

	DECLARACIÓN DE CONFORMIDAD DE SURTIDORES, DISPENSADORES Y/O MEDIDORES DE COMBUSTIBLE LÍQUIDOS	CÓDIGO: CAL-FOR-018
		VERSIÓN: 01
		FECHA: 02/08/2017

DECLARACIÓN : INSEPET-053-2023

EMPRESA: INSEPET S.A.S

NIT: 830006334-3

DIRECCION: CRA 90 N.17B-81 BG 20

TEL: 4222525

La presente declaración tiene por objeto demostrar que el surtidor/dispensador de combustible líquido es conforme con el modelo ENCORE SD NP3, marca GILBARCO. Los seriales de los equipos a los cuales se les realizó el ensayo son:

MODELO	SERIAL DE FABRICA	SERIAL ASIGNADO SEGÚN RESOLUCIÓN 77507 DE 2016	SERIALES DE LA UNIDADES DE MEDIDA VERIFICADAS
ENCORE SD NP3	EN00251003	(414)7709590699030(21)E N00251003	118614310
			118614405

Los siguientes seriales son cubiertos por la declaración de conformidad según la orden de compra OC21000863 de fecha 29/12/22, así:

MODELO	SERIAL DE FABRICA	SERIAL ASIGNADO SEGÚN RESOLUCIÓN 77507 DE 2016
ENCORE SD NP3	EN00251002	(414)7709590699030(21)EN00251002

Los anteriores seriales hacen parte integral de esta declaración, y cumplen satisfactoriamente con las pruebas metrológicas establecidas en la resolución 77507 de 2016 reglamento técnico metrológico aplicable a surtidores, dispensadores y/o medidores de combustible líquido.

Como soporte a esta declaración de conformidad, se adjunta a la misma:

	DECLARACIÓN DE CONFORMIDAD DE SURTIDORES, DISPENSADORES Y/O MEDIDORES DE COMBUSTIBLE LÍQUIDOS	CÓDIGO: CAL-FOR-018
		VERSIÓN: 01
		FECHA: 02/08/2017

Informe de ensayos No:

Q23-0158

Q23-0159

Fecha de emisión de Informe:

05 de Mayo del 2023

Emitido por el laboratorio :

CMC E INGENIERIA SAS

NIT:

901.340.578-1

Certificado de acreditación:

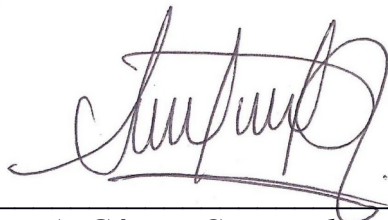
20-LAC-016

Fecha de vigencia de la acreditación:

2024-07-28

Anexos al certificado:

- Informe emitido por laboratorio Certificado de conformidad de fabrica
- Copia declaración de importación.
- Certificación de acreditación del laboratorio



Johan A. Gómez Cristancho

Líder de Producción y Logística



CERTIFICACIÓN MEDICIÓN Y CALIBRACIÓN SAS

Laboratorio de calibración Calle 128 # 93D - 39
Telefono: 312 492 4398, Bogotá D.C. - Colombia

Certificado de calibración

Descripción	Sistema de medición	Número	Q23-0158
Tipo de equipo	Dispensador de combustible	Localización	Instalaciones insepet
Fabricante	Liquis controls	Dirección	Carrera 90 # 17b-75 Bodega 21
Modelo	NP3 - Unidad: M-5-1 P9635	Municipio	Bogotá D.C.
Fecha de recepción	2023-04-20	N° de identificación	EN00251003 - Unidad: 118614310
Fecha de calibración	2023-04-20	Intervalo de medición	(5-60) gpm (19 - 227) L/min
Fecha de emisión	2023-05-05	Diámetro	1 in
Información de contacto	(+57 1) 422 2525	Cliente	Grupo Empresarial Insepet
Nombre de contacto	Grupo Empresarial Insepet		
Método de calibración	La calibración del surtidor de combustible se realizó por el método de comparación Documento normativo OIML R120 Edition 2010 (E).		

Este certificado de calibración no puede ser reproducido parcialmente, sin la autorización escrita del laboratorio que lo emite, puede ser reproducido en su totalidad con la autorización del laboratorio que lo emite. Los certificados de calibración sin firma no son validos.

El propietario del sistema es responsable de la inspección y calibración a frecuencias de calibración apropiadas.

Se utiliza un espacio para separación en unidades de mil y coma para separación de unidades decimales. N.D. corresponde a la abreviación de No Disponible y N.A. corresponde a la abreviación de No Aplica.

La conversión se realiza basado en la guía de uso del sistema internacional de unidades (SI) - NIST SP-811

Los resultados de este certificado solo está relacionado con el objeto calibrado, y válidos únicamente para el estado del equipo en el momento de la prueba. La calibración se realiza en las instalaciones del cliente.

Resultados de la calibración

Rata de Flujo		Vol. Probador - in ³	Vol. medidor - in ³	Error - %	Error - in ³	Error - ml	Incertidumbre	k
54,00 gpm	204,41 L/min	1153,136	1155,000	0,16 %	1,86	30,54	0,06 %	2
35,00 gpm	132,49 L/min	1153,683	1155,000	0,11 %	1,32	21,59	0,14%	2
24,00 gpm	90,85 L/min	1153,435	1155,000	0,14 %	1,57	25,65	0,11%	2
16,80 gpm	63,60 L/min	1153,443	1155,000	0,13 %	1,56	25,52	0,11 %	2
8,40 gpm	31,80 L/min	1152,675	1155,000	0,20 %	2,32	38,10	0,03 %	2
6,60 gpm	24,98 L/min	1153,406	1155,000	0,14 %	1,59	26,11	0,14 %	2
Cantidad de medida mínima								
6,60 gpm	24,98 L/min	115,15	115,50	0,30 %	0,35	5,72	0,31 %	2

Incertidumbre relativa del volumen en el tanque probador.

Nota: La incertidumbre expandida de la medición reportada se establece como la incertidumbre estándar de medición multiplicada por el factor de cobertura "k" y la probabilidad de cobertura, la cual debe ser aproximada al 95% y no menor a este valor.

Información suministrada por el cliente

Producto ACPM API 34,0

El laboratorio no se hace responsable de la información suministrada por el cliente y que pueda afectar la validez de los resultados.



ISO/IEC 17025:2017
20-LAC-016

CERTIFICACIÓN MEDICIÓN Y CALIBRACIÓN SAS

Laboratorio de calibración Calle 128 # 93D - 39
Telefono: 312 492 4398, Bogotá D.C. - Colombia

N° de identificación EN00251003 - Unidad: 118614310 **Número** Q23-0158

Condiciones ambientales La temperatura ambiente promedio fue de 17,6 °C.

Trazabilidad de la medición

El laboratorio asegura la trazabilidad de las mediciones y de sus patrones al Sistema Internacional de unidades SI, por medio de la calibración de sus equipos a intervalos definidos, con laboratorios acreditados bajo la norma ISO 17025.

Patrón	Identificación	No Certificado	Fecha	Trazabilidad
Termómetro	EQ-0063	T-37-4732-39786	2022-11-21	ATE
Tanque probador	EQ-0044	CMK-PVRV-22078	2022-06-24	Colmetrik
Tanque probador	EQ.0045	CMK-PVRV-22043	2022-02-25	Colmetrik

Calibró: Eliecer Julio Peña

Autoriza: Adrián Montoya López

Fin del certificado



CERTIFICACIÓN MEDICIÓN Y CALIBRACIÓN SAS

Laboratorio de calibración Calle 128 # 93D - 39
Telefono: 312 492 4398, Bogotá D.C. - Colombia

Certificado de calibración

Descripción	Sistema de medición	Número	Q23-0159
Tipo de equipo	Dispensador de combustible	Localización	Instalaciones insepet
Fabricante	Liquid controls	Dirección	Carrera 90 # 17b-75 Bodega 21
Modelo	NP3 - Unidad: M-5-1 P9635	Municipio	Bogotá D.C.
Fecha de recepción	2023-04-20	N° de identificación	EN00251003 - Unidad: 118614405
Fecha de calibración	2023-04-20	Intervalo de medición	(5-60) gpm (19 - 227) L/min
Fecha de emisión	2023-05-05	Diámetro	1 in
Información de contacto	(+57 1) 422 2525	Cliente	Grupo Empresarial Insepet
Nombre de contacto	Grupo Empresarial Insepet		
Método de calibración	La calibración del surtidor de combustible se realizó por el método de comparación Documento normativo OIML R120 Edition 2010 (E).		

Este certificado de calibración no puede ser reproducido parcialmente, sin la autorización escrita del laboratorio que lo emite, puede ser reproducido en su totalidad con la autorización del laboratorio que lo emite. Los certificados de calibración sin firma no son validos.

El propietario del sistema es responsable de la inspección y calibración a frecuencias de calibración apropiadas.

Se utiliza un espacio para separación en unidades de mil y coma para separación de unidades decimales. N.D. corresponde a la abreviación de No Disponible y N.A. corresponde a la abreviación de No Aplica.

La conversión se realiza basado en la guía de uso del sistema internacional de unidades (SI) - NIST SP-811

Los resultados de este certificado solo está relacionado con el objeto calibrado, y válidos únicamente para el estado del equipo en el momento de la prueba. La calibración se realiza en las instalaciones del cliente.

Resultados de la calibración

Rata de Flujo		Vol. Probador - in ³	Vol. medidor - in ³	Error - %	Error - in ³	Error - ml	Incertidumbre	k
55,00 gpm	208,20 L/min	1154,419	1155,000	0,05 %	0,58	9,52	0,07 %	2
40,00 gpm	151,42 L/min	1154,609	1155,000	0,03 %	0,39	6,40	0,05 %	2
23,00 gpm	87,06 L/min	1154,443	1155,000	0,05 %	0,56	9,13	0,07 %	2
16,20 gpm	61,32 L/min	1153,791	1155,000	0,10 %	1,21	19,82	0,04 %	2
8,40 gpm	31,80 L/min	1153,879	1155,000	0,10 %	1,12	18,37	0,07 %	2
6,10 gpm	23,09 L/min	1153,651	1155,000	0,12 %	1,35	22,10	0,03 %	2
Cantidad de medida mínima								
6,10 gpm	23,09 L/min	115,03	115,50	0,41 %	0,47	7,73	0,32 %	2

Incertidumbre relativa del volumen en el tanque probador.

Nota: La incertidumbre expandida de la medición reportada se establece como la incertidumbre estándar de medición multiplicada por el factor de cobertura "k" y la probabilidad de cobertura, la cual debe ser aproximada al 95% y no menor a este valor.

Información suministrada por el cliente

Producto ACPM API 34,0

El laboratorio no se hace responsable de la información suministrada por el cliente y que pueda afectar la validez de los resultados.



ISO/IEC 17025:2017
20-LAC-016

CERTIFICACIÓN MEDICIÓN Y CALIBRACIÓN SAS

Laboratorio de calibración Calle 128 # 93D - 39
Telefono: 312 492 4398, Bogotá D.C. - Colombia

N° de identificación EN00251003 - Unidad: 118614405 **Número** Q23-0159

Condiciones ambientales La temperatura ambiente promedio fue de 19,7 °C.

Trazabilidad de la medición


El laboratorio asegura la trazabilidad de las mediciones y de sus patrones al Sistema Internacional de unidades SI, por medio de la calibración de sus equipos a intervalos definidos, con laboratorios acreditados bajo la norma ISO 17025.

Patrón	Identificación	No Certificado	Fecha	Trazabilidad
Termómetro	EQ-0063	T-37-4732-39786	2022-11-21	ATE
Tanque probador	EQ-0044	CMK-PVRV-22078	2022-06-24	Colmetrik
Tanque probador	EQ.0045	CMK-PVRV-22043	2022-02-25	Colmetrik

Calibró: Eliecer Julio Peña

Autoriza: Milton Rene Solano

Fin del certificado

		Declaración de Importación			Privada	500																																																						
1. Año 2023 Espacio reservado para la DIAN (Años de diligenciar este formulario son exclusivamente las instrucciones)					4. Número de formulario 482023000195679-1																																																							
5. Número de identificación Tributaria (NIT) 830006334		8. DV. 3	11. Apellidos y nombres o Razón Social INSEPET S.A.S.																																																									
13. Dirección CR 90 17 B 81 BG 20		15. Teléfono 4222525	12. Cód. Admón. 48	16. Cód. Dpto. 11	17. Cód. Ciudad Municipio 001																																																							
24. Número de identificación Tributaria (NIT) 890404619		25. DV. 2	28. Razón social del declarante autorizado AGENCIA DE ADUANAS ASERCOL S.A NIVEL 1		27. Tipo usuario 26	28. Cód. usuario 0073																																																						
29. Número documento de identificación 45496132		30. Apellidos y nombres PATERNINA MARTINEZ CLARIBEL																																																										
31. Clase importador 02	32. Tipo declaración Inicial	33. Cód. 1 1	34. No. Formulario Anterior XXXXXXXXXXXXXX	35. Año - Mes - Día XXXX - XX - XX	36. Cód. Admón. XX	37. Declaración de Exportación No. XXXXXXXXXXXXXX																																																						
38. Año - Mes - Día XXXX - XX - XX	39. Cód. Admón. XX																																																											
40. Cód. lugar ingreso de las mercancías CTG	41. Cód. Depósito 14004	42. Manifiesto de carga No. 116575013259418	43. Año - Mes - Día 2023 - 03 - 24	44. Documento de transporte No. PEVCTG50287	45. Año - Mes - Día 2023 - 03 - 18																																																							
46. Nombre exportador o proveedor en el exterior GILBARCO INC					47. Ciudad GREENSBORO.	48. Cód. País Exportador 249																																																						
49. Dirección exportador o proveedor en el exterior 7300 W FRIENDLY AVE GREENSBORO NC 27410					50. Email FAX: 1 338-547-5208																																																							
51. No. de factura 202302000606	52. Año - Mes - Día 2023 - 02 - 23	53. Cód. país procedencia 249	54. Cód. Modo Transporte 1	55. Código de Bandera 434	56. Cód. Depósito destino 0	57. Empresa transportadora CARIBBEAN AMERICAN SHIPPING AGENCY LTDA																																																						
58. Subpartida arancelaria S 8413110000	59. Cód. Complementario XX	60. Cód. Suplementario XX	61. Cód. Modalidad C100	62. No. cuotas o mojes XX	63. Valor cuota USD XXXX	64. Periodicidad del pago de la cuota XX																																																						
65. Cód. país de origen 249	66. Cód. Acuerdo XXX	67. Tasa de cambio \$ cív. 4,755.12																																																										
68. Forma de pago de la importación 01	69. Tipo de importación 01	70. Cód. país compra 249	71. Peso bruto kgs. 3,736.24	72. Peso neto kgs. 3,585.95	73. Código arancelario PK	74. No. buques 12																																																						
75. Subpartidas 1	76. Cód. unidad comercial U	77. Cantidad cívica. 12.00																																																										
78. Valor FOB USD 82,897.58		79. Valor fletes USD 2,590.00																																																										
80. Valor Seguros USD 41.45		81. Valor Otros Gastos USD 645.00																																																										
82. Sumatoria de fletes, seguros y otros gastos USD 3,276.45		83. Ajuste valor USD 0.00																																																										
84. Valor aduana USD 86,174.03		85. Código registro o licencia R	86. Número 50036117																																																									
87. Cód. oficina 3	88. Año 2023	89. Programa No. XXXXXXXXXX	90. Cód. interno del Producto 0																																																									
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Concepto</th> <th>%</th> <th>Base</th> <th>Total Liquidado (\$)</th> <th>Total a pagar con esta declaración (\$)</th> <th>Total Liquidado (USD)</th> </tr> </thead> <tbody> <tr> <td>Arancel</td> <td>0.00</td> <td>409,767,854</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>I.V.A.</td> <td>19.00</td> <td>409,767,854</td> <td>77,856,000</td> <td>77,856,000</td> <td>0</td> </tr> <tr> <td>Salvaguardia</td> <td>0.00</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>Derechos Comerciales</td> <td>0.00</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>Derechos Antidumping</td> <td>0.00</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>Sanción</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>Rescate</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>Total</td> <td></td> <td></td> <td>77,856,000</td> <td>77,856,000</td> <td>0</td> </tr> </tbody> </table>							Concepto	%	Base	Total Liquidado (\$)	Total a pagar con esta declaración (\$)	Total Liquidado (USD)	Arancel	0.00	409,767,854	0	0	0	I.V.A.	19.00	409,767,854	77,856,000	77,856,000	0	Salvaguardia	0.00	0	0	0	0	Derechos Comerciales	0.00	0	0	0	0	Derechos Antidumping	0.00	0	0	0	0	Sanción	0	0	0	0	0	Rescate	0	0	0	0	0	Total			77,856,000	77,856,000	0
Concepto	%	Base	Total Liquidado (\$)	Total a pagar con esta declaración (\$)	Total Liquidado (USD)																																																							
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Salvaguardia	0.00	0	0	0	0																																																							
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Derechos Antidumping	0.00	0	0	0	0																																																							
Sanción	0	0	0	0	0																																																							
Rescate	0	0	0	0	0																																																							
Total			77,856,000	77,856,000	0																																																							
91. Descripción de las mercancías (No incluir la descripción de las mercancías ni importar con lo exhibido en el arancel de aduanas en la subpartida arancelaria - Incluye marcas, señas y otros (SI el campo es insuficiente, continúe al respaldo de esta Comprobante)																																																												
DO 233110877 PEDIDO OC22000863 DECLARACION 1 DE 1; FACTURA(S) / FECHA(S):202302000606 DE 23/02/2023///9 UNIDAD PRODUCTO: DISPENSADOR DE COMBUSTIBLE-GASOLINA, CON SUS RESPECTIVOS ACCESORIOS PARA SU NORMAL FUNCIONAMIENTO, MARCA: GILBARCO VEEDER ROOT, REFERENCIA: NA2, MODELO: NA2, USO O DESTINO: DISPENSADOR ELECTRONICO DE COMBUSTIBLE GASOLINAY DIESEL EN ESTACIONES DE SERVICIO, TIPO DE BOMBA: SIN BOMBA, DISPOSITIVO MEDIDOR: DESPLAZAMIENTO POSITIVO, LIQUIDO A BOMBLEAR: COMBUSTIBLE, GASOLINA, TIPO DE MOTOR: SIN MOTOR, POTENCIA DEL MOTOR: NO APLICA, NO SE TRATA DE BOMBA CENTRIFUGA. SERIALES: EN00250919, EN00250921, EN00250914, EN00250918, EN00250913, EN00250915, EN00250917, EN00250916, EN00250920. V80-SIC-2310769, CERTIFICADO DE CONFORMIDAD(continúa al respaldo)																																																												
127. Valor pagos anteriores: 0		128. Recibo oficial de pago anterior No.: XXXXXXXXXXXXXX			129. Fecha: XXXX XX XX																																																							
130. Espacio reservado DIAN - Actuación aduanera Estado de levantamiento: Levantamiento automático No hay declaración posterior			131. Espacio reservado uso exclusivo Ministerio de Relaciones Exteriores		132. No. Aceptación declaración 482023000195679																																																							
134. Levante No. 482023000171420		135. Fecha 2023 - 03 - 31	Firma funcionario responsable		133. Fecha: 2023 03 31																																																							
Firma declarante		997. Espacio exclusivo para el sello de la entidad recaudadora (Fecha efectiva de la transacción) Coloque el timbre de la máquina registradora al dorso de este formulario			980. Pago Total \$ 996. Espacio para autoadhesivo de la entidad recaudadora (Número del adhesivo) BANCOLOMBIA S.A. Autoadhesivo 07300262939541 Fecha presentación 2023-03-31 16:06:00 Valor pagado \$77,856,000																																																							



EL ORGANISMO NACIONAL DE ACREDITACIÓN DE COLOMBIA
acredita a:

CERTIFICACIÓN MEDICIÓN Y CALIBRACIÓN S.A.S.

NIT: 901.340.578-1

Carrera 89 # 139 - 43 Bogotá D.C., Cundinamarca, Colombia.

La evaluación y acreditación de este organismo de evaluación de la conformidad, se han realizado con respecto a los requisitos especificados en la norma internacional:

ISO/IEC 17025:2017

Esta Acreditación es aplicable al alcance establecido en el anexo

20-LAC-016

*Esta Acreditación está sujeta a que el organismo de evaluación de la conformidad se mantenga conforme con los requisitos especificados, lo cual será evaluado por ONAC.
La vigencia de este certificado se puede verificar en www.onac.org.co*

Certificado de Acreditación

20-LAC-016

Fecha Publicación del Otorgamiento:

2021-07-29

Fecha de Publicación Última Actualización:

Fecha de Renovación:

Fecha de Vencimiento:

2024-07-28


Director Ejecutivo

Página 1 de 6





ANEXO DE CERTIFICADO
 CERTIFICACIÓN MEDICIÓN Y CALIBRACIÓN S.A.S.
 20-LAC-016
 ACREDITACIÓN ISO/IEC 17025:2017
 Alcance de la acreditación aprobado / Documento Normativo



SEDE	Calle 128 No. 93D-39, Bogotá D.C., Colombia					
CÓDIGO	MAGNITUD	INTERVALO DE MEDICIÓN	INCERTIDUMBRE EXPANDIDA DE MEDIDA	INSTRUMENTO A CALIBRAR	INSTRUMENTOS, EQUIPOS PATRONES UTILIZADOS	DOCUMENTO NORMATIVO
DC3	Longitud	$0 \text{ m} \leq l < 50 \text{ m}$	0,48 mm	Cinta métrica	Cinta patrón, regla rígida	NIST.IR.8028 Calibration length SOP No.12 (2014 Ed)

SEDE	Sitio					
CÓDIGO	MAGNITUD	INTERVALO DE MEDICIÓN	INCERTIDUMBRE EXPANDIDA DE MEDIDA	INSTRUMENTO A CALIBRAR	INSTRUMENTOS, EQUIPOS PATRONES UTILIZADOS	DOCUMENTO NORMATIVO
DC3	Longitud	$0 \text{ m} \leq l < 50 \text{ m}$	0,48 mm	Cinta métrica	Cinta patrón, regla rígida	NIST.IR.8028 Calibration length SOP No.12 (2014 Ed)
DF7	Medianos volúmenes ($5 \text{ L} \leq V < 5000 \text{ L}$)	$0,318 \text{ m}^3 \leq V < 5 \text{ m}^3$ ($2 \text{ bbl} \leq V \leq 31,45 \text{ bbl}$)	0,021 % del volumen total del tanque	Tanques cilíndricos horizontales	Cinta de medición strapping y de fondo, medidor de espesores, flexómetro, termómetro y estación total	ANSI/API MPMS CHAPTER 2.2E Petroleum and Liquid Petroleum Products—Calibration of Horizontal Cylindrical Tanks Part 1: Manual Methods. Reaffirmed, August 2014
DF8	Grandes volúmenes (mayor a 5000 L)	$5 \text{ m}^3 \leq V \leq 397 \text{ m}^3$ ($31,45 \text{ bbl} \leq V \leq 2500 \text{ bbl}$)	0,021 % del volumen total del tanque	Tanques cilíndricos horizontales	Cinta de medición strapping y de fondo, medidor de espesores, flexómetro, termómetro y estación total	ANSI/API MPMS CHAPTER 2.2E Petroleum and Liquid Petroleum Products—Calibration of Horizontal Cylindrical Tanks Part 1: Manual Methods. Reaffirmed, August 2014



ANEXO DE CERTIFICADO
 CERTIFICACIÓN MEDICIÓN Y CALIBRACIÓN S.A.S.
 20-LAC-016
 ACREDITACIÓN ISO/IEC 17025:2017
 Alcance de la acreditación aprobado / Documento Normativo



SEDE	Sitio					
CÓDIGO	MAGNITUD	INTERVALO DE MEDICIÓN	INCERTIDUMBRE EXPANDIDA DE MEDIDA	INSTRUMENTO A CALIBRAR	INSTRUMENTOS, EQUIPOS PATRONES UTILIZADOS	DOCUMENTO NORMATIVO
DF7	Medianos volúmenes (5 L ≤ V < 5000 L)	1 m ³ ≤ V < 5 m ³ (6,29 bbl ≤ V < 31,45 bbl)	0,014 % del volumen total del tanque	Tanques cilíndricos verticales	Cinta de medición strapping y de fondo, medidor de espesores, regla, mira, flexómetro, termómetro y estación total	<p>API MPMS 2.2.A Measurement and Calibration of Upright Cylindrical Tanks by the Manual Tank Strapping Method, SECOND EDITION, NOVEMBER 2019</p> <p>API MPMS 2.2.B Calibration of Upright Cylindrical Tanks Using the Optical Reference Line Method, REAFFIRMED, APRIL 2019</p> <p>API MPMS 2.2D Calibration of Upright Cylindrical Tanks Using the Internal Electrooptical Distance-ranging Method, REAFFIRMED, NOVEMBER 2020</p> <p>API MPMS 2.2.G Calibration of Upright Cylindrical Tanks Using the Total Station Reference Line Method, REAFFIRMED, NOVEMBER 2019</p>



ANEXO DE CERTIFICADO
 CERTIFICACIÓN MEDICIÓN Y CALIBRACIÓN S.A.S.
 20-LAC-016
 ACREDITACIÓN ISO/IEC 17025:2017
 Alcance de la acreditación aprobado / Documento Normativo



SEDE	Sitio					
CÓDIGO	MAGNITUD	INTERVALO DE MEDICIÓN	INCERTIDUMBRE EXPANDIDA DE MEDIDA	INSTRUMENTO A CALIBRAR	INSTRUMENTOS, EQUIPOS PATRONES UTILIZADOS	DOCUMENTO NORMATIVO
DF8	Grandes volúmenes (mayor a 5000 L)	$5 \text{ m}^3 \leq V < 127\,200 \text{ m}^3$ (31,45 bbl $\leq V < 700\,063$ bbl)	0,014 % del volumen total del tanque	Tanques cilíndricos verticales	Cinta de medición strapping y de fondo, medidor de espesores, regla, mira, flexómetro, termómetro y estación total	API MPMS 2.2.A Measurement and Calibration of Upright Cylindrical Tanks by the Manual Tank Strapping Method, SECOND EDITION, NOVEMBER 2019 API MPMS 2.2.B Calibration of Upright Cylindrical Tanks Using the Optical Reference Line Method, REAFFIRMED, APRIL 2019 API MPMS 2.2D Calibration of Upright Cylindrical Tanks Using the Internal Electrooptical Distance-ranging Method, REAFFIRMED, NOVEMBER 2020 API MPMS 2.2.G Calibration of Upright Cylindrical Tanks Using the Total Station Reference Line Method, REAFFIRMED, NOVEMBER 2019
DF8	Grandes volúmenes (mayor a 5000 L)	$5 \text{ m}^3 \leq V < 477 \text{ m}^3$ (31,45 bbl $\leq V < 3000$ bbl)	0,013 % del volumen total del tanque	Esferas y esferoides	Cinta de medición strapping y de fondo, medidor de espesores, flexómetro, termómetro.	API STD 2552 Method for Liquid Calibration of Tanks; September 1966; Reaffirmed, May 2014
DF7	Medianos volúmenes (5 L $\leq V < 5000$ L)	$5 \text{ L} \leq V \leq 5000 \text{ L}$ (1,32 gal $\leq V \leq 1320$ gal)	0,013 % del volumen del probador	Tanque probador tipo atmosférico (Recipiente volumétrico)	Tanque probador tipo atmosférico, termómetro, probeta	API MPMS 4.9.2 Determination of the Volume of Displacement and Tank Provers by the Waterdraw Method of Calibration; First Edition; Reaffirmed, July 2015 API MPMS 12.2.4 Calculation of Base Prover Volumes by the Waterdraw Method, FIRST EDITION, REAFFIRMED SEPTEMBER 2014
DF6	Pequeños volúmenes (hasta 5 L)	$0,2 \text{ mL} \leq V < 5 \text{ L}$ (0,000053 gal $\leq V < 1,32$ gal)	0,013 % del volumen del probador	Tanque probador tipo atmosférico (Recipiente volumétrico y escalas)	Tanque probador tipo atmosférico, termómetro, probeta	API MPMS 4.9.2 Determination of the Volume of Displacement and Tank Provers by the Waterdraw Method of Calibration; First Edition; Reaffirmed, July 2015



ANEXO DE CERTIFICADO
 CERTIFICACIÓN MEDICIÓN Y CALIBRACIÓN S.A.S.
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SEDE	Sitio					
CÓDIGO	MAGNITUD	INTERVALO DE MEDICIÓN	INCERTIDUMBRE EXPANDIDA DE MEDIDA	INSTRUMENTO A CALIBRAR	INSTRUMENTOS, EQUIPOS PATRONES UTILIZADOS	DOCUMENTO NORMATIVO
DF9	Probadores de caudal/volumen	$0,019 \text{ m}^3 \leq V < 20,668 \text{ m}^3$ ($0,119 \text{ bbl} \leq V < 130 \text{ bbl}$)	0,011 % del volumen del probador	Probador de volumen pequeño, unidireccional y bidireccional	Tanque probador tipo atmosférico, termómetro, manómetro, probeta.	API MPMS 4.9.2 Determination of the Volume of Displacement and Tank Provers by the Waterdraw Method of Calibration; First Edition; Reaffirmed, July 2015 API MPMS 12.2.4 Calculation of Base Prover Volumes by the Waterdraw Method, FIRST EDITION, REAFFIRMED SEPTEMBER 2014
DF7	Medianos volúmenes ($5 \text{ L} \leq V < 5000 \text{ L}$)	$159 \text{ L} \leq V < 5000 \text{ L}$ ($42 \text{ gal} \leq V < 1320 \text{ gal}$)	0,026 % del volumen del tanque	Recipientes volumétricos de cualquier forma geométrica (fondo de tanques, tanques móviles, autotanque, carrotanques, ferrotanques, frack tank, gauge tank)	Tanque probador tipo atmosférico, termómetro, medidor de flujo, cinta de fondo, manómetro	API STD 2555 Method for liquid calibration of tanks. Reaffirmed 2014
DF8	Grandes volúmenes (mayor a 5000 L)	$5000 \text{ L} \leq V \leq 110\,000 \text{ L}$ ($1\,320 \text{ gal} \leq V \leq 29\,001 \text{ gal}$)	0,026 % del volumen del tanque	Recipientes volumétricos de cualquier forma geométrica (fondo de tanques, tanques móviles, autotanque, carrotanques, ferrotanques, frack tank, gauge tank)	Tanque probador tipo atmosférico, termómetro, medidor de flujo, cinta de fondo, manómetro.	API STD 2555 Method for liquid calibration of tanks. Reaffirmed 2014
DF2	Caudal volumétrico	$3,78 \text{ L/min} \leq Q \leq 5680 \text{ L/min}$ ($1 \text{ gpm} \leq Q \leq 1500 \text{ gpm}$)	0,012 % del factor del medidor ¹	Instrumento totalizador de volumen (Medidores de flujo)	Tanque probador tipo atmosférico, termómetro, manómetro	API MPMS 4.8 Operation of Proving Systems, SECOND EDITION, SEPTEMBER 2013 API MPMS 12.2.3 Proving Report First Edition October 1998 Reaffirmed May 2014



ANEXO DE CERTIFICADO
 CERTIFICACIÓN MEDICIÓN Y CALIBRACIÓN S.A.S.
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SEDE	Sitio					
CÓDIGO	MAGNITUD	INTERVALO DE MEDICIÓN	INCERTIDUMBRE EXPANDIDA DE MEDIDA	INSTRUMENTO A CALIBRAR	INSTRUMENTOS, EQUIPOS PATRONES UTILIZADOS	DOCUMENTO NORMATIVO
DF2	Caudal volumétrico	$0,1 \text{ L/min} \leq Q \leq 1,25 \text{ L/min}$	0,30 % del caudal calculado ¹	Caudalímetro y rotámetro	Probeta, termómetro, manómetro	UNE-EN ISO 8316 Mayo 1996 Medida del caudal de líquidos en conductos cerrados, Método por recogida de líquido en un tanque volumétrico
DF2	Caudal volumétrico	$1,25 \text{ L/min} < Q \leq 1880 \text{ L/min}$	0,029 % del caudal calculado ¹	Caudalímetro y rotámetro	Tanque probador tipo atmosférico, termómetro, manómetro	UNE-EN ISO 8316 Mayo 1996 Medida del caudal de líquidos en conductos cerrados, Método por recogida de líquido en un tanque volumétrico
DF2	Caudal volumétrico	$3,78 \text{ L/min} \leq Q \leq 5680 \text{ L/min}$ ($1 \text{ gpm} \leq Q \leq 1500 \text{ gpm}$)	0,015 % del volumen del probador ¹	Sistemas de medición	Tanque probador tipo atmosférico, termómetro, manómetro	OIML R120 Edition 2010 (E) Standard capacity measures for testing measuring systems for liquids other than water

Notas:

La incertidumbre expandida de la medición reportada se establece como la incertidumbre estándar de medición multiplicada por el factor de cobertura "k=2" con una probabilidad de cobertura aproximadamente del 95%

El valor de "V" en el Intervalo de Medición hace referencia al valor al Volumen del Probador, tanque, tanque probador o recipiente volumétrico a calibrar

l : Corresponde a la longitud a calibrar

1, La CMC reportada excluye de sus contribuciones la incertidumbre debida a la repetibilidad del instrumento bajo calibración, la cual puede ser mayor a la evaluada para el sistema y método implementados por el laboratorio.

Q corresponde al caudal medido en el intervalo."



NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:
Retail Motor Fuel Dispenser (RMFD)
Electronic Computing
Model: Nxx Series (See Page 3 for Model Designation)
Generic Names: Encore 300, Encore 300S, Encore 500, Encore 500S, Encore 550, Encore 550S and Encore 700S, Encore 700F
Capacity: \$999.99 Total Sale
\$999.99 Total Volume
\$9.999 Maximum Unit Price

Submitted By:
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7300 W. Friendly Ave
Greensboro, NC 27420
Tel: 336-547-5375
Fax: 336-547-5516
Contact: Gordon Johnson
Email: gordon.johnson@gilbarco.com
Website: www.gilbarco.com

Standard Features and Options			
Meter Model Numbers:	T19976-G3*1,2, T19976-V3*1,2 T19976-V10*1,2, T19976-G5*3,4	M07300A001*1, M07300A002*1, M07300A003*1, M07300A004*1, M07300A005*1, M07300A006*1	P9XXX*1
Name:	"C+" or "V " Meter	Ecometer	LC M5 Series
Minimum Flow Rate:	0.5 GPM	0.5 GPM	5 GPM
Maximum Flow Rate:	12 GPM	10 GPM	60 GPM
*Fuels types:	*1 Gasoline up to E15; Diesel up to B20; fuel oil, kerosene *2 Gasoline up to (E25), isobutanol up to 16% (iBu 16) *3 Gasoline up to (E85), isobutanol up to 16% (iBu 16) *4 E100; B100, isobutanol up to 16% (iBu 16)		

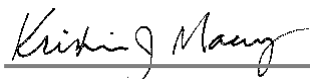
Features:

- All Units Have the Electronic Totalizer as a Standard Feature
- Back-lighted Liquid Crystal Displays (LCD)
- Display Back-up for up to 72 Hours
- Electronic Totalizer with Volume and Sales up to 9 999 999.99 units
- Nozzles Lane-oriented and High-hose Attachment
- Down Loadable Software
- Category 2 or Category 3 Device (see Sealing) Page 2
- Stand-alone or Console Controlled


Options:

- Cash/Credit
- Preset Cash and/or Credit
- Cash Acceptor
- CRIND (card reader in dispenser)
- TRIND (transmitter/receiver in dispenser)
- Bar Code Scanner
- Push-to-Start (activates pump if nozzle is lifted)
- Managers Keypad (provided to the site)
- Encrypted: Card Reader, Pin Pad and Display (PCI-1, PCI-2) referred to as (NGP or FlexPay II)
- Electrical Mechanical Totalizer (up to 999 999.9 units)
- FlexPay IV.
- 5.7" "Monochrome" Display
- 10.4" LCD Display
- 10.4" "Touch-Screen"
- 10.4" "Soft Key" Display
- InfoScreen
- FlintLoc Security System
- Intercom/Overhead Speaker
- "VaporVac"
- Full Vapor Recovery Balance (booted)
- Vapor Recovery Ready
- Programmable Pump Preset
- Lever-activated Nozzle
- SMART CRIND
- Key Control

This device was evaluated under the National Type Evaluation Program and was found to comply with the applicable technical requirements of "NIST Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices." Evaluation results and device characteristics necessary for inspection and use in commerce are on the following pages.



Kristin Macey
Chairman, NCWM, Inc.



Jerry Buendel
Chairman, National Type Evaluation Program Committee
Issued: January 4, 2017



Gilbarco, Inc.

Retail Motor Fuel Dispenser (RMFD) / Nxx Series

Application: For use in dispensing standard fuels such as gasoline, gasoline with up to 15% ethanol and gasoline with up to 15% methanol blend types and diesel fuel, fuel oil, kerosene and up to 20% biodiesel products as indicted in Section C. "Product Families for Meters" table in NCWM Publication 14, Measuring Devices at retail service stations, attended or unattended, with approved and compatible equipment. Units equipped with the T19976-G3 or V3 meter are additionally rated for up to E25. Units equipped with the Gilbarco T19976 G5 meter are additionally approved for dispensing alternate fuels such as gasoline with greater than 25% Ethanol and diesel with greater than 20% biodiesel (i.e. up to 100% Ethanol and 100% Bio-diesel). E25 and E85 rated units may also be used with up to 16% isobutanol. (iBu 16) The Ultra High series with the LC M5 meter are approved to dispense gasoline and diesel fuels. These dispensers are approved for use with Phase II vapor recovery equipment and approved booted or bootless nozzles when the system and components are certified and comply with the zero-set-back interlock requirements. Gilbarco self-contained dispensers (unit with a pump and a motor) are provided with onboard automatic air elimination. Gilbarco remote dispensers (units do not have motor and pump) require the use of a remotely located pump. These remote dispensers require automatic air elimination at the remote pump / STP, or the use of a low product cut off that will prevent air from entering the pump if the fluid level in the tank falls below a point that air could be ingested into the system or the use of other automatic means to prevent air from entering the system.

Identification: The identification badge, metal or a self-destructive badge is on the lower base plate below the access panel covering the hydraulics cabinet or located behind the locked main options door. Optional features are indicated on the identification plate.

Sealing Category 2: The initial release of the Encore Series Dispensers Encore 300, 500, 500S, 700S and 700F and continuing through CoC 02-019A27 had no remote configuration capability and were classified as Category 2 devices. The category of sealing can be identified on the main display by pressing the "Enter" key on the manager's key pay. The Money display will change showing a "P" indicating the unit is a Category 2 device. Representative examples of Category 2 displays are in the "Operation" section. Note that Category 2 devices may be upgraded to Category 3 device. See **Sealing Category 3:**

Access to all metrological features and functions are controlled through the use of a sealable security switch. The security switch has two positions, "normal/sealed" and "calibration/configuration." When the security switch is in the "calibration/configuration" position, sealable parameters including meter calibration, gallon/liter settings, and blend ratio settings can be accessed. Access to sealable parameters is prevented by placing the security switch in the "normal/sealed" position and threading a wire security seal through the cover, which fits over the security switch. The wire security seal must be broken in order to lift the hinged cover and to move the security switch to the "calibration/configuration" position. The security switch and Manager's keypad are located behind the locked main options door. Access to the security switch and Manager's keypad requires opening the options door. Due to security concerns and theft issues, many stations have removed the Manager's Keypad from the unit. W&Ms officials may need to contact station personnel to obtain this keypad. Gilbarco will provide Manager's keypad(s) to each site.

All Encore models - To deter tampering and increase dispenser security within the hydraulics area a new reinforced lower panel is being offered as an option. The lower door has additional hardware and uses a special security lock. Locks and Keys are furnished by the customer. Security sensors - As a means to deter fuel theft and fraudulent activities Gilbarco may add security sensors to the doors on the Encore series dispensers. These sensors may trigger audible alarms, lights or notify the station operator that a door or panel has been opened. Sensors may be used with the standard lower door, the reinforced lower panel and with the main electronic bezel door.

Encore 700F uses the same sealing means but the location of the security switch has been relocated – see Encore 700F photos. Note the lower door has a new locking device and the lower door must be removed before gaining access to the electronics cabinet. The lower hydraulics cabinet door latch may be provided with a customer supplied locking device. Units may be provided with High security locks for the main electronics door and the lower hydraulics cabinet door. The unit may be supplied with electronic sensors on the electronics door and the lower hydraulics cabinet door. Gilbarco cannot duplicate or send out replacement keys for the high security locks or customer provided locks. **W&M officials will need to contact the site manager for keys and access to the device.**

The Gilbarco T20453-GX ECO meter or M07300A001, M07300A002, M07300A003, M07300A004 M07300A005 or M07300A006 E-Meter Model (NTEP CC 02-040A3) is located in the side column, and does not have any adjustable or metrological calibration features. Gilbarco provides a factory installed, tamper evident decal/seal containing the Gilbarco Inc. name, Trademark or logo, and a non-repetitive serial number. (See Operation)

Encore "S" series may also have a user provided lock that must be accessed. The locked lower hydraulics door must be removed to access the user provided lock. This locks a "tool box" type latch that secures the main door. To access features located behind the main



Gilbarco, Inc.

Retail Motor Fuel Dispenser (RMFD) / Nxx Series

door first remove the lower hydraulics door, then unlatch the main door's "tool box" latch, then open the main door. The main door is secured with a lock / key and the lock is located on the left side of the door.

Electronic calibration (E-cal): Access to the electronic calibration feature is through the security switch described above. With the switch in the "calibration/configuration" position, a calibration code and the volume of the volumetric standard are entered into the keypad next to the security switch. Product is then dispensed into the standard, a delivery error is determined in cubic inches, and the error value is entered into the keypad. The security switch is then returned to the normal operating ("normal/sealed") position and the switch cover is sealed with a wire security seal.

Gallon/Liter setting: Access to the gallon/liter setting is through the security switch described above. With the switch in the "calibration/configuration" position, a conversion factor is used to program all Encore® Series dispensers to indicate in gallons or liters. Gallon/Liter setting information can also be viewed without entering the configuration mode. With the switch in the "normal/sealed" position, the number of times that the conversion factor has been changed since the initial installation can be displayed in the main "Volume" display by pressing "ENTER" on the manager's keypad. Press any other key to revert to the normal display. See "examples" shown below.

Blend ratio setting: Access to the blend ratio setting is through the security switch described above. On customer-selectable and fixed-blenders, the individual blend ratios for each grade may be programmed at the dispenser. Blend ratio information can also be viewed without entering the configuration mode. With the switch in the "normal/sealed" position pressing "ENTER" on the manager's keypad causes the display at the dispenser to indicate the number of times the blend ratio has been changed as shown below.

Sealing Category 3: Encore 500, 500S, 700S and 700F may be equipped with category 3 event logger. These models may be identified on the main display by pressing the "Enter" key on the managers key pay. The Money display will change showing a or "Cat3--" or "PPP3--" indicating the device is a Category 3 device. Representative examples of Category 3 displays are in the "Operation" section.

Note that Category 2 devices may be upgraded to Category 3 device.

Access to meter calibration is controlled through the use of a sealable security switch. The security switch has two positions, "normal/sealed" and "calibration/configuration." When the security switch is in the "calibration" position, meter calibration, can be accessed. Access to sealable parameters is prevented by placing the security switch in the "normal/sealed" position and threading a wire security seal through the cover, which fits over the security switch. The wire security seal must be broken in order to lift the hinged cover and to move the security switch to the "calibration" position. The security switch and Manager's keypad are located behind the locked main options door. Access to the security switch and Manager's keypad requires opening the options door. Due to security concerns and theft issues, many stations have removed the Manager's Keypad from the unit. W&Ms officials may need to contact station personnel to obtain this keypad. The Manager's keypad is shipped with each dispenser.

Printing – Category 3 devices are required to have a means to print the event log. On the mangers key pad press the "F1" key to print the event logs on the dispensers receipt printer. Note that the printed log file of may print many feet of paper depending on the number of events in the log file. Press the "F2" key to stop printing. The dispenser will take some time to retrieve and format the file before printing starts. The display will show that the unit is processing the log data by the Money display showing Cat3__ and cycling "Print", "Print-", "PrintL", "Print7", "Print8" on the Volume display. On Encore dispenser with older displays the volume display will show "PPP3" cycling "PPPPPP-" "PPPPPPPL", "PPPPPP7", "PPPPPP8" and repeating. If a Category 3 device in not capable of printing, the device will revert to a category 2 device.



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Retail Motor Fuel Dispenser (RMFD) / Nxx Series

Model Designation: The specific characters in the model designation are represented below:

Position 1	Positions 2 and 3	Hydraulics Description	Grade/Hose	Not Part of Model Code
N = Encore	A0	Dispenser	1 Grade	A = Multi-House
	A1	Dispenser	2 Grade	
	A2	Dispenser	3 Grade	
	A3	Dispenser	4 Grade	
	C0	Pump	1 Grade	C = Multi-Pump
	C1	Pump	2 Grade	
	C2	Pump	3 Grade	
	C3	Pump	4 Grade	
	G0	Dispenser Single Hose	3 Grade	G = Single Hose
	G1	Dispenser Single Hose + 1	3 + 1 Grade	
	G2	Pump Single Hose	3 Grade	
	G3	Pump Single Hose + 1	3 + 1 Grade	
	G4	Dispenser Single Hose	2 Grade	
	G5	Pump Single Hose	2 Grade	
	J0	Blender Dispenser	3 Grade	J = Multi-Hose Blender
	J1	Blender Pump	3 Grade	
	J2	Blender + 1 Dispenser	4 Grade	
	J3	Blender + 1 Pump	4 Grade	
	J4	Multi-Hose Hybrid Blender 3+2	3+2 Grade	
	J5	Multi-Hose Hybrid Blender 5+0	5 blended grades 3 hoses	
	J6	Multi-Hose Hybrid Blender 4+1	4 blended grades 2 hoses	
	L0	Blender Dispenser X + 1	2 + 1 Grade	L = X + 1 Blender
	L1	Blender Dispenser X + 1	3 + 1 Grade	
	L2	Blender Dispenser X + 1	4 + 1 Grade	
	L3	Blender Dispenser X + 1	3+1+1 Grade	
	L4	Blender Pump X + 1	2 + 1 Grade	
	L5	Blender Pump X + 1	3 + 1 Grade	
	L6	Blender Pump X + 1	4 + 1 Grade	
	L7	Blender Pump X + 1	5 + 1 Grade	
	N0	Blender Dispenser X + 0	2 + 0 Grade	
	N1	Blender Dispenser X + 0	3 + 0 Grade	
	N2	Blender Dispenser X + 0	4 + 0 Grade	
	N3	Blender Dispenser X + 0	5 + 0 Grade	
	N4	Blender Pump X + 0	2 + 0 Grade	
	N5	Blender Pump X + 0	3 + 0 Grade	
	N6	Blender Pump X + 0	4 + 0 Grade	
	N7	Blender Pump X + 0	5 + 0 Grade	
	P0	Super-Hi Dispenser	1 Grade	P = High Flow
	P1	Super-Hi Master	1 Grade	
	P2	Super-Hi Combo	1 Grade	
	P3	Ultra-Hi Master	1 Grade	
	P4	Ultra-Hi Combo	1 Grade	
	P5	Ultra-Hi Satellite	1 Grade	
	P6	Ultra-Hi Master	2 Grade Single Side	
	P8	Ultra-Hi Satellite	2 Grade Single Side	



Gilbarco, Inc.

Retail Motor Fuel Dispenser (RMFD) / Nxx Series

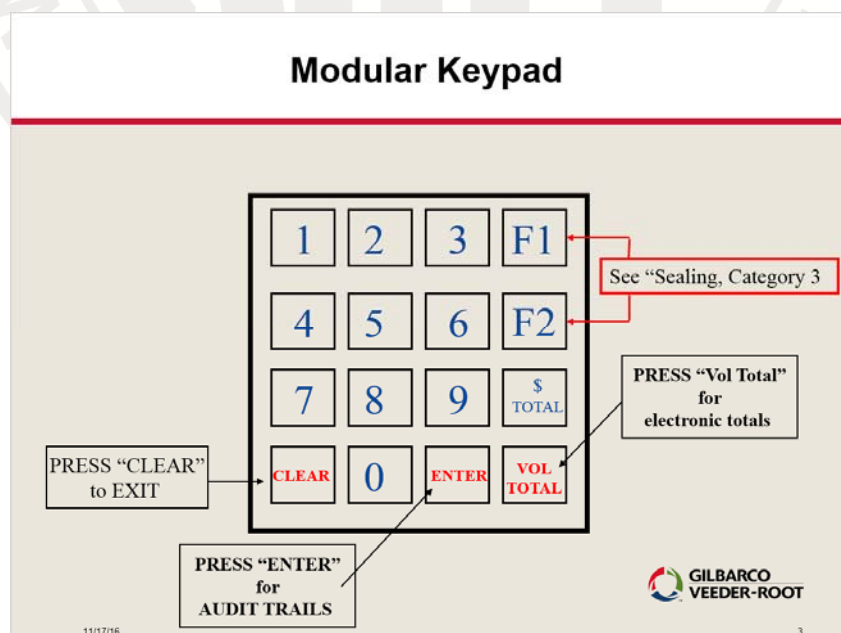
Operation: Gilbarco Smart meter, Model number M02950A001 or Gilbarco E-Meter Model M07300xx is an alternate to the Gilbarco C+ meter and the LC M5 series meters and is located in the side column of the dispenser. The Gilbarco "Smart Meter" (is a counter rotating twin turbine inferential meter that accurately meters retail motor transportation fuels. Diesel fuel, gasoline, gasoline/ethanol, and gasoline/methanol blend types of products. Each meter is equipped with an electronic printed circuit board that contains a "calibration curve" that is unique to that individual's meter's configuration (bore size, internal components such as bearings, spacers and rotors including the individual tolerances of all components). Replacement of any internal component changes the metrological characteristics of the meter. The calibration curve data cannot be assessed or changed in the field. The PCB is encapsulated to prevent tampering. Rotations of the turbines are detected by electronic pick-ups (located on the PCB) through the meter body. This electronic signal is then converted to volumetric display by the dispenser electronics. Traditional Gilbarco Pulsers are not used. The meter is not suitable for field repair.

The Gilbarco E-Meter Model M07300Axx series (CoC 02-040A3) also located in the side column is a twin spindle positive displacement meter does not have any adjustable or metrological calibration features. Gilbarco provides a factory installed, tamper evident decal/seal containing the Gilbarco Inc. name, Trademark or logo, and a non-repetitive serial number. Destruction or absence of the tamper evident seal indicates that the meter's internal mechanisms have been accessed. While the meter does not have any adjustable or metrological calibration features, the inspector should verify that access to the meter's internal mechanisms has not altered the metrological integrity of the device. The meter does not contain any field serviceable components.

The vacuum-assist vapor recovery option for the Encore® Series consists of an explosion-proof motor driving a vacuum pump. The motor(s)/pump(s) are in the hydraulic section of the dispenser. The PC board for the electronic vacuum pump-controller is in the electronic section of the dispenser. The PC board monitors the rate at which gasoline is dispensed and then proportionally controls the motor(s)/pump(s) speeds. The rate of vapor recovery is proportional to the product flow rate. Each hose is equipped with an electronically operated vapor valve, which operates without isolating hoses.

Dispensers equipped with the "TRIND" (transmitter/receiver in the dispenser) are authorized by radio frequency communication. The transponder tag, mounted in the vehicle or hand-held unit, communicates to the receiver in the dispenser of the customer's predetermined preferences. The transponder may be overridden by using a credit card or the transaction canceled by pressing the "CANCEL" button. Transponders are not capable of concurrent use at multiple fueling positions or consecutive use at the same dispenser.

For units with electronic totalizers (effective April 1, 1998), you can retrieve totals electronically at the pump or dispenser by using the modular keypad. This keypad sits behind the locked access door on the "A" side of the electronics module. For the Encore® Series, it mounts on a removable magnetic pad that attaches to the inside cabinet behind the left or right option door.





Gilbarco, Inc.

Retail Motor Fuel Dispenser (RMFD) / Nxx Series

The **VOL TOTAL** key is used to retrieve volume totals for each fuel grade. These key functions do not require a security code to access. Just press the **VOL TOTAL** button. The **CLEAR** key is used to exit volume total or audit trail modes. See Sealing Category 3 for use of “F1” and “F2” keys

Retrieving VOL TOTAL Examples:

1. Press **VOL TOTAL** - display changes from normal to volume totals.
2. Press **Enter** to change the flashing display location to the first digit.
3. Press **1** for side one or **2** for side two.
4. Press **Enter** - flashing display moves to the second digit.
5. Press 1 or 2 or 3 or 4 or 5 or 6, etc., for grades.
6. Read electronic totalizer for each side and grade.
7. Press **Clear** to return to normal mode.

The sample below shows a volume total of **1 420 598.736** gallons on side 1, product 3. Electronic totalizer can display up to 9 999 999.999 units (gallons or liters).

Encore Electronic Totals

“4” indicates volume totals	Indicates “side” 1 or 2	Indicates “grade” 1 - 8
\$	4	1 3
Vol.	1 4 2 0 5 9	Read both lines for volume totals
8.736		
Read as 1,420,598.736 gallons		

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The Encore is provided with a means to change the multiple meters' calibration with one sealable means. As a result, HB 44 regulations were changed to require that a means be provided to determine which meter was calibrated.

Examples:

Pressing the ENTER key on the Manager keypad of the dispenser with both sides idle will yield the following information each time ENTER is pressed. Below are tables explaining what is shown on the Money, Volume and PPU displays during the audit process.

Prior to V02.9.06, only information up to P1 in the below tables were available. Current production versions allow for all of the below information to be accessed.

MPD (Non-Blender) Information is Displayed in the Following Format:

Sale Display: XXXX – Blank

Volume Display: XXXX – Number of times volume units (Gallon Liter) have been adjusted.
Example – 0019 would indicate that the volume unit has been changed a total of 18 times.

PPU Grade Display: XXX – Blank

Blender Information is Displayed in the Following Format:

Money Display: XXXX – Number of times blend ratios have been adjusted.
Example – 0018 would indicate that the blend ratios have been changed 18 times.

PPU Grade Display: XXX – Each PPU window will display the percentage of the low octane of the pure product portion of the blend.
Example: PPU 1 = 100, PPU 2 = 65, PPU 3 = 0. This would indicate that grade 1 was composed of 100% of the low octane pure product, grade 2 was composed of 65% of the low octane pure product and grade 3 was composed of 0% of the low octane pure product.

Programmed Feature set “Unit type” - Different information will be shown for MPD versus Blender types.

Unit type (supplemental information)
1 = 1 Grade, 1 Hose MPD (also Ultra-Hi™)
2 = 2 Grade, 2 Hose MPD (also Ultra-Hi™)
3 = 3 Grade, 3 Hose MPD (also Ultra-Hi™)
4 = 4 Grade, 4 Hose MPD
5 = 2 Grade, 1 Hose MPD
6 = 3 Grade, 1 Hose MPD
7 = 3 Grade, 1 Hose + 1 MPD
8 = 3 Grade, 3 Hose Blender
9 = 3 Grade, 3 Hose Blender + 1
12 = 2 Grade, 1 Hose Blender
13 = 3 Grade, 1 Hose Blender
14 = 4 Grade, 1 Hose Blender
15 = 5 Grade, 1 Hose Blender
16 = 2 Grade, 1 Hose Blender + 1
17 = 3 Grade, 1 Hose Blender + 1
18 = 4 Grade, 1 Hose Blender + 1
19 = 5 Grade, 1 Hose Blender + 1
20 = 2 Grade, 1 Hose Blender + 2 Grade, 1 Hose Blender
21 = 3 Grade, 1 Hose Blender + 2 Grade, 1 Hose Blender
22 = 2 Grade, 1 Hose Blender + 1 + 1
23 = 3 Grade, 1 Hose Blender + 1 + 1
24 = 2 Grade, 1 Hose Blender + 2 Grade, 2 Hose Blender
25 = 3 Grade, 1 Hose Blender + 2 Grade, 2 Hose Blender
26 = Super-Hi™
27 = Super-Hi™ (Super-Hi and Standard Speed Nozzles)
60 = Multi-Hose Hybrid Blender 5 Grade
61 = Multi-Hose Hybrid Blender 4 Grade +1



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Tables below show the information that may be available on the dispensers displays. The Information shown will be dependent on the software version and the unit type noted above. Unit types are “MPD” types 1-7 and “Blender” are unit types 8, 9, 12 - 27 and 60 – 61. The KEY shown in the first table is used for both tables. Fields noted as Metrological are required. Fields noted as Non- metrological are not required and are used by Service providers. Non metrological fields should be ignored by W&Ms officials.

Category 2 devices

Category 2 - For unit type 1-7 MPD Types with standard fuel, Alternate fuels of DEF.											KEY
# of times ENTER is pressed	1	2	3	4	5	6	7	8			METROLOGICAL
Money Display	P	Programmed Feature set	P1	P2XXX xxx- software CRC* Door node only	P3 XXX= Software CRC Door node 5 only	P4	P5	P6			NON-METROLOGICAL
Volume Display	Number of times Volume type has changed	Programmed Unit Type (CC90)	Blank	Software version number	Pump Boot Version number	Side 1 door node software version number	Side 2 door node software version number	ATC node Version (if ATC enabled,			
PPU Display	Days since meter has been calibrated	# of times meter has been calibrated	Pulses per gallon	MIP version number	Blank	Door node host version	Door node hose number	No Change			

Category 2 - For unit type 8 - 9, 12 - 27 and 60 - 61 Blender types with standard fuel, Alternate Fuels.											KEY
# of times ENTER is pressed	1	2	3	4	5	6	7	8	9		METROLOGICAL
Money Display	P and Number of time blend Ratios have Changed	Programmed Feature set	P1	P2	P3 XXX= Software CRC Door node 5 only	P4	P5	P6	P7		NON-METROLOGICAL
Volume Display	Number of times Volume type has changed	Programmed Unit Type (CC90)	Blank	Blank	Software version number	Pump Boot Version number	Side 1 door node software version number	Side 2 door node software version number	ATC node Version (if ATC enabled, otherwise no change)		
PPU Display	Blend Ratios	Days since meter has been calibrated	# of times meter has been calibrated	Pulses per gallon	MIP version number	Blank	Door node host version	Door node hose number	No Change		

Category 3 devices:

Category 3 - For unit type 1-7 MPD Types with standard fuel, Alternate fuels of DEF.											KEY
# of times ENTER is pressed	1	2	3	4	5	6	7	8	9		METROLOGICAL
Money Display	CAT3 or PPP3	Programmed Feature set	P1	P2XXX xxx- software CRC* Door node only	P3 XXX= Software CRC Door node 5 only	P4	P5	P6			NON-METROLOGICAL
Volume Display	Blank	Number of times Volume type has changed	Programmed Unit Type (CC90)	Blank	Software version number	Pump Boot Version number	Side 1 door node software version number	Side 2 door node software version number	ATC node Version (if ATC enabled, otherwise no change)		
PPU Display	Blank	Days since meter has been calibrated	# of times meter has been calibrated	Pulses per gallon	MIP version number	Blank	Door node host version	Door node hose number	No Change		

Category 3 - For unit type 8 - 9, 12 - 27 and 60 - 61 Blender types with standard fuel, Alternate Fuels.											KEY
# of times ENTER is pressed	1	2	3	4	5	6	7	8	9	10	METROLOGICAL
Money Display	CAT3 or PPP3	P and Number of time blend Ratios have Changed	Programmed Feature set	P1	P2	P3 XXX= Software CRC Door node 5 only	P4	P5	P6	P7	NON-METROLOGICAL
Volume Display	Blank	Number of times Volume type has changed	Programmed Unit Type (CC90)	Blank	Blank	Software version number	Pump Boot Version number	Side 1 door node software version number	Side 2 door node software version number	ATC node Version (if ATC enabled, otherwise no change)	
PPU Display	Blank	Blend Ratios	Days since meter has been calibrated	# of times meter has been calibrated	Pulses per gallon	MIP version number	Blank	Door node host version	Door node hose number	No Change	



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Examples shown below are not representative of all the information that may be seen on the dispenser displays. Information shown will be dependent on the software version and the unit types noted above. Below are representative examples of the displays for blender types when pressing the “Enter” key on the Manager’s key pad the number of times indicated in the chart above.


Audit trail information after software version 01.8.0 contains supplemental information.

Encore - Normal Display

\$			2	4	.	5	2
Vol.		1	5	.	7	6	5

1.111	1.222	1.333	1.444	1.555
-------	-------	-------	-------	-------

PPU Display



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Encore Category 2 audit trail Display Press Enter 1st time

“P” indicates equipped with Category 2 audit trail

Counts blend change mode

Configuration changes Gallon or liter

\$ P 1 0

Vol. 3

100 75 50 25 0

% low grade

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Encore Category 2 audit trail Display press Enter 2nd time with supplemental information

Supplemental info Indicates Series
- = 500
5 = 500S
7 = 700s

Supplemental info Indicates unit type

\$ 5

Vol. 1 7

14 62

Number of days since last calibration

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Encore Category 2 audit trail Display
press Enter 3rd time with supplemental information

“P” indicates equipped with
Category 2 audit trail

\$

P	1					
---	---	--	--	--	--	--

Vol.

--	--	--	--	--	--	--

4				3
---	--	--	--	---

Number of calibrations per meter





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Encore Category 2 audit trail Display

press Enter 4th time with supplemental information

“P” indicates equipped with Category 2 audit trail

\$

P	2				
---	---	--	--	--	--

Vol.

--	--	--	--	--	--

1000				1006
------	--	--	--	------

Number of pulses per gallon or liter



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Encore Category 3 event logger

Press Enter 1st time

“CAI or PPP3-” indicates Category 3 device (fonts shown may not match display)

\$

C	A	I	3		
---	---	---	---	--	--

Vol.

--	--	--	--	--	--

--	--	--	--	--



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**Encore Category 3 event logger display
press Enter 4th time** with supplemental information



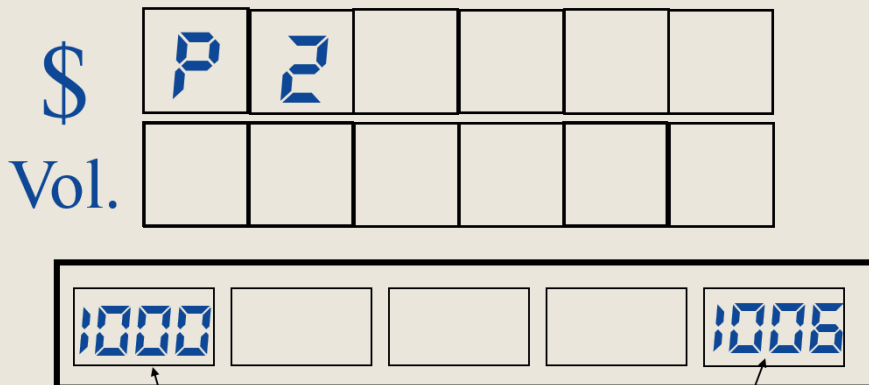
Number of calibrations per meter



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**Encore Category 3 event logger display
press Enter 5th time** with supplemental information



Number of pulses per gallon or liter



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Encore Category 3 event logger display
Press “F1” to print. Press “F2” to cancel

“CA or PPP3-” indicates
 Category 3 device (fonts shown may not match display)

\$	C	A	T	3		
Vol.	P	R	I	N	T	-

“Print” or “PPPP-”
indicates preparing
to print

← Cycles “ - L 7 8”

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Test Conditions: This certificate supersedes Certificate of Conformance number 02-019A27 and is issued to change the sealing means from a Category 2 device to a Category 3 device and note the additional of security sensors on the dispenser’s side columns.

Category 3 devices have virtually unlimited access to sealable parameters. A representative Gilbarco Encore dispenser with the Category 3 event logger was evaluated at the manufacturers facility in Greensboro NC and was based on the 2016 edition of NIST Handbook 44 and NCWM Publication 14. The evaluation verified required number of events, event number, date, time parameter ID and new value were present. The log file contains 1000 events. The file in is stored in nonvolatile memory and will last longer than 30 days. If the file record exceeds 1000 events, the oldest event is dropped and a new event is recorded. The device will not function when in the remote configuration mode. Parameters that may be in the log file were discussed and approved.

Encore models with Category 2 sealing means may be upgraded to a Category 3 device. See Sealing Category 2 devices and Sealing Category 3 Devices for detailed information on accessing the Category 2 event counters or the Category 3 event log. The Category 3 section will also note how to print the log file and how W&M’s officials may determine if the device is a Category 2 or a Category 3 device.

In addition to the new security lock, and sensors on the electronics door and the lower hydraulics door, Encore models may additional be equipped with sensors on the dispenser’s side columns. All graphics were updated. Previous test conditions are listed below for reference.

Certificate of Conformance Number 02-019A27: This certificate supersedes Certificate of Conformance number 02-019A26 and is issued to add a new model series, Encore 700F. The Encore 700F Pump and Dispenser by Gilbarco Inc. is an evolutionary update. Meters, Pulsers, valves, payment systems components, power supplies, and all PCBs remain the same except for a new main display and PPU boards. The main and PPU boards were tested under varying environmental conditions at the Gilbarco facility for 43 days. Two Encore 700 F dispensers were evaluated. The Encore 700 F model NL2 (4+1 Blender) with a thru put of 30,000+ gallons of fluid on each meter. Gilbarco Encore 700 F model number NP3 (Ultra- high flow dispenser) a thru put of 40,000+ gallons of fluid on each meter. Verified meter accuracy or both standard and Ultra high flow models, confirmed Money / Volume / PPU computations were correct, verified displays counted, could show all zeros, show a blank display. Verified the location and access to the sealable switch.



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Verified the units ID label will indicate “Encore 700F.” Note that the lower door has a new locking device and the lower door must be removed to before gaining access to the electronics cabinet. The lower hydraulics cabinet door latch may be provided with a customer supplied locking device. Units may be provided with High security locks for the main electronics door and the lower hydraulics cabinet door. The unit may be supplied with electronic sensors on the electronics door and the lower hydraulics cabinet door. Gilbarco cannot duplicate or send out replacement keys for the high security locks or customer provided locks. W&M’s officials will need to contact the site manager for keys and access to the device. The device evaluation was based on the 2016 edition of NIST Handbook 44 and NCWM Publication 14. Internal photos of the Encore 700F are included.

Page 1 - added Encore 700F to the list of Generic Names.

Page 2 - Sealing, added Encore 700F uses the same sealing means but the location of the security switch has been relocated – see photo.

Certificate of Conformance Number 02-019A26: This certificate supersedes Certificate of Conformance number 02-019A25 and is issued to: Add Meter model M07300A004. The meter differs from other meters in this series in having a different pulser. The pulser is manufactured by MEAS, part number CA-1226. The M07300A004 with the MEAS CA-1226 was tested at the manufacturers facility in an Encore series dispenser. The emphasis of the evaluation was to verify that the new MEAS CA-1226 communicated correctly with the Encore dispenser’s electronics. The M07300A004 Meter/pulser were checked for accuracy, money / volume totals. The meter was tested at the manufacturer’s gas lab facility in Greensboro. The new meter with the MEAS CA-1226 was installed on an Encore series dispenser. The pulser was tested over 46 days with a thru put of 161,000 gallons of fluid. The device evaluation was based on the 2016 edition of NIST Handbook 44 and NCWM Publication 14. No photos were provided of the meter/pulser. Based on this testing, CoC 02-040 for the Gilbarco Ecometer will be updated to reflect the addition of the M07300A004 meter.

Add a new optional reinforced lower panel. To deter tampering and increase dispenser security within the hydraulics area a new reinforced lower panel is being offered as an option. The lower door has additional hardware and uses a special security lock. Locks and Keys are furnished by the customer. Testing was not required. No photos were provided for security purposes.

Security sensors - As a means to deter fuel theft and fraudulent activities Gilbarco may add security sensors to the doors on the Encore series dispensers. These sensors may trigger audible alarms, lights or notify the station operator that a door or panel has been opened. Sensors may be used with the standard lower door, the reinforced lower panel and with the main electronic bezel door.

Page 1 under FOR: Deleted models Encore 350, Encore 350S. These models were never released.

Page 1 under Standard Features and Options, added fuel types for meters and footnotes for meter. This information is noted under the application section on page 2. Gilbarco has received requests from W&M’s officials to note fuel types on page 1. No changes to meter types or fuels. Testing was not required. Corrected meter model number from T19976-Gx to T19976-G3.

Meter Model Numbers:	T19976-G3 ^{*1,2} , T19976-V3 ^{*1,2} , T19976-G5 ^{*3,4} , T19976-V10 ^{*1,2}	M07300A001 ^{*1} , M07300A002 ^{*1} , M07300A003 ^{*1} , M07300A004 ^{*1} , M07300A005 ^{*1} , M07300A006 ^{*1}	P9XXX ^{*1}								
Name:	"C+" or "V " Meter	Ecometer	LC M5 Series								
Minimum Flow Rate:	0.5 GPM	0.5 GPM	5 GPM								
Maximum Flow Rate:	12 GPM	10 GPM	60 GPM								
Fuels types:	<table border="1"> <tr> <td>*1</td> <td>Gasoline Up to E15; Diesel up to B20; fuel oil, kerosene</td> </tr> <tr> <td>*2</td> <td>Gasoline up to (E25), isobutanol up to 16% (iBu 16)</td> </tr> <tr> <td>*3</td> <td>Gasoline up to (E85), isobutanol up to 16% (iBu 16)</td> </tr> <tr> <td>*4</td> <td>E100; B100</td> </tr> </table>			*1	Gasoline Up to E15; Diesel up to B20; fuel oil, kerosene	*2	Gasoline up to (E25), isobutanol up to 16% (iBu 16)	*3	Gasoline up to (E85), isobutanol up to 16% (iBu 16)	*4	E100; B100
*1	Gasoline Up to E15; Diesel up to B20; fuel oil, kerosene										
*2	Gasoline up to (E25), isobutanol up to 16% (iBu 16)										
*3	Gasoline up to (E85), isobutanol up to 16% (iBu 16)										
*4	E100; B100										

Page one under Features. Corrected and changed “Category 1” to “Category 2” to match “Category 2” noted on page 2 under Sealing.

Page one under Options updated description adding “or FlexPay II”. FlexPay II is the Marketing name for this product. Encrypted: Card Reader, Pin Pad and Display (PCI-1, PCI-2) referred to as (NGP or FlexPay II)



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Page 2 added M07300A004 under sealing. This is the new meter noted in item 1.

Page 2 under Application. Corrected meter model number from T1976-G5 to T19976-G5

Updated and Moved the “Examples section” on page 4 to page page 5 to be shown with the keypad.

Updated information on accessing audit trail information on pages 6 and 7. Added New tables and examples.

Page 8 updated with new information:

“Examples shown below are not representative of all of the information that may be seen on the dispenser displays. Information shown will be dependent on the software version and the unit type noted above. Unit types are MPD types 1 – 7 for. Blender types are unit types 8, 9, 12-25 and 60 – 61. Examples shown show the dispenser display when pressing the Enter key on the Manager’s key pad 1 – 4 times.”

Page 12- Added updated **Test Conditions**: This certificate supersedes Certificate of Conformance number 02-019A25 and is issued to:..... items 1 - 11

Certificate of Conformance Number 02-019A25: This certificate supersedes Certificate of Conformance number 02-019A24 and is issued to:

1. Add 2 additional models NJ5 Multi-Hose Hybrid Blender 5+0 (FFD) and model NJ6 Multi-Hose Hybrid Blender 4=1(FFD)
2. Correct model numbers on page 4, NN1 = 3 + 0, NN2 = 4 + 0
3. Add a high security lock to the Encore Series
4. Add Security sensors
5. Add gasoline / isobutanol blends with up to 16% isobutanol (iBu 16) when used with approved E25 or E85 rated Encore fuel dispensers

New model NJ5, NJ6. Model NJ5 is a Multi-Hose Hybrid Blender 5+0 (FFD). Model NJ6 is a Multi-Hose Hybrid Blender 4+1 (FFD) These models were added on page 3 and shown on page 20. As with any dispenser the fuel grades are representative and may change depending in the products in the fuel storage tanks. All component, meters, valves, pulsers remain the same. The electronics remain the same. The Hydraulic piping is reconfigured for the new models. No testing was deemed necessary for this change.

Corrected model descriptions on page 3, NN1 = 3 + 0, NN2 = 4 + 0

Security Locks. As a means to deter fuel theft and fraudulent activities, Gilbarco may provide high security locks to the main electronics door, printer door, lower hydraulics panel and other locations. These locks are provided with unique keys. Locks/ keys may be unique to each dispense, group of dispensers or all dispensers at a site. Keys must be obtained from the station personnel to gain access to these dispensers. Replacement Security keys cannot be duplicated and will not be provided by Gilbarco.

Security sensors - As a means to deter fuel theft and fraudulent activities Gilbarco may add security sensors to doors on the Encore series dispensers. These sensors may trigger audible alarms, lights or notify the station operator that a door or panel has been opened.

Page one, meter models: added footnote ³ to meter models and description for footnote ³ up to 16% isobutanol (iBu 16) Additional testing or 16% isobutanol (iBu 16) with gasoline was not required per the NTEP labs when used with E25 or E85 rated hydraulics. Page 2 under Application added “E25 and E85 rated units may also be used with up to 16% isobutanol. (iBu 16)”

Certificate of Conformance Number 02-019A24: This certificate supersedes Certificate of Conformance number 02-019A23 and is issued to indicate a new payment option named “FlexPay IV.” FlexPay IV may be known as M7 in countries other than the US. FlexPay IV / M7 complies with the latest security protocol mandated by the Payment Card Industry (PCI). PCI compliance is adherence to a set of security standards that were developed to protect card information during and after financial transactions. These changes include new card readers, new pin pads and other associated hardware. Gilbarco will provide the hardware that will be used in new production units and will additionally provide field upgrade kits that may be used to upgrade existing Gilbarco Encore series dispensers that are installed and in use. No photos of the internal components or kits are shown for security purposes. The pin pad, card reader and other required hardware are not field serviceable. Tampering or disconnecting these components will trigger security features. An Encore series dispenser was evaluated and tested at the manufacturer's facility using the 2015 edition of NCWM Publication 14 and NIST Handbook 44 as the basis for the evaluation. The emphasis of the evaluation was to verify the payment



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system accurately reflects all aspects of customer transactions. Information on the money volume and PPU displays was checked for mathematical agreement and rounding; display last transaction time outs; power failures; and printed receipts were verified.

Certificate of Conformance Number 02-019A23: This certificate supersedes Certificate of Conformance number 02-019A22 and is issued to add a new meter Gilbarco part numbers M07300A005 and M07300A006 (CoC 02-040A3) The meter itself is unchanged. Changes to the model number were due to a change in the electrical connector. Additional testing was not deemed necessary. No photos were provided of this pulser or of the pulsers internal components for security purposes.

Certificate of Conformance Number 02-019A22:

1. Add a new meter model number T19976-V10, (Page 1)
2. Use of new Pump Control node, Gilbarco Part number M12702. New software
3. Remove the super hi family, (Page 1)
4. Makes the use of the Manager’s key pad optional. (Page 1, 2)
5. Add statement to the application section concerning air elimination (Page 2)
6. Correct typographical errors on (Page 15) for the meter model number and

Page 1 -The T19976 V10 meter is the same as the manufacturers T19976 V3 meter with a new internal valve and valve seat. The meter was tested and rated for dispensing standard fuels such as gasoline, gasoline with up to 15% ethanol and gasoline with up to 15% methanol blend types and diesel fuel, fuel oil, kerosene and up to 20% biodiesel products as indicted in Section C. "Product Families for Meters" table in NCWM Publication 14. The meter was additionally evaluated for use with up to 25% ethanol (E25). The Encore blender dispenser with a new meter model number T19976-V10-was evaluated and tested at the manufacturer's facility using the 2013 edition of NCWM Publication 14 as the basis for the evaluation. Accuracy testing (meter) was done a 3 flow rates for both the initial and subsequent test. Each meter was retested after having dispensed 27425 gallons gasoline containing 25% ethanol and 24976 gallons of diesel. The emphasis of the evaluation was to assure the new meter meets the accuracy requirements.

The pump node Part number M12702 is responsible for 3 major functions: 1 - It contains all logic related to measurement (rate and volume) and control (start/stop, blend) of fuel flow and includes all aspects of temperature compensation if ATC is installed (ATC is not for use in the US). 2 - all aspects of the customer interaction with non-payment portions of a transaction (money/volume/PPU display, pump handles, grade selects, etc) are controlled by the software resident on the pump node. 3. it interfaces through the 2-wire interface to provide transaction information to the site controller. An Encore blender dispenser was evaluated and tested at the manufacturer's facility using the 2013 edition of NCWM Publication 14 as the basis for the evaluation. The emphasis of the evaluation was to assure pump node and software correctly and accurately reflect all aspects of customer transactions. Verified the information displayed on the dispenser for mathematical agreement and rounding; blend settings, calibration function; totalizer reading, display last transaction time outs; power failures; audit trail and event counter information.

Page 1 - removed the section concerning Super Hi models. These models have not and will not be produced

Standard Features and Options

Meter Model Numbers:	T19976-GX ¹ or V3 ¹ T19976-G5 ²	M07300A001 M07300A002 M07300A003	P9XXX
Used in Dispenser:	¹ Standard (Up to E25) ² Alternate Fuels (E85)	Standard	Ultra Hi
Name:	"C" + "V +" Meter	Ecometer	LC M5 Series
Minimum Flow Rate:	0.5 GPM	0.5 GPM	5 GPM
Maximum Flow Rate:	12 GPM	10 GPM	60 GPM

Page 1 - Added Manager Keypad to the options section.

Page 2 - Added the following to the applications section. Due to security concerns and theft issues, many stations have removed the Managers Keypad from the unit. W&M’s officials may to contact station personnel to obtain this keypad. The station will provide Managers keypads. The Managers Keypad may be shipped separately from the dispenser.

Sealing - Changed from Category 1 to Category 2 device.

Page 2 - Added the following to the Application Section: Gilbarco self-contained dispensers (units with a pump and a motor) are provided with onboard automatic air elimination. Gilbarco remote dispensers (units that do not have motor and pump) require the use



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of a remotely located pump. These remote dispensers require automatic air elimination at the remote pump / STP, or the use of a low product cut off that will prevent air from entering the pump if the fluid level in the tank falls below a point that air could be ingested into the system or the use of other automatic means to prevent air from entering the system.

Page 15 - (CoC 02-019A7) - corrected meter model number (typo) "...The alternate fuel dispenser uses a Gilbarco ~~T19796-G5~~ T19976 G5 meter. The meter located in the dispenser's hydraulic cabinet and is electronically calibrated. The dispenser with the ~~T19796-G5~~ T19976 G5 meter and console were..."

There are no visible changes to the internal or external appearance of the dispenser.

Certificate of Conformance Number 02-019A21: This certificate supersedes Certificate of Conformance number 02-019A20 and is issued noting a new family series designation for the manufacturer's Encore series, the "Encore 700 S." The Encore 700 S consists of the manufacturers Encore 500 S series and a specific options set known as "Next Generation Payment" or "NGP". NGP was evaluated and approved under CCs 02-019A16 and 02-019A12. NGP consists of an encrypted pin pad, encrypted card reader and an encrypted display. The encrypted pin pad, encrypted card reader and an encrypted display are not field serviceable. Tampering or disconnecting these components will trigger internal security features. No additional testing was deemed necessary. No photos were provided on the internal components for security purposes.

Certificate of Conformance Number 02-019A20: This certificate supersedes Certificate of Conformance number 02-019A19 and is issued to include a new Encore model NJ4 designated as a Multi-Hose Hybrid Blender 3+2. This model will allow the blending of gasoline with up to 85% ethanol (E85). This is a new configuration for the Encore series. All meters, valves and electronics are the same as in previously tested models. The Encore NJ4 was evaluated at the manufacturer's Greensboro facility. The evaluation consisted of testing the NJ4 checking the blending functions. Blend accuracy was based on totalizer readings. The device evaluation was based on the 2011 edition of NIST Handbook 44 and NCWM Publication 14. All of the changes are in the unit's hydraulics in the upper canopy. No photos were provided on the internal components. There are no changes to the external appearance of the dispenser. Previous test conditions are listed below for reference.

Certificate of Conformance Number 02-019A19: This certificate supersedes Certificate of Conformance number 02-019A18 and is issued to correct model numbers shown on page 3. Model NG6; Dispenser Single hose; 3+1+1, is not a valid model and has never been produced. NG6 is removed from the model code. Model NL3; Blender dispenser X + 1; 5+1 grades. The description is incorrect. Gilbarco does not produce a 5+1 blender. The description should be NL3; blender dispenser X + 1; 3+1+1 grades. Model number NL8 Blender Dispenser 3+1+1 is incorrect. This model has never been produced. Remove NL8 from the model code. No testing was deemed necessary for this clarification change.

Certificate of Conformance Number 02-019A18: New pulser for the Encore 500 series. The new pulser Gilbarco part number M11816xxx may also be marked Metrom LLC "FA-1026." This pulser has enhanced security features to deter tampering with the pulser. The pulser's electronics are fully enclosed in a metal housing. An Encore 500 dispenser with the new pulser was evaluated at the manufacturer's facility in Greensboro NC. The emphasis of the evaluation was to assure the pulser communicated correctly with the Encore series electronics. The Encore was tested at 3 flow rates. The pulser communicated correctly with the electronics. Money volume calculations were checked as well as the accuracy of the Encore. Security features were demonstrated but are not noted on this certificate per the manufacturer's request. No photos were provided of this pulser or on the pulsers internal components for security purposes.

Certificate of Conformance Number 02-019A17: This certificate supersedes Certificate of Conformance number 02-019A16 and is issued noting a change to the minimum flow rate of the Encore Ultra high from 12 GPM to the new flow rate of 5 minimum to 60 GPM maximum with diesel and gasoline. No testing was deemed necessary as the LC Meter was previously approved under NCWM Certificate of Conformance number 97-023A2 at 5 GPM minimum to 60 GPM maximum using diesel and gasoline as test products. This meter is currently in use and has been tested in the manufacturer's Ultra high dispenser.

Certificate of Conformance Number 02-019A16: This certificate supersedes Certificate of Conformance number 02-019A15 and is issued noting the addition of: Next Generation Payment system. (NGP); a 4-boot nozzle door; SMART CRIND; E25 rating; and removes Model NB0 and references to the use of the Murray model 989 meters for alternate fuels.



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Next Generation Payment (NGP) system consists of a new encrypted security card reader and a new encrypted display. Display sizes are 5.7 inch or 10.4 inch. The credit card industry is mandating an update to the current security features to be in compliance with PCI-2 requirements. (Information from a credit / debit card and from the PIN pad must be encrypted to reduce fraud) The encrypted data is sent to the card company and the transaction proceeds as a normal credit / debit card. The use of the encrypted data does not affect the metrological function of the dispenser. The new card reader and display are not field serviceable. Tampering or disconnecting these components will trigger internal security features. The Encore 500 series dispenser (software version v 01.8.30) with NGP was evaluated with a Gilbarco Passport console controller (CoC 02-039) with software version 8.20) at the manufacturer's Greensboro facility. Emphasis of the testing was to verify credit card, debit card, and cash sales. Verify the dispensers receipt and displayed amounts matched the Passports receipts and displays and credit card / debit receipt, verify the card debit time out functions, verify price changes, and verify display time outs. The device evaluation was based on the 2010 edition of NIST Handbook 44 and NCWM Publication 14. The device complies with applicable requirements. No photos were provided on the internal components for security purposes.

4-boot door is a variation of the manufacturer's 2-boot door adding a 4th fueling position. Due to the similarities between the 2 boot door and the 4-boot door no testing was deemed necessary for the new 4-boot door. All internal components including the, main display PPU display the Encrypted PIN Pad and Encrypted Card Reader were previously evaluated and tested at the manufacturer's facility using the 2010 edition of NCWM Publication 14 as the basis for the evaluation. The device complies with applicable requirements.

Certificate of Conformance Number 02-019A16 Continued: SMART CRIND – uses a SMART CRIND CPU board, a SMART CRIND interface board, an additional power supply with battery backup and the Gilbarco Security Module (GSM). The SMART CRIND allows the dispenser to function independently from the inside control console in the event the inside system is not working. The Encore 500 series dispenser (software version v 01.8.30) and the Smart CRIND option was evaluated and tested at the manufacturer's facility. Emphasis of the testing was to verify credit card, debit card, and inside cash sales. Verify the dispensers receipt and displayed amounts agree; verify the credit / debit card time out functions; verify price changes; verify display time outs and verify correct operation after system power fails. The device evaluation was based on the 2010 edition of NIST Handbook 44 and NCWM Publication 14. The device complies with applicable requirements. No photos were provided on the internal components for security purposes. No changes to the external appearance of the dispenser.

E25 rating - A Gilbarco Encore 500 series dispensers (software version v 01.8.30) with the Gilbarco T19976-G3 and T19976-V3 meter were additionally tested with Gasoline containing up to 25% ethanol at the manufacturer's Greensboro facility. The dispenser also included the manufacturers VaporVac vapor recovery system. The T19976-GX and T19976-V3 are currently evaluated for use in dispensing standard fuels such as gasoline, gasoline with up to 15% ethanol and gasoline with up to 15% methanol blend types and diesel fuel, fuel oil, kerosene and up to 20% biodiesel products as indicted in Section C. "Product Families for Meters" table in.

NCWM Publication 14. The manufacturer requested additional testing with up to E25 to align with UL87A 5th edition and in anticipation of EPA changing the ethanol content for "standard" gasoline. Each meter was evaluated with gasoline containing 25% ethanol (E25) as the test fluid. Accuracy testing was done at 3 flow rates for both the initial and subsequent test. The T19976-G3 meter was evaluated after having dispensed gallons 43,663 gallons of E25, followed by 46,592 gallons of gasoline followed by 17,687 gallons of E25 with a total throughput of 107,942 gallons. The T19976-V3 meter was evaluated after having dispensed gallons 44,004 gallons of E25, followed by 46,598 gallons of gasoline followed by 17,677 gallons of E25 with a total throughput 108,279 gallons. The manufacturer stated that switching from E25 then to gasoline and then back to E25 represented the worst case testing for the meters. No changes were made to the standard T19976-G3 and T19976-V3 meters. Because these are the same models as previously evaluated with no internal or external differences, photos of the meter in the manufacturer's equipment was not provided. The device evaluation was based on the 2010 edition of NIST Handbook 44 and NCWM Publication 14. The device complies with applicable requirements.

Model NB0 and references to the use of the Murray model 989 meters is being removed from the certificate at the manufacturer's request. This model and meter were never placed into production and will not be used.

Certificate of Conformance Number 02-019A15: This certificate supersedes Certificate of Conformance number 02-019A14 and is issued noting the addition of a new Gilbarco meter model T19976-V3. This meter is the same as the manufacturers T19976 G1 and G2 with a new piston and meter end cap as CC No. 02-038A4. Testing was conducted at the manufactures test facility using a Gilbarco Encore series dispenser with the T19976-V3 meters installed. The 2009 edition of NCWM Publication 14 was the basis for the



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evaluation. The meter was evaluated with gasoline and diesel as the test fluids. Accuracy testing was done at 3 flow rates for both the initial and subsequent test. Each meter was retested after having dispensed 22290 gallons of gasoline and 20465 gallons of diesel. Other than the model number on the meter, no external differences are notable and photo of the meter in the manufacturer's equipment was not provided.

Certificate of Conformance Number 02-019A14: This certificate supersedes Certificate of Conformance number 02-019A13 and is issued noting a new Gilbarco pulser, Model: M09040xxxx for Encore 500 and Model: M09261xxxx for Encore 300. The dispenser with the new pulser was evaluated and tested at the manufacturer's facility using the 2008 edition of NCWM Publication 14 as the basis for the evaluation. Accuracy testing was done at 3 flow rates. Subsequent testing was not deemed necessary.

Certificate of Conformance Number 02-019A13: This certificate supersedes Certificate of Conformance number 02-019A12 and is issued noting a change in the minimal flow rate of the Gilbarco Model T19976 Gx meter series. No changes were made to the T19976 Gx series meters. A change in the meter minimum flow rate is needed to meet new customer demands. The meter was placed into the manufacturer's Encore series dispenser for testing. The dispenser with the T19976 Gx meters was evaluated and tested at the manufacturer's facility using the 2008 edition of NCWM Publication 14 as the basis for the evaluation. **E100 (100% ethanol) and "Worthpar7" as a 100% biodiesel equivalent** (10 centipoises) were used as the test fluids. Accuracy testing was done at 3 flow rates for both the initial and subsequent test. Each meter (2 meters tested) was retested after having dispensed 20,002 gallons of E100 and 20,108 gallons of Worthpar7 (B100).

Additionally, meters models M02950, T20453-GX and the Murray 989 meters were removed from the list of options. The manufacturer no longer offers these models. Models numbers: NB1, NB2, NB3, NB4, NF0, NF1, NF2, NM0, NM1, NM2, and NM3 were removed from the model code list (page3) and were never offered by the manufacturer. The name of the M07300 series meters changed from E-meter to Ecometer.

Certificate of Conformance Number 02-019A12: This certificate supersedes Certificate of Conformance number 02-019A11 and is issued to add: FlintLoc Security System, Encrypted Card reader, Encrypted PIN pad and to document changes to the Audit trail.

Flintloc device is not manufactured by Gilbarco. The FlintLoc System may be added to existing units or may be provide on the unit by Gilbarco. The system will require the use of a special remote "key" to deactivate the system. Opening the electronics cabinet without first deactivating the security device will trigger an audible alarm and flashing light. The device does not have any metrological features.

Encrypted PIN pad and Encrypted Card Reader - The credit card industry is mandating that information from a credit / debit card and from the PIN pad be encrypted to reduce fraud. The encrypted data is then sent to the card company and the transaction proceeds as a Normal credit / debit card. The use of the encrypted data does not affect the metrological function of the dispenser. The Encrypted PIN Pad and Encrypted Card Reader was evaluated and tested at the manufacturer's facility using the 2007 edition of NCWM Publication 14 as the basis for the evaluation.

Audit trail information has been updated noting that supplemental information is shown on the audit trail screens on units with software versions greater than 01.8.00. All of the original information is still present with new supplemental information shown. Additional information is included to facilitate the use the audit trail as requested by W&M field officials. The new format for the Audit trail information was evaluated at the manufacturer's facility using the 2007 edition of NCWM Publication 14 as the basis for the evaluation.

Certificate of Conformance Number 02-019A11: This certificate supersedes Certificate of Conformance number 02-019A10 and is issued to add M07300A001, M07300A002 and M07300A003 Eco meters. (Reference CoC 02-040A2) The M07300A001 meter will supersede and replace the original T20453-Gx part number. The new models are M07300A001 with a cast iron body, (original T20453Gx). The M07300A002 approved in CoC 02-040A1 has a stainless steel body and the M07300A003 has a aluminum body. All internal components are unchanged. The M07300A003 with an aluminum body was tested with gasoline and then diesel fuel. This meter was placed in the manufacturers Encore series dispenser (cc 02-019A10). The Encore series dispenser with the Meter was connected was evaluated and tested at the manufacturer's facility using the 2007 edition of NCWM Publication 14 as the basis for the evaluation. Accuracy testing was done a 3 flow rates for both the initial and subsequent test. Each meter was retested after having dispensed 20,591 gallons gasoline and 20,212 gallons of diesel.



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Certificate of Conformance Number 02-019A10: This certificate supersedes Certificate of Conformance number 02-019A9 and is issued to add four additional models to the Encore series: Model NP6 a Ultra-hi dual master single sided unit; model NP8, a Ultra-hi dual satellite single sided; Model NG6 a single hose blender with 2 additional single grade products i.e. 3+1+1 blender and model NL8 a single hose blender with 2 additional single products i.e. a 3+1+1 blender. These are the same as the manufactures Model NP3 and NP5 except for being single sided. Models NG6 and NL8 are additions to the model family adding an additional single hose to the 3+1 series. Referred to as 3+1+1. All components, electronics, meters are the same as used in models NP3 and NP5. No metrological changes were made. No additional testing was deemed necessary.

It is noted that the "S" series bezel door (CoC 02-019A6) is provided with indicator lights over each grade select switch. Lifting a hose or lifting of a hose and hose lever activates the indicator light associated with hose. Example lifting the hose for diesel illuminates the light for the diesel grade selection switch. While this feature is not required it is included by the manufacturer to minimize the selection of the wrong grade by the customer. The Lighting feature for the "S" series bezel is called "Progressive Lighting."

Certificate of Conformance Number 02-019A9: This certificate supersedes Certificate of Conformance number 02-019A8 and is issued to add alternate fuels such as E100 (100% ethanol), E85 (gasoline with 85% ethanol), and B100 biodiesel (100% biodiesel) or any biodiesel blend greater that 20%. The alternate fuel dispenser uses a Gilbarco T19976 G5 meter. The meter located in the dispenser's hydraulic cabinet and is electronically calibrated. The dispenser with the T19976 G5 meter and console were evaluated and tested at the manufacturer's facility using the 2007 edition of NCWM Publication 14 as the basis for the evaluation. Gasoline, Diesel, E100 (100% ethanol) and "Worthpar7" (10 centipoise) as 100% biodiesel were used as the test fluids. Accuracy testing was done at 3 flow rates for both the initial and subsequent test. Each meter was retested after a minimum of 20 days use and having dispensed 25356 gallons of gasoline, 25377 gallons of diesel, 25359 gallons of E100 and 25547 gallons of Worthpar7 (B100).

Certificate of Conformance Number 02-019A8: This certificate supersedes Certificate of Conformance number 02-019A7 and is issued to add an alternate meter, the Gilbarco E-Meter_M07300xx (cc 02-040.A1). The meter located in the dispenser's side column does not have any adjustable or metrological calibration features. The meter does not contain any field serviceable components. The meter is provided with a factory installed, tamper evident decal/seal containing the Gilbarco Inc. name, Trademark or logo, and a non-repetitive serial number. Destruction or absence of the tamper evident seal indicates that the meter's internal mechanisms have been accessed. While the meter does not have any adjustable or metrological calibration features, the inspector should verify that access to the meter's internal mechanisms has not altered the metrological integrity of the device. The dispenser with the E-Meter meter and console were evaluated and tested at the manufacturer's facility using the 2007 edition of NCWM Publication 14 as the basis for the evaluation. Gasoline and Diesel were used as the test fluids. Accuracy testing was done at 3 flow rates for both the initial and subsequent test. Each meter was retested after a minimum of 22 days use and having dispensed 21723 gallons gasoline and 22233 gallons of diesel.

Certificate of Conformance Number 02-019A7: This certificate supersedes Certificate of Conformance number 02-019A6 and is issued to add alternate fuels such as E100 (100% ethanol), E85 (gasoline with 85% ethanol), and B100 biodiesel (100% biodiesel) or any biodiesel blend greater that 20%. The alternate fuel dispenser uses a Murray model 989 meter. The meter located in the dispenser's hydraulic cabinet is provided with a calibration wheel located on the top of the meter. The calibration wheel shall be sealed with a physical sealing means. The dispenser with the Murray meter and console were evaluated and tested at the manufacturer's facility using the 2006 edition of NCWM Publication 14 as the basis for the evaluation. E100 (100% ethanol) and "Worthpar7" (10 centipoise) were used as the test fluids. Accuracy testing was done at 3 flow rates for both the initial and subsequent test. Each meter was retested after a minimum of 23 days use and having dispensed 30,600 gallons E100 and 30,200 gallons of B100.

Certificate of Conformance Number 02-019A6: This certificate supersedes Certificate of Conformance number 02-019A5 and is issued to: indicate updated instructions needed to access the unit's event counters due to a change in HB 44 regulations; add "S" to the Encore 300 (new bezel currently used in other Encore models) and update fuels to include the Product Families for meters table in NCWM Publication 14. No additional testing was deemed necessary.

Certificate of Conformance Number 02-019A5: This certificate supersedes Certificate of Conformance number 02-019A4 and is issued to indicate updated instructions needed to access the unit's sealable switch and Manager's keypad. See instructions under Sealing Encore "S" series. All switch and Keypad functions/features remain the same. This only effects units with the "S" model numbers. The location of the keypad "on a drop down bracket" as noted in 02-019A4 were revised before production started. These changes are required to deter unauthorized access to the unit that may result in undetected fraudulent activities. No additional testing was deemed necessary.



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Certificate of Conformance Number 02-019A4: This certificate supersedes Certificate of Conformance number 02-019A3 and is issued to indicate a new Generic Name, Encore 350S, Encore 500S, Encore 550S. The "S" or "Stylized" Series has a new main door that offers customers a "new look" and a larger main display. The manager's keypad is located behind the locked printer door on a drop down bracket. All other functions/features remain the same. The model numbers remain the same. Units with the new main door show an "S" after the Generic Name. No additional testing was deemed necessary.

Certificate of Conformance Number 02-019A3: This certificate supersedes Certificate of Conformance number 02-019A2 and is issued to indicate a change in Family names. Encore 550 represents the model containing the Smart Meter and Smart Connect. Smart Meter is detailed under NTEP CC 03-049. Smart Connect is a new PCB that facilitates remote diagnostics capability. This model is identical to the Encore 500 plus Smart meter. The Family name of Encore 350 is will be used to define models with the standard Gilbarco C+ meter. This series is identical to the Encore 500 series.

Certificate of Conformance Number 02-019A2: This certificate supersedes Certificate of Conformance number 02-019A1 and is issued to indicate a new meter. See Certificate number 03-049 for detailed test information. The emphasis of the evaluation was to assure that the new meter functioned as evaluated in NTEP CC 03-049 and that the dispenser's electronics continued to function with the new meter. An Encore Series dispenser with the Smart Meter installed was connected to the manufactures G-Site control console. The dispenser and console were evaluated and tested at the manufacturer's facility using the 2003 edition of NCWM Publication 14 as the basis for the evaluation. Additional meter accuracy testing was conducted at several flow rates.

Certificate of Conformance Number 02-019A1: This certificate supersedes Certificate of Conformance number 02-019 and is issued to indicate an alternate location of the identification badge behind the main options door. The location was changed in accordance with HB 44 S.4.4.2. "Location of Marking Information; Retail Motor-Fuel Dispensers." A key is required to access this portion of the dispenser. Also, under "Sealing" a section was added to better describe the locations of the security switch. The part number of the LC meter used for ultra-hi flow model was changed from P9550/9560 (M5) to P9xxx (M5). The P9xxx indicates non-metrological changes to the LC M5 meter. No additional tests were considered necessary. The test conditions for the original type evaluations are listed below for reference.

Certificate of Conformance Number 02-019: This certificate supersedes Certificate of Conformance number 00-035A2 and is issued to indicate the transfer of ownership from 00-035A2 to 02-019. The NTEP Certificate of Conformance 00-035A2, though inactive, remains in effect to cover those devices previously sold and installed under the original name. Previous test information and documentation provided by the company was reviewed.

Certificate of Conformance Number 00-035A2: This Certificate supersedes Certificate of Conformance Number 00-035A1 and is issued to reflect a change in the model's base electronics options. The new optional electronics in the Encore comes directly from the manufacturers Advantage Series, Certificate of Conformance Number 99-173. The model with the Advantage Series electronics option will be identified as Encore 300. The manufactures current Encore will be renamed Encore 500. For all models, Encore, Encore 500 and the new Encore 300, the Audit trail, Electronic totalizers and Electronic meter calibration remain the same as currently shown in this Certificate. This certificate also adds two new models NG4, Dispenser Single Hose, 2 Grade and NG5, Pump Single Hose, 2 Grade to the model code section of this certificate. These models represent are same as previously evaluated models, minus one hose position, and does not represent a change that requires additional evaluation. This Certificate is issued based upon information provided by the manufacturer, the previous evaluation, and the evaluation of the manufacturers Advantage series. The units hydraulics section (Meters, valves, piping, filters, etc.) have not changed. Due to all components having active Certificates of Conformance, additional type evaluation or field permanence testing is not required.

Certificate of Conformance Number 00-035A1: This Certificate supersedes Certificate of Conformance Number 00-035 and is issued to correct the method of sealing used in the device, to reflect the elimination of the event logger capability from the device, and to include additional information in the original test conditions. This Certificate is issued based upon information provided by the manufacturer, the previous evaluation, and an evaluation of the sealable features on a recently installed unit.

An Encore Series dispenser was installed in a field site interfaced with a console for the purposes of this evaluation. The emphasis of the evaluation was on the method of accessing the sealable features on the device and the security provided to control access to the features. A summary of the changes to the Certificate as a result of the current evaluation are outlined below followed by the previous test conditions.



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The original Certificate incorrectly stated that the blend ratios can be configured at the device or remotely through the console. All sealable features, including the blend feature, are accessed only through a physical switch at the device, which is protected by a physical security seal. Because its sealable features cannot be accessed remotely, the device is categorized as a "Category 1" device. Access to these features is protected by a physical seal as described under "Sealing." The operation of the physical switch to access sealable parameters and the method of sealing that switch were evaluated in the original evaluation of the device. Additionally, the current operation of accessing and securing the sealable parameters was verified as described in the evaluation above.

The original Certificate listed an "event logger" as a feature for providing information concerning changes to sealable parameters. An event logger is required for devices with unlimited remote access, that is, for "Category 3" devices. While the device originally evaluated included an event logger similar to that required in Category 3 devices, the device did not have unlimited remote access and an event logger was not required; the manufacturer chose to provide the event logger only as supplemental information. The manufacturer has now chosen to eliminate the event logger feature from the device. As a Category 1 device, the device does not have unlimited access to sealable parameters and an event logger is not required. The deletion of this feature was confirmed during the evaluation described above, and the Certificate has been modified accordingly.

Certificate of Conformance Number 00-035: The emphasis of the evaluation of this device, generically known as the Encore Series, was on the operation and performance of the device. A unit was evaluated at the manufacturer's facility where more than 1,000,000 gallons of product were run through the device. Additionally, a unit was installed in a field installation where it was evaluated initially and again after 20 days to evaluate the operation of the electronics. Tests were conducted at both the field sites and laboratory for all options listed on page 1 of this Certificate. Additionally, the options listed on page 1 are identical to those evaluated in conjunction with Certificate of Conformance Number 90-115A9 for the Marconi (formerly Gilbarco) Advantage Series.

Evaluated By: R. Murdock, J. Butler, W. Scruton (NC) 00-035; R. Murdock, J. Butler (NC) 00-035A1; J. Butler (NC), W. Scruton (NC) 02-019A2, 02-019A3; J. Butler (NC), 02-019A6; J. Butler, Katalinic (NC), 02-019A7, 02-019A8, 02-019A9, 02-019A10; J. Butler, B. Moore (NC), 02-040A2; A. Katalinic (NC), 02-019A13, 02-019A14; J. Butler, Katalinic (NC), 02-019A15; J. Butler (NC), Katalinic (NC) Rick LaMountain (NC) 02-019A16; J. Butler (NC), Katalinic (NC) 02-019A17, 02-019A18; J. Butler (NC) 02-019A19, 02-019A21; J. Butler, A. Katalinic (NC) 02-019A22, 02-019A23, 02-019A24; A. Katalinic (NC), Hunter Hairr (NC) 02-019A25, 02-019A26, 02-019A27, 02-019A28

Type Evaluation Criteria Used: NIST, Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices, 2016. NCWM, Publication 14: Measuring Devices, 2016.

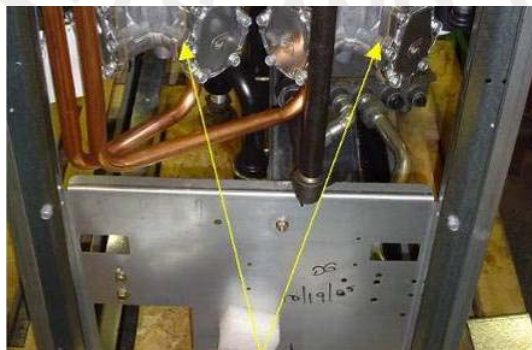
Conclusion: The results of the evaluation and information provided by the manufacturer indicate the device complies with applicable requirements.

Information Reviewed By: T. Butcher, L. Sebring (NIST) 00-035A1; S. Patoray, L. Bernetich (NCWM) 00-035A2, 02-019, 02-019A1, 02-019A2, 02-019A3, 02-019A4, 02-019A5, 02-019A6, 02-019A7, 02-019A8, 02-019A9, 02-019A11, 02-019A12, 02-019A13; J. Truex (NCWM) 02-019A14, 02-019A15, 02-019A16, 02-019A17, 02-019A18, 02-019A19, 02-019A20, 02-019A21, 02-019A22, 02-019A23, 02-019A24, 02-019A25, 02-019A26, 02-019A27, 02-019A28

Examples of Device:



Nxx Series Tool Box Type Latch
(may be provided with owner supplied lock)



Nxx Series Side View Gilbarco Meters

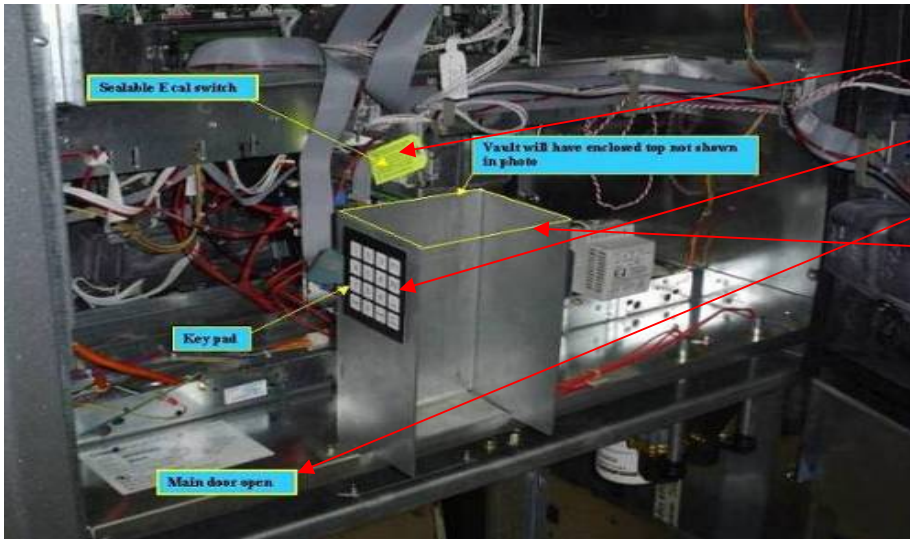


Encore with T19976-G5 Flex Fuel Meter



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Retail Motor Fuel Dispenser (RMFD) / Nxx Series



- Sealable E cal Switch
- Key Pad
- Main Door Open
- Vault Will Have Enclosed Top (not shown in photo)

Ethanol Blender



NJ4 Multi-Hose Hybrid Blender 3+2

NL4 Blender Dispenser 3+1+1



Multi-Hose Hybrid Blender



Model NJ5: Multi-Hose Hybrid Blender 5+1 (FFD)

Model NJ6: Multi-Hose Hybrid Blender 4+1 (FFD)

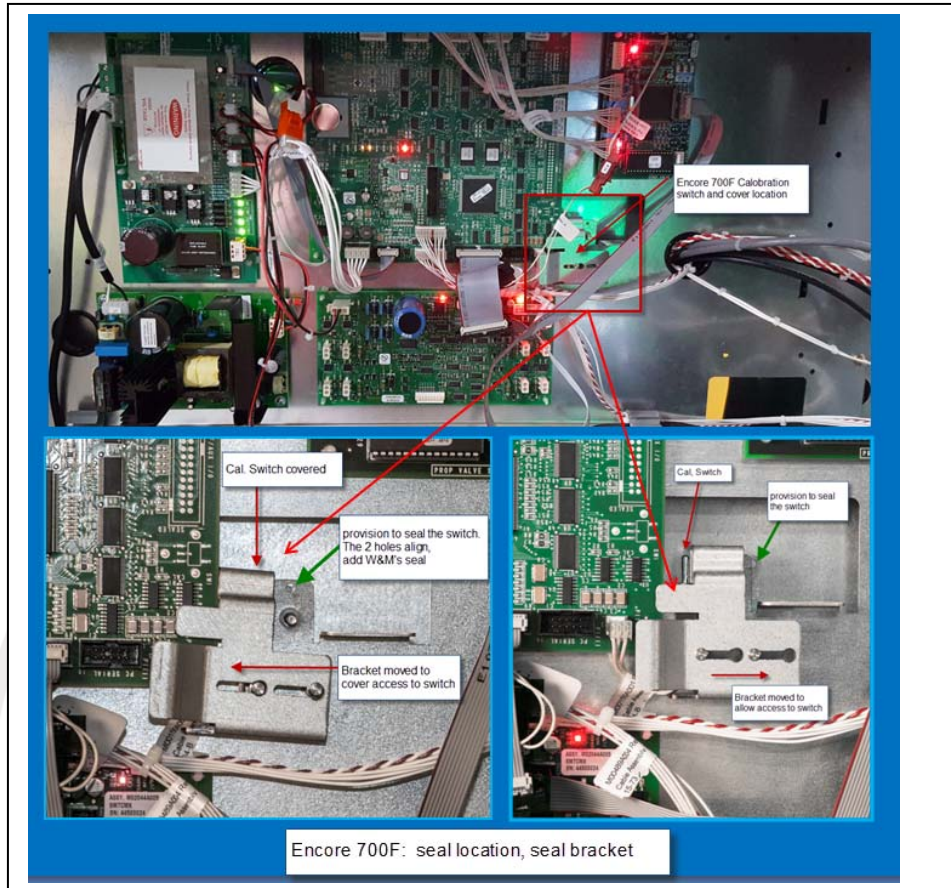


Fuel grades shown are representative and will change depending upon the fuels in the storage tanks



Gilbarco, Inc.

Retail Motor Fuel Dispenser (RMFD) / Nxx Series



CERTIFICATE OF COMPLIANCE

Certificate Number 20150720-MH6518
Report Reference MH6518-19860708
Issue Date 2015-JULY-20

Issued to: EMCO WHEATON RETAIL CORP
2300 INDUSTRIAL PARK DR
WILSON NC 27893

This is to certify that representative samples of SHUTOFF VALVES, EMERGENCY
A0060 Series

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 842, Valves for Flammable Fluids
UL 842A, Valves for Gasoline and Gasoline/Ethanol Blends With Nominal Ethanol Concentrations Up To 85 Percent (E0-E85)
UL 842B, Valves for Diesel Fuel, Biodiesel Fuel, Diesel/Biodiesel Blends with Nominal Biodiesel Concentrations Up to 20 Percent (B20), Kerosene and Fuel Oil
UL 87C, Outline of Investigation for Power-Operated Dispensing Devices for Diesel Exhaust Fluid

Additional Information: See the UL Online Certifications Directory at www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



Certificate of Compliance

Certificate Number **20100317 – MH6036C**
Report Reference **MH6036, 1998 September 29**
Issue Date **2010 March 17**

Page 1 of 1



Issued to: **EMCO WHEATON RETAIL CORP**
2300 INDUSTRIAL PARK DR
WILSON, NC 27893 USA

*This is to certify that
representative samples of*

Swivel Connectors


Model Descriptions: Swivel Connectors for flammable liquids - Model A0360.

*Have been investigated by Underwriters Laboratories Inc.® in accordance
with the Standard(s) indicated on this Certificate.*

Standard(s) for Safety: **The basic standard used to investigate products in this category is ANSI/UL 567,
"Emergency Breakaway Fittings, Swivel Connectors and Pipe-Connection Fittings
for Petroleum Products and LP-Gas."**

Additional Information: **See UL On-line Certification Directory at www.ul.com for additional information.**

Only those products bearing the UL Listing Mark should be considered as being covered by UL's Listing and Follow-Up Service.

The UL Listing Mark generally includes the following elements: the symbol UL in a circle:  with the word "LISTED"; a control number (may be alphanumeric) assigned by UL; and the product category name (product identifier) as indicated in the appropriate UL Directory.

Look for the UL Listing Mark on the product

William R. Carney
Director, North American Certification Programs

Underwriters Laboratories Inc.

Any information and documentation involving UL Mark services are provided on behalf of Underwriters Laboratories Inc. (UL) or any authorized licensee of UL.

For questions, please contact a local UL Customer Service Representative at <http://www.ul.com/global/eng/pages/corporate/contactus/>

CERTIFICATE OF COMPLIANCE

Certificate Number 20190920-MH17833
Report Reference MH17833-19940719
Issue Date 2019-SEPTEMBER-20

Issued to: EMCO WHEATON RETAIL CORP
2300 INDUSTRIAL PARK DR
WILSON NC 27893

This certificate confirms that representative samples of EMERGENCY BREAKAWAY COUPLINGS
Models A4119, A4119EVR and A4119EVR-020RC coaxial
emergency breakaway coupling.

Have been investigated by UL in accordance with the
Standard(s) indicated on this Certificate.


Standard(s) for Safety: UL 567 Standard for Emergency Breakaway Fittings, Swivel
Connectors and Pipe-Connection Fittings for Petroleum
Products and LP-Gas

Additional Information: See the UL Online Certifications Directory at
<https://iq.ulprospector.com> for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Mark. Only the UL Follow-Up
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Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program
UL LLC

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ETAZ.MH10919 Flammable Liquid Hose Nozzle Valves

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Flammable Liquid Hose Nozzle Valves

[See General Information for Flammable Liquid Hose Nozzle Valves](#)

CATLOW INC

2750 U S RTE 40
TIPP CITY, OH 45371 USA

MH10919

Interchangeable service-station type, Models 1A, Elite, Elite Prepay, Streamline automatic closing type with latch-open device.

Non-interchangeable type, Models BIG MAC, BIG MAC Prepay, MAX1, MAX1 PREPAY, GPI, HT, automatic closing type with latch-open device.

Vapor recovery type, Models ICVN, ICVN-1 automatic closing types with hold open device.

Rebuilt interchangeable service-station type, Models 1A, 11A, 11B, Elite, Elite Prepay, Streamline automatic closing type with latch-open device.

Rebuilt non-interchangeable type, Models 7H, 7HB, BIG MAC, MAX1, MAX1 PREPAY, automatic closing type with latch-open device.

Rebuilt vapor recovery type, Model 4001 automatic closing type with latch open device and no seal-no flow device.

[Last Updated](#) on 2007-08-07

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ERBY.MH14120 Emergency Breakaway Couplings

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Emergency Breakaway Couplings

[See General Information for Emergency Breakaway Couplings](#)

CATLOW INC

2750 U S RTE 40
TIPP CITY, OH 45371 USA

MH14120

Coaxial emergency breakaway coupling , Model C2N1.

Coaxial vapor recoveries, Models AV200CN, AV200CNT, C200CV, IVC200S, MCVA, CTMVA.

Single lines, Models C86NT, C860S, C1000S, C100N, C100N-BP, C100N-BT, MC75, CTM75, MC100, CTM100, SBS-3/4*, SBS-3/4BP*, SBS-1*, for flammable liquids.

*For use between the hose nozzle valve and hose assembly only.

Trademark and/or Tradename: "MH14120"

[Last Updated](#) on 2008-04-04

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ERLV.MH15747 Swivel Connectors

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Swivel Connectors

[See General Information for Swivel Connectors](#)

CATLOW INC
2750 U S RTE 40
TIPP CITY, OH 45371 USA

MH15747

Single lines. Models 3D , 3DC, C720 for flammable liquids.

Vapor recovery. Model IC3 for flammable liquids.

[Last Updated](#) on 1999-12-10

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**EUQT.MH25355
Dispensing Device Accessories, Miscellaneous**

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Dispensing Device Accessories, Miscellaneous

[See General Information for Dispensing Device Accessories, Miscellaneous](#)

CATLOW INC
2750 U S RTE 40
TIPP CITY, OH 45371 USA

MH25355

Flow limiters, Model 10G. For use only between the hose nozzle valve and hose assembly, intended for use with gasoline, kerosene and diesel fuel.

The basic standard used to investigate this product is UL 842, "Valves for Flammable Fluids".

Model 10G-1. For use only between the dispenser and hose assembly, intended for use with gasoline, kerosene and diesel fuel.

The basic standard used to investigate this product is UL 842, "Valves for Flammable Fluids".

[Last Updated](#) on 2008-09-25

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