yield\_factors\_R

factors<-function(){

##reading tables and obtaining the tidy data set

OvW\_table<-read.csv("z) OvW Plant Wk.csv")

##View(OvW\_table)

y\_by\_wk<-read.csv("Copy Of 3 2) Y by week.csv")

##View(y\_by\_wk)

col\_ovw<-gsub("\\.","",colnames(OvW\_table))

col\_ovw<-gsub("^SumOfSumof","",col\_ovw)

colnames(OvW\_table)<-col\_ovw

col\_y<-gsub("\\.","",colnames(y\_by\_wk))

##View(col\_y)

colnames(y\_by\_wk)<-col\_y

colnames(y\_by\_wk)<-gsub("\_","",colnames(y\_by\_wk))

ovw\_y<-merge(OvW\_table,y\_by\_wk,by.x=c("WeekC","Location"),by.y=c("WeekC","Location"))

write.csv(ovw\_y,"ovw\_y.csv")

##ovw\_y1<-sapply(select(ovw\_y,-1,-2,-3,-7),parse\_number) ##does not do what I want

ovw\_y0<-select(ovw\_y,-1,-2,-3,-7)

ovw\_y1<-data.frame()

for(i in 1:nrow(ovw\_y0)){

for(j in 1:ncol(ovw\_y0)){

ovw\_y1[i,j]<-parse\_number(ovw\_y0[i,j])

}}

names(ovw\_y1)<-names(ovw\_y0)

ovw\_y2<-as.data.frame(cbind("date"=(as.character(ovw\_y[,1])), "location"=as.character(ovw\_y[,2]), "loctype"=as.character(ovw\_y[,3]),"locnav"= as.character(ovw\_y[,7]),ovw\_y1))

write.csv(ovw\_y2,"ovw\_y2.csv")

## colnames(ovw\_y2)

##[1] "date" "location" "loctype" "locnav"

##[5] "Overwpounds" "Totalpounds" "OvW" "PSWkY"

##[9] "CRWkY" "TOTWkY" "PSFriedLbsTot" "PSLbstot"

##[13] "PSWSeasLbsTot" "CRFriedLbsTot" "CRLbsTot" "AllFGLbsTot"

##[17] "Cheeselbs" "PSWLb" "CRWLb"

##Add the new calculated variables

ovw\_yn<-mutate(ovw\_y2, PS\_FG\_OvW= (PSLbstot)\*(1+(OvW)/100), PS\_Oil\_to\_Y\_PS=(PSLbstot)-(PSFriedLbsTot), PS\_OvW\_Oil\_to\_Y= (PS\_FG\_OvW)- (PSFriedLbsTot)+ (PSWLb), CR\_FG\_OvW= (CRLbsTot)\*(1+(OvW)/100), CR\_Oil\_to\_Y\_CR=(CRLbsTot)-(CRFriedLbsTot), CR\_OvW\_Oil\_to\_Y= (CR\_FG\_OvW)-(CRFriedLbsTot)+ (CRWLb), OilConFctPS= (PSWkY)-1+(Overwpounds)/(PSFriedLbsTot)+(PSWLb)/(PSFriedLbsTot), OvWFctPS=-(Overwpounds)/(PSFriedLbsTot), WFctPS=-(PSWLb)/(PSFriedLbsTot),OilConFctCR= (CRWkY)-1+(Overwpounds)/(CRFriedLbsTot)+(CRWLb)/(CRFriedLbsTot), OvWFctCR=-(Overwpounds)/(CRFriedLbsTot), WFctCR=-(CRWLb)/(CRFriedLbsTot))

write.csv(ovw\_yn,"ovw\_yn.csv")

##split in two tables, PS and CR

ovw\_yn\_ps<-subset(ovw\_yn,subset=grepl("PS",ovw\_yn$loctype),select=!grepl("CR",colnames(ovw\_yn)))

ovw\_yn\_cr<-subset(ovw\_yn,subset=grepl("CR",ovw\_yn$loctype),select=!grepl("PS",colnames(ovw\_yn)))

##a<-subset(ovw\_yn\_ps,as.character(ovw\_yn\_ps$date)=="02-Sep-18")

##convert to date and sort

aa<-arrange(mutate(ovw\_yn\_ps,date1=dmy(date)),desc(date1))

aa$date<-ymd(as.Date(aa$date,"%d-%b-%y"))

bb<-arrange(mutate(ovw\_yn\_cr,date1=dmy(date)),desc(date1))

bb$date<-ymd(as.Date(bb$date,"%d-%b-%y"))

write.csv(aa,"aa.csv")

write.csv(bb,"bb.csv")

##plot charts

dev.new()

plot(filter(aa,location=="CAL")$date,filter(aa,location=="CAL")$OilConFctPS,type="l",lwd=2,col="pink",main="Oil absorption as contribution to PS yield",ylab="",xlab="Date",ylim=c(0,max(aa$OilConFctPS)))

points(filter(aa,location=="TX")$date,filter(aa,location=="TX")$OilConFctPS,type="l",col="green")

points(filter(aa,location=="OH")$date,filter(aa,location=="OH")$OilConFctPS,type="l",col="blue")

points(filter(aa,location=="CHI")$date,filter(aa,location=="CHI")$OilConFctPS,type="l", lwd=2,col="orange")

points(filter(aa,location=="COI")$date,filter(aa,location=="COI")$OilConFctPS,type="l", lwd=1,col="red")

points(filter(aa,location=="MEX")$date,filter(aa,location=="MEX")$OilConFctPS,type="l",col="purple")

legend("bottom",lty=1:1,col=c("pink","green","blue","orange","red","purple"),legend=c("CAL","TX","OH","CHI","COI","MEX"),ncol=3,lwd=2)

abline(h=0.1,col="lightgray",lwd=1,lty="dotted")

abline(h=0.2,col=" lightgray ", lwd=1,lty="dotted")

abline(h=0.3,col=" lightgray ", lwd=1,lty="dotted")

abline(h=0.4,col=" lightgray ", lwd=1,lty="dotted")

abline(h=0.5,col=" lightgray ", lwd=1,lty="dotted")

dev.new()

plot(filter(bb,location=="CAL")$date,filter(bb,location=="CAL")$OilConFctCR,type="l",lwd=2,col="pink", main="Oil absorption as contribution to CR yield",ylab="",xlab="Date",ylim=c(min(bb$OilConFctCR),max(bb$OilConFctCR)))

points(filter(bb,location=="TX")$date,filter(bb,location=="TX")$OilConFctCR,type="l",col="green")

points(filter(bb,location=="OH")$date,filter(bb,location=="OH")$OilConFctCR,type="l",col="blue")

points(filter(bb,location=="CHI")$date,filter(bb,location=="CHI")$OilConFctCR,type="l", lwd=2,col="orange")

points(filter(bb,location=="COI")$date,filter(bb,location=="COI")$OilConFctCR,type="l", lwd=1,col="red")

points(filter(bb,location=="MEX")$date,filter(bb,location=="MEX")$OilConFctCR,type="l",col="purple")

legend("bottomleft",lty=1:1,col=c("pink","green","blue","orange","red","purple"),legend=c("CAL","TX","OH","CHI","COI","MEX"),ncol=3,lwd=2)

abline(h=-0.05,col="lightgray",lwd=1,lty="dotted")

abline(h=-0.1,col=" lightgray ", lwd=1,lty="dotted")

abline(h=-0.15,col=" lightgray ", lwd=1,lty="dotted")

abline(h=-0.2,col=" lightgray ", lwd=1,lty="dotted")

abline(h=-0.25,col=" lightgray ", lwd=1,lty="dotted")

##grid (nx=0,ny=NULL, lty = 1, col = "cornsilk2")

}

plot(1, type="n", xlab="", ylab="Oil absorption factor", xlim=c(min(aa$date),max(aa$date)), ylim=c(0, max(aa$OilConFctPS)),xaxt="n")

>

##ovw\_yn1<-ovw\_yn[,ovw\_yn$loctype %in% row.names(ovw\_yn)]

##d1[row.names(d1) %in% row.names(d2),]

thing<-"mutate(ovw\_y2, PS\_FG\_OvW= parse\_number(PSLbstot)\*(1+parse\_number(OvW)/100), PS\_Oil\_to\_Y\_PS=parse\_number(PSLbstot)-parse\_number(PSFriedLbsTot), PS\_OvW\_Oil\_to\_Y= parse\_number(PS\_FG\_OvW)- parse\_number(PSFriedLbsTot)+ parse\_number(PSWLb), CR\_FG\_OvW= parse\_number(CRLbsTot)\*(1+parse\_number(OvW)/100), CR\_Oil\_to\_Y\_CR=parse\_number(CRLbsTot)-parse\_number(CRFriedLbsTot), CR\_OvW\_Oil\_to\_Y= parse\_number(CR\_FG\_OvW)-parse\_number(CRFriedLbsTot)+ parse\_number(CRWLb), OilConFctPS= parse\_number(PSWkY)-1+parse\_number(Overwpounds)/parse\_number(PSFriedLbsTot)+parse\_number(PSWLb)/parse\_number(PSFriedLbsTot), OvWFctPS=-parse\_number(Overwpounds)/parse\_number(PSFriedLbsTot), WFctPS=-parse\_number(PSWLb)/parse\_number(PSFriedLbsTot),OilConFctCR= parse\_number(CRWkY)-1+parse\_number(Overwpounds)/parse\_number(CRFriedLbsTot)+parse\_number(CRWLb)/parse\_number(CRFriedLbsTot), OvWFctCR=-parse\_number(Overwpounds)/parse\_number(CRFriedLbsTot), WFctCR=-parse\_number(CRWLb)/parse\_number(CRFriedLbsTot))"

ovw\_yn<-mutate(ovw\_y2, PS\_FG\_OvW= (PSLbstot)\*(1+(OvW)/100), PS\_Oil\_to\_Y\_PS=(PSLbstot)-(PSFriedLbsTot), PS\_OvW\_Oil\_to\_Y= (PS\_FG\_OvW)- (PSFriedLbsTot)+ (PSWLb), CR\_FG\_OvW= (CRLbsTot)\*(1+(OvW)/100), CR\_Oil\_to\_Y\_CR=(CRLbsTot)-(CRFriedLbsTot), CR\_OvW\_Oil\_to\_Y= (CR\_FG\_OvW)-(CRFriedLbsTot)+ (CRWLb), OilConFctPS= (PSWkY)-1+(Overwpounds)/(PSFriedLbsTot)+(PSWLb)/(PSFriedLbsTot), OvWFctPS=-(Overwpounds)/(PSFriedLbsTot), WFctPS=-(PSWLb)/(PSFriedLbsTot),OilConFctCR= (CRWkY)-1+(Overwpounds)/(CRFriedLbsTot)+(CRWLb)/(CRFriedLbsTot), OvWFctCR=-(Overwpounds)/(CRFriedLbsTot), WFctCR=-(CRWLb)/(CRFriedLbsTot))