

Utah Energy Corporation
BLM Plan of Operations UTU-74631
Item G. Topsoil Pile Calculations

Areas Topsoil Calculations-Topsoil Stockpile I

Mine Yard: $220 \times 65 = 14,300 \text{ ft}^2 \times 1 \text{ ft deep} = 530 \text{ yd}^3$

Shop/Office Yard: $265 \times 70 = 18,550 \text{ ft}^2 \times 1 \text{ ft deep} = 687 \text{ yd}^3$

Waste Pile and Ore Stockpile: \emptyset
Previously removed **1217 yd³**

Calculated topsoil stockpile I
Use ellipsoid, volume x 1/2

Volume: $\frac{4}{3} a b c$
1/2 Volume: $\frac{4}{3} \frac{1}{2} a b c$

Where: $a = 10 \text{ ft}$
 $b = 50 \text{ ft}$
 $c = 40 \text{ ft}$

Volume Stockpile: $\frac{4}{3} \frac{1}{2} \times 15 \times 40 \times 30 = 41,880 \text{ ft}^3$
1551 yd³

Approximately 12 inches of soil material from a total of approximately .77 acres will be salvaged and stockpiled. The .075 area from which topsoil will be salvaged includes the Shop/Office Yard and the Mine Yard. Approximately 1,217 yd³ of soil will be stockpiled.

Areas Topsoil Calculations-Topsoil Stockpile II

Area:

Waste Pile:

Salvage veneer of red talus from slope of hill to be buried by waste disposal:

Section: 5+00W	Cut	=	373 yd ³
Section 6+00W	Cut	=	373 yd ³
Total Salvage			746 yd ³

Cover:	1 foot deep	746 x 27 ft ³ /yd	=	20,142 ft ²	=	0.41 ac
	Waste reclaimed	100 x 200	=	20,000 ft ²		

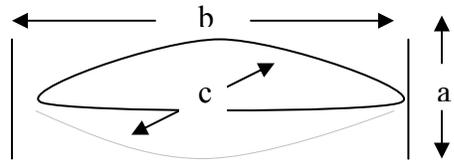
Calculated topsoil stockpile II

Use ellipsoid, volume x 1/2

Volume: $\frac{4}{3} abc$

1/2 Volume: $\frac{4}{3} \frac{1}{2} abc$

where: $a = 10 \text{ ft}$
 $b = 50 \text{ ft}$
 $c = 20 \text{ ft}$



Volume stockpile II = $\frac{4}{3} \frac{1}{2}$
 $2.095 + 10 \times 50 \times 20 / 27 = 775 \text{ yd}^3$