

See
4/10/93

GOLD COAST TECHNOLOGIES

April 8, 1991

Fire Marshal Tom Hathcox
Dougherty Regional Fire Department
9399 Fircrest Lane
San Ramon, CA 94583
415-829-2333

RE: Internal Inspection and UTG Report for
Corwood Car Wash 6973 Village Pkwy Dublin, CA

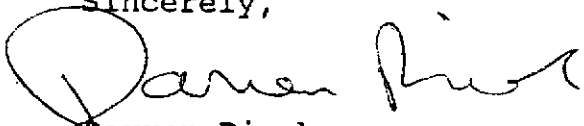
Dear Mr. Hathcox:

Please find the enclosed Internal Inspection and UTG Report prepared by Gold Coast Technologies for the above mentioned facility.

GCT will forward the laboratory analysis to both Alameda County and Dougherty Regional Fire Departments as they are available.

Please feel free to call if you have any questions or need additional information. Thank you.

Sincerely,



Darren Rieck
Project Manager

enclosure

INTERNAL TANK INSPECTION AND UTG REPORT FOR:

CORWOOD CAR WASH
6973 VILLAGE PARKWAY
DUBLIN, CALIFORNIA
94568

PREPARED BY:

GOLD COAST TECHNOLOGIES
101 MILL DR.
VENTURA, CA. 93001
805-643-0873

MARCH, 1990

TABLE OF CONTENTS

SITE MAP

INSPECTION AND UTG TESTING - GENERAL

FIELD NOTES

UTG TANK # 1

UTG TANK # 2

Corwood Car Wash
6973 Village Pkwy
Dublin, CA

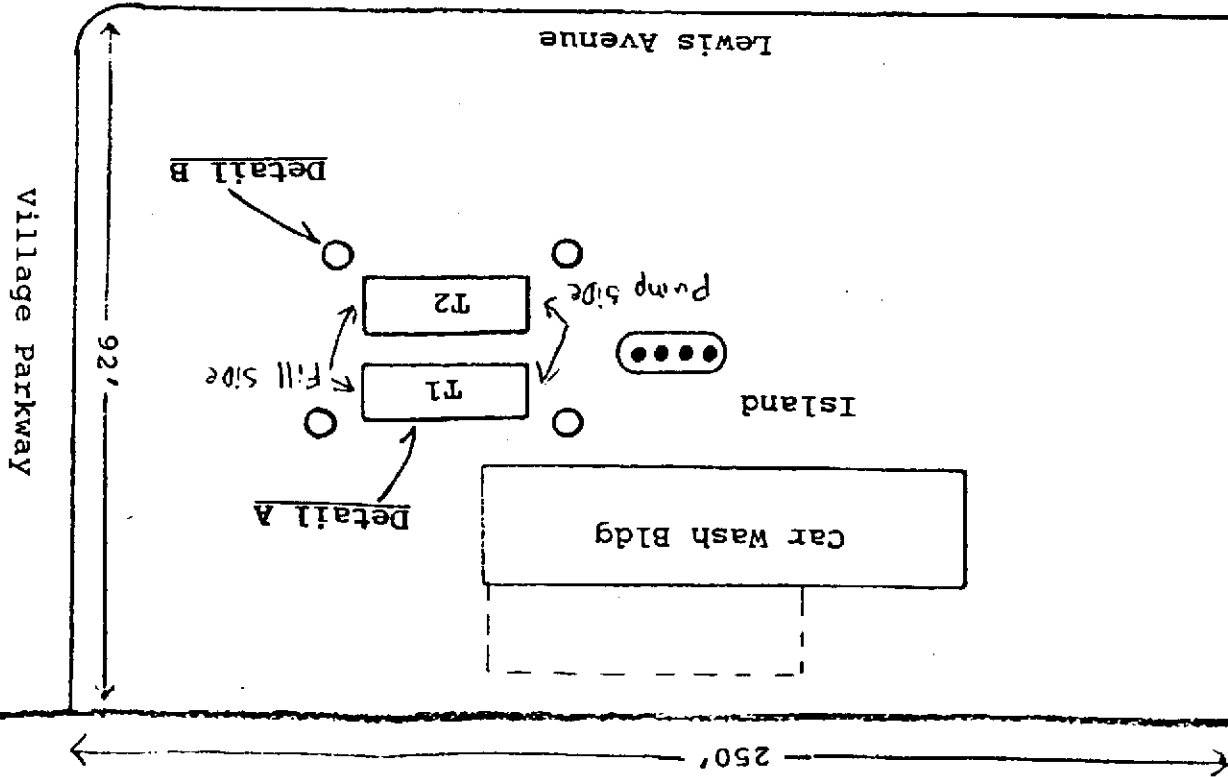


Not To Scale



N

- Scope Of Work:
- 1) Tanks to be Interior Lined per attached Armor Shield Specifications. Detail A
 - 2) Cathodically protected with an impressed current cathodic protection system. Detail B
- Cathodic Anode
- Tank #1 & Tank #2 10K UST's



TANK INSPECTION

During inspection, the entire interior surface of the tank shall be inspected using a light fixture approved for Class I, Division I, Group D - Hazardous Locations.

Prior to the use of any inspection tools in metal tanks, the entire internal tank surface shall be free of any flammable vapors, liquids or sludge. It is preferable to conduct a preliminary sandblasting (White Metal Blast SSPC SP-5) of the internal surface for inspection purposes. White metal blast preparation (SSPC SP-5) is required prior to application of lining material (see 7.5 and figure 5).

Tank sludge and scale are potentially hazardous as they may contain tetraethyl lead or benzene vapors which can be inhaled or absorbed through the skin and are flammable. If the dry internal surface of the tank is scraped, the resulting atmosphere may contain harmful quantities of these materials. The quantity of these materials in the tank atmosphere shall be checked using an air analyzer.

The product, sludge, and compounds that are constituents of the product stored in tanks and some tank lining materials can be flammable and hazardous to personnel working with them if appropriate precautions are not taken.

HAMMER TESTING STEEL TANKS (Structural Strength)

Hammering, as an inspection procedure, reveals a significant amount of information about the tank condition. Vibration, denting, and movement produced when the hammer strikes the steel will indicate defects. Discrepancies in areas of reduced thickness in the tank walls, loose joints (seams), loose rivets and intergranular cracking can be revealed. It is a simple and effective practice of checking for existing discrepancies.

Two hammers commonly used in hammer testing are pictured in figure 4. The brass ballpeen hammer (Figure 4A) preferably weighs 16 to 18 ounces; the hammer pictured in Figure 4B, a brass hammer for rivet testing, weighs approximately 18 ounces. Commonly called boilermakers or inspectors hammers, these tools are reliable for tank evaluation purposes.

An example of hammer testing is its use in testing wood structures, including telephone poles for dry rot or termites. When the hammer strikes a dry rotted area, it creates a noticeably different resonance. Conversely, when striking a

not less than 3 feet, to the top of the tank.

Ultrasonic Testing

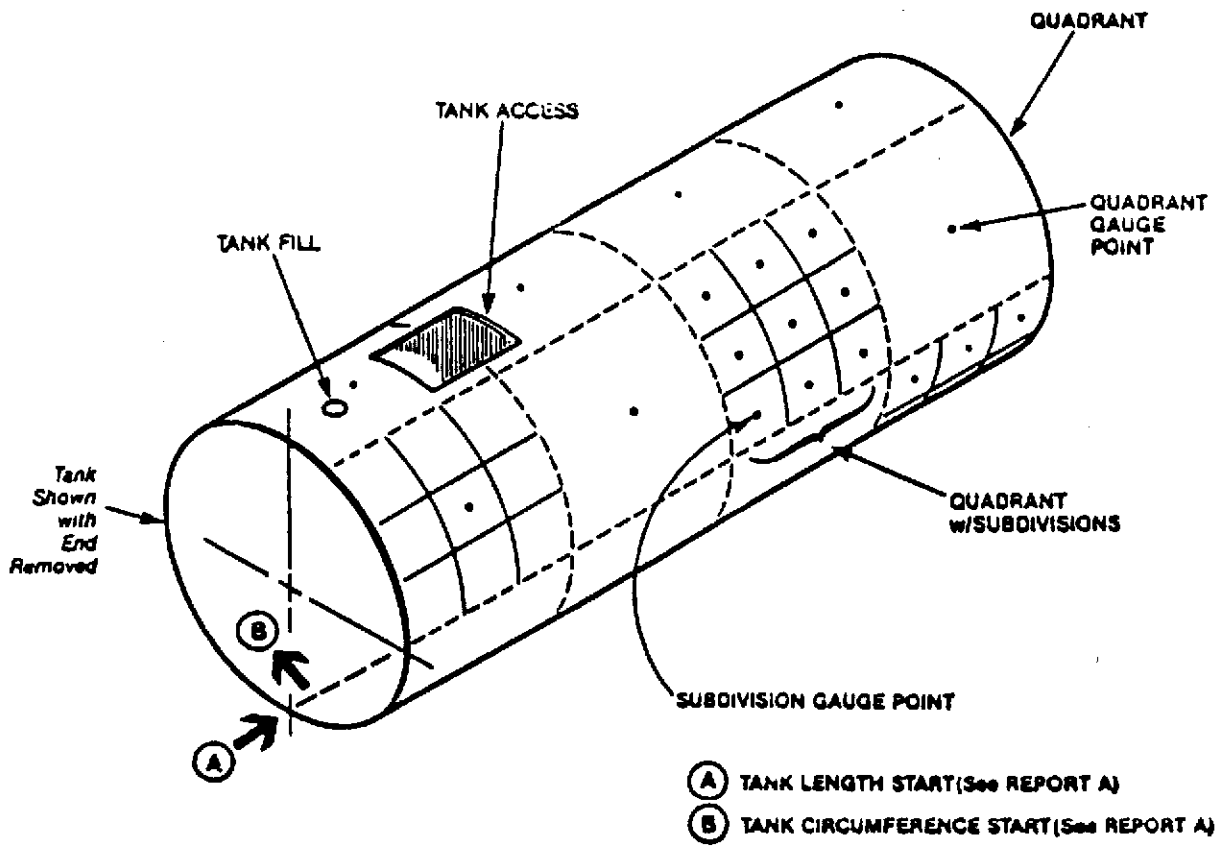
Ultrasonic thickness gauging shall be used as an additional method to hammer testing for qualifying the tank for lining if required by the authority having jurisdiction. (See Appendix MI)

TANK ASSESSMENT (Steel Tanks)

Tank shall be sandblasted to white metal, removing all sludge from pits and rust plug(s) from perforation(s), opening any perforation(s) into hole(s), see 7.5 Surface Preparation.

Corrosion does not usually take the form of a uniform loss (i.e. general deterioration of a surface area). Most corrosion occurs by leaving a pitted appearance resulting in perforations. A small perforation in a tank wall can result when the entire tank surface has lost no more metal than is found in a 50 cent piece. Numerous perforations in a one square foot area indicate localized corrosion. The number and size of perforations in a tank are the criteria used to evaluate if a tank can be lined to give a minimum of a 10 year life extension.

If a tank has perforations not exceeding the limitations of 7.4.2, the tank is considered not to have been structurally impaired. A tank with a perforation or leak can, in fact, have over 100 years of structural life remaining before the tank structurally is impaired to the point that the tank collapses. Structural strength tests shall be performed in accordance with section 7.4.2. For assessment and monitoring the operational structural life of a tank, see 11.0



- Ⓐ TANK LENGTH START (See REPORT A)
- Ⓑ TANK CIRCUMFERENCE START (See REPORT A)

Date: 3-30-91
Location: Corwood Car Wash
6973 Village Parkway
Dublin, CA

I. Field Notes

A. Tank # 1

1. Visual Inspection

- a. Seams are single welded.
- b. Negligible floor pitting
- c. Dents in tank - none

2. Hammer Test

- a. 16 oz brass mallet used on 3' X 3' quadrant centers
- b. No denting, echoing or penetrating occurred as a result of this test - passed

B. Tank # 2

1. Visual Inspection

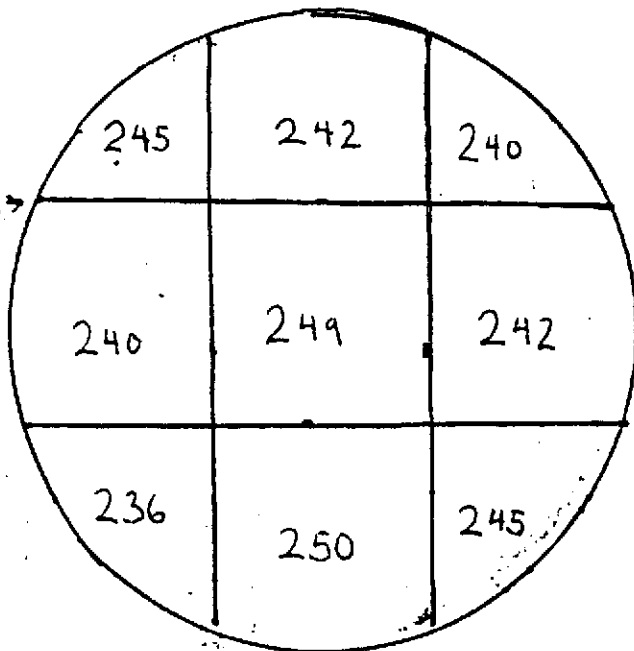
- a. Seams are single welded.
- b. Negligible floor pitting
- c. Dents in tank - none

2. Hammer Test

- a. 16 oz brass mallet used on 3' X 3' quadrant centers
- b. No denting, echoing or penetrating occurred as a result of this test - passed

Tank # 1

Fill SIDE →



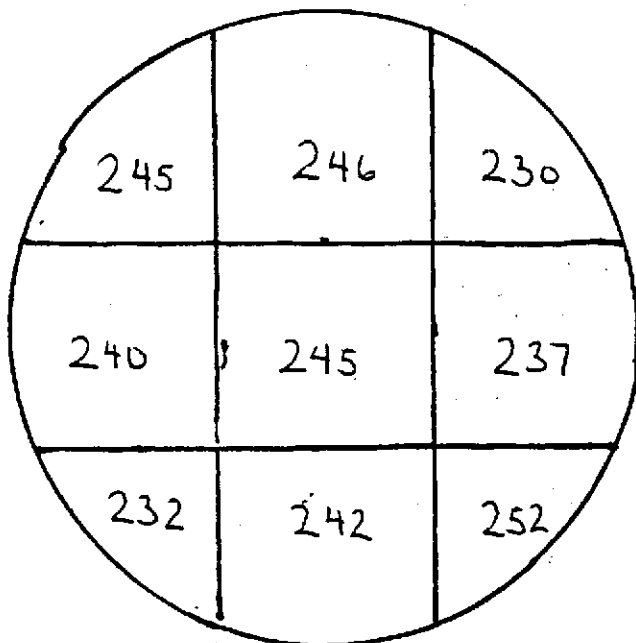
ULTRASONIC
TEST RESULTS

Fill SIDE

SIDE {	226	242	254	226	216	247	260	218	236
	218	242	222	224	226	251	246	217	239
Top →	252	222	224	250	217	253	244	216	245
SIDE {	230	225	219	221	220	235	226	217	216
	226	248	246	230	264	259	218	248	215
Floor Center →	230	226	220	231	247	222	251	233	238
	250	261	255	231	253	232	254	257	240
	226	223	245	250	230	247	218	215	212

Pump SIDE

Pump Side →



ULTRASONIC THICKNESS GAUGING REPORT

TANK WALLS

Tank I.D. No: T 2

Station No: CORWOOD

Date: 3-30-91

CYLINDER WALL

1

Total of Gauges	<u>16875</u>	•	<u>234</u>	Av. Thk.
Total No. of Gauges	<u>72</u>			

FILL END TANKHEAD

2

Total of Gauges	<u>2157</u>	•	<u>243</u>	Av. Thk.
Total No. of Gauges	<u>9</u>			

OPPOSITE END TANKHEAD

3

Total of Gauges	<u>2169</u>	•	<u>241</u>	Av. Thk.
Total No. of Gauges	<u>9</u>			

TOTAL TANK SHELL AVERAGE

Total of Gauges	<u>21233</u>	•	<u>235.9</u>	Av. Thk.
Total No. of Gauges	<u>90</u>			
Av. Thk.	<u>235.9</u>	X 100 =	<u>94.3</u>	% of Design Thk.
Design Thk.	<u>250</u>			

This block is average of blocks 1, 2 & 3

ULTRASONIC THICKNESS GAUGING REPORT

TANK WALLS

Tank I.D. No: T 2

Station No: CORWOOD

Date: 3-30-91

CYLINDER WALL

1

Total of Gauges	<u>17052</u>	•	<u>236.8</u>	Av. Thk.
Total No. of Gauges	<u>72</u>			

FILL END TANKHEAD

2

Total of Gauges	<u>2200</u>	•	<u>244</u>	Av. Thk.
Total No. of Gauges	<u>9</u>			

OPPOSITE END TANKHEAD

3

Total of Gauges	<u>2160</u>	•	<u>240.1</u>	Av. Thk.
Total No. of Gauges	<u>9</u>			

TOTAL TANK SHELL AVERAGE

Total of Gauges	<u>21412</u>	•	<u>237.1</u>	Av. Thk.
Total No. of Gauges	<u>90</u>			
Av. Thk.	<u>237.1</u>	X 100 =	<u>95.2</u>	% of Design Thk.
Design Thk.	<u>250</u>			

This block is average of blocks 1, 2 & 3