FORM U-1 MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

42412-4914 DVT-300-D

| 1, (| Manufactured ar | nd certified by | , Little | eford Day | , Inc. 74 | 51 Empi | ire dri | ve, PO B | | | | | | | | | | | |
|----------------------------|--|----------------------------------|----------------------|--|---|---|-------------------|--|-----------|-------------------------|---------------------------|----------------------------------|------------------------------|-----------|------------------|----------------------------------|---------------------------------------|------------|--|
| 2, } | Manufactured fo | BFC | Goodric | h P.O. Bo | x 41256, | Brecksy | ville, (| DH 4414 | 11 | | ress of Ma dress of Pu | | | | ···· | | | | |
| 3. 1 | Location of insta | llation <u>E</u> | 3 F Goo | odrich, 992 | 21 Breck | sville Ro | oad, B | recksvill | • | 44141 | | | <i>)</i> | | | | | | |
| | Horiz | ontal | Ĭa | icketed Ve | accal | | | 13 | 323 | (Na | me and add | • | 0009 | 27 | | 1 | 584 | | 1007 |
| 4. | Type: <u>FTOLIZ</u> (Horiz,, ve | ontal ert., or sphere | . <u></u> e) (Tar | nk, separator | | , heat exh., | elc.) | (Mfg's s | | .) (| CRN) | | | wing No. |) | | . Bd. No | .) (Ÿ | 1997 ear built) |
| 5. / | ASME Code, Se | ction VIII. Div | v. 1 | 995, 1995 | | | | | | - | | | | | | | | | |
| | ns 6 - 11 inct, to | | | | n and Adde s, jackets o | | | shell of he | at excha | | Case No. chamber o | f multi-c | . – hamber | | | Service | e per UC | -120(d) | |
| 6. | Shell (a) No. of | course(s): | ` | | 1 | | | (b) Ove | rall leng | th (ft & in.) |): | <u> </u> | | 3' 1-9/ | 16" | | | ** | |
| Course(s) | | | | | Material | | | hickness | T | Long Joint (Cat | | A) Circum, Joint (Cat. | | | (Cat. A | A, B & C) Heat Treatment | | | |
| No | Diameter, in. | Diameter, in. Length (ft. & in.) | | Spec/Grade or Type | | | Nam. Corr. | | Тур | Type Full, Spot, None | | Eff Type Full, Spot, I | | ot, Non | None Eff. Te | | emp. Time | | |
| 1 | 27-1/8"ID | 3' 1-9/ | 16" | S. | 1240-316 | | 3/8 | " Nil | <u> </u> | N | None | | | No | None | | N | /A | N/A |
| | | | | | | | | | | | | | | | | | _ | 1 | |
| | | <u> </u> | | λΙοπο | | | | | | | | | NI. | | | | L | 1 | |
| 7. | Heads: (a) . | (M | at'l Snec. | None No., Grade o | r Type) H.T | Time & T | emo | | (b) | (b) | | Soec No | None O., Grade or Type) H.T | | e\ H.T. | -Time / | & Temn | | |
| | Location (Top, | · · | kness | Radius | | Elliptical | Ţ | Conical | | spherical | Flat | Side to Pressure | | | 1 | | | Category A | |
| | Bottom, Ends) | Min. | Corr. | Crown | Knuckle | Ratio | 1 | x Angle | | adius | Diameter | | nvex | Conca | ive T | Type Full, | | | |
| (a) | | | | | | | | | | | | 1 | | | | | · | | <u>; </u> |
| (b) | | | | | | | | | | | |) } | | | | | | | |
| 8. Type of jacket Fig. 9-7 | | | | | *************************************** | (Mat'l Spec. No., Grade, size, No.) Jacket closure Ogee & Weld Fig. 9-5 (b-2) (Describe as ogee & weld, bar, etc.) If bolted, describe or sketch | | | | | | | | | | | | | |
| | • | 150 nternal) | (exter | nal) | at max. tem | • | 00 emai) | (exte | mal) | °F | Min. desig | n metal | temp. | | 32 | 우 | at _ | 150 | psi. |
| 11. iter | 10. Impact test No - per UHA 51 (d) & (e) (Indicate yes or no and the component(s) impact tested) 11. Hydro., pneu., or comb. test press. 470 PSI Proof test UG101 (P) items 12 and 13 to be completed for tube sections. | | | | | | | | | | | | | | | | | | |
| 12. | Tubesheet: | Ci-1: // | 1-18 0 | - N-V | · 4 | f | | | | 95-1- 1 | | | 011- | | | A Hack | nent (w | udad a | hellad\ |
| | | Stationary (N | — — | ;, No) | | . (subject to | | | | orn, thk., i | n. ———— | | rr. Allov | w., in. | | | | elaea or | voicea) |
| | Floating (Mat | 'I Spec. No.) | | Oia., | in. | | Nom. | thk., in. | | | Corr. Allov | /., ia. | | | , | Attachr | nent | | |
| | Tubes: Mat'l. ms 14 - 18 incl. l | Spec. No., G | | , | |).D., in. | · channe | | | , in. or ga | uge | | Numb | er | | T | ype (St | aight o | · U) |
| | Shell (a) No. of | • | | 1 | | | | | ~ | th (ft & jn. |): <u>3</u> ' | 3-3/8 | ı ı | | | | | | |
| | Co | urse(s) | | ··· | Material | | | Thickr | iess | L |) InioL gno. | Cat. A) | <u> </u> | Circum, . | Joint (C | at, A, | B & C) | Heat T | realment |
| No. | Diameter, in. | | | Spec. | Spec./Grade or Type | | | Nom. | | Туре | Full, Spot | , None | None Eff. Ty | | Full, Spot, None | | e Eff. | Temp. | Time |
| | 24 7/8"ID | 3' 3-3/8 | 8" | SA240-316 | | | | 3/8" | ИII | 1 | Nor | 1e | 70% | | No | ne | | N/A | N/A |
| | | | | | | | | | | | <u> </u> | | | | | | <u> </u> | | <u> </u> |
| | | | | | | | | | | | | |] | <u> </u> | | | | | ļ |
| 15. | Heads: (a) | SA240-3 | | HT-NA | | | | | (b) | SA2 | 40-316 | | HT-N | | | | | | |
| _ | T | | | pec. No., Grade or Type) H.TTime & Tel | | | | | | | | (Mat'l Spec. No., Grade or Type) | | | | | | | |
| | Location (Top, Bottom, Ends) | | cness | 0 | Radius | | liptical Ratio | Conica Apex Ar | | | | lat | Side to Pressure | | | Category A Type Full, Spot, None | | | |
| 121 | Left | Min. | Corr. | Crow | i | | | | igic | Radius | | neter 78"ID | Convex Concave | | icave | 1996 | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | | |
| (a) (b) | | 1" | Nil Nil | | | | | | | | | /3" ID | | | | | | one | |
| | 1 115111 | 1 1 | 1 111 | | | | | | | | L | | | | | | | | |



| |) } | | | | | | | | | | |
|-------------------------|---------------------|---------------------|---|--|---|---------------|------------------|----------------------|-------------------|---|---------------|
| 3. MAWP | 50 | | | t max. temp. 4(| 00 400 | of i | Vin. design | metal temp. | 32 '°F at | 5 | 0 psi. |
| 17, Impact test | (intern | • | (external) | (inte | mal) (external) | | | | | | |
| 11, Impact test | 140 - | - bei Or | [A 51 (d) & (e) | /Indicate | was as and the serve | | | | | | |
| 18. Hydro., pnet | ı., or coı | mb. test pr | ess, 95 PSI | | yes or no and the comp of test | onent(s) in | ipact tested |) | | , | |
| 19. Nozzles, ins | pection, | and safety | valve openings: | | | | | | | | |
| Purpose (inlet, | | Diameter | Flange | \ N | /laterial | Nozzle | Thicknessi | Reinforcement | How Atta | ached | Location |
| Outlet, Orain, et | 3.) No. | or Size | Туре | Nozzle | Flange | Nom. | Соп. | Material | Nozzle | Flange | (Insp.Open) |
| Vapor Port | 1 | 15-1/2" | #150 Pattern | SA240-316 | SA240-316 | 1/4" | Nii | Inherent | UW.16.1(a-2) | | Drum |
| Filtorr Pad | 1 | 6" | Pad | SA240-316 | | 3" | Nil | Inherent | UW16.1(c) | | Drum |
| Charge Port | | 4" | CL #150 Flg. | SA312-316 | SA182-316 | .237 | Nil | Inherent | UW16.1(c) | 2-4(9) | Drum |
| Sight Glasse | s 2 | 4" | CL #150 Flg. | SA312-316 | SA182-316 | .237 | Nil | Inherent | UW16.1(c) | 2-4(9) | * 1 |
| Discharge Drain Port | L | 4" | | SA351-316 | ***** | .245 | Nil | Inherent | UW16.1(c) | | Drum |
| Relief Port | 1 1 | 2" 2" | Pad Ct #150 F1- | SA479-316 | 0.100.514 | 2-1/2" | Nil | Inherent | UW16.1(c) | | *2 |
| | | Yes | CL #150 Flg. | SA312-316 | SA182-316 | .154 | Nil | Inherent | UW16.1(c) | 2-4(9) | Drum |
| 20. Supports: Si | KIRT | | | Legs | 2 Other | · | | AI | tached <u>Wel</u> | ded to Ir | ner Drum |
| 21 Manufacture | 's Partis | Yesor N) Retella | | (No.) | (No.) nissioned Inspectors hav | | (Describ | e) | | (Where an | d Haw) |
| (List the nam | e of par | t, item nun | nber, mfg's, name and | l identifying number) | | J 04CH 10H | ilorica ioi ui | le following items o | гие героп; | • | |
| • | · | | 5 | | | | | | | | |
| | | | | | | *** | | | | | |
| 22. Remarks: To | rckete | d Haada | Com drilled an | d_l | 1 1// 1000000 7 | | | | | | |
| service o | nk/ F | vempt f | - Gun armed an | a plugged, lest b | lock# 1000899. Bu | rst test # | <u>10. Al a</u> | cceptance 5/1/ | 97. Jacket is | for non-c | corrosive |
| *4 (2) ea | ch hes | yembe r | tom mipaci tesm | ng per UHA 31(a) |) & (e). Safety relie | t by use | r. *1-Va | por Port, *2-R | ight Head, *3 | (4) Eac | h Head, |
| <u> </u> | on noc | <u> </u> | | | | | | | | | |
| | | | | | | | | | | | |
| We certify th | at the s | statement | s made in this ran | CER | TIFICATE OF SHO | OP COM | PLIANC | E | | | |
| the ASME Co | ode for | Pressure | Vessels, Section | VIII. Division 1 | nat all details of desig | n, materi | al, constru | iction, and workr | nanship of this | vessel co | onform to |
| U Certificate | of Auth | orization | No. | 1.193 | | Expires | = | Jan. 30 | / 19 98 | | |
| | 1 1 | | | | | expires | | Jan. 50 | 19 98 | , , , , , , , , , , , , , , , , , , , | , |
| Date 7/ | 1/9 | 77 | Name Littleford | 1 Day Inc | | ÷ | | | 1. VA 1 | | <u>/</u> |
| 1 | / | • | ranie <u>Statotore</u> | | rufacturer) | | | Signed // | W/Z) [| Must | |
| | * | | | CERT | IFICATE OF SHO | PINSPE | CTION | | (Represent | / | |
| I, the undersign | ed, hold | ding avali | d commission issue | ed by The National Bo | pard of Boiler and Pre | sure Ves | selinspec | tors and the State | or Province of | Kentu | ckv |
| and employed | by | | commercial Unio | n Insurance Co. | | | | of Boston, M | | have ins | |
| | | | | er's Data Report on | 7-/ | <u> 27</u> .: | and state | that, to the best | of my knowled | _ lge and be | elief, the |
| Manufacturer h | as con | structed | this pressure vessi | el in accordance with | h ASME Code, Section | n VIII, Di | vision1. B | y signing this ce | rtificate neither | the Inspe | ector nor his |
| employer make | s any v | warranty, | expressed or impli | ied, concerning the p | oressure vessel descr | bed in this | Manufaci | turer's Data Repo | rt.Furthermore | , neitherth | reinspector |
| nor ms employ | ersnall | oe liable | in any manner tor (/ | any personal injury | or property damage | or a loss o | of any kind | arising from or | connected with | this insp | ection. |
| Date | -97 | Sigr | and W | 1911 Pulmen | 00 4 . | | | | / ~~~ | | |
| | | _ 0.9, | | uthorized Inspector) | | mmission | | 16813-14 | 1.8/5 | | |
| | | | | | | 34.00 | • | l Board incl. end | orsement, Stat | e, Provinc | ce and No.) |
| We certify that | the stat | ementso | n this report are con | rect and that the fiel | F FIELD ASSEMB d assembly construc | LY COM | PLIANC | E | | | |
| Code, Section | VIII, Di | vision 1. | and reportance con | ncctand that thener | d assembly constitue | uon or all j | parts of thi | s vessei contorn | iswith the requ | irements o | OT ASME |
| U Certificate of | | - | a. | | Expires | | | | . 19 | | - |
| _ | | | **** | | | | · | | . , 13 | · | |
| Date | | Name | | (Assembler) | | Signe | ed | | | | |
| | | | CI | | FIELD ASSEMBLY | INSDE | CTION | (Represe | ntative) | | |
| l the undersian | ad bai | ldina a ua | | | | | | | | | |
| and employed t | eu, no | iuing a va | ilia commission iss | sued by The Nationa | Board of Boiler and | Pressure | Vessel in | spectors and the | State or Prov | ince of _ | |
| , , | • | ntemonto | in this Manufacture | | | | of _ | | | | |
| nave compared | 1110 211 | atements | iii uiis ivianuractur | ers Data Report With | h the described press | ure vess | el and stal | te that parts refe | rred to as data | items | |
| and belief the ! | danufa | cturer ha | not inc | accombled this =: | ate of shop inspection | , nave be | en insped | ted by me and to | o the best of m | y knowled | ige |
| was inspected : | viatiuid And cul | oterted to | s constructed and a hydrostatic test | | sure vessel in accord | | | | | | |
| | | | | | il. By signing this cert | incate ne | ither the Ir | nspector nor his | employer make | es any wa | rranty, |
| be liable in any | Waune 'P''ou' | er for any | nersonal injury or : | osei ueschbed in (Nis | s Manufacturer's Data a loss of any kind ari | Report. | rurthermo | ore, neither the li | nspector nor hi | s employe | er snait |
| | | or any | porsonal injury Of | Property dantage of | a ioss of any kind ari | ang trom | or connec | cea with this ins | pection. | | |
| Date | | Signed | | and the second s | Commissi | ons _ | 45 754 744 | Min. | | | |
| | | | (Au | th d Inspector) | | | at'l Boan | ી. endorseme | nt, State, Prov | ince and h | No.) |

42412-4914 DVT-300-D Page 2 of 2

FORM U-4 MANUFACTURER'S DATA REPORT SUPPLEMENTARY SHEET - As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

| Manufactured an | nd ce | ertified by | Littleford Day, I | nc. 7451 Empire | | 128, Florense and addr | | | | | | |
|---------------------------------------|--------------|--------------|------------------------|---------------------|---|------------------------|-------------------|------------------|--|--------|--|--|
| 2. Manufactured fo | r | B.F. G | oodrich, P.O. Box | 41256, Brecksvil | | and address | of purcha | ser) | | | | |
| Location of insta | llatio | on E | 3.F. Goodrich, 992 | l Brecksville Ro | ad, Brecksville, | OH 441 | 41 | | | | | |
| | | | | T 1 1 1 7 7 | (name and addre | | | | 13323 | | | |
| 4. Type: <u>Horiz</u> | ont | al | | Jacketed Ves | | | (mfg's serial no. | ` | | | | |
| | | (horiz., ver | t., or sphere) | • | or, heat exh., etc.) 000927 | | | 1584 | (Illig a sellar no. | | 1997 | |
| | | | | | | (Nat'l. 8d. no.) | | ıitt) | | | | |
| | | (CRN) | | (di | awing no.) | | | (marin out many | | | | |
| Data Rep Item Nun | | | | | Remark | s | | | | | | |
| 19. Nozzles, inspec | ction | , and safet | y valve openings: | | | | | | | | | |
| Purpose (inlet, | <u> </u> | Diameter | Flange | Mat | erial | Nozzle T | nickness | Reinforcement | How Attac | hed | Location | |
| Outlet, Drain, etc.) | No. | | Туре | Nozzle | Flange | Nom. | Соп. | Material | Nozzle | Flange | (Insp. Open) | |
| Drain Port | 1 | 1" | CL #150 LWN | SA182-316 | 44444 | .500 | Nil | Inherent | UW16.1(c) | | Drum | |
| Thermowell | 1 | 3/4" | CPLG | SA479-316 | , | .257 | Nil | Inherent | UW16.1(c) | | Drum | |
| Mount | | | | | | | | | | | | |
| Liquid Feed | 1 | 1" | CPLG | SA479-304 | | .375 | Nil | Inherent | UW16.1(c) | ***** | Drum | |
| Shaft Access | 2 | | | Machined | Intergrally | | | Inherent | ************************************** | 2.4(0) | Heads | |
| Inlet/Outlets | 6 | 1 1/2" | CL #150 FLG | SA312-316 | SA182-316 | .145 | Nil | Inherent | UW16.1(c) | 2-4(9) | Jacket +3 | |
| Inlet/Outlets | 8 | 1/2" | CPLG | SA182-316 | | 3000# | Nil | Inherent | UW16.2(L) | | *4 | |
| Vents | 4 | 3/8" | Thr'd | SA240-316 | | | Nil | Inherent | - | | | |
| | | | | | .: | | | | | | | |
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| | | | | | 1,193 | Charle | es <u>Jar</u> | . 30 | /,19_ <u>98</u> | 1 | 1 | |
| Certificate of Auth | onz: | ation: | Type <u>U</u> | No | 1,193 | Expir | es <u>Jan</u> | | $\frac{1}{2}$ | 1// | 7 | |
| Date 7/ | <u> </u> | 97 | Name <u>Littleford</u> | Day, Inc. | | | Signe | ed <u>fall</u> | (representati | Lut | | |
| Dale | 7- | 1-97 | | (manufactur Name | M Edona | UJ. | ommissic | on | 1B-14. | 875 | | |
| | | <u> </u> | | | ithorized Inspector) | | | (Nat'l, Board in | nci. endorsøment | | | |
| | | | • | ν, | | | | | | RR 10 | J67.4 | |



