

### Improving Processes. Instilling Expertise.







# Mobile Crushing & Screening Canyon Rock History

Canyon Rock Sonoma County California Russian River Valley

Third generation , family Operated Since 1972

Principle One : Forestville, CA +/- 1.0 Million STPH

Cazdero Quarry : Green field Operation +/- 200k STPH

Located 10 miles Air and 20 miles road.

Material : Greywacke , Intermittent Clay seams

Support Existing Operation with Gabion and Stone As well as future secure market area, material is mostly used in Santa Rosa Area.

**Remain Cost Effective** 

Health and safety , as well as environmentally suited





## Mobile Crushing & Screening Canyon Rock History





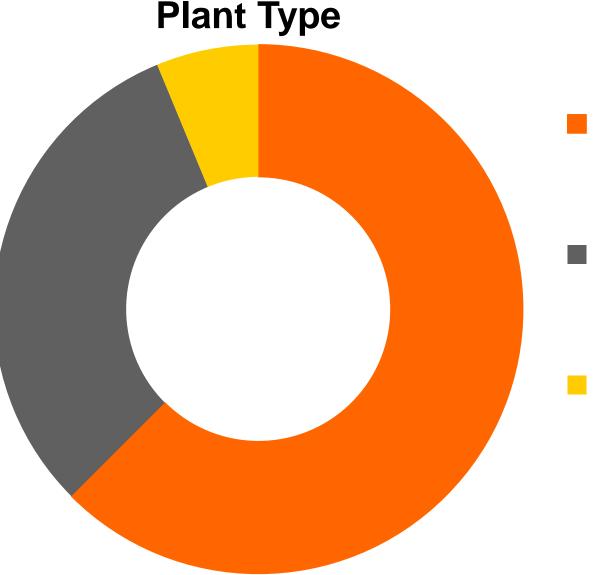


# Mobile Crushing & Screening Canyon Rock Evolution 40 years

Operated Fixed for 20 years

Decided to expand in Contracting added mobiles & recycle plant.

Decided to expand Beyond one operation





### Fixed 1972

### Mobile/Fixed 1992

Mobile 2012

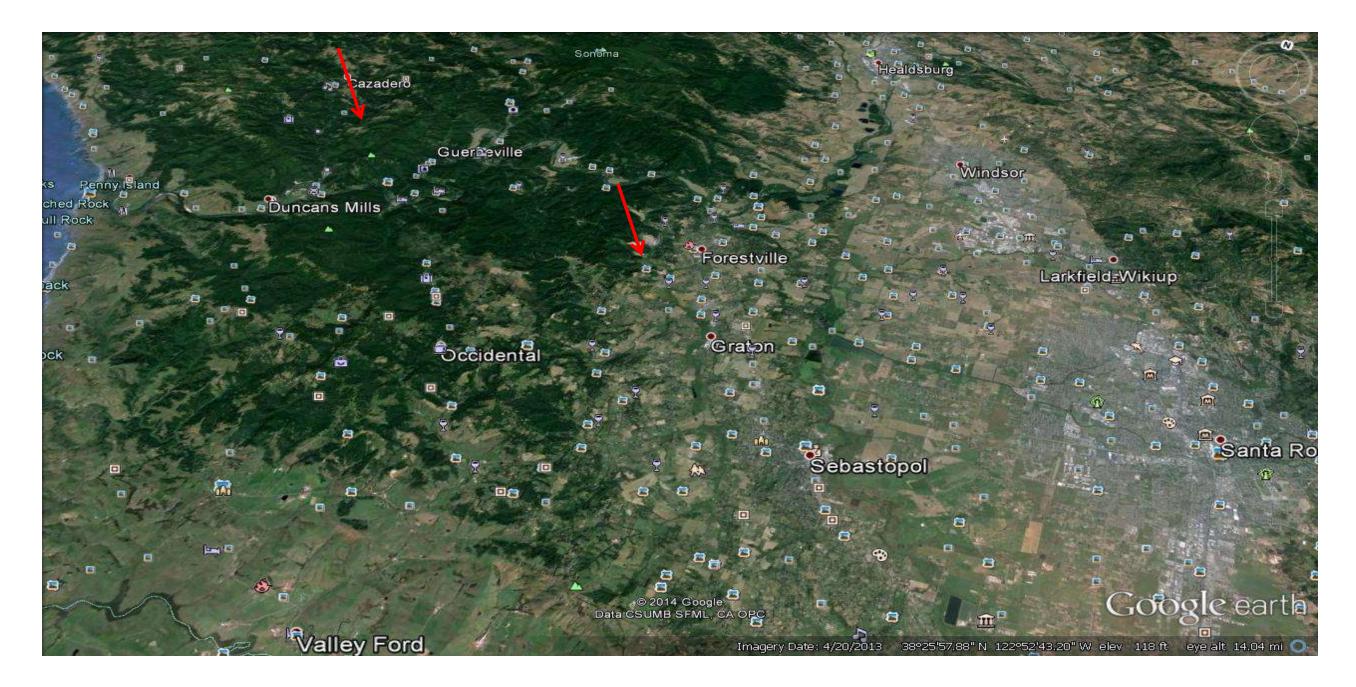
# Mobile Crushing & Screening Canyon Rock Pre-selection

Primary Large enough too Support existing facility & Future Still mobile and self contained for Contracting Crushing 10,000 Hour plus design, Reliable, Robust Pre-Screen Capability, Large side belt Low fuel Consumption, Low In Operating costs Large discharge Belt, with Magnet Good service access & Service support Rubber lined feeder for sound reduction Smooth in operation, and Sound 106 Decibels Fit Finish and overall quality Dust suppression System Pre plumbed





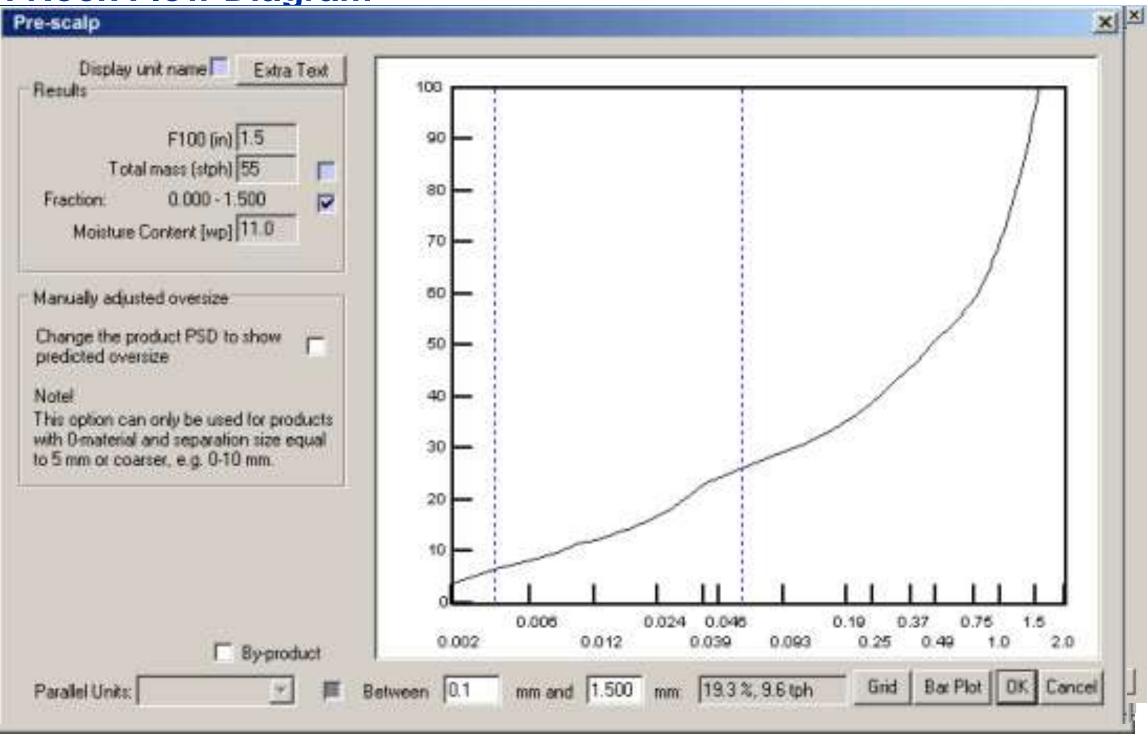
# Mobile Crushing & Screening Canyon Rock Site





# **Mobile Crushing & Screening**

### **Canyon Rock Flow Diagram**





# Mobile Crushing & Screening Canyon Rock : Site Readings Sound

### **Challenges :**

Heart of Cottage Country

Resonance from High wall

In between Mountains

**On A River** 





#### Houses 53-61db

#### Roadway 57-63 db

#### Property 75-85 db

#### Scalp Plant 91-106 db

#### Jaw Plant 91-103 db

#### **Trailer Loading 108 db**

#### **Changes :**

### Feeder liner , Truck Loading

# Mobile Crushing & Screening Canyon Rock Site Equipment

Sandvik UJ 440 Trend	950 K 6.0 GPH			
Sandvik QE 440 Scalper Screen	350 K 4.1 GPH			
Caterpillar 345 Excavator	550 K 11.0 GPH			
Caterpillar 972 Loader	400 K 4.5 GPH			
Power screen 65 Stacker	65 K 1.3 GPH			
Other Cat 980	Occasional Use			

Total Fuel Burn 27.0 – 29.0 GPH @ 350-400 TPH

Costs Gallon 4.00 X \$112.00 Hour or \$.35 Ton





# Mobile Crushing & Screening Canyon Rock Mobile Plant Advantages

Guaranteed availability at Forestville

Capability to expand product range

Self Contained , self powered , self controlled

Low investment Capital

Ability to expand beyond home market as required

Advantages over peek Power period

Capability to grow Or divest as needed





# Mobile Crushing & Screening Canyon Rock Costs Ton Comparison

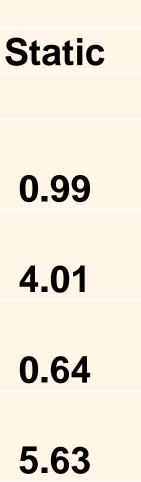
Car	yon Rock							
Туре	Т	Track		Wheel Static		tatic	Total	1400000
Plant Investment	\$	1,465,000	\$	1,485,000	\$	1,385,000	Annual	200000
Investment Costs Ton	\$	1.05	\$	1.06	\$	0.99	Hr rate	\$ 300.00
Annual Labor		2430		2304		2673	Shots	12
Mob Hrs Shot		12		24		64	Tons Shot	10000
Mob Costs	\$	43,200	\$	86,400	\$	230,400	Tons hour	350
Mob Year		144		288		768	Shots year	1(
Availability Mech.Hrs.		762		672		635	Track	75%
Labor Costs Total	\$	729,000	\$	691,200	\$	801,900	wheel	85%
Labor Costs Ton	\$	3.65	\$	3.46	\$	4.01	Static	90%
GPH		15		15		15	Track	762
Plant GPH		13		35		35	wheel	672
Total GPH		28		50		50	Static	635
Fuel Total	\$	85,344	\$	134,400	\$	127,000	Cat C18	35 gph
Fuel Costs Ton	\$	0.43	\$	0.67	\$	0.64	Fuel	\$ 4.00
Operating Costs	\$	814,344	\$	825,600	\$	928,900	Track	1:
Total Costs Per Ton	\$	5.12	\$	5.19	\$	5.63	Other	35



## Mobile Crushing & Screening Canyon Rock Costs Ton Comparison

Ca			
Туре	Track	Wheel	S
	10%		
Investment Costs Ton	1.05	1.06	
Labor Costs Ton	3.65	3.46	
Fuel Costs Ton	0.43	0.67	
Total Costs Per Ton	5.12	5.19	

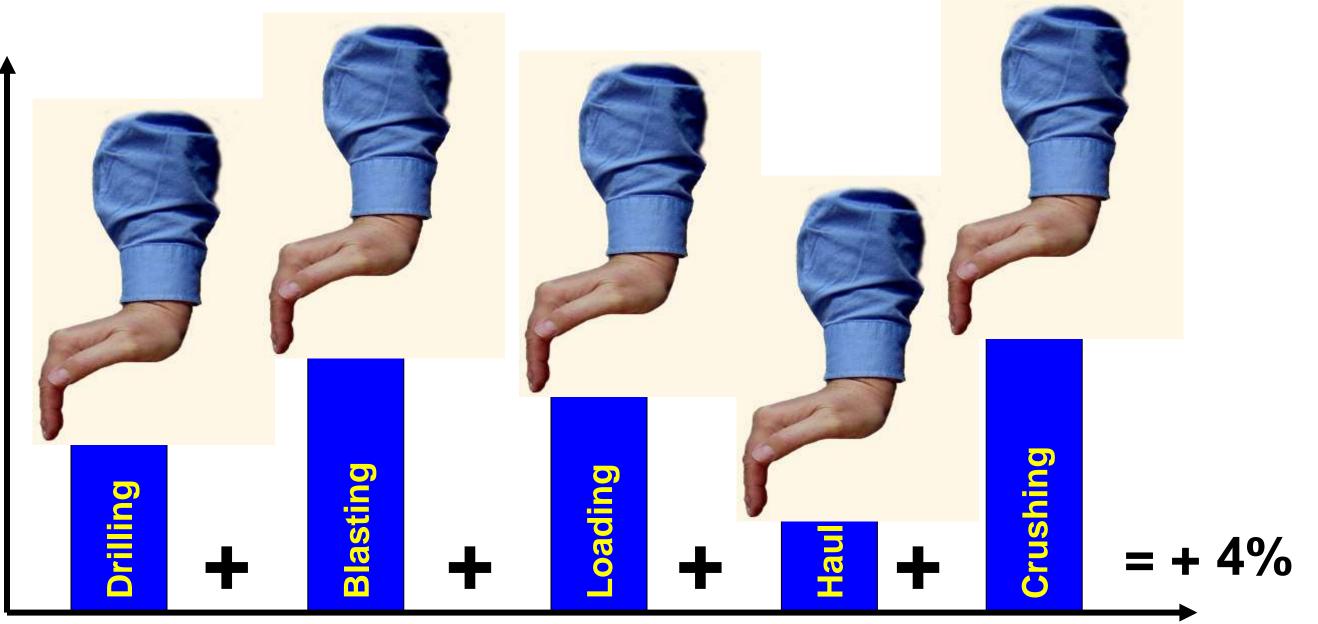




### **Mobile Crushing & Screening Canyon Rock Improvement Forward**

#### Less is not always best







**Unit Operation Division** 



## **Mobile Crushing & Screening** TAKE AWAY from Canyon Rock

### **Research Look around and Have a Plan ! What ELSE !**

### **Travel beyond your competition ! Lead do not follow !**

### Keep an open mind !



# SE! ow!

### www.quarryacademy.com



Improving Processes. Instilling Expertise.

DYNO Dyno Nobel

