Biodiesel

Manufacturer's Affirmative Statement of Compatibility
(As required by California Code of Regulations section 2631(k))

Manufacturer(s) (including prior marketed names)	Model	Component Type (i.e. pipe, tank, etc.)	Current UL Standard Listing	Years Manufactured	Sizes	Unique Identifiers for Field Evaluation (i.e. color, material)	Blend Concentration	Supporting Test Data & Documents Attached
Bravo	B-400 Series	cont. sump	MH29867	2003-present	~	2003-2005 with white interior. 2006+ is light brown fiberglass	1-100	Yes
Bravo	B-500 Series	cont. sump	MH29867	2003-present	~	Same as B-400 + cream poly	1-100	Yes
Bravo	B-600 Series	cont. sump	MH29867	2003-present	~	Same as B-400 + cream poly	1-100	Yes
Bravo	B-800 Series	cont. sump	3rd Party	2008-present	~	light brown fiberglass	1-100	Yes
Bravo	B-8000 Series	cont. sump	MH29867	2003-present	~	Same as B-400	1-100	Yes
Bravo	B-8500 Series	cont. sump	No	2004-present	~	Same as B-400	1-100	Yes
Bravo	B-9000 Series	cont. sump	MH29867	2003-present	~	Same as B-400	1-100	Yes
Bravo	F-Series	entry fitting	MH29867	2006-present	~	light brown fiberglass	1-100	Yes
Bravo	FF-Series	entry fitting	MH29867	2008-present	~	light brown fiberglass	1-100	Yes
Bravo	FPE-Series	entry fitting	MH29867	2010-present	~	light brown fiberglass	1-100	Yes
Bravo	FR-Series	test reducer	MH29867	2010-present	~	light brown fiberglass	1-100	Yes
Bravo	F-Series BLR	retrofit entry fitting	MH29867	2008-present	~	light brown fiberglass	1-100	Yes
Bravo	F-Series D-BLR-S	retrofit entry fitting	3rd Party	2009-present	~	light brown or red fiberglass	1-100	Yes
Bravo	F-Series D-INR-S	retrofit entry fitting	3rd Party	2012-present	~	light brown or red fiberglass	1-100	Yes
Bravo	F-Series Retrofit-S	retrofit entry fitting	MH29867	2010-present	~	light brown or red fiberglass	1-100	Yes

For **tanks and piping** please list only double wall products

(Insert a company logo below if available)

❖ Please complete and submit form to Cory Hootman of the SWRCB at chootman@waterboards.ca.gov.

4/2012

Biodiesel

Manufacturer's Affirmative Statement of Compatibility
(As required by California Code of Regulations section 2631(k))

Manufacturer(s) (including prior marketed names)	Model	Component Type (i.e. pipe, tank, etc.)	Current UL Standard Listing	Years Manufactured	Sizes	Unique Identifiers for Field Evaluation (i.e. color, material)	Blend Concentration	Supporting Test Data & Documents Attached
Bravo	B-2000 Series	cont. sump	MH29867	1887-present	~	black steel	1-100	Yes
Bravo	CONV-B2000 CONV-B2000-opp	dispenser conversion frame	3rd Party	1991-present	~	black steel	1-100	Yes
Bravo	B-3000 Series	cont. sump	MH29867	1995-present	~	black steel w/ fiberglass pan	1-100	Yes
Bravo	B-4000 Series	cont. sump	MH29867	1997-present	~	black steel w/ fiberglass pan	1-100	Yes
Bravo	B-7000 Series	cont. sump	MH29867	2008-present	~	light brown or red fiberglass	1-100	Yes
Bravo	B-8600 Series	cont. sump	3rd Party	1998-present	~	black steel or stainless	1-100	Yes
Bravo	B-700 Series	cont. sump	3rd Party	2006-present	~	light brown or red fiberglass	1-100	Yes
Bravo	ES-1	reducing boot	3rd Party	1998-present	~	black alcryn	1-100	Yes
Bravo	B-17	entry boot	3rd Party	2003-present	~	black alcryn	1-100	Yes
Bravo	B-30 Series	entry boots	3rd Party	2003-present	~	black alcryn	1-100	Yes
Bravo	BR-Series	reducing boot	3rd Party	1998-present	~	black alcryn	1-100	Yes
Bravo	B1 Series	vapor shear valve	CARB + MH18310	1997-present	~	yellow zinc coated cast iron	1-100	Yes
Bravo	MO Series	cast offsets	No	1998-present	~	black cast iron	1-100	No
Bravo	CXX Covers	tank sump covers	No	2003-present	~	white or red fiberglass	1-100	Yes
Bravo	Retrofit Epoxy	Adhesive	MH29867	2011-present	~	bright yellow	1-100	Yes

For **tanks and piping** please list only double wall products

(Insert a company logo below if available)

❖ Please complete and submit form to Cory Hootman of the SWRCB at chootman@waterboards.ca.gov.

Biodiesel

Manufacturer's Affirmative Statement of Compatibility
(As required by California Code of Regulations section 2631(k))

Manufacturer: Bravo (S. Bravo Systems, Inc.)
Corporate Headquarters Address: 2929 Vail Ave, Commerce, CA
Phone: 323-888-4133 / 800-AT-BRAVO
Email: compatibility@sbravo.com

BRAVO PROBLEM SOLVED

www.sbravo.com

I declare, to the best of my knowledge and belief, that this affirmative statement of compatibility and the information contained herein is true, correct, and complete.

Jonathan Smith	Director
Print Name	Title
Manufacturer's Authorized Signature	10-21-14
	Date

❖ Please complete and submit form to Cory Hootman of the SWRCB at chootman@waterboards.ca.gov.

James H. Ray
CIVIL ENGINEER
2041 Hidden Valley Drive
Santa Rosa. CA 95404
707-480-8115

FEBRUARY 20, 2006

S. Bravo Systems, Inc.
2929 Vail Avenue
Commerce, CA 90040

RE: STATE REGISTERED PROFESSIONAL ENGINEER APPROVAL
CCR Title 23 Division 3, Chapter 16, Section 2636(g) (2)
Adapted to provide similar protection for UDC installations of dispensers at marinas or at aboveground tanks.

ABOVE GROUND /MARINA STEEL UNDER DISPENSER CONTAINMENT B-8600

I have examined and reviewed the following items on the Bravo Aboveground/ Marina Steel Under Dispenser Containment Model B-8600:

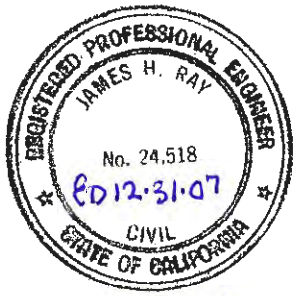
1. Bravo catalog sheets with illustrations, optional equipment and specifications.(2)

2. B-8600 INSTALLATION GUIDE and MAITENANCE INSTRUCTIONS. (4) Conversion Frame Installation Instructions.

3. Page 22 from Bravo Master Pricelist 6-01-05. Covers all items, sizes and options available with the B-8600 dispenser containment.

Upon review of the materials and construction it is my opinion and conclusion that sound engineering design and engineering of the product provide a suitable under dispenser containment for dispensers at Marinas or aboveground tanks.

James H. Ray
Civil Engineer



9-14-06

Don K. Mukai
MECHANICAL ENGINEER
1841 Paloma St. Pasadena, CA 91104
323-888-4136

December 23, 2010

Mrs. Paola Recendez
S. Bravo Systems, Inc.
2929 Vail Ave.
Commerce, CA 90040

Re: Specification approved by a state registered professional engineer
CCR Title 23, Division 3, Chapter 16, Article 3, Section 2631(d)

This letter is for an engnieering specification review and approval of a secondary containment system component which is not an integral part of primary containment for an underground fuel tank storage system in California. The authority for this approval comes from the California Code of Regulations (CCR) Title 23, Division 3, Chapter 16, Article 3, Section 2631(d).

I have examined and reviewed the following specifications for both the Bravo **FF-Series** fiberglass entry fittings and the **FR-Series** fiberglass reducer:

1) UL Certifications Directory MH26018 for Vipel F-764 and F-774 resins
2) AOC Vipel Product Selection Guide
3) AOC Vipel Corrosion Resistance Guide
4) Bravo Systems datasheet FF-Series-SW-10D
5) Bravo Systems datasheet FR-3x2-Series10A
6) Bravo Systems Installation Manual ii-FF-SERIES-10B
7) Bravo Systems Installation Manual ii-FF-SERIES-LCX-10B
8) Bravo Systems Installation Manual ii-FF-CONDUIT-10A
9) Bravo Systems Third Party document 3RP-F-Series
10) Bravo Systems UL Approval document CUL-FSeries
11) Smith Bulletin D4025 December 15, 2007
12) Smith Bulletin D4010 April 15, 2007
13) Smith Bulletin B2102 May 1, 2006
14) Ameron PSX-20 Adhesive Kit - Bondstrand Product Data FP698B (10/04)
15) Bravo Adhesive Epoxy Kit, Product Data Sheet

The FF-Series entry fitting system provides a bonded fiberglass solution for Smith (NOV) and Ameron fiberglass pipe and steel conduit for a fiberglass containment sump for the purpose of making a permanent seal. This product maintains the integrity of the containment sump wall by bonding the wall to the fiberglass pipe or conduit that passes through it by means of an FF-Series fiberglass entry fitting.

The FR-Series fiberglass reducer provides a bonded fiberglass solution for Smith (NOV) and Ameron fiberglass pipe for initial or retrofit installations for the purpose of making a permanent seal between piping components.

Continued on Page 2...

...Continued from Page 1

For the purposes of this review, I have:

1) Reviewed the construction and installation procedures for the single wall FF-Series fiberglass entry fittings for conduit. Models reviewed:
   A) F-07-FF, F-07-FFRR, F-10-FF, F-10-FFRR, F-07-FF-RND, F-07-FFRR-RND, F-10-FF-RND, F-10-FFRR-RND

2) Reviewed the construction and installation procedures for the single wall FF-Series fiberglass entry fittings for fiberglass pipe. Models reviewed:
   A) F-20-FF, F-30-FF, F-40-FF, F-20-FF-RND, F-30-FF-RND, F-40-FF-RND, F-20-FF-LCX, F-30-FF-LCX, F-40-FF-LCX, F-20-FF-LCX-RND, F-30-FF-LCX-RND

3) Reviewed the construction and installation procedures for the single wall FR-Series fiberglass reducing split coupler for fiberglass pipe. Models reviewed:
   A) FR-3X2, FR-3X2-T, FR-4X3, FR-4X3-T

4) Reviewed materials used to construct the secondary containment system component for sufficient thickness, density and corrosion resistance to prevent structural weakening or damage to the secondary containment system component as a result of contact with hazardous substances contained in California fuels.

Upon review of the manufacturing procedures, the selection and employment of the materials used in the production of Bravo Systems FF and FR-Series product lines and the manufacturer's installation guidelines, it is my conclusion that sound design and engineering of this product for use with fiberglass single wall containment structures and aforementioned pipe types will meet or exceed the secondary containment requirements as concerns corrosion resistance and material compatibility of all motor vehicle fuels, alternative fuels or their additives currently used by petroleum marketers today. I approve the above engineering specifications for the following Bravo FF and FR-Series fittings:

FF-Series SingleWall Fiberglass Entry Fittings for flat sump walls:
For Conduit: F-07-FF, F-07-FFRR, F-10-FF, F-10-FFRR
For Pipe: F-20-FF, F-30-FF, F-40-FF
For LCX Pipe: F-20-FF-LCX, F-30-FF-LCX, F-40-FF-LCX

FF-Series SingleWall Fiberglass Entry Fittings for round sump walls:
For Conduit: F-07-FF-RND, F-07-FFRR-RND, F-10-FF-RND, F-10-FFRR-RND
For Pipe: F-20-FF-RND, F-30-FF-RND, F-40-FF-RND
For LCX Pipe: F-20-FF-LCX-RND, F-30-FF-LCX-RND

FR-Series SingleWall Fiberglass Split Fiberglass Reducer:
For Pipe: FR-3x2, FR-4x3, FR-3x2-T, FR-4x3-T
For LCX Pipe: FR-22-LCX, FR-33-LCX, FR-44-LCX

Please contact me with any questions at 323-888-4136.

Sincerely,

Don K. Mukai
Mechanical Engineer

RHL DESIGN GROUP INC.

ARCHITECTURE • ENGINEERING • ENVIRONMENTAL SERVICES

1137 North McDowell Blvd., Petaluma, CA 94954-1110 ***Telephone: (707) 765-1660*** *Facsimile: (707) 765-9908*

Established 1966

JOHN W. JOHNSON
Architect
Co-President

BRIAN F. ZITA
Architect
Co-President

JOHN B. HICKS
Architect
Vice President

CECIL R. SPENCER
Architect
Vice President

BRUCE J. GREENFIELD
Managing Architect
Associate

HOWARD G. KIMURA
Architect
Associate

CHRIS LAWTON
Regional Manager
Associate

JAMES E. PRESTEN
Regional Manager
Associate

GARY M. SEMLING
Managing Architect
Associate

BLYTHE R. WILSON
Managing Architect
Associate

May 23, 1998

S. Bravo System, Inc.
6320 Caballero Blvd.
Buena Park, CA 90620-1100

ATT: Don Mukai, P.E.

RE: THIRD PARTY APPROVAL Sec. 2361(d)
BRAVO Uni-Fitting Models B-17, B-33, B-34, B-17R, B-34R, BR (3x2, 3x2-T, -2, -1-1/2
CALIFORNIA WATER RESOURCES CONTROL BOARD.

I have examined and reviewed the following items the Bravo's Uni-Fittings and Reducers Models B-17, B-33, B-34, B-17R, B-34R, BR (3x2, 3x2-T, -2, -1-1/2:

1. Representative samples.

2. Appendix A ..Material Specifications and installation instructions for the B-17, B-33, B-34, B-17R and B-34R.

3. Appendix #1 UL testing documents on Celcon.

4. Appendix #2 Information , physical properties and test data on alcryn.

5. Appendix #3 Manufacturer's certification documents on use of ALCRYN and of CELCON.

Upon review of the manufacturing procedures and the employment of the materials used in the Bravo fittings and reducers as listed above, it is my opinion and conclusion that sound design and engineering of this product will meet or exceed the emergency secondary containment of all motor vehicle fuels and their additives currently used by petroleum marketers today.

James H. Ray
Civil Engineer

REGISTERED PROFESSIONAL ENGINEER
JAMES H. RAY
No. 24,518
CIVIL
STATE OF CALIFORNIA

F:\CIVIL\bravuni.doc

Don K. Mukai
MECHANICAL ENGINEER
1841 Paloma St. Pasadena, CA 91104
323-888-4136

November 3, 2009 Rev. 11.6.11

Mr. Sergio M. Bravo
S. Bravo Systems, Inc.
2929 Vail Ave.
Commerce, CA 90040

Re: Specification approved by a state registered professional engineer
CCR Title 23, Division 3, Chapter 16, Article 3, Section 2631(d)

This letter is for an engnieering specification review and approval of a secondary containment system component which is not an integral part of primary containment for an underground fuel tank storage system in California. The authority for this approval comes from the California Code of Regulations (CCR) Title 23, Division 3, Chapter 16, Article 3, Section 2631(d).

I have examined and reviewed the following specifications on the Bravo F-Series F1X fiberglass split retrofit BLR-S (Blue Line Retrofit - Split) fittings:

1) UL Certifications Directory MH26018 for Vipel F-764 and F-774 resins
2) AOC Vipel Product Selection Guide
3) AOC Vipel Corrosion Resistance Guide
4) Bravo Systems datasheet F-Series-SW-10A
5) Bravo Systems datasheet F-Series-DW-10A
6) Bravo Systems datasheet F-Series-Retrofit-S-11C
7) Bravo Systems datasheet F-Series-DW-BLR-S-11B
8) Bravo Systems Installation Manual ii-F-SERIES-1X-SS-11A
9) Bravo Systems Installation Manual ii-F-SERIES-1X-SS-D-11A
10) Bravo Systems Installation Manual ii-FS-RETROFIT-S-11A
11) Bravo Systems Installation Manual ii-F-SERIES-F1X-D-BLR-S-09C
12) Bravo Systems Third Party document 3RP-F-Series
13) Bravo Systems UL Approval document CUL-FSeries
14) Smith Bulletin D4025 December 15, 2007
15) Smith Bulletin D4010 April 15, 2007
16) Smith Bulletin B2102 May 1, 2006
17) Ameron PSX-20 Adhesive Kit - Bondstrand Product Data FP698B (10/04)
18) RPM Technology Petrol Seal Weight Loss and Flexibility
19) RPM Technology Petrol Seal Swell Test Results

Continued on Page 2...

...Continued from Page 1

20) RPM Technology Petrol Seal Test Reports with Methods
21) RPM Technology Petrol Seal Summary Test Report Fuel Exposure

This system provides a permanent retrofit solution to replace from the inside of a containment sump, a suspect or failing Blue Line Technologies Kwik-Fit pellethane flexible penetration fitting for the purpose of making a seal between the fiberglass wall and either PVC coated or galvanized conduit. This product maintains the integrity of the interstice of the double wall containment sump by sealing the secondary wall (outer) and the primary wall (inner) to the conduit that passes through them. I have noted that specific models of the D-BLR-S are available that are each tailored to the type of conduit (PVC coated or galvanized) and the diameter (3/4" and 1"ø).
For the purposes of this review, I have:

1) Reviewed the construction and installation procedures for the double wall F-Series Retrofit-S fiberglass split retrofit fittings for FRP pipe and conduit. Models reviewed:
   A) F-10-Retrofit-S, F-20-Retrofit-S, F-30-Retrofit-S, F-40-Retrofit-S
2) Reviewed the construction and installation procedures for the double wall F-Series fiberglass split retrofit D-BLR-S fittings for conduit. Models reviewed:
   A) F-10-SS-D-BLR-S, F-17-SS-D-BLR-S, F-30-SS-D-BLR-S, F-40-SS-D-BLR-S
3) Reviewed materials used to construct the secondary containment system for sufficient thickness, density and corrosion resistance to prevent structural weakening or damage to the secondary containment system as a result of contact with hazardous substances contained in California fuels.

Upon review of the manufacturing procedures, the employment of the materials used in the Bravo Systems F-Series D-BLR-S fitting and the manufacturer's installation guidelines, it is my conclusion that sound design and engineering of this product for use with fiberglass double wall containment structures and aforementioned conduit types will meet or exceed the secondary containment requirements as concerns corrosion resistance and material compatibility of all motor vehicle fuels, alternative fuels or their additives currently used by petroleum marketers today. I approve the above engineering specifications for the following Bravo F-Series D-BLR-S fittings:

F-Series DoubleWall Fiberglass Split Retrofit Fittings for Conduit:
F-10-SS-D-BLR-S, F-17-SS-D-BLR-S, F-30-SS-D-BLR-S, F-40-SS-D-BLR-S

Please contact me with any questions at 323-888-4136.

Sincerely,

Don K. Mukai
Mechanical Engineer

TRANS TECH CONSULTANTS
Engineering and Environmental Compliance Services
License # 697833 (A-Haz)
Since 1987

July 8, 2008
TTC Job Number 2113.01

Mr. Don Mukai
Bravo Systems
2929 Vail Avenue, Commerce, CA 90040 (323) 888-4133
Sent via .pdf to don@sbravo.com and via FedEx Std.

Re: Specification approved by a state registered professional engineer
CCR Title 23, Division 3, Chapter 16, Article 3, Section 2631(d)

This letter is for an engineering specification review and approval of a secondary containment system element which is not an integral part of primary containment for an underground fuel tank storage system in California. The authority for this approval comes from the California Code of Regulations (CCR) Title 23, Division 3, Chapter 16, Article 3, Section 2631(d).

I have examined and reviewed the following specifications on the Bravo F-Series rigid fiberglass reinforced plastic (FRP) fittings:

1. UL Certifications Directory MH26018 for Vipel F-764 and 774 resins
2. AOC Vipel Product Selection Guide
3. AOC Vipel Corrosion Resistance Resin Guide
4. Bravo Systems document FS-S-DS 11-07C
5. Bravo Systems document FS-S-DS-D 11-07C
6. Bravo Systems document FS-A-DS-D 11-07A
7. Bravo Systems document FS-1X-D 6-30B
8. Bravo Systems document F-Series ADS 11-07A
9. Bravo Systems document ii-F-Series-1X-SS-D-08B
10. Bravo Systems document ii-F-Series-1X-SS-08A
11. Bravo Systems document ii-F-Series-LCX-08B
12. Bravo Systems document ii-F-Series-TS-08B
13. Bravo Systems drawing F 30 Assembly-Detail-06-30-08 2213[1].dwg
14. Smith Red Thread IIA Installation Instructions
15. Smith Bulletin D4010 April 15, 2007
16. Smith Bulletin D4025 December 15, 2007
17. Smith Bulletin B2102 May 1, 2006
18. Ameron Dualloy LCX Installation Instruction Bulletin 9903 FP824D (11/07)
19. Ameron Dualloy product data FP737F(11/07)
20. Ameron Dualloy 3000/L Installation Instructions Bulletin 7501 FP104H (11/07)
21. RPM Technology Petrol Seal Weight Loss and Flexibility
22. RPM Technology Petrol Seal Swell Test Results

23. RPM Technology Petrol Seal Test Report w Methods
24. RPM Technology Petrol-Seal Summary Test Report Fuel Exposure
25. APA Full Immersion Data for Selected APA Products
26. APA Fluid Resistance Guide Alcryn
27. Third Party Approval Stainless Steel Hose Clamps by James H. Ray 02/13/2001
28. UL B-200 Dispenser Containment Sump System MH17263, 95NK3824 (3 pages) 01/13/96
29. UL B-200 Dispenser Containment Sump System MH 18486 94NK14961 (6 pages) 01/18/95

This system provides for penetration of Smith or Ameron double wall fiberglass pipe and for the penetration of PVC coated or galvanized rigid metal conduit through single or double wall FRP containment structures (sumps). This system maintains the integrity of the interstitial space provided by the secondary piping through the sump wall and provides a test port for the pipe interstice. For double wall sumps, this system provides a separate testing point for the sump interstice and provides interstice fluid contact with the outer pipe wall. For the purposes of this review, I have:

1. Reviewed the construction and installation procedures for the F-Series fiberglass reinforced plastic (FRP) bulkhead fittings.
2. Reviewed materials used to construct the secondary containment system for sufficient thickness, density, and corrosion resistance to prevent structural weakening or damage to the secondary containment system as a result of contact with hazardous substances contained in California fuels.

Upon review of the materials and construction, it is my conclusion that sound engineering design and engineering of these piping penetration fittings for single and double wall sumps provides adequate penetration testing and monitoring of the interstitial spaces and provides appropriate materials types, thicknesses, density, and corrosion resistance. I approve the above engineering specifications for the following Bravo F-Series fittings part numbers:

Termination Fittings AMERON OR SMITH Singlewall Sumps
F-43-TS
F-43-TS T
F-32-TS
F-32-TS T

Termination Fittings AMERON LCX Singlewall Sumps
F-33-LS
F-33-LS T
F-22-LS
F-22-LS T

Penetration Fittings AMERON OR SMITH Singlewall Sumps
F-44-SS
F-33-SS
F-33-LL
F-22-LL

Penetration Fittings Hot Dipped Galvanized Conduit and Rob Roy PVC Coated Conduit
F-10-SS
F-17-SS
F-10-RR
F-17-RR

Doublewall Termination Fittings AMERON OR SMITH
F-43-TS D
F-32-TS D

Doublewall Termination Fittings AMERON LCX
F-33-LS D
F-22-LS D

Doublewall Penetration Fittings AMERON OR SMITH
F-44-SS
F-33-SS
F-33-LL
F-22-LL

Doublewall Penetration Fittings Hot Dipped Galvanized Conduit and Rob Roy PVC Coated Conduit
F-10-SS -D
F-17-SS-D
F-10-RR-D
F-17-RR-D

Please call with any questions at 707 837-8408. Thanks!

Sincerely,

JUL 0 8 2008

REGISTERED PROFESSIONAL ENGINEER
MATTHEW E. DONOHUE
C 57219
Exp. 12-31-09
CIVIL
STATE OF CALIFORNIA

Matthew E. Donohue, P.E.
Civil Engineer C57219

Don K. Mukai
MECHANICAL ENGINEER
1841 Paloma St. Pasadena, CA 91104
323-888-4136

June 1, 2010 Rev. 10.24.11

Mrs. Paola Recendez
S. Bravo Systems, Inc.
2929 Vail Ave.
Commerce, CA 90040

Re: Specification approved by a state registered professional engineer
CCR Title 23, Division 3, Chapter 16, Article 3, Section 2631(d)

This letter is for an engnieering specification review and approval of a secondary containment system component which is not an integral part of primary containment for an underground fuel tank storage system in California. The authority for this approval comes from the California Code of Regulations (CCR) Title 23, Division 3, Chapter 16, Article 3, Section 2631(d).

I have examined and reviewed the following specifications on the Bravo F-Series fiberglass split retrofit "Retrofit-S" and "Retrofit-SD-AB" fittings:

1) UL Certifications Directory MH26018 for Vipel F-764 and F-774 resins
2) AOC Vipel Product Selection Guide & Corrosion Resistance Guide
3) Bravo datasheets F-Series-SW-10A, F-Series-DW-10A, F-Series-BLR-11A, F-Series-D-BLR-S-11B, F-Series-Retrofit-S-11B and F-Series-Retrofit-SD-AB-11A
4) Bravo Installation Manuals ii-F-SERIES-TS-11A, ii-F-SERIES-TS-D-11A, ii-F-SERIES-SS-09B, ii-F-SERIES-TS-ADJ-INSERT, ii-F-SERIES-1X-SS-11A, ii-F-SERIES-1X-SS-D-11A, ii-F-SERIES-LCX-09B, ii-F-SERIES-LCX-D-09B, ii-FS-RETROFIT-S-10C, ii-FS-RETROFIT-SD-AB-10A, ii-SANDKIT-11B
5) Bravo Systems Third Party document 3RP-F-Series and 3RP-FS-F1X-D-BLR-S
6) Bravo Systems UL Approval document CUL-FSeries
7) Bravo material compatibility letters Sumps_AlternativeFuels_R1 and Fittings_AlternativeFuels_R1
8) Smith Bulletin D4025, D4010 and B2102
9) Ameron PSX-20 Adhesive Kit - Bondstrand Product Data FP698B
10) Bravo ADHESIVE-EPOXY-KIT and ADHESIVE-RETROFIT-EPOXY-KIT

This system provides a bonded retrofit solution to replace from the inside of a single wall fiberglass containment sump or from both sides of a double wall fiberglass containment sump, a suspect or failing flexible penetration fitting. This product maintains the integrity of a single walled containment sump or both the primary and secondary wall of a double wall containment sump including the integrity of it's existing interstice by permanently bonding the sump wall to the fiberglass pipe or conduit at each entry point

Continued on Page 2...

...Continued from Page 1

For the purposes of this review, I have:

1) Reviewed the construction and installation procedures for the single wall (Retrofit-S) and double wall (Retrofit-SD-AB) F-Series Retrofit Split Fiberglass fittings for conduit.
2) Reviewed the construction and installation procedures for the single wall (Retrofit-S) and double wall (Retrofit-SD-AB) F-Series Retrofit Split Fiberglass fittings for fiberglass pipe.
3) Reviewed add-on parts that are used to increase the angle of entry. These wedges are made from the same material as the fittings and provide incremental degrees of additional angle.
4) Reviewed materials used to construct the secondary containment system for sufficient thickness, density and corrosion resistance to prevent structural weakening or damage to the secondary containment system as a result of contact with hazardous substances contained in common fuels.

Upon review of the manufacturing procedures, the employment of the materials used in the Bravo Systems F-Series Retrofit-S and Retrofit-SD-AB product lines and the manufacturer's installation guidelines, it is my conclusion that sound design and engineering of this product for use with fiberglass single wall and double walled containment structures and aforementioned pipe types will meet or exceed the secondary containment requirements for corrosion resistance and material compatibility of all motor vehicle fuels, alternative fuels or their additives currently used by petroleum marketers today. I approve the above engineering specifications for the following Bravo F-Series fittings:

F-Series SingleWall Fiberglass Split Retrofit Fittings for flat sump walls:
For Conduit: F-05-Retrofit-S, F-07-Retrofit-S, F-10-Retrofit-S
For Pipe: F-20-Retrofit-S, F-30-Retrofit-S, F-40-Retrofit-S, F-60-Retrofit-S
For LCX Pipe: F-20-Retrofit-S-LCX, F-30-Retrofit-S-LCX, F-40-Retrofit-S-LCX
F-Series SingleWall Fiberglass Split Retrofit Fittings for round sump walls:
For Conduit: F-05-Retrofit-S-RND, F-07-Retrofit-S-RND, F-10-Retrofit-S-RND
For Pipe: F-20-Retrofit-S-RND, F-30-Retrofit-S-RND, F-40-Retrofit-S-RND, F-60-Retrofit-S-RND
For LCX Pipe: F-20-Retrofit-S-RND-LCX, F-30-Retrofit-S-RND-LCX, F-40-Retrofit-S-RND-LCX
F-Series DoubleWall (Double-Sided) Fiberglass Split Retrofit Fittings for flat sump walls:
For Conduit: F-05-Retrofit-SD-AB, F-07-Retrofit-SD-AB, F-10-Retrofit-SD-AB
For Pipe: F-20-Retrofit-SD-AB, F-30-Retrofit-SD-AB, F-40-Retrofit-SD-AB, F-60-Retrofit-SD-AB
For LCX Pipe: F-20-Retrofit-SD-AB-LCX, F-30-Retrofit-SD-AB-LCX, F-40-Retrofit-SD-AB-LCX
F-Series DoubleWall (Double-Sided) Fiberglass Split Retrofit Fittings for round sump walls:
For Conduit: F-05-Retrofit-SD-AB-RND, F-07-Retrofit-SD-AB-RND, F-10-Retrofit-SD-AB-RND
For Pipe: F-20-Retrofit-SD-AB-RND, F-30-Retrofit-SD-AB-RND, F-40-Retrofit-SD-AB-RND, F-60-Retrofit-SD-AB-RND
For LCX Pipe: F-20-Retrofit-SD-AB-RND-LCX, F-30-Retrofit-SD-AB-RND-LCX, F-40-Retrofit-SD-AB-RND-LCX

Please contact me with any questions at 323-888-4136.

Sincerely,

Don K. Mukai
Mechanical Engineer

RHL DESIGN GROUP INC.

ARCHITECTURE • ENGINEERING • ENVIRONMENTAL SERVICES

1137 North McDowell Boulevard, Petaluma, CA 94954-1110 Telephone: (707) 765-1660 Facsimile: (707) 765-9908

John W. Johnson
Co-President
Architect

Brian F. Zita
Co-President
Architect

John B. Hicks
Vice President

Cecil R. Spencer
Vice President

Regional Managers
Jesse E. Macias
Roy W. Pedro
Alan K. Shimabukuro
John W. Strobel
Blythe R. Wilson

Established 1966

Offices
ANAHEIM, CA
BELLEVUE, WA
CAMAS, WA
MARTINEZ, CA
PETALUMA, CA
ROSEVILLE, CA
SCOTTSDALE, AZ

www.rhldesign.com

August 20, 2003, **Amended 9/17/04**

S. Bravo Systems, Inc.
2929 Vail Avenue
Commerce, CA 90040

RE: STATE REGISTERED PROFESSIONAL ENGINEER APPROVAL
CCR Title 23 Division 3, Chapter 16, Section 2631(d)
CCR Title 23 Division 3, Chapter 16 Section 2636(h) Secondary Containment Design, Construction and Installation & Section 2637 Secondary Containment Testing.

BRAVO DOUBLE WALL UNDER DISPENSER CONTAINMENT WITH DOUBLE WALL PENETRATION FITTINGS, MODELS B-4000-B-AB, B-5000-D-AB, B-8000-BD-AB & B-9000-D-AB.

I have examined and reviewed the following items on the Bravo double wall under-dispenser containment with double wall penetration fittings:

1. Double wall under dispenser containment installation Guide and Maintenance Instructions for listed products.
2. Testing and Monitoring Instructions for the listed products.
3. Double wall containment dispenser illustrations.
4. Illustrations and drawings of B-17-D and B-33-D Flexible Double Penetration Fittings that interconnect with the interstitial space of the double wall dispenser containment and are tested with the interstitial space of the dispenser sump.
5. A section removed from a double wall dispenser containment for inspection of the construction and for determination of the volume of the interstitial space.
6. Bravo standard Dispenser Containment water testing instructions dated 9/27/01. This is an alternate for non-double wall dispenser containment.
7. Material Data Sheet for interstitial fluid used for continuous monitoring of the Bravo UDS interstitial space.
8. The sensor for monitoring the interstitial space is furnished by others.
9. Chemical compatibility data for Dion ISO 6631
10. Chemical compatibility for Derakane 411
11. **UL letter with test record dated 9/12/04 on annulus proof pressure/vacuum test.**

Upon review the materials and construction it is my opinion and conclusion that sound engineering design and engineering of these products provide an in-place system that will provide the required secondary containment and **allow** continuous **vacuum** or hydrostatic monitoring of the containment interstitial space including the sump penetration fittings.

James H. Ray
Sr. Civil Engineer

C:\CIVIL\3rdPARTY\BRAVO\DWUDC0803-R1.doc

ONLINE CERTIFICATIONS DIRECTORY

EGVV2.MH26018
Flammable and Combustible Liquid Tank Accessories - Component

Page Bottom

Flammable and Combustible Liquid Tank Accessories - Component

See General Information for Flammable and Combustible Liquid Tank Accessories - Component

AOC L L C MH26018
950 HWY 57 E
COLLIERVILLE, TN 38017 USA

Resin for use in the manufacture of Fiberglass-reinforced-plastic cladding for composite and jacketed underground steel tanks. "Vipel F764" and "Vipel F774" -minimum thickness 0.10 in. (2.54 mm).

Resin for use in the manufacture of glass-fiber-reinforced plastic underground storage tanks for petroleum products, alcohols and alcohol-gasoline mixtures. "Vipel F764" and "Vipel F774" .

Marking: Company name or tradename and UL Recognition Mark.
Last Updated on 1999-10-13

Questions? Notice of Disclaimer Page Top

Copyright © 2009 Underwriters Laboratories Inc.®

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL's Follow-Up Service. Only those products bearing the UL Mark should be considered to be Listed and covered under UL's Follow-Up Service. Always look for the Mark on the product.

UL permits the reproduction of the material contained in the Online Certification Directory subject to the following conditions: 1. The Guide Information, Designs and/or Listings (files) must be presented in their entirety and in a non-misleading manner, without any manipulation of the data (or drawings). 2. The statement "Reprinted from the Online Certifications Directory with permission from Underwriters Laboratories Inc." must appear adjacent to the extracted material. In addition, the reprinted material must include a copyright notice in the following format: "Copyright © 2009 Underwriters Laboratories Inc.®"

An independent organization working for a safer world with integrity, precision and knowledge.

SCOTT LANE
PRODUCT LEADER
CORROSION AND FIRE RETARDANT RESINS

July 13, 2010

Mr. Jonathan Smith
S. Bravo Systems, Inc.
2929 Vail Avenue
Commerce, CA 90040

RE: Vipel® F764 and F774 for Biodiesel Containment

Dear Mr. Smith,

The purpose of this letter is to confirm that a properly designed and cured corrosion barrier made from Vipel F764 or F774 resin is appropriate and recommended to contain all biodiesel and biodiesel/diesel fuel blends up to 180°F. Biodiesel is defined as a long chain (typically 16 to 18 carbons long) fatty acid mono-alkyd ester of vegetable oils and animal fats meeting the physical properties outlined in ASTM D 6751. Some sources of the oils and fats in biodiesel are soy beans, corn, cotton, sunflowers, rapeseeds, lard from pork, tallow from beef, etc. Pure biodiesel meeting ASTM D 6751, referred to as B100, has a minimum closed cup flash point of 130°C when measured by ASTM D 93.

These resins need to be used with appropriate reinforcement, coupled with good quality engineering, workmanship, and processing in the construction of the composite. Underground fuel tanks listed to UL standard 1316 can be expected to meet these requirements.

A minimum of 1.0% full strength MEKP (not diluted) is the recommended catalyst.

Please contact me if you have any questions.
Yours truly,

Scott A. Lane

VIPEL and FIREPEL are a Registered Trademarks of AOC, LIc.

950 HIGHWAY 57 EAST • COLLIERVILLE, TN 38017 • 901/861-8362 • FAX 901/854-2895 • slane@aoc-resins.com

SCOTT LANE
PRODUCT LEADER
CORROSION AND FIRE RETARDANT RESINS

April 23, 2012

Mr. Jonathan Smith
S. Bravo Systems, Inc.
2929 Vail Avenue
Commerce, CA 90040

RE: Vipel® F764 for Ethanol Fuel Blends

Dear Mr. Smith,

The purpose of this letter is to confirm that a properly designed and cured corrosion barrier made from Vipel F764 isophthalic polyester resin is appropriate and recommended to contain all blends of ethanol with petroleum fuel from 1 to 100% at ambient temperatures. This resin needs to be used with appropriate reinforcement, coupled with good quality engineering, workmanship, and processing in the construction of the composite. A minimum of 1.0% full strength MEKP (not diluted) is the recommended catalyst.

A datasheet for F764 is attached. Please contact me if you have any questions.

Regards,

Scott A. Lane

VIPEL and FIREPEL are a Registered Trademarks of AOC, Llc.

950 HIGHWAY 57 EAST • COLLIERVILLE, TN 38017 • 901/861-8362 • FAX 901/854-2895 • slane@aoc-resins.com

AOC
World Leader in Resin Technology

Vipel® F764 Series Polyester Resin

Product Information

Vipel Corrosion High Cross-Linked Isophthalic Polyester Resin

TYPICAL CAST MECHANICAL PROPERTIES * (1) see back page

	Nominal	Test Method
Tensile Strength, psi/MPa	10,100/70	ASTM D 638
Tensile Modulus, psi /GPa	510,000/3.5	ASTM D 638
Tensile Elongation, %	2.3	ASTM D 638
Flexural Strength, psi /MPa	17,800/122	ASTM D 790
Flexural Modulus, psi /GPa	560,000/3.9	ASTM D 790
Heat Distortion Temperature °F/°C, @ 264 psi	282/139	ASTM D 648
Barcol Hardness	51	ASTM D 2583

TYPICAL LIQUID RESIN PROPERTIES of Vipel® F764 *(2) see back page

Versions	Viscosity, cps	Thix Index	Gel Time, min	Gel to Peak, min	Peak Exotherm, °F/C°	Specific Gravity	Styrene Content %
F764-BBD-00	400[1]	NA	20[9]	10	414/212	1.09	42
F764-BTX-00	600[1]	3[2]	20[3]	10	331/166	1.08	44
F764-PTA-27	600[4]	2[5]	27[6]	16	425/218	1.07	45
F764-PTH-20	500[7]	2[5]	20[8]	17	374/190	1.07	44

1) 77°F/25°C Brookfield LV viscosity spindle #2 at 30 rpm
2) 77°F/25°C 3/30 Thix Index
3) 77°F/25°C Gel time with 0.3% cobalt 6% and 1.5% MEKP
4) 77°F/25°C Brookfield RV viscosity spindle #2 at 20 rpm
5) 77°F/25°C 2/20 Thix Index
6) 77°F/25°C Gel time with 1.0% MEKP
7) 77°F/25°C Brookfield LV viscosity spindle 3 at 60 rpm
8) 77°F/25°C Gel time with 1.5% MEKP
9) 77°F/25°C Gel time with 0.25% cobalt 6% and 1.25% MEKP

*Typical properties are not to be construed as specifications.

DESCRIPTION

AOC's Vipel F764 Series is a high cross-linked isophthalic polyester resin. Vipel F764 Series resins are recognized by underwriters laboratories for meeting the requirements of UL 1316 and UL 1746 Part II and Part III.

AOC's Vipel F764 Series resins were developed to meet the demanding requirements of underground petroleum storage tanks that contain oxygenated fuels.

BENEFITS

UL Recognition

AOC's Vipel F764 Series resins are recognized by UL for meeting the requirements of UL 1316 and UL 1746 Part II and Part III.

Corrosion Resistance

Vipel F764 Series resins provide excellent corrosion resistance when used in contact with inorganic and organic acids. Solvent resistance is field-proven for many fuels including gasoline, kerosene, heating oil and crude oils. Refer to AOC's "Corrosion Resistant Resin Guide" for corrosion resistance information or for questions regarding suitability of a resin to any particular chemical environment contact AOC.

Versatile

Suitable for various fabricating methods such as hand lay-up, spray-up, filament winding, etc.

Vipel®
F764 Series
Polyester Resin

PERFORMANCE GUIDELINES

A. Keep full strength catalyst levels between 1.0% - 2.0% of the total resin weight.

B. Maintain shop temperatures between 65°F/18°C and 90°F/32°C and humidity between 40% and 90%. Consistent shop conditions contribute to consistent gel times and will help the fabricator make a high quality part.

C. Sanding and/or grinding is recommended if a secondary bond is applied to a laminate that was made with a resin containing wax.

STORAGE STABILITY

This product is stable for three months from the date of manufacture when stored in the original containers, away from direct sunlight or other UV light sources and at or below 25°C (77°F). Storage stability of two months or less should be anticipated if the storage temperature exceeds 30°C (86°F).

After extended storage, some drift may occur in the product viscosity and gel time.

SAFETY

See appropriate Material Safety Data Sheet for guidelines.

ISO 9002:2008 CERTIFIED

The Quality Management Systems at every AOC manufacturing facility have been certified as meeting ISO 9002:2008 standards. This certification recognizes that each AOC facility has an internationally accepted model in place for managing and assuring quality. We follow the practices set forth in this model to add value to the resins we make for our customers.

FOOTNOTES

(1)

These tests are based on Vipel® F764 with 45% styrene at 77°F/25°C and 50% relative humidity. All tests performed on unreinforced cured resin castings. Thixotropic components, if applicable, are excluded from casting samples. Castings were post cured.

(2)

The gel times shown are typical but may be affected by catalyst, promoter, inhibitor concentration, resin, mold, and shop temperature. Variations in gelling characteristics can be expected between different lots of catalysts and at extremely high humidities. Pigment and/or filler can retard or accelerate gelation. It is recommended that the fabricator check the gelling characteristics of a small quantity of resin under actual operating conditions prior to use.

AOC®
World Leader in Resin Technology

AOC, LLC
955 Highway 57 East
Collierville, TN 38017
Toll Free: +1 (866) 319-8827
www.aoc-resins.com

Global Contacts

Asia\Australia
australia@aoc-resins.com
Middle East
middleeast@aoc-resins.com
Latin America
latinamerica@aoc-resins.com
Africa
africa@aoc-resins.com
India
India@aoc-resins.com
Europe
europe@aoc-resins.com

The information contained in this data sheet is based on laboratory data and field experience. We believe this information to be reliable, but do not guarantee its applicability to the user's process or assume any liability for occurrences arising out of its use. The user, by accepting the products described herein, agrees to be responsible for thoroughly testing each such product before committing to production.

Our recommendations should not be taken as inducements to infringe any patent or violate any law, safety code or insurance regulation.

Copyright © 2012, AOC L.L.C.

S. Bravo Systems, Inc.

2929 Vail Avenue
Commerce,
CA 90040

1-800-AT-BRAVO

FAX: 323-888-4123

Email:
info@sbravo.com

Website:
www.sbravo.com

Tuesday - August 30 - 2011

R2 1.18.12

RE: Bravo Fiberglass Fittings and Alternative fuels

This letter is to certify the compatibility of S. Bravo Systems, Inc. Single and Double Wall Fiberglass Sump Entry Fittings with Alternative Fuels such as Biodiesel and Ethanol blended fuels. It also addresses compatibility with DEF Diesel Exhaust Fluid.

Bravo Systems Fiberglass Fittings are engineered with the same UL Listed materials used in the manufacture and certification of Fiberglass Tanks, matching the UL Standard 1316. Since our Fiberglass Fittings are Built like a Tank, they can withstand continuous fuel exposure to, or submersion in Biodiesel, Ethanol and Alcohol blends without failure.

All Fiberglass Fittings designed for DoubleWall Sumps are engineered to be fully compliant with the California State Water Resource Control Board Assembly Bill AB-2481 for DoubleWall Sumps and Continuous Monitoring Systems.

The following Single and Double Wall Fiberglass Fittings manufactured by Bravo Systems in Commerce, California are compatible with Biodiesel and Ethanol fuel blends up to B100 and E100, respectively.

> **F-Series** “Full Body” Fiberglass Fittings.
> **FF-Series** “Flange” Fiberglass Fittings.
> **FPE-Series** Fiberglass Fittings for Polyethylene pipe.
> **FR-Series** Fiberglass Split Test Reducers.
> **F-Series Retrofit-S** Fiberglass Split Retrofit Fittings.
> **FPE-Retrofit-Si** Fiberglass Split Retrofit Fittings for Polyethylene pipe.
> **F-Series BLR** “Full Body” Fiberglass Retrofit Fittings.
> **F-Series D-BLR-S** Fiberglass Split Retrofit Fittings.
> **TBF-Series** Fiberglass Tank Bung Fittings.

Bravo Systems also certifies that these fittings are compatible with and approved for use in secondarily containing DEF Diesel Exhaust Fluid.

This letter also addresses any fittings above sold under an OEM agreement.

Each respective Series may be UL Listed in addition to being manufactured of UL recognized materials approved for use in the manufacture of Fiberglass UST tanks. Please visit www.sbravo.com/thirdparty to find associated information.

Please feel free to contact us with any questions you may have at:

S. Bravo Systems, Inc.
2929 Vail Avenue
Commerce, CA 90040
323-888-4133
compatibility@sbravo.com

Additionally, you may find further information at www.sbravo.com.

Sincerely,

Jonathan E. Smith
Director of Brand Management
S. Bravo Systems, Inc.

Wednesday - August 25 - 2010 R2 5.16.12

RE: Bravo Fiberglass Sumps and Alternative fuels

This letter is to certify the compatibility of S. Bravo Systems, Inc. Single and Double Wall Fiberglass Containment Sumps with Alternative Fuels such as Biodiesel and Ethanol blended fuels. It also addresses compatibility with DEF Diesel Exhaust Fluid.

Bravo Systems Fiberglass products are engineered with the same UL Listed materials used in the manufacture and certification of Fiberglass Tanks, matching the UL Standard 1316. Since our Fiberglass containment sumps are Built like a Tank, they can withstand continuous fuel exposure to Biodiesel, Ethanol and Alcohol blends without failure.

All DoubleWall Containment Sumps are engineered to be fully compliant with the California State Water Resource Control Board Assembly Bill AB-2481 for DoubleWall Sumps and Continuous Monitoring Systems.

The following Single and Double Wall Containment Sumps manufactured by Bravo Systems in Commerce, California are compatible with Biodiesel and Ethanol fuel blends up to B100 and E100, respectively.

> B3XX Series Spill Buckets
> B4XX Series Tank Sumps & Covers
> B5XX Series Planter Transition Sumps
> B6XX Series Walkover Transition Sumps
> B7XX Series H-20 Rated Transition Sumps
> B8XX Series Transition Sumps
> B7XXX Series Under Dispenser Containment Sumps
> B8XXX Series Under Dispenser Containment Sumps
> B9XXX Series Under Dispenser Containment Sumps

Bravo Systems also certifies that these fittings are compatible with and approved for use in secondarily containing DEF Diesel Exhaust Fluid.

Each respective Series may be UL Listed in addition to being manufactured of UL recognized materials approved for use in the manufacture of Fiberglass UST tanks. Please visit www.sbravo.com/thirdparty to find associated information.

Please feel free to contact us with any questions you may have at:

S. Bravo Systems, Inc.
2929 Vail Avenue
Commerce, CA 90040
323-888-4133
compatibility@sbravo.com

Additionally, you may find further information at www.sbravo.com.

Sincerely,

Jonathan E. Smith
Director of Brand Management
S. Bravo Systems, Inc.

S. Bravo Systems, Inc.

2929 Vail Avenue
Commerce,
CA 90040

1-800-AT-BRAVO

FAX: 323-888-4123

Email:
info@sbravo.com

Website:
www.sbravo.com

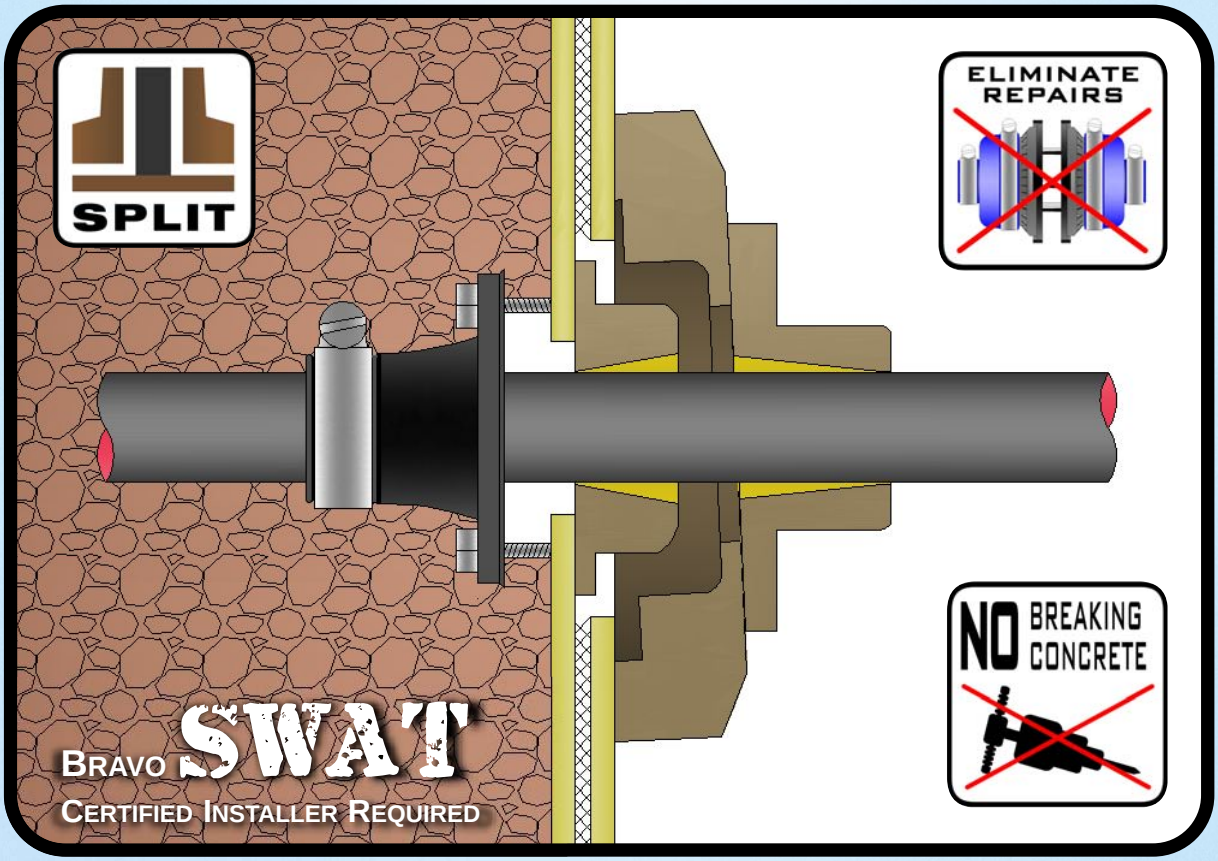
D-INR-S Split Retrofit Fitting
for Doublewall Sumps

F-XX-XX-D-INR-S - Split Fitting For Conduit & Fiberglass Pipe

All-Fiberglass Retrofit Fitting for Bolted Flexible Entry Fittings

AVOID BREAKING CONCRETE !

BRAVO HAS YOUR PERMANENT SOLUTION



- > No station downtime
- > No breaking concrete
- > No breaking conduit or rewiring
- > AB-2481 Compliant
- > All "FRP" construction
- > Low profile and diameter
- > Designed for 90° degree bends

PRODUCT SPECS:

Material . . . . UL Fiberglass

DoubleWall #:	Dia:	Length:	Made for:	List:
F-10-SS-D-INR-S	7.5"	3.75"	1" Galvanized	$ 445
F-17-SS-D-INR-S	7.5"	3.75"	3/4" Galvanized	445
F-20-SS-D-INR-S	11"	3.75"	2" Fiberglass	585
F-30-SS-D-INR-S	11"	3.75"	3" Fiberglass	585
F-40-SS-D-INR-S	11"	3.75"	4" Fiberglass	945

THIRD PARTY APPROVED

S. Bravo Systems, Inc. - The Leader in Secondary Containment

2929 Vail Ave. | Commerce, CA | 323-888-4133 | FAX: 323-888-4123 | www.sbravo.com

PEI MEMBER

Certificate of Compliance

Certificate Number **20101221 – MH18310**
Report Reference **MH18310, 1994 June 21**
Issue Date **2010 December 21**

Underwriters Laboratories Inc.®

Issued to: **S BRAVO SYSTEMS INC**

2929 VAIL AVE
COMMERCE, CA 90040 USA

This is to certify that representative samples of

Vapor Recovery System Accessories, Flammable Liquid

Model Descriptions: Model B-1 vapor recovery shear valve.

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 842, "Valves for Flammable Fluids"**

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: (UL) 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 **20101221 – MH29867A**
Report Reference **MH29867, 2005 March 24**
Issue Date **2010 December 21**

Underwriters Laboratories Inc.®

Issued to: **S BRAVO SYSTEMS INC**

2929 VAIL AVE
COMMERCE, CA 90040 USA

This is to certify that representative samples of

Flammable and Combustible Liquid Tank Accessories

Model Descriptions:
B-400 single wall underground tank sumps.
B-400-TC single wall tank collar.
B-400-D-AB and B-400-D-VAC-AB double wall underground tank sumps.
B-400-D-TC double wall tank collar.

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 UL Subject 2258, "Outline of Investigation for Nonmetallic Tanks for Oil Burner Fuel."**

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: (UL) 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 **20101221 – MH29867B**
Report Reference **MH29867, 1994 September 15**
Issue Date **2010 December 21**

Underwriters Laboratories Inc.®

Issued to: **S BRAVO SYSTEMS INC**

2929 VAIL AVE
COMMERCE, CA 90040 USA

This is to certify that representative samples of

Flammable and Combustible Liquid Tank Accessories

Model Descriptions: Models B-2000 and B-8000 dispenser sump with emergency valve mounting systems.

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 UL Subject 2258, "Outline of Investigation for Nonmetallic Tanks for Oil Burner Fuel."**

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: (UL) 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 **20101221 – MH29867C**
Report Reference **MH29867, 2005 March 17**
Issue Date **2010 December 21**

Underwriters Laboratories Inc.®

Issued to: **S BRAVO SYSTEMS INC**

2929 VAIL AVE
COMMERCE, CA 90040 USA

This is to certify that representative samples of

Flammable and Combustible Liquid Tank Accessories

Model Descriptions: Models B-4000, B-5000, B8000, B8000-B and B-9000 single wall fiberglass reinforced plastic dispenser sumps with emergency valve mounting systems.
Models B-4000-D-AB, B-5000-D-AB, B-8000-BD-AB and B-9000-D-AB double wall, monitorable fiberglass reinforced plastic dispenser sumps with emergency valve mounting systems.
Model B-500-JP and B-600-JP single wall fiberglass reinforced plastic transition sump.
Models B-500-D-AB JP and B-600-D-AB double wall, monitorable fiberglass reinforced plastic transition sumps.

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 UL Subject 2258, "Outline of Investigation for Nonmetallic Tanks for Oil Burner Fuel."**

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: (UL) 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 **20101221 – MH29867D**
Report Reference **MH29867, 2008 November 19**
Issue Date **2010 December 21**

Underwriters Laboratories Inc.®

Issued to: **S BRAVO SYSTEMS INC**

2929 VAIL AVE
COMMERCE, CA 90040 USA

This is to certify that representative samples of

Flammable and Combustible Liquid Tank Accessories

Model Descriptions: Models B-7000, B-7000-EO, B8000 and B-9000 single wall fiberglass reinforced plastic dispenser sumps with mounting frames.

Model B-500-JP and B-600-JP single wall fiberglass reinforced plastic transition sump.

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 UL Subject 2258, "Outline of Investigation for Nonmetallic Tanks for Oil Burner Fuel."**

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: (UL) 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 **20101221 – MH29867E**
Report Reference **MH29867, 2009 February 03**
Issue Date **2010 December 21**

Underwriters Laboratories Inc.®

Issued to: **S BRAVO SYSTEMS INC**

2929 VAIL AVE
COMMERCE, CA 90040 USA

This is to certify that representative samples of

Flammable and Combustible Liquid Tank Accessories

Model Descriptions: Models F-10-RR, F-10-SS, F-17-RR, F-17-SS, F-20-LL, F-22-LS, F-22-LS-T, F-30-LL, F-30-SS, F-32-TS, F-32-TS-T, F-33-LS, F-33-LS-T, F-40-SS, F-43-TS and F-43-TS-T fiberglass reinforced plastic sump penetration fittings.

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 UL Subject 2258, "Outline of Investigation for Nonmetallic Tanks for Oil Burner Fuel."**

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: (UL) 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 **20101221 – MH29867F**
Report Reference **MH29867, 1994 September 16**
Issue Date **2010 December 21**

Underwriters Laboratories Inc.®

Issued to: **S BRAVO SYSTEMS INC**

2929 VAIL AVE
COMMERCE, CA 90040 USA

This is to certify that representative samples of **Flammable and Combustible Liquid Tank Accessories**

Model Descriptions: Emergency valve mounting frame coating system.

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 UL Subject 2258, "Outline of Investigation for Nonmetallic Tanks for Oil Burner Fuel."**

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 **20101221 – MH29867B**
Report Reference **MH29867, 1994 September 15**
Issue Date **2010 December 21**

Underwriters Laboratories Inc.®

Issued to: **S BRAVO SYSTEMS INC**

2929 VAIL AVE
COMMERCE, CA 90040 USA

This is to certify that representative samples of

Flammable and Combustible Liquid Tank Accessories

Model Descriptions: Models B-2000 and B-8000 dispenser sump with emergency valve mounting systems.

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 UL Subject 2258, "Outline of Investigation for Nonmetallic Tanks for Oil Burner Fuel."**

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: (UL) 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 **20101221 – MH29867A**
Report Reference **MH29867, 2005 March 24**
Issue Date **2010 December 21**

Underwriters Laboratories Inc.®

Issued to: **S BRAVO SYSTEMS INC**

2929 VAIL AVE
COMMERCE, CA 90040 USA

This is to certify that representative samples of

Flammable and Combustible Liquid Tank Accessories

Model Descriptions:
B-400 single wall underground tank sumps.
B-400-TC single wall tank collar.
B-400-D-AB and B-400-D-VAC-AB double wall underground tank sumps.
B-400-D-TC double wall tank collar.

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 UL Subject 2258, "Outline of Investigation for Nonmetallic Tanks for Oil Burner Fuel."**

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: (UL) 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 **20101221 – MH29867E**
Report Reference **MH29867, 2009 February 03**
Issue Date **2010 December 21**

Underwriters Laboratories Inc.®

Issued to: **S BRAVO SYSTEMS INC**

2929 VAIL AVE
COMMERCE, CA 90040 USA

This is to certify that representative samples of

Flammable and Combustible Liquid Tank Accessories

Model Descriptions: Models F-10-RR, F-10-SS, F-17-RR, F-17-SS, F-20-LL, F-22-LS, F-22-LS-T, F-30-LL, F-30-SS, F-32-TS, F-32-TS-T, F-33-LS, F-33-LS-T, F-40-SS, F-43-TS and F-43-TS-T fiberglass reinforced plastic sump penetration fittings.

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 UL Subject 2258, "Outline of Investigation for Nonmetallic Tanks for Oil Burner Fuel."**

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: (UL) 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 **20101221 - MH29867E**
Report Reference **MH29867, 2009 February 03**
Issue Date **2010 December 21**

Underwriters Laboratories

Issued to:

S BRAVO SYSTEMS INC

2929 VAIL AVE
COMMERCE, CA 90040 USA

This is to certify that representative samples of

Flammable and Combustible Liquid Tank Accessories

Model Descriptions: Models F-10-RR, F-10-SS, F-17-RR, F-17-SS, F-20-LL, F-22-LS, F-22-LS-T, F-30-LL, F-30-SS, F-32-TS, F-32-TS-T, F-33-LS, F-33-LS-T, F-40-SS, F-43-TS and F-43-TS-T fiberglass reinforced plastic sump penetration fittings.

Have been investigated by Underwriters Laboratories of Canada 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 ULC-S631-1984, "Isolating Bushings for Steel Underground Tanks Protected with External Corrosion Protection Systems."

Additional Information:

See UL On-line Certification Directory at www.ul.com for additional information.

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

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

To confirm the current status, validate the above information via the on-line directory.

Look for the ULC Listing Mark on the product

Issued by:

James Larin, Customer Service Professional
Underwriters Laboratories of Canada

Reviewed by:

William R. Carney, Director, North American
Underwriters Laboratories of Canada

Certificate of Compliance

Certificate Number **20101221 – MH29867C**
Report Reference **MH29867, 2005 March 17**
Issue Date **2010 December 21**

Underwriters Laboratories Inc.®

Issued to: **S BRAVO SYSTEMS INC**

2929 VAIL AVE
COMMERCE, CA 90040 USA

This is to certify that representative samples of

Flammable and Combustible Liquid Tank Accessories

Model Descriptions: Models B-4000, B-5000, B8000, B8000-B and B-9000 single wall fiberglass reinforced plastic dispenser sumps with emergency valve mounting systems.
Models B-4000-D-AB, B-5000-D-AB, B-8000-BD-AB and B-9000-D-AB double wall, monitorable fiberglass reinforced plastic dispenser sumps with emergency valve mounting systems.
Model B-500-JP and B-600-JP single wall fiberglass reinforced plastic transition sump.
Models B-500-D-AB JP and B-600-D-AB double wall, monitorable fiberglass reinforced plastic transition sumps.

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 UL Subject 2258, "Outline of Investigation for Nonmetallic Tanks for Oil Burner Fuel."**

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: (UL) 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 **20101221 – MH29867D**
Report Reference **MH29867, 2008 November 19**
Issue Date **2010 December 21**

Underwriters Laboratories Inc.®

Issued to: **S BRAVO SYSTEMS INC**

2929 VAIL AVE
COMMERCE, CA 90040 USA

This is to certify that representative samples of

Flammable and Combustible Liquid Tank Accessories

Model Descriptions: Models B-7000, B-7000-EO, B8000 and B-9000 single wall fiberglass reinforced plastic dispenser sumps with mounting frames.

Model B-500-JP and B-600-JP single wall fiberglass reinforced plastic transition sump.

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 UL Subject 2258, "Outline of Investigation for Nonmetallic Tanks for Oil Burner Fuel."**

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: (UL) 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 **20101221 - MH29867D**
Report Reference **MH29867, 2008 November 19**
Issue Date **2010 December 21**

Underwriters Laboratories

Issued to:

S BRAVO SYSTEMS INC

2929 VAIL AVE
COMMERCE, CA 90040 USA

This is to certify that representative samples of

Flammable and Combustible Liquid Tank Accessories

Model Descriptions: Models B-7000, B-7000-EO, B8000 and B-9000 single wall fiberglass reinforced plastic dispenser sumps with mounting frames.
Model B-500-JP and B-600-JP single wall fiberglass reinforced plastic transition sump.

Have been investigated by Underwriters Laboratories of Canada 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 ULC-S631-1984, "Isolating Bushings for Steel Underground Tanks Protected with External Corrosion Protection Systems."

Additional Information:

See UL On-line Certification Directory at www.ul.com for additional information.

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

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

To confirm the current status, validate the above information via the on-line directory.

Look for the ULC Listing Mark on the product

Issued by:

James Larin, Customer Service Professional
Underwriters Laboratories of Canada

Reviewed by:

William R. Carney, Director, North American
Underwriters Laboratories of Canada