Run Data Calculations

COMPANY : Antler River

LOCATION: 2-29-2-28

DAILY OIL PROD.: 1.7 m3

GOR: 60 m3/m3

TREATER PRESS(kPa): 130

H_2S MOLE FRAC.: 0.0148

TANK GOR: 60 m3/m3

SOURCE TYPE	Point
EMISSION RATE (G/S)	0.025184636
STACK HEIGHT (M)	16
STK INSIDE DIAM (M)	0.0762
STK EXIT VELOCITY (M/S)	0.2588712
STK GAS EXIT TEMP (K)	293.0000
AMBIENT AIR TEMP (K)	293.0000
RECEPTOR HEIGHT (M)	0000
URBAN/RURAL OPTION	RURAL
BUILDING HEIGHT (M).	0000
MIN HORIZ BLDG DIM (M).	0000
MAX HORIZ BLDG DIM (M)	0000

STACK EXIT FLOW RATE $m^3/s = \frac{(m^3 \text{ oil/d}) \times (\text{tank GOR}) \times (H_2S \text{ mole fraction})}{\text{sec/day}}$

EMISSION RATE g/s H_2S = Flow Rate x 1441.41 (constant for H_2S)

$S0_2$ = Flow Rate x 2709.47 (constant for $S0_2$)

STACK EXIT VELOCITY $m/s = \frac{(\text{vent gas vol. } m^3/d) \times (\text{stack height})}{\text{Stack volume}} \times \left(\frac{1}{\text{sec/day}}\right)$