ANEXO 2. FORMATOS LLENOS

FORMATO DE INSERTO (SENSOR) GAMMA

Sperry Drilling Services — **DGR Top Assembly Build/Inpsection Sheet**

Serial Numbers

See MWD/LWD R&M Manuals website for sub cutback drawings.

Tool Type: ☑ Std ☐ HF ☐ HP ☐ S175 Tool Size: ☐ 4¾" ☑ 6¾" ☐ 8" ☐ 9½"

Collar	S/N _____	DIM A_____ DIM B_____
Insert	S/N 238843	☐ Azimuthal
ABI	S/N _____	SW Version_____
DDS	S/N _____	SW Version_____
Pin End A/C	S/N 11392183	Size 11"/2

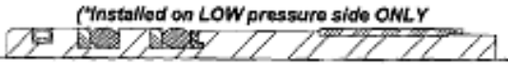
Schedule A (every 250 hours or after each job)

All bolt holes on top of box end of insert cleaned, inspected, and tapped.	☑ Yes ☐ No ☐ N/A
O-ring grooves, seal surfaces, and J-slot areas free of galling, nicks, corrosion, pitting, dings, raised metal and scratches.	☑ Yes ☐ No ☐ N/A
O-ring glands intact and straight.	☑ Yes ☐ No ☐ N/A
Arlon band free of wear and nicks; use straight edge to check wear on end.	☑ Yes ☐ No ☐ N/A
Sub bus Kemlon connector straight and free from wear.	☑ Yes ☐ No ☐ N/A
Sub bus Kemlon and pin end connectors torqued.	☑ Yes ☐ No ☐ N/A
Insert bore free from deep erosion and/or pitting.	☑ Yes ☐ No ☐ N/A
Verify all burp valves (pin end a/c, insert, and connectors) move freely in and out and stays in the out position.	☑ Yes ☐ No ☐ N/A
Ground detent moves freely.	☑ Yes ☐ No ☐ N/A
GM tubes tightly in banks and dent free.	☑ Yes ☐ No ☐ N/A
Check the gauge of the insert with the appropriate gauge ring.	☑ Yes ☐ No ☐ N/A
Pin end insert extension pogo pins are clean, a minimum of 10 pogo pins are in place, clean, and have a good spring return when depressed. (9½" only)	☐ Yes ☐ No ☐ N/A
Pin end insert extension flange bolts are torqued (9½").	☐ Yes ☐ No ☐ N/A
Pin end insert extension wire way RTV is intact, not hard, or discolored (9½").	☐ Yes ☐ No ☐ N/A
Third Party Inspection completed for all tool joints.	☑ API ☐ DS-1 ☐ NS-2
Collar ID seal area visually inspected for corrosion/damage and clean bore.	☑ Yes ☐ No ☐ N/A
Seal and bore back areas are free of pitting, corrosion, and damage; bore free of debris.	☑ Yes ☐ No ☐ N/A
Verify female connectors extraction, insulation, and continuity tests were performed on the pin end annular connector (D00200553).	☑ Yes ☐ No ☐ N/A

O-Rings, Backup Rings*, Anode Rings, and Ground Springs Installation:

☐ Insert ☑ Pin End A/C

*(*Installed on LOW pressure side ONLY*



Torque:

Box End/Hanger/Lock Down Bolt	25 ft-lb ☑	Pin A/C UG	7 in-lb ☐
Insert UG (Peek)	7 in-lb ☑	Insert Sub Bus Kemlons: Steel Type	25 in-lb ☐

Confidence test performed (INSITE).	☑ Yes ☐ No ☐ N/A

FORMATO INSERTO HCIM

Sperry Drilling Services — **HCIM Top Assembly Build/Inspection Sheet**

Serial Numbers
See the MWD/LWD R&M Manuals website for sub cutback drawings.

Tool Type: ☑ Std. ☐ HF ☐ HP ☐ Stab. Tool Size: ☐ 4¾" ☑ 6¾" ☐ 8" ☐ 9½"

Collar	S/N _____	DIM A _____	DIM B _____		
Stabilizer Sleeve	S/N _____	Gauge _____			
Electronics Collar	S/N _____	DIM A _____	DIM B _____	DIM C _____	DIM D _____
SWRO Collar	S/N _____	Crossover S/N _____	DIM _____		
Insert	S/N 1107318	SW Version 99.11			
ABI	S/N _____	SW Version _____			
DDSR	S/N _____	SW Version _____			
HSC	S/N _____	SW Version _____			
Battery	S/N _____	Amp/Hrs _____			
Bulkhead (4¾")	S/N _____				
Pin End A/C	S/N 237948	Size 11"/2"			
Hard Connect	S/N _____	Locking Collar Size _____			

Schedule A (every 250 hours)

All bolt holes on top of box end of insert cleaned and inspected.	☑ Yes ☐ No
O-ring grooves, seal surfaces, and J-slot areas free of scratches, corrosion, and raised metal.	☑ Yes ☐ No
O-ring glands intact and straight.	☑ Yes ☐ No
Arlon band free of wear and nicks; use straight edge to check wear on end.	☑ Yes ☐ No
Insert Kemlon connectors straight and free from wear.	☑ Yes ☐ No
Insert Kemlon and UG connectors torqued.	☑ Yes ☐ No
Verify stamped "x" on the known UCA connections.	☑ Yes ☐ No
Grounding UG connector torqued.	☑ Yes ☐ No
PCBs covers dent free and no sign of vibration (black dust).	☑ Yes ☐ No
Check the gauge of the insert with the appropriate gauge ring.	☑ Yes ☐ No
Ground detent moves freely.	☑ Yes ☐ No
SWRO bracket braided ground cable free of tears.	☑ Yes ☐ No
SWRO bracket moves freely and threads are free of damage.	☑ Yes ☐ No
SWRO pin free of wear, erosion, corrosion, or damage.	☑ Yes ☐ No
SWRO plug threads and O-ring grooves free of damage, wear, or pitting.	☑ Yes ☐ No
SWRO plug head free from excessive wear.	☑ Yes ☐ No
Expiration date for backup battery stated on the case.	☑ Yes ☐ No
Ground springs free of damage. (4¾" only)	☐ Yes ☐ No
Lee plugs are tight and not corroded.	☑ Yes ☐ No
Check hose end OD and ID for sharp edges, round off edge with file.	☑ Yes ☐ No
Verify all burp valves (pin end a/c, insert, and connectors) move freely in and out and stays in the out position.	☑ Yes ☐ No

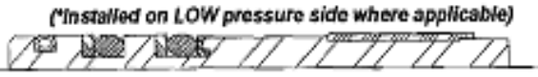
Schedule A (every 250 hours) - continued	
Backup batteries tested and above 2.9V 3.5 V	☑ Yes ☐ No
Verify female connectors extraction, insulation, and continuity tests were performed on the battery. (D00212800)	☑ Yes ☐ No
Pin end insert extension pogo pins are clean, a minimum of 10 pogo pins are in place, clean, and have a good spring return when depressed. (9½" only)	~~☐ Yes ☐ No~~
Pin end insert extension flange bolts are torqued.	☑ Yes ☐ No
Pin end insert extension wire way RTV is intact, not hard, or discolored.	☑ Yes ☐ No
Verify female connectors extraction, insulation, and continuity tests were performed on all connectors. See appropriate build/inspection sheets: Hard connects (D00257431)	☑ Yes ☐ No
Visually inspect erosion caps for erosion, cracking, or other damage.	☑ Yes ☐ No
Collar ID seal area visually inspected for corrosion/damage and clean bore.	☑ Yes ☐ No
Third Party Inspection completed for all tool joints.	☑ API ☐ DS-1 ☐ NS-2
Collar sub bus Kemlon connector straight and free from wear (4¾").	~~☐ Yes ☐ No~~

O-Rings, Backup Rings*, Anode Rings, and Ground Springs Installation:

☐ Insert ☐ Battery Insert ☑ Pin End A/C or Insert Extension ☐ SWRO Plug

☐ Sub Bus Kemlon ☐ Insert Kemlon ☐ Bulkhead

*(*Installed on LOW pressure side where applicable)*



Torque:

SWRO Plug 25 ft-lb ☐

4¾" Electronics Sub to SWRO Sub 10,000 ft-lb ☑

4¾" SWRO Sub to Crossover Sub 10,000 ft-lb ☐

Stabilizer Sleeve

Sub Bus Kemlon 25 in-lb ☑

Bulkhead Bolts 150 in-lb ☐

6¾" 4,000 ft-lb ☑

8" 7,500 ft-lb ☐

9½" 11,000 ft-lb ☐

Confidence test performed (INSITE).	☑ Yes ☐ No
Verify surface and downhole software compatibility and latest revision. (See INSITE portal and Tool Software Downloads on SperryWeb.)	☐ Yes ☐ No

Schedule B (every 500 hours in addition to Schedule A)	
PCBs mounting screws in place and torqued (50-55 in-lb).	☑ Yes ☐ No
Wire harness securely taped down and supported with foam.	☑ Yes ☐ No
Wire harness free of loose and nicked wires.	☑ Yes ☐ No
Wire harness jackscrews in place and torqued (2-3 in-lb).	☑ Yes ☐ No
White fiberglass tape in place, clean, and free of damage.	☑ Yes ☐ No
Insert bore free from deep erosion and/or pitting.	☑ Yes ☐ No
Insert bore ID within limits; see D-GEN-139 2.5 in.	☑ Yes ☐ No

Female Connectors Extraction Test:

Insert UCA _____lbs. Bulkhead A_____ F_____ Insert UG _____lbs Collar Sub Bus UCA _____lbs.

(Must be >0.5 lbs./8 oz. and <3.0 lbs./48 oz.) (T=Top end, B=Boot, P=Piston, A=Adapt end, F=Flex)

Pin A/C UG _____lbs. *(Must be >3 lbs./48 oz. and <5.0 lbs./80 oz.)*

Schedule B (every 500 hours in addition to Schedule A) - continued			
Insulation (MegΩ) and Continuity (Ω) Test: Pin A/C	2.75 MegΩ	0.11 Ω	(MegΩ>500MΩ Ω<= 0.5Ω)

Torque:

Box End/Hanger	25 ft-lb ☐	Insert Kemlon	25 in-lb ☑
Insert Male/Female Connectors:	Steel Type 25 in-lb ☐	Bulkhead Bolts	150 in-lb ☐
	Peek Type 7 in-lb ☐	Sub Bus Kemlon	25 in-lb ☐

Real time or recorded download and read test on upper and lower sub bus sensors performed (INSITE).	☐ Yes ☐ No

Documentation/Final QC	
Battery Usage updated.	☑ Yes ☐ No
INSITE Confidence Test Report.	☑ Yes ☐ No
Tool Traveler updated and SAP Tool Hours updated.	☐ Yes ☐ No
SAP work order completed.	☐ Yes ☐ No
All outstanding Sub/Insert SAP work orders closed.	☐ Yes ☐ No

NOTES / NONCONFORMANCE REPORTS (NCR)

SIGNATURES

Tool Build Technician:	Tahona A	Date:	14/12/2009
QC Technician:		Date:	
Work Order Number:			
Tool Build Start Date:			
Overall Tool Serial/ID Number:			
Previous Toolstring Number:			

FORMATO HARD CONNECT

Sperry Drilling Services — Hard Connect Inspection Sheet

Maintenance Work/Production Order Number:		Previous Toolstring Number:	
Tool Build Start Date:	19/11/2009		

Serial Numbers

Hard Connect S/N 11107835 Locking Collar Size ____ ☑ Std. ☐ Sht. ☑ Long ☐ S175

Schedule A (every 250 hours)

All O-ring glands are free from:	
Galling	☑ Yes ☐ No
Nicks	☑ Yes ☐ No
Corrosion/Pitting	☑ Yes ☐ No
Dings	☑ Yes ☐ No
Raised Metal	☑ Yes ☐ No
Scratches	☑ Yes ☐ No
Serial numbers verified.	☑ Yes ☐ No
Free from ID/OD erosion.	☑ Yes ☐ No
Spring housing moves in and out freely.	☑ Yes ☐ No
Piston moves freely with booted Kemlon removed.	☑ Yes ☐ No
Top and bottom Kemlon boots free of holes and tears.	☑ Yes ☐ No
Top and bottom Kemlon contacts replaced and free of damage.	☑ Yes ☐ No
Carbide coating is in tact and free of damage.	☑ Yes ☐ No
Threads free from galling or raised metal.	☑ Yes ☐ No
Jumper retainer is free to slide.	☑ Yes ☐ No
Connector tagged with appropriate classification sticker.	☑ Yes ☐ No
Work order completed.	☑ Yes ☐ No
FAD thoroughly completed.	☑ Yes ☐ No

Female Connectors Extraction Test:

Hard Connect T 2.1 B 2.3 P 1.9 lbs.

(Must be >0.5 lbs./8 oz. and <3.0 lbs./48 oz.)(T=Top end, B=Boot, P=Piston, A=Adapt end, F=Flex)

Insulation (MegΩ) and Continuity (Ω) Test: *(MegΩ>500MΩ Ω</= 0.5Ω) (*Pin C & D only)*

CIM/Rev Adapter Tip ____ MegΩ ____ Ω Hard Connect 10.1 MegΩ 0.31 Ω

Schedule E (every 2,000 hours / Schedules B, C, D do not apply)

Hard connect sent to the lab for rebuild.	☐ Yes ☒ No

NOTES / NONCONFORMANCE REPORTS (NCR)

SIGNATURES

Tool Build Technician:	Tatiana Arenas	Date:	19/11/2009
QC Technician:		Date:	

FORMATO PIND END

Sperry Drilling Services — Pin End Annular Connectors Inspection Sheet

Maintenance Work/Production Order Number:		Previous Toolstring Number:	
Tool Build Start Date:	19/11/2009		

Serial Numbers

Pin End/Ext. A/C S/N 239945 ☐ Ext. ☑ 6¾" / 8" ☐ 9½" ☐ Short ☐ Med ☑ Long ☑ Std. ☐ HP ☐ S175

Schedule A (every 250 hours)

All O-ring glands are free from:	
Galling	☑ Yes ☐ No
Nicks	☑ Yes ☐ No
Corrosion/Pitting	☑ Yes ☐ No
Dings	☑ Yes ☐ No
Raised Metal	☑ Yes ☐ No
Scratches	☑ Yes ☐ No
Serial numbers verified.	☑ Yes ☐ No
Free from ID/OD erosion.	☑ Yes ☐ No
Minimum thickness on molded contact ring end is 0.070".	☑ Yes ☐ No
For 6¾" and 8" pin end connectors, a minimum of 8 pogo pins are in place, clean, and have a good spring return when depressed.	☑ Yes ☐ No
For 9½" pin end connectors, a minimum of 10 pogo pins are in place, clean, and have a good spring return when depressed.	☐ ~~Yes~~ ☐ ~~No~~
Verify all burp valves move freely in and out and stays in the out position.	☑ Yes ☐ No
UG connector in place, clean, torqued and is peek type.	☑ Yes ☐ No
Sub bus line RTV is in place, clean, pliable, and free from cuts, voids, and discoloration.	☑ Yes ☐ No
Sub bus line pass-through point connections are secure and free from corrosion and debris.	☑ Yes ☐ No
Sub bus pass-through Kemtite and has layer of conformal coating.	☑ Yes ☐ No
Sub bus pass-through Kemtite has layer of RTV. (Extensions only)	☐ ~~Yes~~ ☐ ~~No~~
Alignment pin less than 0.500" in length and free from corrosion. (Extensions only)	☐ ~~Yes~~ ☐ ~~No~~
Sub bus wire upgraded with pin and socket connector. (Extensions only)	☑ ~~Yes~~ ☐ No
Insulation (MegΩ) and Continuity (Ω) Test: *(MegΩ>500MΩ Ω</= 0.5Ω) (*Pin C & D only)*	
Pin End A/C or Insert Extension 513 Mega 0.22Ω	
O-rings installed on pin end a/c or insert extension.	☑ Yes ☐ No
Connector tagged with appropriate classification sticker.	☑ Yes ☐ No
Work order completed.	☐ Yes ☑ No
FAD thoroughly completed.	☐ Yes ☑ No
Schedule C (every 500 hours / Schedules B does not apply)	
Dye penetrant test on connector body performed.	☐ Yes ☑ No
Schedule E (every 2,000 hours / Schedules C, D do not apply)	
Pin end a/c or insert extension sent to the lab for rebuild.	☐ Yes ☑ No

FORMATO BOX END

Sperry Drilling Services — Box End Annular Connectors Inspection Sheet

Maintenance Work/Production Order Number:		Previous Toolstring Number:	
Tool Build Start Date:	10 / 11 / 2009		

Serial Numbers

Box End A/C S/N 11120928 ☑ 6¾" / 8" ☐ 9½" ☑ Std. ☐ HF

Schedule A (every 250 hours)	
All O-ring glands are free from:	
Galling	☑ Yes ☐ No
Nicks	☑ Yes ☐ No
Corrosion/Pitting	☑ Yes ☐ No
Dings	☑ Yes ☐ No
Raised Metal	☑ Yes ☐ No
Scratches	☑ Yes ☐ No
Serial numbers verified.	☑ Yes ☐ No
Free from ID/OD erosion.	☑ Yes ☐ No
Plated brass contact ring clean, smooth, and free from corrosion, nicks, and scratches.	☑ Yes ☐ No
Molded rubber insulation bands clean, smooth, and free from cracks, cuts, voids discoloration, and does not protrude.	☑ Yes ☐ No
Male Kemlon pin connector clean, straight, free from wear, and no discoloration at base.	☑ Yes ☐ No
Retaining bolt guide holes clean and free of corrosion.	☑ Yes ☐ No
All 8 wear sleeve retaining ring cap screws in place and free from damage. (6¾" and 8")	☑ Yes ☐ No
Wear sleeve retaining snap ring in place and free from damage or corrosion.	☑ Yes ☐ No
Wave spring free from cracks, breaks, and crimped spots.	☑ Yes ☐ No
Spring retains firm compression between contact assembly and bottom plate.	☑ Yes ☐ No
Contact assembly moves against spring compression with some tension.	☑ Yes ☐ No
Compression test passed with maximum allowable compression at 1.375.	☑ Yes ☐ No
Kemlon circlip retaining ring free of damage.	☑ Yes ☐ No
Male Kemlon retaining ring in good condition and properly installed.	☑ Yes ☐ No
Insulation (MegΩ) and Continuity (Ω) Test: *(MegΩ>500MΩ Ω<= 0.5Ω) (*Pin C & D only)*	
Box End A/C 25.5 MΩ 0.150	
O-rings installed on box end a/c.	☑ Yes ☐ No
Connector tagged with appropriate classification sticker.	☑ Yes ☐ No
Work order completed.	☐ Yes ☑ No
FAD thoroughly completed.	☐ Yes ☑ No
Schedule C (every 1,000 hours / Schedule B does not apply)	
Wear sleeve removed and inspected for erosion.	☐ Yes ☑ No
Schedule E (every 2,000 hours / Schedule D does not apply)	
Box end a/c sent to lab for rebuild.	☐ Yes ☑ No

FORMATO PULSER

SPERRY DRILLING SERVICES / HALLIBURTON	PART No: SS.856424	ISSUE: AB
	ORIGINATOR: R Greening	DATE: 26MAR96
THIS DOCUMENT IS ISSUED BY HALLIBURTON MANUFACTURING & SERVICES LTD ON THE UNDERSTANDING THAT IT IS STRICTLY CONFIDENTIAL AND MAY NOT BE REPRODUCED OR UTILISED IN ANY WAY WITHOUT THE PRIOR WRITTEN PERMISSION OF THE COMPANY	REVISOR: CR Bell	DATE: 01OCT08
	CHECKED: KJ Wilkins	DATE: 03OCT08
TITLE: QA RECORD SHEET FOR MK6 PULSER	APPROVED: P Brown	DATE: 30OCT08
	Task No: T00000431132	SHEET 2 OF 3

RESISTANCE TEST

Do not use a colleard. If readings are unstable, try changing polarity of the measurement leads.
PMS: DO NOT USE MEGGER, USE ONLY DVM
NO PMS: use a Megger set to 100v for all values of >2MΩ
Major R&M centres: Test all values shown as >2MΩ to >20MΩ

	B	C	D	E	F	G	CASE
A	122 Ω/5041 340-660Ω	∞/∞ >2MΩ PMS>100kΩ	∞/∞ >2MΩ PMS>100kΩ	∞/∞ >2MΩ PMS>100kΩ	XXX Not Connected	XXX Not Connected	∞/∞ >2MΩ PMS>100kΩ
B	–	∞/∞ >2MΩ PMS>100kΩ	∞/∞ >2MΩ PMS>100kΩ	∞/∞ >2MΩ PMS>100kΩ	XXX Not Connected	XXX Not Connected	∞/∞ >2MΩ PMS>100kΩ
C	–	–	16.58/19.92 15-25Ω PMS 9-11kΩ	17.12/20.42 15-25Ω PMS 9-11kΩ	XXX Not Connected	XXX Not Connected	∞/∞ >2MΩ
D	–	–	–	19.12/20.22 15-26Ω PMS 0-5Ω	XXX Not Connected	XXX Not Connected	∞ >2MΩ
E	–	–	–	–	XXX Not Connected	XXX Not Connected	∞/∞ >2MΩ
F	–	–	–	–	–	XXX Not Connected	XXX Not Connected
G	–	–	–	–	–	–	XXX Not Connected

Hot Check	Pass ✓	Fail

PUMP TEST

Extends through 1000 – 3600rpm	Pass ✓	Fail

PULSE CHECK

No Missed Pulses (30mins @ 3000rpm)	Pass ✓	Fail

PULSER TEMPERATURES

		Temperature
PUMP OUTER CASE	95°C MAX	76.1°C
2" CASE	90°C MAX	73.5°C

POPPET DISPLACEMENT

Stroke – 8.875 – 10.125mm	Stroke Length
Stroke Length @ 3000 ± 10 RPM	9.50
Stroke Length @ 1800 ± 10 RPM	9.50

PLEASE DESTROY THIS DOCUMENT ON RECEIPT OF NEXT ISSUE

SPERRY DRILLING SERVICES / HALLIBURTON	PART No: SS.856424	ISSUE: AB
	ORIGINATOR: R Greening	DATE: 26MAR96
THIS DOCUMENT IS ISSUED BY HALLIBURTON MANUFACTURING & SERVICES LTD ON THE UNDERSTANDING THAT IT IS STRICTLY CONFIDENTIAL AND MAY NOT BE REPRODUCED OR UTILISED IN ANY WAY WITHOUT THE PRIOR WRITTEN PERMISSION OF THE COMPANY	REVISOR: CR Bell	DATE: 01OCT08
	CHECKED: KJ Wilkins	DATE: 03OCT08
TITLE: QA RECORD SHEET FOR MK6 PULSER	APPROVED: P Brown	DATE: 30OCT08
	Task No: T00000431132	SHEET 3 OF 3

ALTERNATOR CHECKS

	PMS	No PMS	
PULSER SPEED = 3600 ± 10 REV/MIN			
VOLTAGE (SOLENOID OFF)	22v – 30v	>30v	33.3 V
CURRENT (SOLENOID OFF)	>170mA	>170mA	189 mA
VOLTAGE (SOLENOID ON)	22v – 30v	>28v	35.8 V
CURRENT (SOLENOID ON)	>250mA	>250mA	260 mA
PULSER SPEED = 2500 ± 10 REV/MIN			
VOLTAGE (SOLENOID OFF)	22v – 30v	>22v	32.3 V
CURRENT (SOLENOID OFF)	>160mA	>160mA	189 mA
VOLTAGE (SOLENOID ON)	22v – 30v	>22v	28.8 V
CURRENT (SOLENOID ON)	>210mA	>210mA	266 mA

PROBE PULSING TEST

PULSE START	< 45 sec	Probe S/N	Pass ✓	Fail
Continuous Pulsing	> 1 min	PC08 - 090	Pass ✓	Fail
Probe / Pulser Contact – Continue Pulsing			Pass ✓	Fail

DATOS OBTENIDOS AL HACER UNA PRUEBA DEL MS DEVICE, PROMEDIÁNDOSE LOS VALORES OBTENIDOS.

HALLIBURTON

Sperry Drilling Services

ABI TX - MS Rx TEST

DATE	04 / Enero / 2010	TECH	Eliana Arenas - Ana María Bautista		
SIZE	6 3/4	SERIAL	250	EQUPMENT	11078848
SoftWare Version	1.40	AccHrs	98189		

MS Rx Test Set

EQUIPMENT	11292 ACCEL	TESTE BY	S I	DATE	21 / 4 / 09

Aditional Information / Special Modifications

READING OBTAINED	SAMPLE 1	2	3	4	5	6		AVERAGE
A	-12.92	-13.42	-13.03	-25.16	-19.59	-14.84		-16.49
B	-13.19	-14.87	-13.41	-13.73	-13.44	-18.70		-14.55
C	-13.31	-13.40	-16.20	-13.39	-13.49	-17.62		-14.36
D	-13.30	-13.79	-21.06	-15.58	-14.15	-16.08		-15.66
						AVERAGE TOTAL		-15.31

NOTES

Piezo accelerometer is dedicated to and characterized with its specific text box and cannot be separated. If replacements are required the box and accelerometer are to be returned to Tewksbury for re-characterization.

The average of readings obtained must be greater than see following table

TYPE		VALUE
6 3/4 , 8 , 9 5/8 ABI		- 25.00 dB
4 3/4 ABI		- 17.00 dB