Supplemental Material

FIXED COSTS

Vendor	Item	Quantity	Unit Price	Extended Price
PC Connection	Lenovo ThinkPad Edge:2.53GHz Core i5 15.6in display.	1	$599.00	$599.00
New Era Pumps	Syringe Pump	1	$495.00	$495.00
	OEM starter kit	1	$25.00	$25.00
Torrey Pines Electric	Thermoeletric shaking dry bath	1	$2,164.60	$2,164.60
	custom heat block	1	$407.57	$407.57
National Instruments	LabVIEW Full Development System	1	$2,699.00	$2,699.00
	CompactDAQ Chassis	1	$259.00	$259.00
	USB cable with locking screw, 1 M	1	$20.00	$20.00
	Dsub terminal block for screw terminal connectivity to 37 pin Dsub C Series modules	1	$129.00	$129.00
	32-Channel 24 V, 500 us Sourcing Digital Output Module	1	$329.00	$329.00
	USB-232/2, 2-Port USB to RS-232 Converter	1	$349.00	$349.00
Digi Key	Aluminum Box 5 X 4 X 3 Gray	1	$13.40	$13.40
	DSUB 37 M G T	1	$8.88	$8.88
	DSUB 37 F SOD G T	1	$17.22	$17.22
	PC Board .1"SP 3X3.5 Single Side	1	$5.75	$5.75
	Standoff RD 6-32THR .750"L Aluminum	4	$0.45	$1.80
	Diode STD REC 1A 1000V DO-41	20	$0.32	$6.32
	Pwr Supply 24V 50W	1	$53.43	$53.43
	Conn Powerjack Solder W/HDWR	1	$3.52	$3.52
	Capacitors TANT 22UF 50V 10% RADIAL	2	$6.08	$12.16
Burkert	Solenoid Valves	15	$124.44	$1,866.60
McMaster-Carr	Steel Workbench Pegboard	1	$272.22	$272.22
	Shelf, 4-3/4" Projection	2	$12.75	$25.50
	Zinc-Plated Steel Pegboard Hook Multi Clip	1	$3.93	$3.93
	Zinc-Plated Steel Pegboard Hook Multi Prong	2	$1.54	$3.08
	Zinc-Plated Steel Pegboard Hook Spring Clip	1	$12.34	$12.34
	Easy-to-Form Impact-Resistant ABS Rect Bar3/4" Thick	1	$26.26	$26.26
	Easy-to-Form Impact-Resistant ABS Sheet 1/2" Thick	1	$49.52	$49.52
		TOTAL FIXED COST		**$9,858.10**

QUARTERLY COSTS

Manufacturer	Item	Quantity needed per Quarter	Price	Extended Price
Supleco	Teflon Tubing (50 feet)	1	$42.00	$42.00
Supleco	Teflon Fittings	40	$0.85	$34.00
		TOTAL QUARTERLY COSTS		**$76.00**

OPERATING COSTS- (PER DOSE)

Manufacturer	Item	Quantity needed per dose	Price	Number of units within packaging	Extended Price
B Braun	0.22µ Nylon Filter - 47 mm	1	$134.25	50	$2.69
B Braun	0.2µ Vented Sterilizing Filter	1	$150.00	50	$3.00
B Braun	Filter Straw	1	$38.91	100	$0.39
Hospira	Male/Female Sterile Cap	1	$0.24	1	$0.24
Hospira	10 mL Sterile Vial	1	$14.50	50	$0.29
Spectrum	Dehydrated alcohol (Ethanol), USP (mL)	1	$56.37	500	$0.11
Waters	C18 Sep-Pak Plus cartridge	1	$168.00	25	$6.72
CLAVE	Vial Adapter	1	$2.11	1	$2.11
HSW	10mL Syringe	1	$17.00	100	$0.17
Sigma	Sterile water for irrigation, USP (SWirr)	10	$1.31	1500	$0.01
Sigma	Sterile Water High Purity (SWI), USP	20	$30.05	500	$1.20
Sigma	0.9% Sodium Chloride for Injection, USP	1	$9.50	25	$0.38
Sigma	1M Hydrochloric acid - 2mL	1	$145.50	10	$14.55
			TOTAL COST PER DOSE		**$31.86**

Timelist 1: DOTATOC Production

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5     Heat/Cool  100   Set heater to 100 degrees
6     Heat/Cool  100   Safe check that has heater has turned on
15    Inject     1     Purge line to V1
50    V1    On   Open line to generator
55    Inject     0.5   (F1) to waste
90    V7    On   Open vent to reactor
95    V2    On   open pathway to reactor
100   Inject     6.0   (F2)
285   V2    Off  close pathway to reactor
290   V1    Off
295   Mix   5    Turn on Mix
895   Heat/Cool  25    Set heater to 25 degrees
955   Mix   0    Turn off mixing
960   V11   On   Open pathway to SPE
965   V6    On   Flip valve from SV1 to SV2
970   V7    Off  Close Vent to reactor
975   V5    On   Open N2 to H20
980   V3    On   Open N2
1040  V5    Off  Close N2 to H20
1045  V6    Off  Close H20 to Reactor
1050  V11   Off  Close pathway to SPE
1055  V12   On   Open SPE to Product Vial
1060  V3    Off  Close N2 supply
1065  V8    On   Open pathway to Ethanol
1068  V8    off
1090  V8    On   Open Pathway to Ethanol
1095  V3    On   Open N2 supply
1120  V8    Off  Close pathway to Ethanol
1125  V10   On   Open pathway to Vial 4 Saliene
1130  V9    on   Open N2 to Saliene
1190  V3    off  Close N2 supply
1195  V12   off  Close V12
1200  V10   off  close V10
1205  V9    off  Close v9
1230  STOP
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Timelist 2: DOTATOC Cleaning

```
5     Inject     2     Purge line to V1 (air only)
10    Heat/Cool  50    Turn heater on
11    Heat/Cool  50    Turn heater on
70    V1    On   Open elution line to waste1
75    Inject     2     Purge line to waste1
135   V2    On   Open line to reaction vial
136   V7    On   Open Vent to reactor
140   Inject     2     Purge line to Reaction Vial
205   V1    Off  Close V1
206   V2    Off  Close V2
207   V7    Off  Close Vent
208   V11   On   Open reactor to waste
210   V4    On   Open Nitrogen path to vial1
210   V3    On   Open Nitrogen
400   V4    Off  Close Nitrogen path to Vial1
405   V6    On   Open Nitrogen path from Vial2 to Reactor
406   V5    On   Open Nitrogen path to Vial2
600   V5    Off  Close Nitrogen path through Vial 2
601   V6    Off  Close V6
602   V11   Off  Close Path
603   V8    On   Open V8 (vial3)
800   V8    Off  Close V8
801   V10   On   Open Pathway to waste
802   V9    On   Open V9 (Vial4)
825   V12   On   Open pathway to product vial
1000  V9    Off  Close V9
1001  V10   Off  Close V10
1002  V12   Off  Close V12
1003  V3    Off  Close nitrogen
1010  Heat/Cool  25    Turn heater to 25 degrees, off.
1015  STOP
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Timelist 3: DOTATOC Cleaning and Extended Drying

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5     Inject     2     Purge line to V1 (air only)
10    Heat/Cool  50    Turn heater on
11    Heat/Cool  50    Turn heater on
70    V1    On   Open elution line to waste1
75    Inject     2     Purge line to waste1
135   V2    On   Open line to reaction vial
136   V7    On   Open Vent to reactor
140   Inject     2     Purge line to Reaction Vial
205   V1    Off  Close V1
206   V2    Off  Close V2
207   V7    Off  Close Vent
208   V11   On   Open reactor to waste
210   V4    On   Open Nitrogen path to vial1
210   V3    On   Open Nitrogen
400   V4    Off  Close Nitrogen path to Vial1
405   V6    On   Open Nitrogen path from Vial2 to Reactor
406   V5    On   Open Nitrogen path to Vial2
600   V5    Off  Close Nitrogen path through Vial 2
601   V6    Off  Close V6
602   V11   Off  Close Path
603   V8    On   Open V8 (vial3)
800   V8    Off  Close V8
801   V10   On   Open Pathway to waste
802   V9    On   Open V9 (Vial4)
803   V12   On   Open pathway to product vial
1000  V9    Off  Close V9
1001  V10   Off  Close V10
1002  V12   Off  Close V12
1003  V3    Off  Close nitrogen
1010  Heat/Cool  25    Turn heater to 25 degrees, off.
1015  STOP
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