 °C**Sensor Spacing :** 67.3 mm**Pipe Configuration :** Horizontal, straight,
6.1m long, mounted
1.2m from inlet.**CALIBRATION DATA**

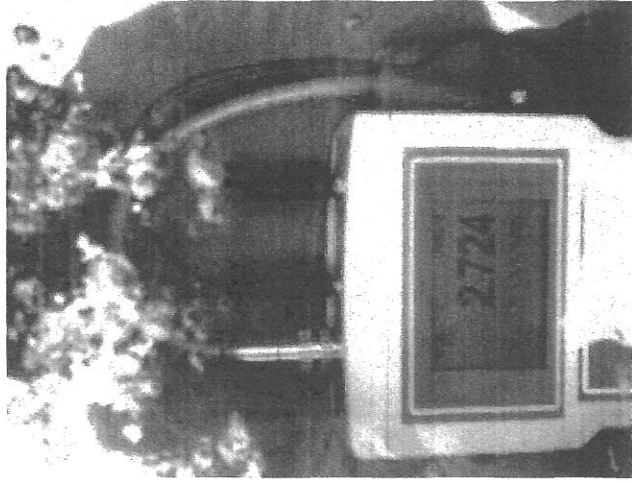
Ref Meter (L/s)	TTFM (L/s)	TTFM (4-20mA)	Error (L/s)	Error %
6.91	7.07	7.81	0.16	2.3
11.42	11.51	10.21	0.09	0.8
15.85	15.97	12.62	0.12	0.8
20.29	20.24	14.92	-0.05	-0.2
25.08	24.94	17.46	-0.14	-0.6

**NOTES:**

- Specified tolerance +/- 1% of reading or 0.03 m/s whichever is greater.
- Reference is 4" magmeter with known accuracy and maintains NIST traceability.
- Model: Krohne OPTIFLUX KC 2000F/6 4" magmeter SN C13500629

January 24, 2014**Print Date**
Calibration Technician





Cypress Discharge Flow Verification

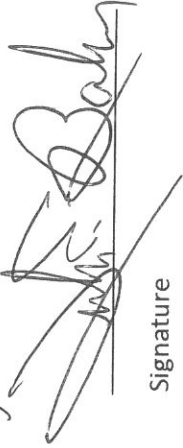
The Eastech flow meter being used to send flow information to the SCADA system at the Cypress Water Treatment Plant has been verified to be reading the correct flow on February 11, 2014. The verification meter being used was a Greyline Instruments Inc. model PTFM 1.0 A-1, serial number 56729 with sensor serial numbers 14A28932 and 14A28933. The calibration certificate for said Greyline instrument is attached to this document.

Eastech Flow Reading: 4.2 mgd Time: 13:10

Greyline Flow Reading: 4.4 mgd Time: 13:10

Luke Baker

Name of Reader



Signature

Rusty Park

Name of Reader



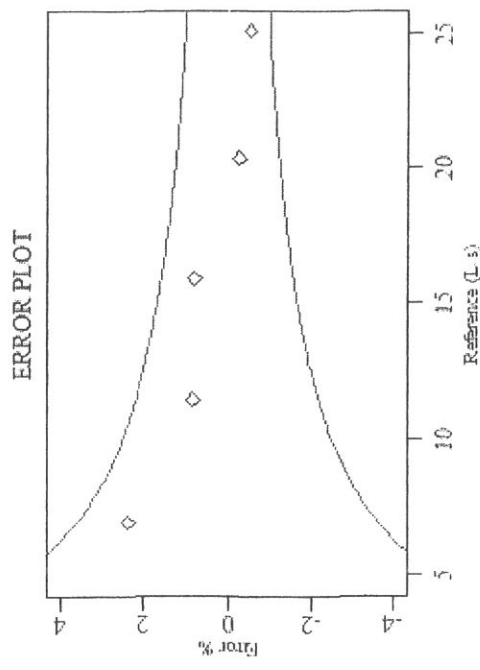
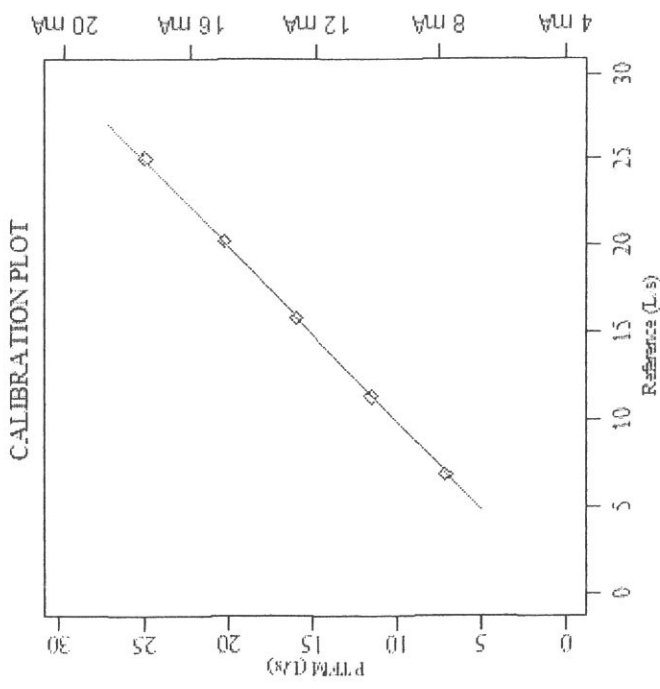
Signature

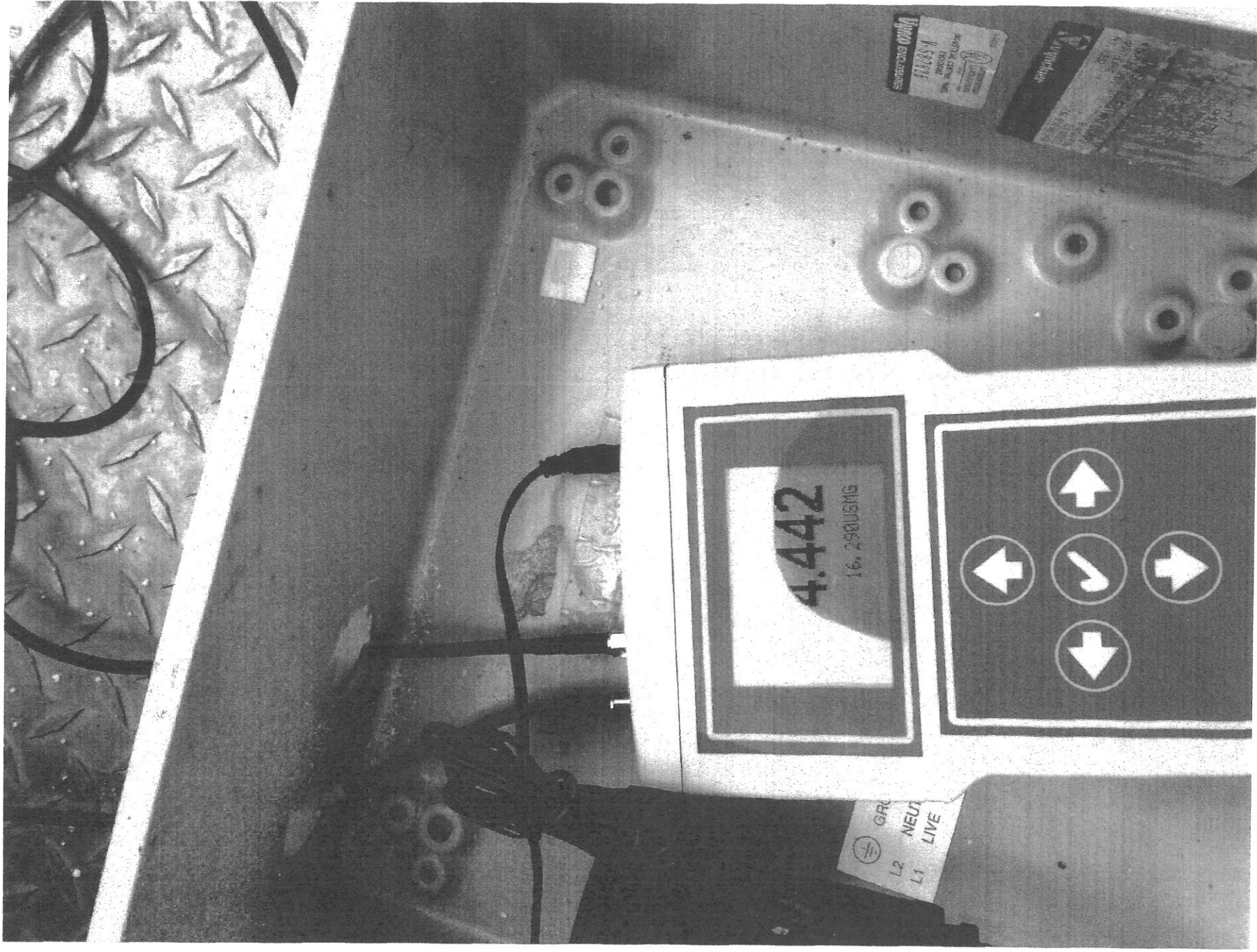
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NOTES:

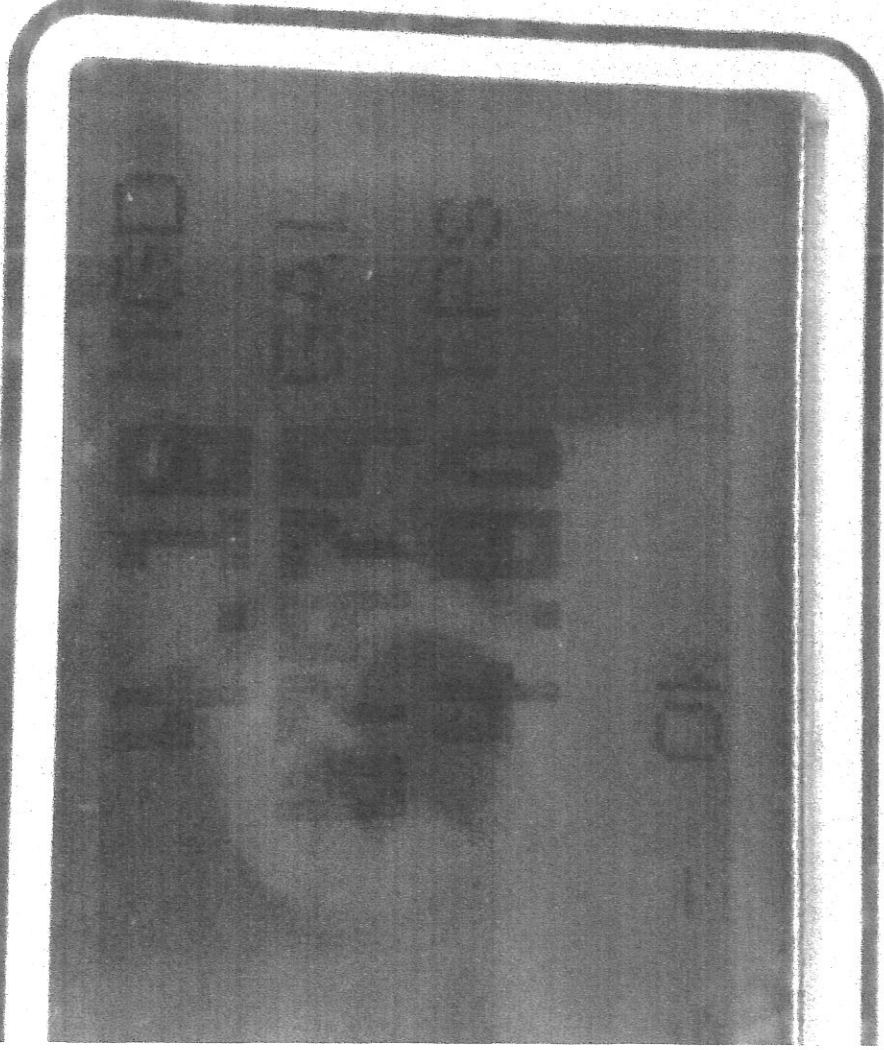
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- Model: Krohne OPTIFLUX KC 2000F/6 4" magmeter SN C13500629

January 24, 2014**Print Date****Calibration Technician**



astecn

FLOW CONTROLS



ANTAGE™ 4400
Ultrasonic Flowmeter

MEN