

433 ReVAP Unit

ghk

Mass and composition of the contents in V1 Treater Feed drum

7/1/2019

Sample taken of the V1 contents - closest to the incident

Called P1 Feed Sample

433P1F

P1 takes suction from V1

sample ID #

707368

6/21/2019 2:00

units liq vol%			
methane	0.01		
ethylene	0		
ethane	0.01		
propane	0.9		
propylene	0.1		
isobutane	37.28		
nbutane	12.81		
butenes	40.41	T2 butene	10.58
neopentane	0	1-butene	9.58
isopentane	3.94	isobutene	12.65
npentane	0.25	C2 butene	7.61
butadiene	0.33		40.42
benzene	0		
C5 olefins	3.54		
C6 sats	0.33		
C7+	0.04		
total	99.95		
calc vapor pressure	52.8		
calc spec gravity	0.5904		

Mass / volume of liquid in V1 at time of incident:

Weight of the vessel - empty

74660 lbs

Vessel dimensions:

12 ft diameter	100% full
40 ft Tan to tan	4524 ft3
2 ellipsoidal heads	452 ft3
	4976 ft3
	37228 gallons
	886 bbls

Level in V1 at the time of the event
43LR023

53.3% level

0.54199 ---->
480 bblsHorizontal vessel at 53.3% Height/Diameter
Volume of partially filled horizontal cylinders
Table 6-52; Chemical Engineers Handbook

Mass of the liquid in V1:

98874 lbs

sp gr = 0.5904

density of water 8.3 lbs/gallon at 88 F, 43TR193 - V1 liquid temperature

density of V1 liquid 4.90032 lbs/gallon at 88 F, 43TR193 - V1 liquid temperature