Technical Assistance

Leak Detection

California Rural Water Association

California Water Boards
STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

Date	Water System
June 7 & 8, 2017	Lebec County Water District (1510051)
Critical Zone Survey	323 Frazier Mountain Park Rd
AR# 5229	Lebec Ca 93243
	Michael Hightower
Tim Healy/Leak Detection Specialist	"661-248-6872"

Water System Inventory

Water System	Lebec County Water District
Street	323 Frazier Mountain Park Rd
City	Lebec Ca 93243
MHI (< $49,191)	
Population	1100
Connections	312
Year Est.	1969
Flat Rate/Tiered	Flat Rate
Maps/As-builts/GIS	Limited Maps
Dirt Roads/Paved	Dirt Roads/Paved
Sewer/ Septic	Septic
System Operator	Michael Hightower

Wells	Qty.	Avg. Depth	Surface Water		Treatment Plant	
	3					

Main Pipe	Size				Miles	Asbestos	Ductile Iron	Steel	Cast Iron	PVC (C-900)	CMLC
	(2) 4 6 (8) 10 (12)				15-20					✓	

Service	Size				Poly	Copper	Galvanized	HDPE	PVC	Driscoll	Other
	(½ ¾ 1) 1½ 2						✓				

Valve	Size				Qty.	Gate	Butterfly	Globe	Check	Ball	Plug
	(2) 4 6 (8) 10 (12)				?	✓					

Hydrant	Size				Qty.	Wharf-Head	Blow-Off	Commercial		Residential	Meter
	(2 4 6)				50	✓		✓			

Meter	Size				Qty.	AMR/AMI	P/D	Smart	Turbine	Compound	Mag
	(¾ 1) 1½ 2 4 6				312		✓				

Air Relief &Vacuum	Size			Qty.	Booster Pump & Hydro Pneumatic	Qty.	Storage Tanks	Qty.
	¾ (1) 1½ 2			10		5		19

Backflow Valve	Size			Qty.	Pressure Reducing Valve		Size	Qty.
	¾ (1) 1½ (2) 4			50			2 4 6 8	3

Comments: The maps/asbuilts were taken by a former employee so they have very limited mapping on hand. The water system has limited amount of isolation valves. The operators change out meters as needed but most are older than 15 yrs. The water systems pressure ranges from 28 to 220 PSI. The water service lines from the mains are all galvanized piping.

Recommendations: Install isolation valves to limit the amount of customer outages due to repairs. Replace meters with smart meters and upgrade to ARM system. Install PRV's in zones of very high pressure. Increase storage capacity. Install SCADA for remote area system facilities.

Daily Log

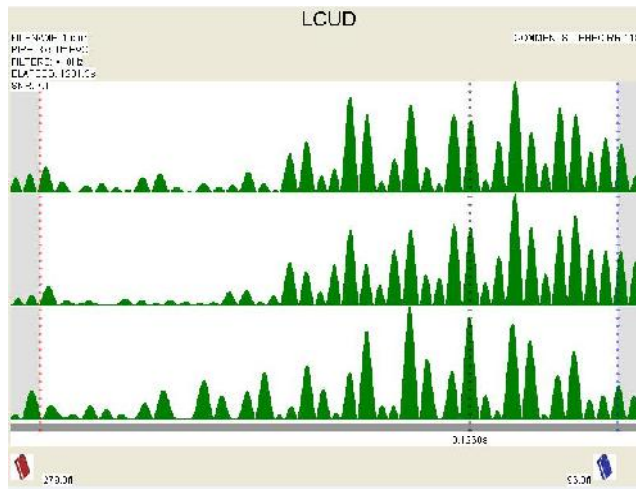| Water System:	Lebec County Water District		California Rural Water Association		
Leak Detection Team Member:	Tim Healy		Leak Detection Specialist		
Equipment Used:	FCS Correlator - FCS Acoustic Ground Mic - Data Loggers – Google Map/System Map				
System PSI:	28-220		Pressure Zone: 3?		

Street Address of both Correlators / Cross Street	Hydrant	System Valve	Curb Stop	Diameter / Material	Length / Footage
1191 Lebec Rd	1		1	8"/PVC	375'
525 North Dr to 659 North Dr			2	8"/PVC	419'
North Dr/Old Ridge Rd to No Name Rd	1		1	8"/PVC	410'
2243 Lebec Rd to 2255 Lebec Rd		1	1	8"/PVC	454'
Lebec Rd under Interstate 5 to the State well		2		12'/PVC	650'
Lebec Rd under Interstate 5 to Lebec Service Rd		2		8"/PVC	400'
602 Wainright Ct to the end of paved road	1	1		8"/PVC	502'
End of Wainrihgt Ct to the first valve out in the field along side the Holiday		2		8"/PVC	334'
Valve in the field along sid ethe Holiday inn Express to the valve on the		2		8"/PVC	400'
217 Chimney Canyon Rd to 382 Chimney Canyon Rd		1	1	6"/PVC	633'
371 Castac View Rd to 288 Castac View RD	1		1	6"/PVC	734'
Cuddy Canyon/Valley View to 333 Valley View Rd	1		1	6"/PVC	440'
333 Valley View Rd to 301 Valley View Rd			2	6"/PVC	385'

Leak Report

Date:	June 7 & 8 2017
System:	Lebec County Water District
Leak Detection members:	Tim Healy
Equipment Used:	FCS Correlator and FCS Acoustic Ground Mic
Map Reference:	Google Map/System Map

Street and/or Block Numbers: Lebec Rd, North Rd, No Name Rd, Under Interstate 5, Wainright Ct, Chimney Canyon Rd, Valley View Rd and Castac Rd

Leak Number	Address of Suspected Leak	Utility or Customer (U or C)	Leak Pinpointed (Y or N)	Leak to be Rechecked (Y or N)	Leak Repaired (Y or N)	Not a Leak? (Date)
N/A						

	Meters / Curb Stop	Hydrants	Valves	Test Rods	Other
Indicate Number of Manual Listening Points Used	10	5	11	0	
Indicate Number of Leak Noise Loggers Listening Points Used	0	0	0	0	

Miles of Mains Surveyed:	1.15	Survey Time: (Hours)	10
Number of Leaks Suspected:	0	Rechecked: (Numbers)	0
Number of Leaks Pinpointed:	0	Pinpointing Time: (Hours)	0

Remarks: No leaks found in surveyed areas

Survey Graph

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☑ Water passing through a meter.   □ Running pumps.

□ Electrical (Transformer).   □ Illegal service.

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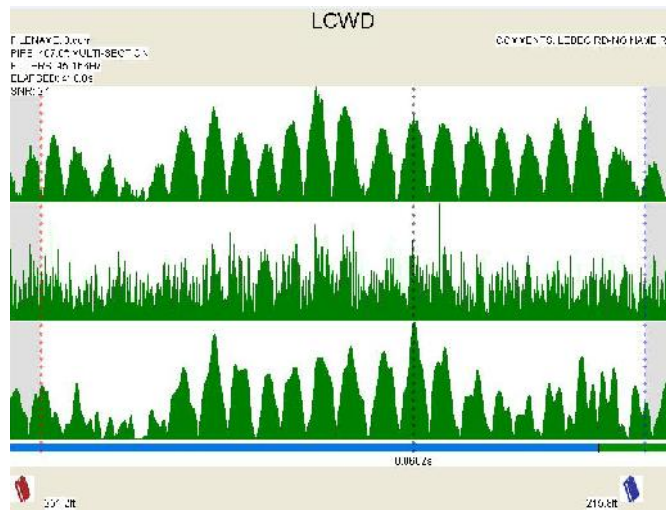
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Comments: No leaks found

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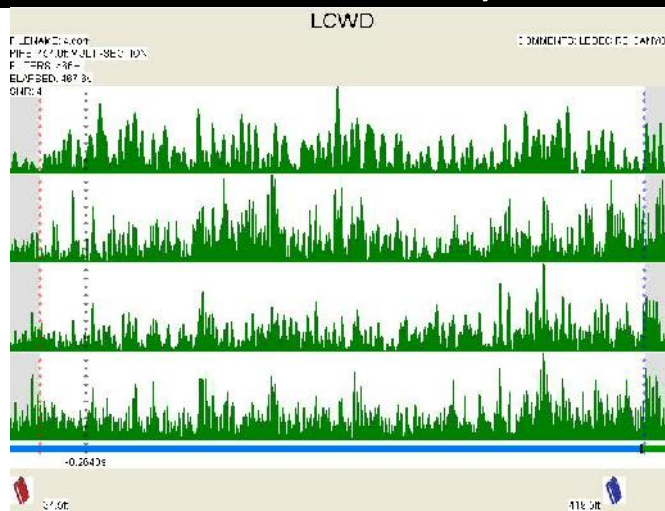|	
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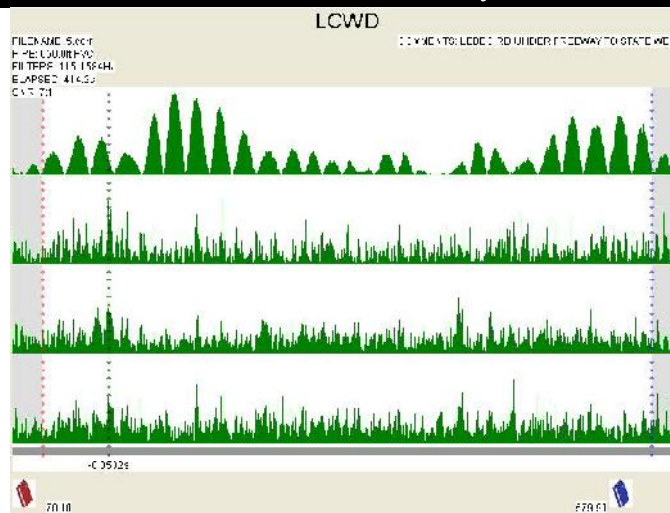|	
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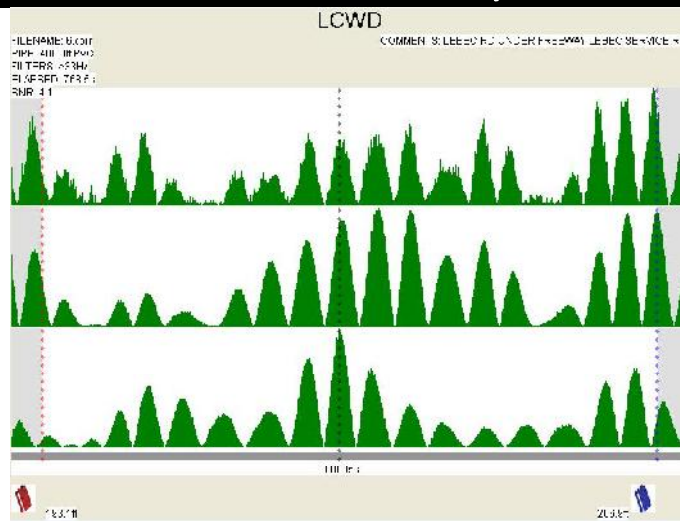|	
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LCWD

FILENAME: S.cct
FILTERS: 115.15&4H.
ELAPSED: 414:33
CVG: 7:1

COMMENTS: LEDC ; RD UNDER FREEWAY TO STATE WELL

-0.0502s

70.10   670.61

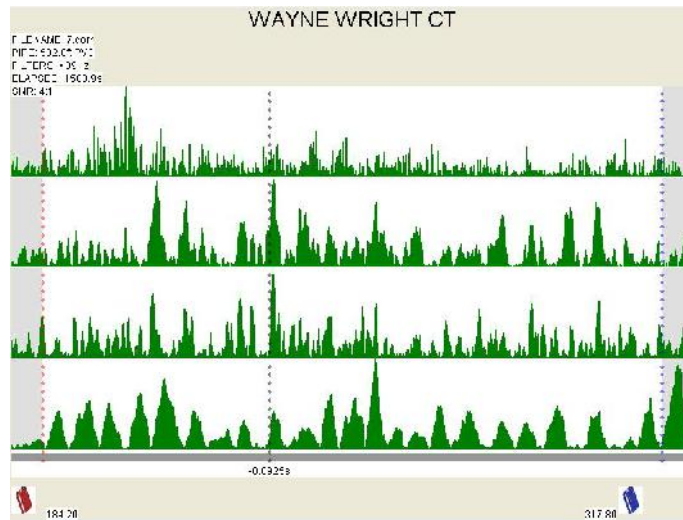|	
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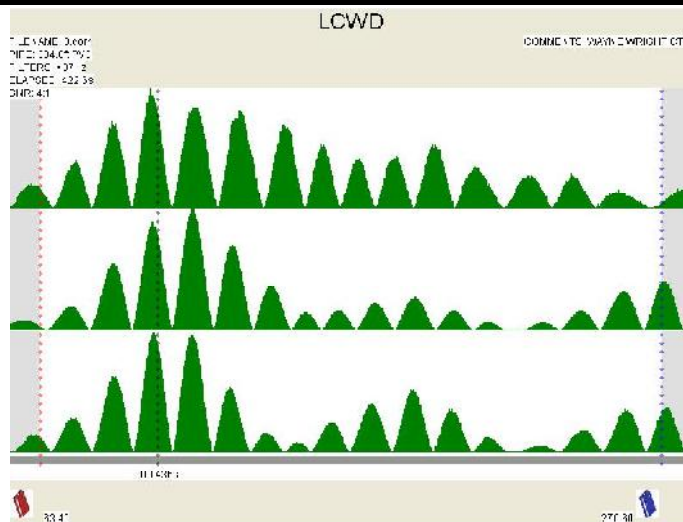|	
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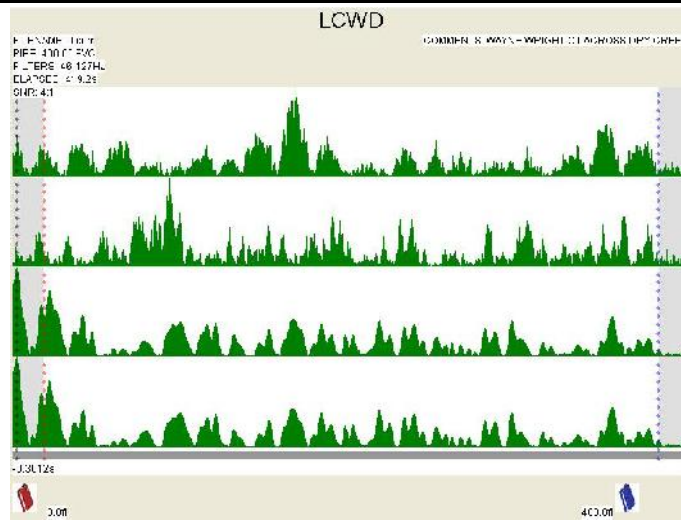|	
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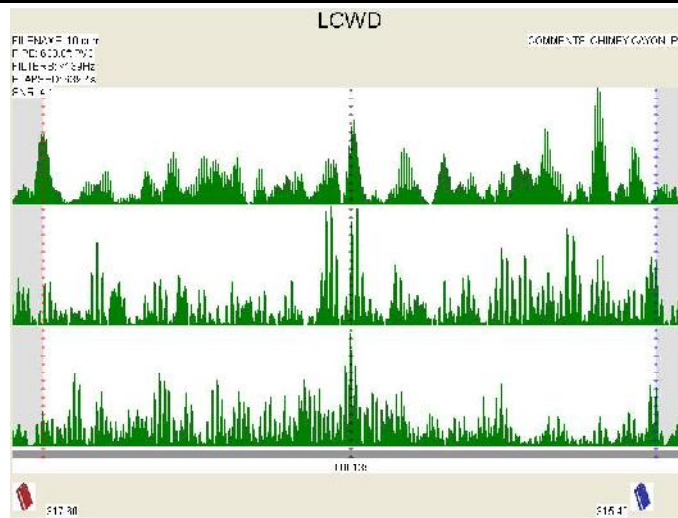|	
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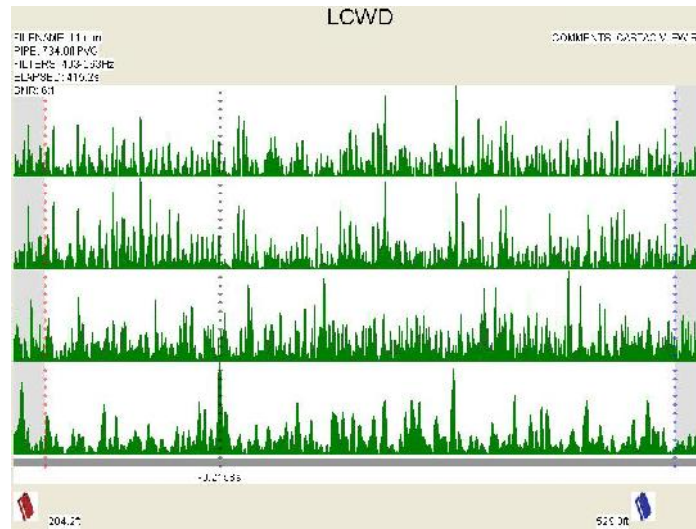|	
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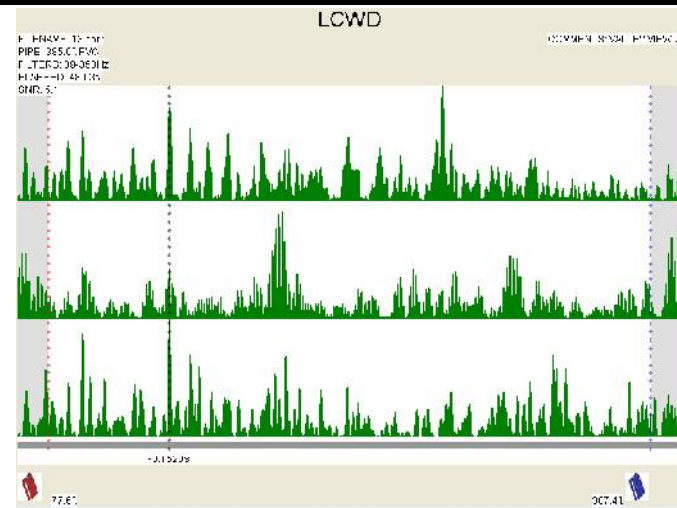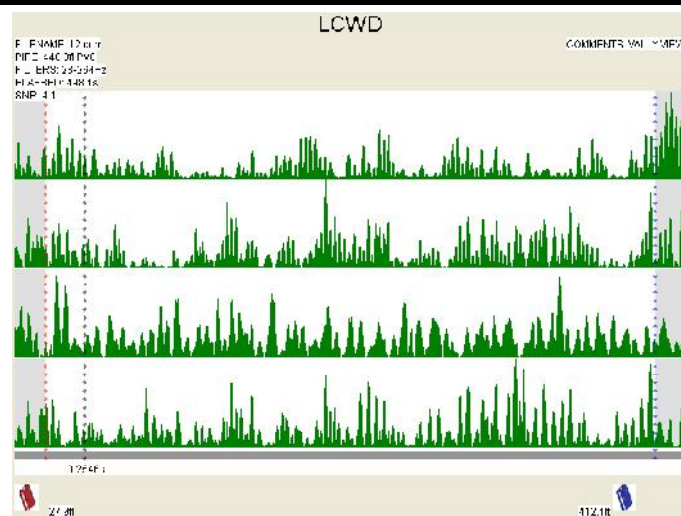***The correlation has detected "No leak(s)".***

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Water System Map

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