

6601 Koll Center Parkway  
P.O. Box 5252  
Pleasanton, CA 94566  
(415) 426-8787

December 21, 1990

Mr. Scott Seary  
Alameda County Health Agency  
Division of Hazardous Materials  
80 Swan Way, Rm 200  
Oakland, CA 94621

RE: Tank Test 6527 Calaveras Road, Sunol  
4,000 gallon unleaded gasoline UST

Dear Mr. Seary:

As promised yesterday in our telephone conversation I am submitting a copy of the tank test results along with this letter explaining the events which took place prior to the tank passing its final pressure test. Please note that in addition to adding an air vent relief valve, a new riser pipe was installed and the vent line was shortened. I apologize for not bringing this information to your attention but I have been working on several tank projects simultaneously and did not have my file with me during our conversation.

The tank was first tested on October 19 and terminated due to a possible large air vapor pocket trapped in the high end of the tank. I visited the site a few days after the tank test results were verbally reported to me. After an inspection of the tank I decided that it may not be an air vapor pocket but rather a bad weld at the top of the fill riser pipe which holds the drop tube in place. I instructed plant personnel to remove the drop pipe and disconnect the fitting at the top of the fill riser.

The tank was retested on October 31 and was again terminated. It was decided that we would excavate and expose the tank top and associated piping. After inspecting the exposed tank I decided to replace the riser pipe to eliminate a three sectioned pipe with one continuous four inch riser.

On December 12 the tank was again tested, this time it passed. The tester indicated he had to further expose the high end of the tank and vent the air pocket trapped inside. My conversation with the tester led me to believe that the

tank failed its two previous test due to this trapped air pocket. An air vent release line was installed to eliminate this from happening during future tank testing. We also decided to shorten the air vent line to eliminate one angled coupling. Please note that there were no visual signs of any product released from the tank when the tank was exposed.

Should you have any questions or require any additional information please contact me at (415) 426-2279.

Sincerely,

  
Bradd Statley  
Environmental Engineer

encl.

# Data Chart for Tank System Tightness Test



CHAMPION'S PRECISION TANK

#2

USE PRINT

**OWNER** Property  Tank(s)

RMC Lonestar Industries P.O. Box 5252 Pleasanton, Ca. 94566

Name: Atn: Bradd Stately Address: Representative: Telephone:

**OPERATOR** RMC LONESTAR CALIFORNIA RD SUNOL CA

Name: Address: Representative: Telephone:

**REASON FOR TEST** (Explain Fully)

REGULATION GOVERNING UNDERGROUND STORAGE OF HAZARDOUS SUBSTANCES  
SUBCHAPTER 16 OF CHAPTER 3 OF TITLE 23 OF THE CALIFORNIA ADMINISTRATIVE CODE

**WHO REQUESTED TEST AND WHEN**

OWNER

Name: Title: Company or Affiliation: Date:

Address: Telephone:

**WHO IS PAYING FOR THIS TEST?**

OWNER

Company, Agency or Individual: Person Authorizing: Title: Telephone:

Billing Address: City: State: Zip:

Attention at: Order No. Other Instructions:

**3. TANK(S) INVOLVED**

Identify by Direction	Capacity	Brand/Supplier	Grade	Approx. Age	Steel/Fiberglass
EW	4000		UNLINED		STEEL

**7. INSTALLATION DATA**

Location	Cover	Fills	Vents	Siphones	Pumps
North inside driveway, Rear of station, etc.	EXPOSED Concrete, Black Top, Earth, etc.	4" Size, Thread make, Drop tubes, Remote Fills	2" Size, Manifolded	Which tanks?	DISCONNECTED Suction, Remote, Make if known

**8. UNDERGROUND WATER**

Depth to the Water table: BELOW TANK.

Is the water over the tank?  Yes  No

**9. FILL-UP ARRANGEMENTS**

Tanks to be filled \_\_\_\_\_ hr. \_\_\_\_\_ Date Arranged by \_\_\_\_\_ Name \_\_\_\_\_ Telephone \_\_\_\_\_

Extra product to "top off" and run TSTT. How and who to provide? Consider NO Lead.

Terminal or other contact for notice or inquiry: \_\_\_\_\_ Company \_\_\_\_\_ Name \_\_\_\_\_ Telephone \_\_\_\_\_

**10. CONTRACTOR, MECHANICS, any other contractor involved**

\_\_\_\_\_

\_\_\_\_\_

**11. OTHER INFORMATION OR REMARKS**

RETEST. EXPOSED TANK, PLUMBING EXPOSED OR REMOVED.

Additional information on any items above: Officials or others to be advised when testing is in progress or completed. Visitors or observers present during test etc.

**12. TEST RESULTS**

Tests were made on the above tank systems in accordance with test procedures prescribed for PETRO-TITE as detailed on attached test charts with results as follows:

Tank Identification	Tight	Leakage Indicated	Date Tested
UNLINED	YES	4005	11-27-90

**13. CERTIFICATION**

This is to certify that these tank systems were tested on the date(s) shown. Those indicated as "Tight" meet the criteria established by the National Fire Protection Association Pamphlet 329.

11-27-90 Date

W. Campbell

CHAMPION'S PRECISION TANK TESTING

2308 HARVARD ST. SACRAMENTO CA 95815



Address No. and Street(s)

City

TO TEST  
**EAST / WEST**  
 Identify by position  
**UNGRADED**  
 Brand and Grade

15a. BRIEF DIAGRAM OF TANK FIELD

16. CAPACITY

Nominal Capacity 4000 Gallons  
 By most accurate capacity chart available 4000 Gallons

- From
- Station Chart
  - Tank Manufacturer's Chart
  - Company Engineering Data
  - Charts supplied with
  - Other \_\_\_\_\_

17. FILL-UP FOR TEST

Suck water column before fill-up 0 in. Tank Diameter 75 in.  
 Gallons \_\_\_\_\_

Inventory

75" \_\_\_\_\_ 4000  
100 FT TOP OF \_\_\_\_\_ 5  
 \_\_\_\_\_ \_\_\_\_\_ 4005  
 Gallons Total Gallons as Reading  
 Transfer total to line 25a

18. SPECIAL CONDITIONS AND PROCEDURES TO TEST THIS TANK

See manual sections applicable. Check below and record procedure in log (27).

Use maximum allowable test pressure for all tests. Four pound rule does not apply to double-walled tanks.

Complete section below:

- 1. Is four pound rule required? Yes  No
- 2. Height to 12" mark from bottom of tank 160 in.
- 3. Pressure at bottom of tank 4.16 P.S.I.
- 4. Pressure at top of tank 2.31 P.S.I.

- Water in tank
- Line(s) being tested with LVLLT
- High water table in tank excavation

19. TANK MEASUREMENTS FOR TSTT ASSEMBLY

Bottom of tank to grade\* 144 in.  
 Add 30" for "T" probe assembly 30 in.  
 Total tubing to assemble - approximate \_\_\_\_\_ in.

20. EXTENSION HOSE SETTING

Tank top to grade\* 69 in.  
 Extend hose on suction tube 6" or more below tank top \_\_\_\_\_ in.

\*If fill pipe extends above grade, use top of fill.

22. Thermal-Sensor reading after circulation

Observed A.P.I. Gravity 12.648 digits  
60.61 °F  
 Between 321 digits

23. Digits per °F in range of expected change

COEFFICIENT OF EXPANSION (Complete after circulation)

24a. Corrected A.P.I. Gravity  
 Observed A.P.I. Gravity \_\_\_\_\_  
 Hydrometer employed \_\_\_\_\_  
 Observed Sample Temperature \_\_\_\_\_ °F  
 Corrected A.P.I. Gravity @ 60°F. From Table A. \_\_\_\_\_  
 Coefficient of Expansion for Involved Product From Table B. \_\_\_\_\_  
 Transfer COE to Line 25b.

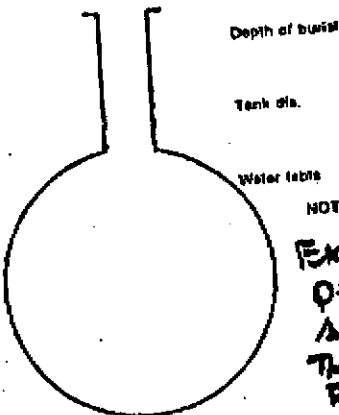
21. VAPOR RECOVERY SYSTEM  Stage I  Stage II

24b. COEFFICIENT OF EXPANSION RECIPROCAL METHOD

Type of Product UNGRADED  
 Hydrometer Employed 6  
 Temperature in Tank After Circulation 60.6 °F  
 Temperature of Sample 60.0 °F  
 Difference (°F) .6  
 Observed A.P.I. Gravity 56.8  
 Reciprocal 1499 Page 60  
4005 • 1499 = 2.67178  
 Total quantity in full tank (16 or 17) Reciprocal Volume change in this tank per °F  
 Transfer to Line 25a

24c. FOR TESTING WITH WATER see Table C & D

Water Temperature after Circulation Table C \_\_\_\_\_  
 Coefficient of Water Table D \_\_\_\_\_  
 Added Surfactant?  Yes  No Transfer COE to Line 25b.



NOTES:  
**EXPOSED TANK,  
 PIPE PUT DOWN  
 AT THE END OF  
 THE TANK TO CHECK  
 FOR WATER**

The above calculations are to be used for dry soil conditions to establish a positive pressure advantage, or when using the four pound rule to compensate for the presence of subsurface water in the tank area.

Refer to N.F.P.A. 30 Sections 3-3.2.4 and 3-3.2 and the tank manufacturer regarding allowable system test pressures.

25. (a) \_\_\_\_\_ x (b) \_\_\_\_\_ = (c) \_\_\_\_\_ gallons  
 Total quantity in full tank (16 or 17) Coefficient of expansion for involved product Volume change in this tank per °F  
2.6717811 • 321 = 0.083233  
 Volume change per °F in test flange (23) Compute to 4 decimal places The test factor (e) 1008

P.06

#15

TO

12720/1990 12:18 FROM COPIES AND MORE ...

27. Sensor Calibration _____ / _____			30. HYDROSTATIC PRESSURE CONTROL		31. VOLUME MEASUREMENTS (G) RECORD TO .001 GAL.			34. TEMPERATURE COMPENSATION USE FACTOR (t)			35. VOLUME CHANGING EACH READING	36. ACCUMULATED CHANGE
LOG OF TEST PROCEDURES			29. Standpipe Level in inches		32. Product in Graduate		33. Product Replaced (-)	35. Thermal Sensor Reading	36. Change Higher - Lower - (t)	37. Computation (t) - (t) = Expansion - Contraction -	Temperature Adjustment	At Low Level compute Change per Hour (NFPA criteria)
28. DATE	Record details of setting up and running test. (Use full length of line if needed.)	29. Reading No.	Beginning of Reading	Level to which Restored	Before Reading	After Reading	Product Recovered (-)				Volume Minus Expansion (+) or Contraction (-) #33(t) - 137(t)	
TIME (24 Hr.)												
1200	START CIRCULATION	EXTENDED CIRC.						12				
1300	FIRST SENSOR & API SAMPLE							644				.0083
15	START HIGH LEVEL	1	40.0	42.0	.990	.860	-.120	650	+2	+0.017	-.137	
30		2	41.1	42.0	.960	.910	-.050	653	+3	+0.025	-.075	
45		3	41.9	42.0	.910	.900	-.010	655	+2	+0.017	-.007	
1400		4	42.1	42.0	.900	.805	+.005	659	+4	+0.033	-.008	
15		5	42.2	42.0	.150	.160	+.010	659	+0	+0.000	+.010	
30	EXTENDING HIGH LEVEL	6	42.3	42.0	.160	.180	+.020	662	+3	+0.025	+.005	
45		7	42.3	42.0	.180	.205	+.025	663	+1	+0.008	+.017	
1500		8	42.4	42.0	.205	.230	+.025	665	+2	+0.017	+.008	
	Go to LOW LEVEL											
1515	Rebound	9	12.6	12.0	.230	.270	+.040	662	-3	-0.025	+.065	
30	"	10	12.4	12.0	.270	.300	+.030	663	+1	+0.008	+.022	
40	START LOW LEVEL TEST	11	12.3	12.0	.300	.320	+.020	665	+2	+0.017	+.003	+.003
50		12	12.3	12.0	.320	.340	+.020	668	+3	+0.025	+.005	+.002
1600		13	12.3	12.0	.340	.360	+.020	670	+2	+0.017	+.003	+.001
10		14	12.1	12.0	.360	.370	+.010	671	+1	+0.008	+.002	+.003
20		15	12.1	12.0	.370	.380	+.010	672	+1	+0.008	+.002	+.005
30	SUN OFF TANK PIT.	16	12.1	12.0	.380	.390	+.010	673	+1	+0.008	+.002	+.007
40		17	12.1	12.0	.390	.395	+.005	674	+1	+0.008	+.003	+.004
50		18	12.1	12.0	.395	.405	+.010	675	+1	+0.008	+.002	+.006
1700		19	12.1	12.0	.405	.410	+.005	675	+0	+0.000	+.005	+.011
10		20	12.1	12.0	.410	.420	+.010	676	+1	+0.008	+.002	+.013
20		21	12.1	12.0	.420	.425	+.005	676	+0	+0.000	+.005	+.018
30		22	12.1	12.0	.425	.435	+.010	677	+1	+0.008	+.002	+.020
40		23	12.1	12.0	.010	.015	+.005	678	+1	+0.008	+.003	+.017
50		24	12.1	12.0	.015	.020	+.005	679	+1	+0.008	+.003	+.014

