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Escherichia coli

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-/)%)\$"+&- '1234'>8:9#"790:"#"'')-&\$/>7&-/'*?/0.:&'=@A9')\$&&-'. \$'78&'\$:&%/ #/*':+'*"%+))B'
#&789-'(')'#9-/?/&'")89(*/*'7"<%&'C'79')89:7&*78&'&7&*7/9*7/#&'79'CD'#/*'.7&)%'E/0.:&'C'
:&\$:&)&*7)'78&'1234'>8:9#"790:"# '9<7'/*&- '(/78'78&'#9-/?/&- '#&789-@''

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BC'D&5*0=+& >+I&"2I&E&&">%3*2+30+\$%&"2I&BC'D&5*0=+& >+IC&'FB&=&=& >*4=2&G". &4. %IC&&

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HG'	G@H'	HG'	IG'
HG@G='	G@H'	J'	KJ'
HD@G='	G@H'	J'	KJ'
HD@GC'	G@H'	=GG'	G'
LC@G='	G@H'	=GG'	G'

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BC'D&5*0=+& >+I&"2I&E&&">%3*2+30+\$%&"2I&BC'D&5*0=+& >+IC&'FB&=&=& >*4=2&G". &4. %IC&&

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G@MG'	G@D'	KJ'	J'
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D@JG'	G@D'	CJ'	IJ'
I@GG'	G@D'	J'	KJ'
M@JG'	G@D'	KJ'	J'

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G".k4.%Ikk"21k3*3"\$k042k3+=%kG".k.JHCB'k=+243%kG+3-k3-%k5\$*GkO"3%k*5kBCK=\$k,%Ok=+243%k

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>*\$4=2kG".k4.%Ik"21k3*3"\$k042k3+=%kG".kMCFk=+243%kG+3-k3-%k5\$*GkO"3%k*5kBCN=\$k,%Ok=+243%k

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A8&')89:7' # &789-' (")'7:"*)?&::&- '79'2:&\$5N234'79'8";&'78&':&7&*7/9*'7/#&'9?'CD' #/* .7&'")'
 -/) \$%" +&- '/*'7" <%&'H@'48:9# "790:" # '0?/0. :&'HP')89 (&- '78"7'>&:7"/*'>9# \$9* &*7)'9?'78&')" # \$%&'
)"7. : "7/*0'78&' -&7&>79: @'A9'0&7'78&'099- '-&7&>79: ':&)\$9*)&B'?%9 ('>&%%' (") '>8"*0&- '79'9* &' (/78'
 G@J # # '\$"78'%&*078@'A8&'>8:9# "790:" # '9<7"/* &- ' (/78'*& ('?%9 ('>&%%B'?/0. :&'LB')89 (&- '*9'
)"7. : "7/9*'9?' -&7&>79: '<. 7'78&'\$&"Q' - .&'79'"7&:'&% .7/*0'>9# \$9* &*7)'0 (8/>8"" :&'9. :.)" # \$%&)'9?'
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I+..*\$Q%I&+2&NBDSQTQUk ">%3*2+30+\$%k+2&G"3%0k "2I&>%230+54/%I&5*0&F&=+243%. &"3k 'HBB&V/C&
62I+..*\$Q%I&. "=, \$%. &k. %, "0"3%I&". &\$*G%0&\$ "<%0&G". &+. *\$ "3%I& "53%0&5+Q%&0*42I. &*5&G". -+2/0&
"2"\$<W%I& "2I&5*42I&3* &>*23" +2&2* &*0&Q%0<&\$+33\$%&*40k. "=, \$%. &*5&+23%0%. 3C&

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.\$\$&:'). \$&:*"7"*7%" +&:'?&:'?9.:':9. *-)'9?' (")8/*0B'/7' (")'78&* '\$.:/?/&-'.)/ *0'2:&\$5N234@'
T":/9.)?:">7/9*)' (&:&'>9%%&>7&- "'*-' (&:&'%"9"'%"%+, &- '9*78&'%"%+7/>"%' 1 2 3 4 5 6 !'79'
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G". \times 4.%IC \times Y"0+*4. \times 50">3+*2. \times G%0% \times >* \times \times >3%I \times 3* \times "2"\$<W% \times *2 \times "2"\$<3+>" \times 6789:) ;C \times \times

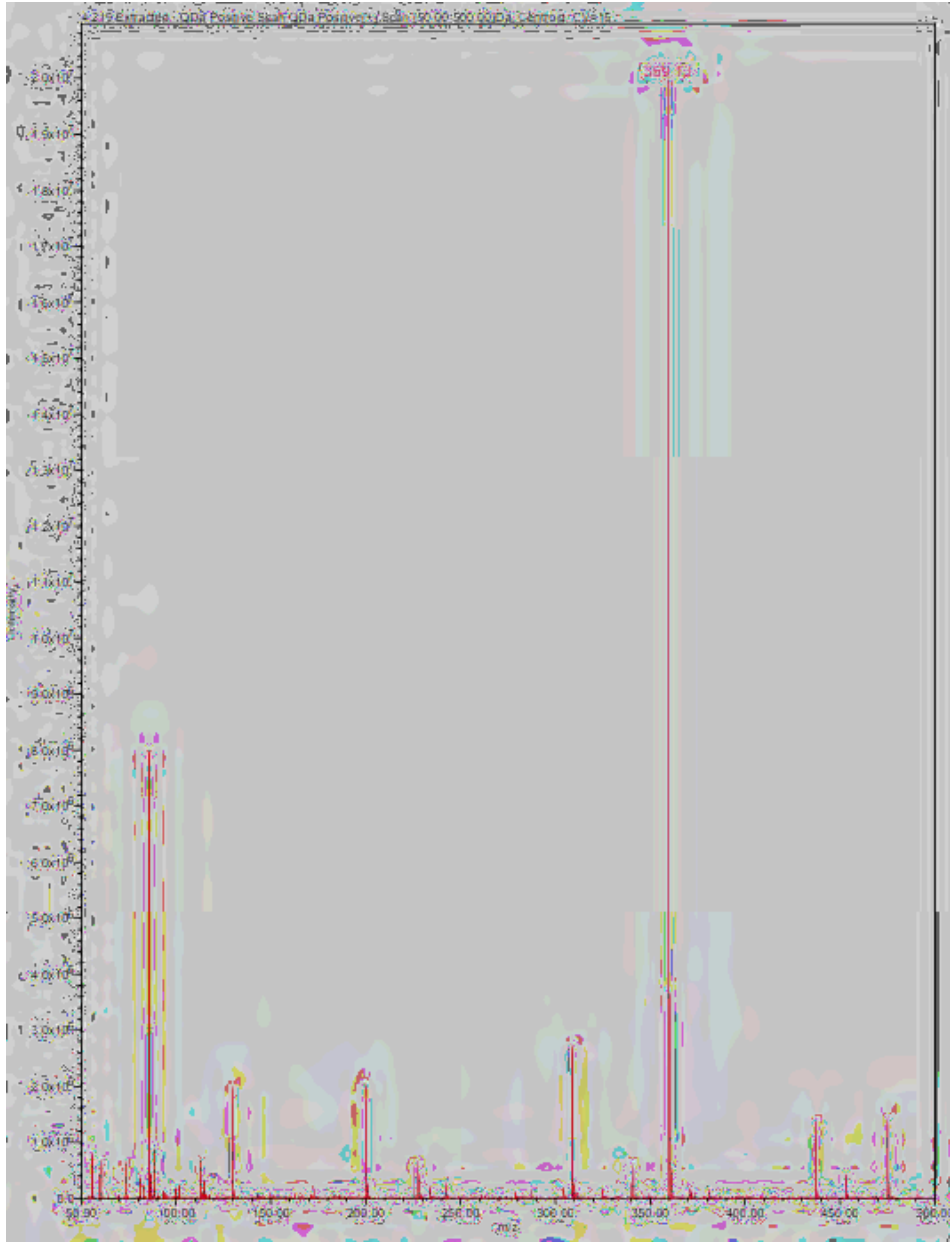
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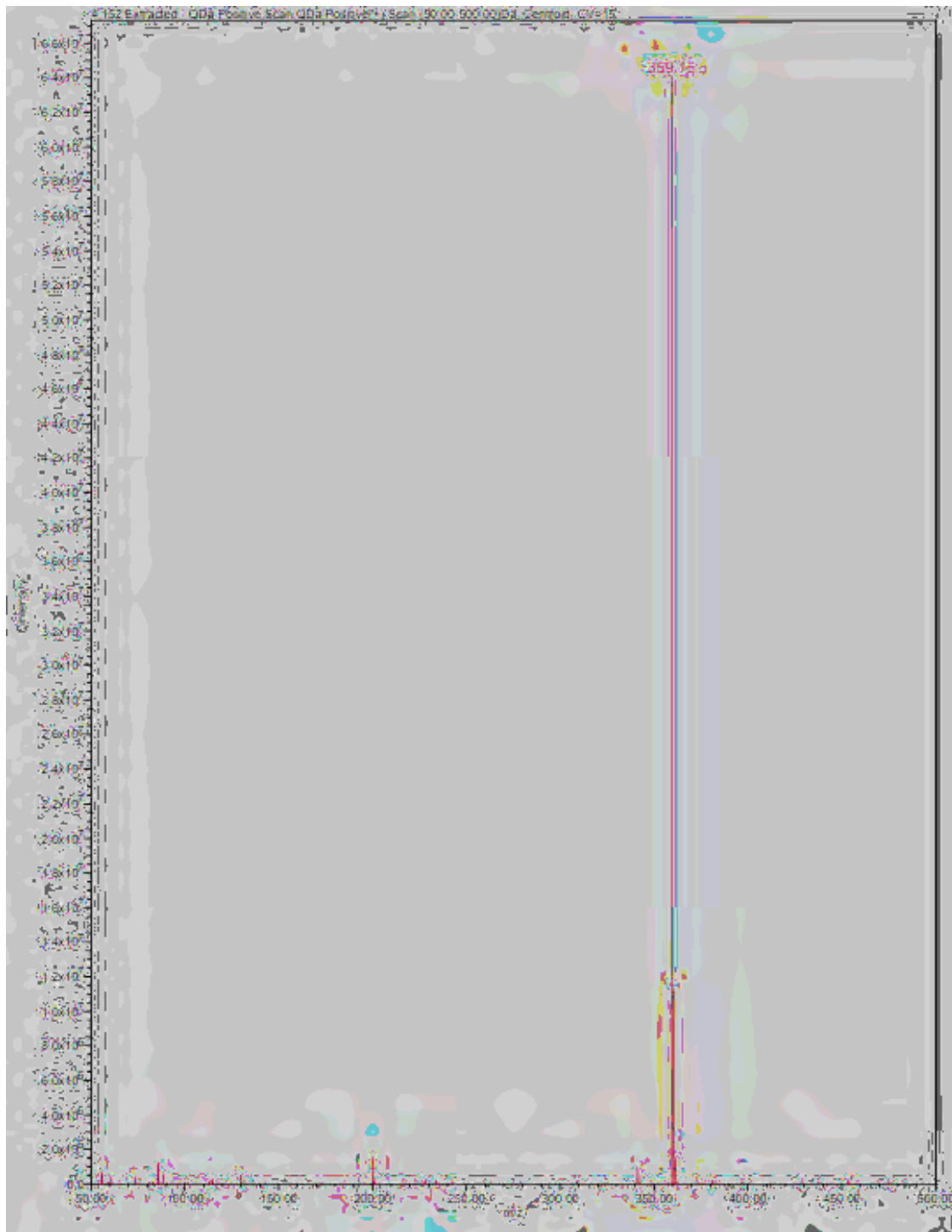
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$I + 40\% \text{ of } (I) ; I. , \% > 30\% \text{ of } V_{30} > 3\% I_{50} * = 50\% > 3 * 2 \text{ of } I * 5 \text{ of } * = , * 421 \text{ of } G + 3 - \text{ of } 0\% 3\% 23 + * 2 \text{ of } 3 + \% \text{ of } * 5 \text{ of } JCHH \text{ of}$
 $= + 243\% \text{ of } I$

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I+/40%k



$I + / 40\%k''(k)$; $k, \% > 30\%V30'' > 3\%I \& 50 * = \& 50'' > 3 + * 2 \& H \& * 5 \& > * = , * 42 I \& G + 3 - \& 3 - \% \& 0 \% 3 \% 2 3 + * 2 \& 3 + = \% \& * 5 \& JCHM' \&$
 $= + 24 3 \% \& k$

$I + / 40\% k' H(k) ; k. , \% > 30'' k \% V 30'' > 3\% I k 50'' = k 50'' > 3 + * 2 k H k * 5 k > * = , * 4 2 1 k G + 3 - k 3 - \% k 0 \% 3 \% 2 3 + * 2 k 3 + = \% k * 5 k J C J F X k$
 $= + 2 4 3 \% C k$

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$I + \frac{40}{100} J(k) ; k. , \% > 30 " k \% V 30 " > 3 \% I k 50 * = k 50 " > 3 + * 2 k K k * 5 k > * = , * 4 2 1 k G + 3 - k 3 - \% k 0 \% 3 \% 2 3 + * 2 k 3 + = \% k * 5 k J ' F [k$
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I+/40%k 'X(k) ; k. , %>30" &%V30">3%I&50*=&50">3+*2&J& *5&>* = , *42I&G+3 - &3 - %&0%3%23+*2&3+=%&k*5&.JCJH[&
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$I + /40\% \text{ ' } [(\text{ \& }) ; \text{ \& } . , \% > 30 \text{ " \& \% V30 \text{ " } > 3\% I \& 50 * = \& 50 \text{ " } > 3 + * 2 \& J \& * 5 \& > * = , * 42 I \& G + 3 - \& 3 - \% \& 0 \% 3 \% 2 3 + * 2 \& 3 + = \% \& * 5 \& FCBNN \&$
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$I + /40\% \text{H}'(k) ; k. , \% > 30'' \text{V}30'' > 3\% I \text{d}50^* = \text{d}50'' > 3+ *2 \text{d}F \text{d}^* 5 \text{d} > * = , *421 \text{d}G+3 - \text{d}3 - \% \text{d}0\%3\%23+ *2 \text{d}3+ = \% \text{d}^* 5 \text{d} \text{FCBJF} \text{d}$
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 \$.:/?/>"7/9*'79)\$&&-'. '\$78&' '*"%+)/B' (&'& ;&%9\$&-')89:7' # &789-'9*' '*"%+7/>"%' 1 2 3 4 5 6 !'E/*"%'
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