



**TESTING
AND
TECHNOLOGY**

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*Edgar Howell
File*

PRECISION TANK TESTING & MONITORING WELL SERVICES

August 8, 1989

Dave Cavanaugh
CAVANAUGH MOTORS
1700 Park Street
Alameda, CA 94501

Dear Dave,

I would like to take this opportunity to thank you for allowing TAT to be of service to you.

Enclosed are the results of the underground storage tank tests performed on August 4th, at Cavanaugh Motors. As you already know, both tanks tested tight and the results were well within the guidelines set forth by state regulations.

I have sent a copy of these reports on to Edgar Howell of the Alameda County Environmental Health Department for your convenience.

If you have any further questions please feel free to call me at, (415) 883-5070.

Sincerely,

Connie

Constance Green
Office Manager

/cg enclosures

✓ CC: Edgar Howell, Alameda County

ALAMEDA COUNTY
DEPT. OF ENVIRONMENTAL HEALTH
HAZARDOUS MATERIALS
8/9/89

TESTING AND TECHNOLOGY
25 L COMMERCIAL
NOVATO, CA 94949
(415) 883-5070

INVOICE # 2534 TEST DATE 8/4/89

COMPANY **CAVANAUGH MOTORS**
MAIL ADDRESS 1700 PARK STREET ALAMEDA 94501
TANK ADDRESS SAME
CONTACT NAME DAVE CAVANAUGH

PHONE # 523-5246

PHONE #

TANK INFORMATION

TANK #	ONE	TWO
PRODUCT	WASTE OIL	UNLEADED
CAPACITY	300	550
CONSTRUCTION	STEEL	STEEL
DIAMETER	48"	45"
FILL PIPE	40"	44"
TANK BOTTOM DEPTH	88"	89"
PUMP TYPE	NONE	SUCTION
VAPOR RECOVERY	NONE	NONE
TANK WATER	0	3"

TEST INFORMATION

TEST EQUIPMENT	AINLAY	AINLAY
FULL SYST/TANK ONLY	FULL	FULL
DATE/TIME FILLED	8/3/89	8/3/89
GALLONS TO TOP OFF	120 +	-
GROUND WATER DEPTH	10' +/-	10' +/-
TANK BTM PRESSURE		

RESULTS

PASS - FAIL	PASS	FAIL
LOSS RATE	-.0277	-.1360

COMMENTS

TESTING AND TECHNOLOGY

TEST REPORT AINLAY TANK INTEGRITY TESTER

COMPANY **CAVANAUGH MOTORS**

INVOICE # 2534 DATE 8/4/89

TANK # 1 PRODUCT WASTE OIL CAPACITY 300

FULL SYSTEM TEST HEIGHT +28" LOW LEVEL TEST HEIGHT

MEASURED API GRAVITY 32 TEMP 71 ADJUSTED API 31.2 COR .00044846

TEMP SHIFT FACTOR .1345 OTHER 1 GALLON ADDED AT 12:00 TO OVERFILL TANK

1) VOLUME CHANGE DUE TO TEMPERATURE VARIATION

	START	15 MIN	30 MIN	45 MIN	END	SHIFT (+/-)	(X)	AVG SHIFT (+/-)
TIME	12:45	13:00	13:15	13:30	13:45			
TOP TEMP	73.42	73.44	73.44	73.44	73.42	0	(.25)	0
MIDDLE T.	70.86	70.91	70.93	70.95	70.97	+ .11	(.50)	+ .0550
BOTTOM T.	69.38	69.38	69.36	69.35	69.33	- .05	(.25)	- .0125
WEIGHTED AVERAGE TEMPERATURE SHIFT								+ .0425

CALCULATIONS FOR VOLUME CHANGE DUE TO TEMPERATURE

TEMP SHIFT FACTOR .1345 (X) WEIGHTED SHIFT +.0425 = +.0057 GAL

2) VOLUME CHANGE DUE TO LEVEL VARIATIONS

EXACT AMOUNT OF LIQUID LOST & REPLACED (-) OR GAINED & REMOVED (+) TO RESTORE ORIGINAL LEVEL = -.0380 GAL

3) NET VOLUME CHANGE

LEVEL CHANGE -.0220 (MINUS) TEMPERATURE CHANGE +.0057 = -.0277 GAL

4) RESULTS

CERTIFIED TIGHT YES AT TEST HEIGHT OF +28" LOSS RATE (GPH) -.0277 (+/-)

TESTED BY John Dager
JOHN DAGER

5) COMMENTS

THE DATA FOR THIS TEST MEETS NFPA 329 STANDARDS. THE EQUIPMENT USED TO GENERATE THIS DATA IS ABLE TO DETECT A PRODUCT LOSS AT THE RATE OF 0.05 GALLONS PER HOUR. THIS IS NOT TO BE CONSTRUED AS AN ALLOWABLE LEAK RATE, BUT RATHER AS AN ACCURACY TOLERANCE OF THE TESTING EQUIPMENT WHICH ALLOWS FOR THE MANY VARIABLES INVOLVED. TAT GUARANTEES ONLY THAT THE DATA FOR THIS REPORT MEETS NFPA CRITERIA ON THE DAY OF THIS TEST. TAT MAKES NO WARRANTY OF TANK AND/OR LINE FITNESS NOR DO WE ASSUME RESPONSIBILITY FOR ANY LEAKAGE WHICH MAY HAVE OCCURRED AS A RESULT OF THIS TEST.

TESTING AND TECHNOLOGY

TEST REPORT AINLAY TANK TEGRITY TESTER

COMPANY CAVANAUGH MOTORS

INVOICE # 2534 DATE 8/4/89

TANK # 2 PRODUCT UNLEADED CAPACITY 550

FULL SYSTEM TEST HEIGHT +28" LOW LEVEL TEST HEIGHT

MEASURED API GRAVITY 57.5 TEMP 75 ADJUSTED API 55.7 COE .00066035

TEMP SHIFT FACTOR .3632 OTHER 1 GALLON ADDED AT 09:30 TO OVERFILL TANK

1) VOLUME CHANGE DUE TO TEMPERATURE VARIATION

	START	15 MIN	30 MIN	45 MIN	END	SHIFT (+/-)	(X)	AVG SHIFT (+/-)
TIME	10:15	10:30	10:45	11:00	11:15			
TOP TEMP	77.44	77.47	77.47	77.49	77.51	+0.06	(.25)	+0.0150
MIDDLE T.	75.49	75.50	75.53	75.55	76.56	+0.07	(.50)	+0.0350
BOTTOM T.	73.99	73.01	73.01	73.01	73.04	+0.05	(.25)	+0.0125
WEIGHTED AVERAGE TEMPERATURE SHIFT								+0.0625

CALCULATIONS FOR VOLUME CHANGE DUE TO TEMPERATURE

TEMP SHIFT FACTOR .3632 (X) WEIGHTED SHIFT +0.0625 = +0.0227 GAL

2) VOLUME CHANGE DUE TO LEVEL VARIATIONS

EXACT AMOUNT OF LIQUID LOST & REPLACED (-) OR GAINED & REMOVED (+) TO RESTORE ORIGINAL LEVEL = -.1360 GAL

3) NET VOLUME CHANGE

LEVEL CHANGE -.1360 (MINUS) TEMPERATURE CHANGE +0.0227 = -.1587 GAL

4) RESULTS

CERTIFIED TIGHT NO AT TEST HEIGHT OF +28" LOSS RATE (GPH) -.1587 (+/-)

TESTED BY John Dager
JOHN DAGER

(5) COMMENTS

FILL PIPE ADAPTOR LEAKING PROFUSELY. COULD NOT REMOVE TO REPAIR.

THE DATA FOR THIS TEST MEETS NFPA 329 STANDARDS. THE EQUIPMENT USED TO GENERATE THIS DATA IS ABLE TO DETECT A PRODUCT LOSS AT THE RATE OF 0.05 GALLONS PER HOUR. THIS IS NOT TO BE CONSTRUED AS AN ALLOWABLE LEAK RATE, BUT RATHER AS AN ACCURACY TOLERANCE OF THE TESTING EQUIPMENT WHICH ALLOWS FOR THE MANY VARIABLES INVOLVED. TAT GUARANTEES ONLY THAT THE DATA FOR THIS REPORT MEETS NFPA CRITERIA ON THE DAY OF THIS TEST, TAT MAKES NO WARRANTY OF TANK AND/OR LINE FITNESS NOR DO WE ASSUME RESPONSIBILITY FOR ANY LEAKAGE WHICH MAY HAVE OCCURRED AS A RESULT OF THIS TEST.