

***** LIQUID SPILLS - VOLUME CALCULATIONS *****

Location of spill: WBR Federal 0005 (32.385963,-103.632578)Date of Spill: 7/3/2019Site Soil Type: Pyote & Maljamar fine sandsEstimated Daily Production Loss: 22 BBL Oil 63 BBL Water**Total Area Calculations**

Total Surface Area	width		length		wet soil depth	oil (%)
Rectangle Area #1	24 ft	X	36 ft	X	27.0 in	27%
Rectangle Area #2	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #3	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #4	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #5	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #6	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #7	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #8	0 ft	X	0 ft	X	0 in	0%

INFORMATION ONLYNo C-141/ Believed to be spill calucations for
incident# NRM1924158933Porosity 0.16 gal per gal**Saturated Soil Volume Calculations:**

		<u>H2O</u>	<u>OIL</u>	
Area #1	864 sq. ft.	1,419 cu. ft.	525 cu. ft.	
Area #2	0 sq. ft.	cu. ft.	cu. ft.	
Area #3	0 sq. ft.	cu. ft.	cu. ft.	
Area #4	0 sq. ft.	cu. ft.	cu. ft.	
Area #5	0 sq. ft.	cu. ft.	cu. ft.	
Area #6	0 sq. ft.	cu. ft.	cu. ft.	
Area #7	0 sq. ft.	cu. ft.	cu. ft.	
Area #8	0 sq. ft.	cu. ft.	cu. ft.	
Total Solid/Liquid Volume:	864 sq. ft.	1,419 cu. ft.	525 cu. ft.	

Estimated Volumes Spilled

	<u>H2O</u>	<u>OIL</u>	
Liquid in Soil:	40.4 BBL	15.0 BBL	
Liquid Recovered :	0.0 BBL	0.0 BBL	
Spill Liquid	40.4 BBL	15.0 BBL	
Total Spill Liquid:	<u>55.4</u>		

Recovered Volumes

Estimated oil recovered: 0.0 BBL
 Estimated water recovered: 0.0 BBL

Soil Type	Porosity
Clay	0.15
Peat	0.40
Glacial Sediments	0.13
Sandy Clay	0.12
Silt	0.16
Loess	0.25
Fine Sand	0.16
Medium Sand	0.25
Coarse Sand	0.26
Gravelly Sand	0.26
Fine Gravel	0.26
Medium Gravel	0.25
Coarse Gravel	0.18
Sandstone	0.25
Siltstone	0.18
Shale	0.05
Limestone	0.13
Basalt	0.19
Volcanic Tuff	0.20
Standing Liquids	