

Accutest Mountain States			07/06/2011 7:48	
Job Number:		D24581		
Account:		Olsson Associates		
Project:		Delta 12B Cuttings		
Project Number:				
Legend:			Hit	Exceed
Client Sample ID:		CO Soil - Oil and Gas Conservation Commission Levels (2 CCR 404-1 9/30/07) ¹	DELTA 12BSS1	DELTA 12BSS1
Lab Sample ID:			D24581-1	D24581-1A
Date Sampled:			06/17/2011	06/17/2011
Matrix:			Soil	Soil
GC/MS Volatiles (SW846 8260B)				
Benzene	ug/kg	170	ND (87)	-
Toluene	ug/kg	85000	228 J	-
Ethylbenzene	ug/kg	100000	138 J	-
Xylene (total)	ug/kg	175000	1780	-
GC/MS Semi-volatiles (SW846 8270C BY SIM)				
Acenaphthene	ug/kg	1000000	ND (330)	-
Anthracene	ug/kg	1000000	ND (370)	-
Benzo(a)anthracene	ug/kg	220	ND (540)	-
Benzo(a)pyrene	ug/kg	22	ND (750)	-
Benzo(b)fluoranthene	ug/kg	220	ND (770)	-
Benzo(k)fluoranthene	ug/kg	2200	ND (460)	-
Chrysene	ug/kg	22000	ND (460)	-
Dibenzo(a,h)anthracene	ug/kg	22	ND (770)	-
Fluoranthene	ug/kg	1000000	ND (420)	-
Fluorene	ug/kg	1000000	ND (350)	-
Indeno(1,2,3-cd)pyrene	ug/kg	220	ND (1100)	-
Naphthalene	ug/kg	23000	ND (390)	-
Pyrene	ug/kg	1000000	ND (390)	-
GC Volatiles (SW846 8015B)				
TPH-GRO (C6-C10)	mg/kg	500	33.3 J	-
GC Semi-volatiles (SW846-8015B)				
TPH-DRO (C10-C28)	mg/kg	500	672	-
Metals Analysis				
Arsenic	mg/kg	0.39	1.3	-
Barium	mg/kg	15000	1630	-
Cadmium	mg/kg	70	<2.6	-
Calcium	mg/l	-	-	12.7
Chromium	mg/kg	-	11.7	-
Copper	mg/kg	3100	20.7	-
Lead	mg/kg	400	<13	-
Magnesium	mg/l	-	-	1.25
Mercury	mg/kg	23	<0.23	-
Nickel	mg/kg	1600	14.9	-
Selenium	mg/kg	390	<13	-
Silver	mg/kg	390	<7.8	-
Sodium	mg/l	-	-	141
Zinc	mg/kg	23000	62.9	-
General Chemistry				
Chromium, Hexavalent	mg/kg	23	<0.99 ^a	-

Chromium, Trivalent	mg/kg	120000	10.9 ^b	-
Redox Potential Vs H2	mv	-	332	-
Sodium Adsorption Ratio	ratio	12	-	10.1 ^c
Solids, Percent	%	-	40.1	-
Specific Conductivity	umhos/cm	4000	569	-
pH	su	09-Jun	10.16	-

Footnotes:

^a Analysis performed at Accutest Laboratories, Marlborough, MA.

^b Calculated as: (Chromium) - (Chromium, Hexavalent)

^c Calculated as: (Na meq/L) / sqrt [(Ca meq/L)+(Mg meq/L)/2]

Regulatory limits listed in this document have been obtained from the latest version of the regulations cited and are used for advisory purposes only. Accutest assumes no responsibility for errors in regulatory documents or changes to criteria detailed in later versions of the referenced regulation. It is the responsibility of the user to verify these limits before using or reporting any data.

3 results exceeded regulatory criteria.

¹ NOTE: The criteria for Specific Conductivity is 4000 umhos/cm OR 2 x background, which must be determined by the user manually.