

Data Chart for Tank System Tightness Test

PLEASE PRINT

1. OWNER Property Tank(s)

Ingersoll Road 1944 Marina Blvd Sausalito CA

Name Address Representative Telephone

2 OPERATOR

Same

Name Address Telephone

3. REASON FOR TEST (Explain Fully)

State Requirement

4. WHO REQUESTED TEST AND WHEN

John Mooney Ingersoll Road 3/22/89

Name Title Company or Affiliation Date Telephone

5. TANK INVOLVED

Identify by Direction	Capacity	Brand/Supplier	Grade	Approx Age	Steel/Fiberglass
<u>South West</u>	<u>10000</u>		<u>Diesel</u>	<u>20yr</u>	<u>Steel</u>

Use additional lines for manifolded tanks

6. INSTALLATION DATA

Location	Cover	Fills	Vents	Siphones	Pumps
<u>S.W. Side of Building</u>	<u>Concrete</u>	<u>4"</u>	<u>2"</u>	<u>Q</u>	<u>Suction</u>
North inside driveway, Rear of station, etc	Concrete, Black Top Earth, etc	Size, Titlell make, Drop tubes, Remote Fills	Size, Manifolded	Which tanks?	Suction, Remote, Make if known

7. UNDERGROUND WATER

Depth to the Water table 120 well

Is the water over the tank? Yes No

8. FILL-UP ARRANGEMENTS

Tanks to be filled _____ hr _____ Date Arranged by _____ Name Telephone

Extra product to "top off" and run tank tester How and who to provide? Consider NO Lead

Terminal or other contact for notice or inquiry _____ Company Name Telephone

9. CONTRACTOR, MECHANICS, any other contractor involved

Paradiso Construction Co.

Dave Mordide

10. OTHER INFORMATION OR REMARKS

Testentice System

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.

11. TEST RESULTS

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

Tank Identification	Tight	Leakage Indicated	Date Tested
<u>#1 South West</u>	<u>YES</u>	<u>-0.03261PN</u>	<u>3/22/89</u>

12. SENSOR CERTIFICATION

3/22/89
Date

623
Serial No. of Thermal Sensor

13. 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.

Technicians

Dave Mordide

Paradiso Construction Co.
Testing Contractor or Company By: Dave Mordide Signature

Certification # 414811371

9220 "G" Street, Oakland, CA 94603
Address

2 _____

Certification # _____

15. TANK TO TEST

30" x 94"
 Identify by position

Diesel
 Brand and Grade

15a. BRIEF DIAGRAM OF TANK FIELD

16. CAPACITY

Nominal Capacity 10000 Gallons

By most accurate capacity chart available 10000 Gallons

From

Station Chart

Tank Manufacturer's Chart

Company Engineering Data

Charts supplied with

Other _____

17. FILL-UP FOR TEST

Stick Water Bottom before Fill-up 0 to 1/2" in 0 Gallons 94 Tank Diameter in

Inventory _____ Gallons _____ Total Gallons ea Reading 10000

18. SPECIAL CONDITIONS AND PROCEDURES TO TEST THIS TANK

Water in tank Line(s) being tested with LVLLT

High water table in tank excavation

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 doublewalled tanks

Complete section below

- 1 is four pound rule required? Yes No
- 2 Height to 12" mark from bottom of tank 221 in
- 3 Pressure at bottom of tank 7.0941 PSI
- 4 Pressure at top of tank 4.0767 PSI

19. TANK MEASUREMENTS FOR TSTT ASSEMBLY

Bottom of tank to grade* 140 in

Add 30" for "T" probe assy 30 in

Total tubing to assemble - approximate 140 in

20. EXTENSION HOSE SETTING

Tank top to grade* 46 in

Extend hose on suction tube 6" or more below tank top 10 in

*If Fill pipe extends above grade, use top of fill

22. Thermal-Sensor reading after circulation 12676 digits

6061 °F Between digits

23. Digits per °F in range of expected change 321 digits

COEFFICIENT OF EXPANSION (Complete after circulation)

24a. Corrected A.P.I. Gravity

Observed A.P.I. Gravity _____

Hydrometer employed _____ H

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 Diesel

Hydrometer Employed 4 H

Temperature in Tank After Circulation 60.8 °F

Temperature of Sample 63.0 °F

Difference (+/-) + 2.2 °F

Observed A.P.I. Gravity 32.6

Reciprocal 2208 Page # 36

10000 2208 = 4.538043478

Total quantity in full tank (16 or 17) Reciprocal Volume change in this tank per °F

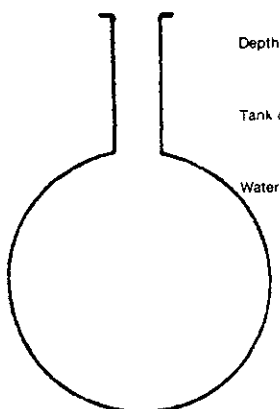
Transfer to Line 26a.

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

Water Temperature after Circulation Table C _____ °F

Coefficient of Water Table D _____

Added Surfactant? Yes No Transfer COE to Line 25b



NOTES

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 2-3.2.4 and 2-7.2 and the tank manufacturer regarding allowable system test pressures.

25. (a) _____ × (b) _____ = (c) _____ gallons

Total quantity in full tank (16 or 17) Coefficient of expansion for involved product Volume change in this tank per °F

26. (a) 4.538043478 × (b) 321 = (c) 0.014137207 This is A = .0141

Volume change per °F (25 or 24b) Digits per °F in test Range (23) Volume change per digit Compute to 4 decimal places. test factor (a)

0815	ARRIVED ON SITE											
0915	Begin Circulation						A = .0141					
1045	1st Sensor Reading							12676				
1100	Begin High Test	1	42.2	42	.250	.260	+0.010	676	+0	±.000	+0.010	
1115		2	41.9	42	.260	.250	-0.010	682	+6	+0.085	-0.095	
1130		3	42.0	42	.250	.250	±.000	687	+5	+0.070	-0.070	
1145		4	41.9	42	.250	.240	-0.010	693	+6	+0.085	-0.095	
1200		5	42.0	42	.240	.240	±.000	698	+5	+0.070	-0.070	
1215		6	42.0	42	.240	.240	±.000	701	+3	+0.042	-0.042	
1230		7	42.0	42	.240	.240	±.000	705	+4	+0.056	-0.056	
1245		8	42.0	42	.240	.240	±.000	711	+6	+0.085	-0.085	
	Drop To Low											
1300	1st Sensor Reading	9	13.5	12	.010	.080	+0.070	715	+4	+0.056	+0.014	
1315	2nd " "	10	12.9	12	.080	.120	+0.040	720	+5	+0.070	-0.030	
1320	Begin Low Test	11	12.4	12	.120	.140	+0.020	720	+0	±.000	+0.020	+0.020
1325		12	12.2	12	.140	.160	+0.020	722	+2	+0.028	-0.008	+0.012
1330		13	12.2	12	.160	.170	+0.010	724	+2	+0.028	-0.018	-0.006
1335		14	12.2	12	.170	.180	+0.010	726	+2	+0.028	-0.018	-0.024
1340		15	12.2	12	.180	.190	+0.010	726	+0	±.000	+0.010	-0.014
1345		16	12.2	12	.190	.200	+0.010	727	+1	+0.014	-0.004	-0.018

**P-T Tank Test Data Chart
Additional Info**

2. Statement:

Tank and product handling system has been tested tight according to the Precision Test Criteria as established by N.F.P.A. publication 329. This is not intended to indicate permission of a leak

OR

Tank and product handling system has failed the tank tightness test according to the Precision Test Criteria as established by N.F.P.A. publication 329.

It is the responsibility of the owner and/or operator of this system to immediately advise state and local authorities of any implied hazard and the possibility of any reportable pollution to the environment as a result of the indicated failure of this system. Heath Consultants Incorporated does not assume any responsibility or liability for any loss of product to the environment

1. Net Volume Change at Conclusion of Precision Test _____ gph

Signature of Tester _____

Date _____

Tank Owner/Operator _____

Date _____

						$R = .0141$						
1345	CONTINUOUS LEAK TEST	16	12.2	12	.190	.200	+ .010	727	+1	+ .014	- .004	- .018
1350		17	12.2	12	.200	.210	+ .010	728	+1	+ .014	- .004	- .022
1355		18	12.2	12	.210	.220	+ .010	729	+1	+ .014	- .004	- .026
1400		19	12.2	12	.220	.230	+ .010	733	+4	+ .056	- .046	- .072
1405		20	12.2	12	.230	.240	+ .010	733	+0	+ .000	+ .010	- .062
1410		21	12.1	12	.240	.250	+ .010	734	+1	+ .014	- .004	- .068
1415		22	12.2	12	.250	.260	+ .010	734	+0	+ .000	+ .010	- .058
1420		23	12.2	12	.260	.270	+ .010	734	+0	+ .000	+ .010	- .048
1425		24	12.2	12	.270	.280	+ .010	735	+1	+ .014	- .004	- .052
1430		25	12.2	12	.280	.290	+ .010	736	+1	+ .014	- .004	- .056
1435		26	12.2	12	.290	.300	+ .010	737	+1	+ .014	- .004	- .060
1440		27	12.2	12	.300	.310	+ .010	737	+0	+ .000	+ .010	- .050
1445		28	12.2	12	.310	.320	+ .010	738	+1	+ .014	- .004	- .054
1450		29	12.2	12	.320	.330	+ .010	739	+1	+ .014	- .004	- .058
1455		30	12.2	12	.330	.340	+ .010	740	+1	+ .014	- .004	- .062
1500		31	12.2	12	.340	.350	+ .010	740	+0	+ .000	+ .010	- .052
1505		32	12.2	12	.350	.360	+ .010	741	+1	+ .014	- .004	- .056
1510		33	12.2	12	.360	.370	+ .010	742	+1	+ .014	- .004	- .060
1515		34	12.2	12	.370	.380	+ .010	743	+1	+ .014	- .004	- .064
												2
												- .032

**P-T Tank Test Data Chart
Additional Info**

- .032 GPH

Net Volume Change at Conclusion of Precision Test _____ gph

Signature of Tester _____

Date _____

3/22/89

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Tank Owner/Operator _____

Date _____