



KAPREALIAN ENGINEERING, INC.
Consulting Engineers

P.O. BOX 996 • BENICIA, CA 94510
(707) 746-6915 • (707) 746-6916 • FAX: (707) 746-5581

KEI-J88-1203.R4
February 5, 1990

Unocal Corporation
2175 N. California Blvd., #650
Walnut Creek, CA 94596

Attention: Mr. Tim Ross

RE: Stockpiled Soil Sampling for
Unocal Service Station #3135
845 - 66th Avenue
Oakland, California

Dear Mr. Ross:

This letter report summarizes the results of the stockpiled soil sampling and laboratory analyses for the referenced site. The soil analyses were conducted to comply with the County Health Department requirements for proper disposal of contaminated soil.

On January 24, 1990, soil samples from approximately 100 cubic yards of stockpiled soil at the referenced site were collected to determine proper disposal of the soil. Two composite soil samples (designated as Comp 1 and Comp 2) were taken. Each composite sample consisted of four individual grab samples taken at various locations and depths ranging from one to two feet. The samples were collected in two-inch diameter, clean brass tubes, which were then sealed with aluminum foil, plastic caps and tape, and placed in a cooled ice chest for subsequent delivery to a certified laboratory for analysis. Both samples were analyzed at Sequoia Analytical in Redwood City, California, and were accompanied by properly executed Chain of Custody documentation. Sample locations are as shown on the attached Site Plan.

The composite samples were analyzed to determine concentrations of total petroleum hydrocarbons (TPH) as gasoline using EPA method 5030 in conjunction with modified 8015; benzene, toluene, xylenes and ethylbenzene (BTX&E) using EPA method 8020. The results of the soil analyses showed concentrations of TPH as gasoline at 230 ppm for Comp 1 and 16 ppm for Comp 2. Analytical results are summarized in Table 1. Copies of the laboratory analyses, and the Chain of Custody documentation are attached to this report.

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Page 2

Based on TPH levels in the stockpiled soil represented by Comp 2 of less than 100 ppm, the soil can be disposed of at an approved Class III disposal site (based on Regional Water Quality Control Board guidelines). However, KEI recommends that during disposal, when obvious isolated high contamination is detected within the stockpiled soil, that portion of the soil be separately stockpiled for further sampling and treatment.

Based on the TPH levels in Comp 1 exceeding 100 ppm, KEI recommends that this soil should be retained on-site for aeration and resampling.

DISTRIBUTION

A copy of this report should be sent to Alameda County Health Agency, and to the Regional Water Quality Control Board (RWQCB), San Francisco Bay Region.

Should you have any questions on this report, please do not hesitate to contact me at (707) 746-6915.

Sincerely,

Kaprealian Engineering, Inc.



Christina L. Lecce

c11

Attachments: Table 1
Site Plan
Laboratory Results
Chain of Custody documentation

KEI-J88-1203.R4
February 5, 1990

TABLE 1

SUMMARY OF LABORATORY ANALYSES

(Results in ppm)
(Samples collected on January 24, 1990)

<u>Sample</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylenes</u>	<u>Ethylbenzene</u>
Comp 1	230	0.10	ND	12	ND
Comp 2	16	ND	ND	ND	ND
Detection Limits	1.0	0.05	0.1	0.1	0.1

ND = Non-detectable.

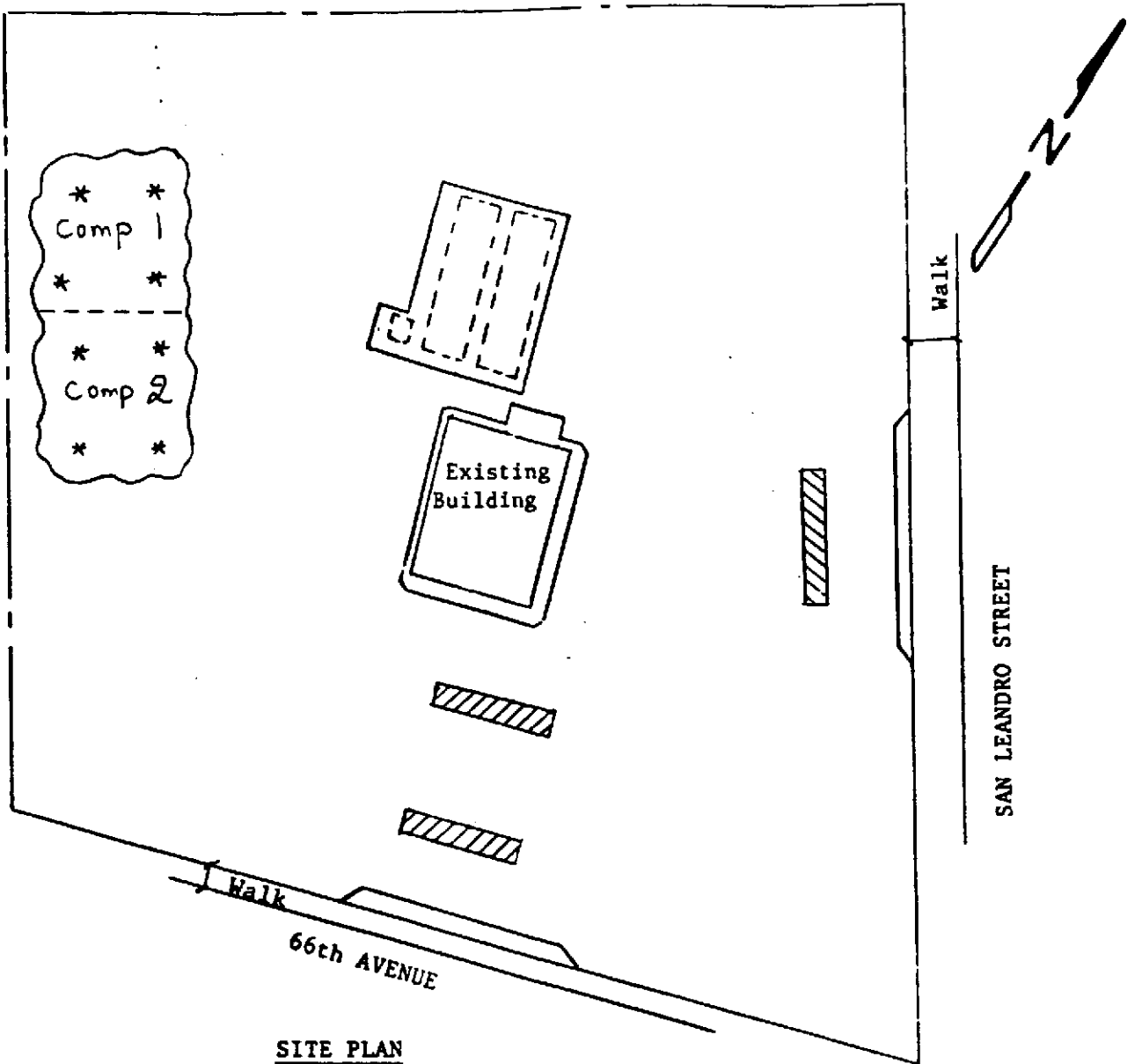


KAPREALIAN ENGINEERING, INC.

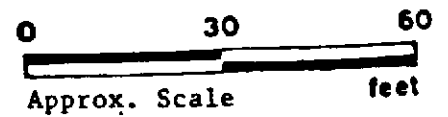
Consulting Engineers

PO BOX 996 • BENICIA, CA 94510

(707) 746-6915 • (707) 746-6916 • FAX. (707) 746-5581



SITE PLAN
Figure



LEGEND

* Sample Point Location

Unocal SS #3135
845 66th AVENUE
OAKLAND, CALIFORNIA



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Kapreallan Engineering, Inc.	Client Project ID: Unocal, Oakland, 66th/San Leandro	Sampled: Jan 24, 1990
P.O. Box 996	Matrix Descript: Soil	Received: Jan 25, 1990
Benicia, CA 94510	Analysis Method: EPA 5030/8015/8020	Analyzed: Jan 25, 1990
Attention: Mardo Kapreallan, P.E.	First Sample #: 001-2899 A-B	Reported: Jan 26, 1990

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P.	Benzene	Toluene	Ethyl Benzene	Xylenes
		Hydrocarbons				
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
0012899 A-B	Composite 1	230	0.10	N.D.	N.D.	12
0012900 A-B	Composite 2	16	N.D.	N.D.	N.D.	N.D.

Detection Limits:	1.0	0.05	0.1	0.1	0.1
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Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Belinda C. Vega
Project Manager



KAPREALIAN ENGINEERING, INC.

CHAIN OF CUSTODY

SAMPLER HAGOP		SITE NAME & ADDRESS Unocal - Oakland - 66th Ave / San Leandro					ANALYSES REQUESTED TPH-G BTXE				TURN AROUND TIME: 24 Hrs
WITNESSING AGENCY											REMARKS
SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	NO. OF <u>COMP</u> CONT.	SAMPLING LOCATION	TPH-G	BTXE		
Comp 1	1/24/90		✓			2	Stockpile	✓	✓	0012899 AB 2906 ✓	
Comp 2	1/24/90		✓			2	Stockpile	✓	✓		

Relinquished by: (Signature) Hargop Keworth	Date/Time 1-24-90 4:35	Received by: (Signature) Ben [Signature]
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature) [Signature]	Date/Time 18:55 1-24-90	Received by: (Signature) [Signature]

The following MUST BE completed by the laboratory accepting samples for analysis:

1. Have all samples received for analysis been stored in ice?
✓
2. Will samples remain refrigerated until analyzed?
✓
3. Did any samples received for analysis have head space?
NO
4. Were samples in appropriate containers and properly packaged?

Signature: **DN** Title: **GR** Date: **1-24-90**

PARADISO CONSTRUCTION CO.

GENERAL & PETROLEUM CONTRACTORS

9220 'G' STREET • P.O. BOX 6397 • OAKLAND, CA 94603
 (415) 562-5511 Contractor's Lic. #259820

LETTER OF TRANSMITTAL

DATE	2/28/90	JOB NO.	571
ATTENTION			
RE: Tank test results			

TO Alameda County Health Care Services
Attn: Hazardous Materials
80 Swan Way, Room 200
Oakland, CA 94621

WE ARE SENDING YOU Attached Under separate cover via _____ the following items

Shop drawings Prints Plans Samples Specifications

Copy of letter Change order _____

90 FEB 29 AM 11:05

COPIES	DATE	NO.	DESCRIPTION
1	2/26/90		Tank test results: Unocal #3135 845 66th Ave. Oakland, CA <i>621</i>

THESE ARE TRANSMITTED as checked below:

- For approval Approved as submitted Resubmit _____ copies for approval
- For your use Approved as noted Submit _____ copies for distribution
- As requested Returned for corrections Return _____ corrected prints
- For review and comment _____
- FOR BIDS DUE _____ 19 _____ PRINTS RETURNED AFTER LOAN TO US

REMARKS _____

COPY TO Unocal - Tim Ross

SIGNED: *Deanna Harding*

If enclosures are not as noted, kindly notify us at once.

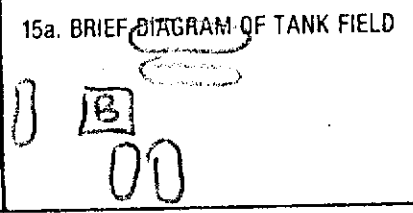
Data Chart for Tank System Tightness Test

PLEASE PRINT

<p>1. OWNER <input type="checkbox"/> Property <input type="checkbox"/> Tanks</p>	<p>UNOCAL 66th AVE OAKLAND.</p> <p>Name Address Representative Telephone</p>																									
<p>2. OPERATOR</p>	<p>SAMS</p> <p>Name Address Telephone</p>																									
<p>3. REASON FOR TEST (Explain Fully)</p>	<p>NEW TANKS + SYSTEMS</p>																									
<p>4. WHO REQUESTED TEST AND WHEN</p>	<p>Tim ROSS ENG UNOCAL</p> <p>Name Title Company or Affiliation Date</p> <p>Address Telephone</p>																									
<p>5. TANK INVOLVED Use additional lines for manifolded tanks</p>	<p>Identify by Direction</p> <p>#1 WEST #2 EAST</p>	<p>Capacity</p> <p>12,000 "</p>	<p>Brand/Supplier</p> <p>UNOCAL "</p>	<p>Grade</p> <p>Super UNLOC</p>	<p>Approx. Age</p> <p>NEW "</p>	<p>Steel/Fiberglass</p> <p>Steel "</p>																				
<p>6. INSTALLATION DATA</p>	<p>Location</p> <p>Rear of Building</p> <p>North inside driveway, Rear of station, etc.</p>	<p>Cover</p> <p>Concrete</p> <p>Concrete, Black Top, Earth, etc.</p>	<p>Fill</p> <p>4"</p> <p>Size, Titfill make, Drop tube, Remote Fills</p>	<p>Vents</p> <p>2"</p> <p>Size, Manifolded</p>	<p>Siphones</p> <p>Ø</p> <p>Which tanks?</p>	<p>Pumps</p> <p>R.J. TURBINE</p> <p>Suction, Remote, Make if known</p>																				
<p>7. UNDERGROUND WATER</p>	<p>Depth to the Water table UNKNOWN</p> <p style="text-align: right;">Is the water over the tank? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>																									
<p>8. FILL-UP ARRANGEMENTS</p>	<p>Tanks to be filled _____ hr. _____ Date Arranged by _____</p> <p>Extra product to "top off" and run tank tester. How and who to provide? Consider NO Lead. Name Telephone</p> <p>Terminal or other contact for notice or inquiry _____ Company Name Telephone</p>																									
<p>9. CONTRACTOR, MECHANICS, any other contractor involved</p>	<p>Paradiso Construction Co.</p> <p>Dave moedike</p>																									
<p>10. OTHER INFORMATION OR REMARKS</p>	<p>Testing Systems without Product Lines</p> <p>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.</p>																									
<p>11. TEST RESULTS</p>	<p>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:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Tank Identification</th> <th style="width: 15%;">Tight</th> <th style="width: 30%;">Leakage Indicated</th> <th style="width: 25%;">Date Tested</th> </tr> </thead> <tbody> <tr> <td>#1 WEST</td> <td>YES</td> <td>7.0005 GPH</td> <td>2/26/90</td> </tr> <tr> <td>#2 EAST</td> <td>YES</td> <td>7.004 GPH</td> <td>2/26/90</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>						Tank Identification	Tight	Leakage Indicated	Date Tested	#1 WEST	YES	7.0005 GPH	2/26/90	#2 EAST	YES	7.004 GPH	2/26/90								
Tank Identification	Tight	Leakage Indicated	Date Tested																							
#1 WEST	YES	7.0005 GPH	2/26/90																							
#2 EAST	YES	7.004 GPH	2/26/90																							
<p>12. SENSOR CERTIFICATION</p> <p>Date _____</p> <p>Serial No. of Thermal Sensor _____</p>	<p>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.</p> <p>Technicians</p> <p>1. Dave m</p> <p>Certification # 414811371</p> <p>2. _____</p> <p>Certification # _____</p> <p style="text-align: right;">Paradiso Construction Co. Dave Moedike</p> <p style="text-align: right;">Testing Contractor or Company. By: Signature</p> <p style="text-align: right;">9220 "G" Street, Oakland, CA 94603</p> <p style="text-align: right;">Address</p>																									

14. UNOCP W 10th Ave OAKLAND Cal. 2/26/90
 Name of Supplier, Owner or Dealer Address No. and Street(s) City State Date of Test

15. TANK TO TEST
1 WEST
 Identity by position
Superc
 Brand and Grade



16. CAPACITY
 Nominal Capacity 12000 Gallons
 By most accurate capacity chart available 12,245 Gallons

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

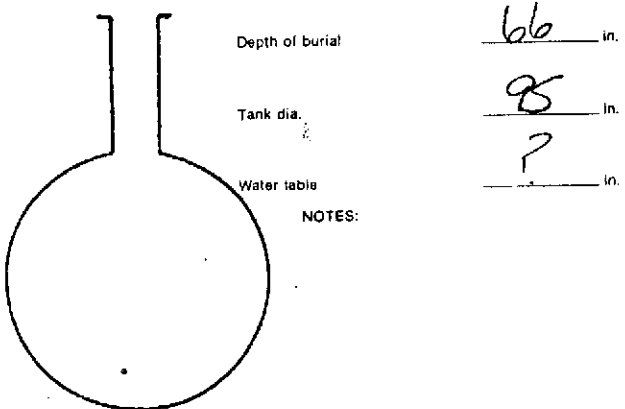
17. FILL-UP FOR TEST

Stick Water Bottom before Fill-up 95 in. 12245 Gallons 95 Tank Diameter in. Inventory _____ Gallons _____ Total Gallons as Reading 12245

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 181 in.
3. Pressure at bottom of tank 6.534 P.S.I.
4. Pressure at top of tank 3.104 P.S.I.



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.

19. TANK MEASUREMENTS FOR TSTT ASSEMBLY
 Bottom of tank to grade* 161 in.
 Add 30" for "T" probe assembly 30 in.
 Total tubing to assemble - approximate 192 in.

20. EXTENSION HOSE SETTING
 Tank top to grade* 66 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 09016 digits
49.50 °F
 23. Digits per °F in range of expected change 299 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 _____
 Hydrometer Employed _____ H
 Temperature in Tank After Circulation _____ °F
 Temperature of Sample _____ °F
 Difference (+/-) _____ °F
 Observed A.P.I. Gravity _____
 Reciprocal _____ Page # _____
 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 49.0 °F
 Coefficient of Water Table D .00004470
 Added Surfactant? Yes No Transfer COE to Line 25b.

25. (a) 12,295 × (b) .00004470 = (c) .5495865 gallons
 Total quantity in full tank (16 or 17) Coefficient of expansion for involved product Volume change in this tank per °F
 26. (a) .5495865 × (b) 299 = (c) .001838081 This is
 Volume change per °F (25 or 24b) Digits per °F in test Volume change per digit This is test

Super

						$\bar{D} =$.0018						
1400	CONTINUOUS LOW	12	12.0	12	.515	.515	±.000	041	+0	±.000	±.000	±.000	-.001
1405		12	12.1	12	.515	.520	+0.005	042	+1	+0.002	+0.003	+0.002	
1410		18	12.0	12	.520	.520	±.000	042	+0	±.000	±.000	+0.002	
1415		19	12.0	12	.520	.520	±.000	044	+2	+0.004	-0.004	-0.002	
1420		20	12.0	12	.520	.520	±.000	044	+0	±.000	±.000	-0.002	
1425		21	12.0	12	.520	.520	±.000	044	+0	±.000	±.000	-0.002	
1430		22	12.1	12	.520	.525	+0.005	045	+1	+0.002	+0.003	+0.001	
1435		23	12.0	12	.525	.525	±.000	045	+0	±.000	±.000	+0.001	
1440		24	12.0	12	.525	.525	±.000	047	+2	+0.004	-0.004	-0.003	
1445		25	12.0	12	.525	.525	±.000	047	+0	±.000	±.000	-0.003	
1450		26	12.1	12	.525	.530	+0.005	047	+0	±.000	+0.005	+0.002	
1455		27	12.0	12	.530	.530	±.000	047	+0	±.000	±.000	+0.002	
1500		28	12.0	12	.530	.530	±.000	048	+1	+0.002	-0.002	±.000	
1505		29	12.0	12	.530	.530	±.000	049	+1	+0.002	-0.002	-0.002	
1510		30	12.0	12	.530	.530	±.000	049	+0	±.000	±.000	-0.002	
1515		31	12.1	12	.530	.535	+0.005	049	+0	±.000	+0.005	+0.003	
1520		32	12.0	12	.535	.535	±.000	050	+1	+0.002	-0.002	+0.001	
1525		33	12.0	12	.535	.535	±.000	050	+0	±.000	±.000	+0.001	
1530		34	12.0	12	.535	.535	±.000	050	+0	±.000	±.000	+0.001	
													+0.005

P-T Tank Test Data Chart
Additional Info

+0.0005 GPH

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

Signature of Tester: Dai C. Martin

Date: 2/26/90

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.

Tank Owner/Operator _____

Date _____

14. UNLOP 66th Ave DAKLAUD CR 2/26/90
 Name of Supplier, Owner or Dealer Address No. and Street(s) City State Date of Test

15. TANK TO TEST
#2 East
 Identify by position
UNLOP
 Brand and Grade

15a. BRIEF DIAGRAM OF TANK FIELD

16. CAPACITY
 Nominal Capacity 12,000 Gallons
 By most accurate capacity chart available 12,245 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 95 in. 12245 Gallons 95 in. Tank Diameter
 Inventory _____ Gallons Total Gallons ea. Reading 12,245

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 179 in.
 3. Pressure at bottom of tank 6.4619 P.S.I.
 4. Pressure at top of tank 3.0324 P.S.I.

19. TANK MEASUREMENTS FOR TSTT ASSEMBLY
 Bottom of tank to grade* 159.5 in.
 Add 30" for "T" probe assy. 30 in.
 Total tubing to assemble — approximate 192 in.

20. EXTENSION HOSE SETTING
 Tank top to grade* 64.5 in.
 Extend hose on suction tube 8" or more below tank top 10 in.
 *If fill pipe extends above grade, use top of fill.

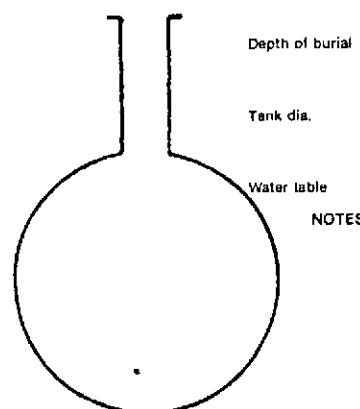
22. Thermal-Sensor reading after circulation 09350 digits
50.151 °F
 23. Digits per °F in range of expected change 301 digits

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 _____
 Hydrometer Employed _____ H
 Temperature in Tank After Circulation _____ °F
 Temperature of Sample _____ °F
 Difference (+/-) _____ °F
 Observed A.P.I. Gravity _____
 Reciprocal _____ Page # _____
 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 50.0 °F
 Coefficient of Water Table D 0.0004887
 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) 12,295 × (b) 0.0004887 = (c) 6.0085665 gallons
 Total quantity in full tank (16 or 17) Coefficient of expansion for involved product Volume change in this tank per °F
 26. (a) 6.0085665 × (b) 301 = (c) 0.001996201 This is
 Volume change per °F (25 or 24) Digits per °F in test Volume change per digit

A = .0020

0715	Arrived on site												
	Top of Tanks with water												
0930	Begin Circulation												
1100	1st Sensor Reading												
1115	Begin High Test	1	42.3	12	.380	.410	+0.030	352	+2	+0.004	+0.026		
1130		2	41.8	12	.410	.360	-0.050	354	+2	+0.004	-0.004		
1145		3	42.0	12	.360	.360	±.000	359	+5	+0.010	-0.010		
1200		4	41.7	12	.360	.290	-0.070	359	+0	±.000	-0.070		
1215		5	42.0	12	.290	.290	±.000	364	+5	+0.010	-0.010		
1230		6	41.7	12	.290	.230	-0.060	364	+0	±.000	-0.060		
1245		7	42.0	12	.230	.230	±.000	368	+4	+0.008	-0.008		
1300		8	42.0	12	.230	.230	±.000	370	+2	+0.004	-0.004		
	Drop To Low.												
1315	1st Sensor Reading	9	12.6	12	.230	.300	+0.070	370	+0	±.000	+0.070		
1330	2nd " "	10	12.0	12	.300	.300	±.000	372	+2	+0.004	-0.004		
1335	Begin Low Test	11	12.0	12	.300	.300	±.000	372	+0	±.000	±.000	±.000	
1340		12	12.1	12	.300	.305	+0.005	373	+1	+0.002	+0.003	+0.003	
1345		13	12.0	12	.305	.305	±.000	373	+0	±.000	±.000	+0.003	
1350		14	12.0	12	.305	.305	±.000	374	+1	+0.002	-0.002	+0.001	
1355		15	12.0	12	.305	.305	±.000	374	+0	±.000	±.000	+0.001	
1400		16	12.1	12	.305	.310	+0.005	375	+1	+0.002	+0.003	+0.004	

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

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

Signature of Tester: _____

Date: _____

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.

Tank Owner/Operator _____

Date _____

UW(rod)

					R =	.0020							
1400	CONTINUOUS LOW	16	12.1	12	.305	.310	+1.005	375	+1	+1.002	+1.003	+1.004	
1405		17	12.0	12	.310	.310	±.000	375	+0	±.000	±.000	+1.004	
1410		18	12.0	12	.310	.310	±.000	375	+0	±.000	±.000	+1.004	
1415		19	12.1	12	.310	.315	+1.005	376	+1	+1.002	+1.003	+1.007	
1420		20	12.0	12	.315	.315	±.000	376	+0	±.000	±.000	+1.007	
1425		21	12.0	12	.315	.315	±.000	377	+1	+1.002	-1.002	+1.005	
1430		22	12.0	12	.315	.315	±.000	377	+0	±.000	±.000	+1.005	
1435		23	12.1	12	.315	.320	+1.005	377	+0	±.000	+1.005	+1.010	
1440		24	12.0	12	.320	.320	±.000	379	+2	+1.004	-1.004	+1.006	
1445		25	12.0	12	.320	.320	±.000	379	+0	±.000	±.000	+1.006	
1450		26	12.1	12	.320	.325	+1.005	379	+0	+1.000	±.005	+1.011	
1455		27	12.0	12	.325	.325	±.000	379	+0	±.000	±.000	+1.011	
1500		28	12.0	12	.325	.325	±.000	380	+1	+1.002	-1.002	+1.009	
1505		29	12.0	12	.325	.325	±.000	380	+0	±.000	±.000	+1.009	
1510		30	12.0	12	.325	.325	±.000	380	+0	±.000	±.000	+1.009	
1515		31	12.1	12	.325	.330	+1.005	381	+1	+1.002	+1.003	+1.012	
1520		32	12.0	12	.330	.330	±.000	382	+1	+1.002	-1.002	+1.010	
1525		33	12.0	12	.330	.330	±.000	382	+0	±.000	±.000	+1.010	
1530		34	12.0	12	.330	.330	±.000	383	+1	+1.002	-1.002	+1.008	
											±	±	
													+1.004

P-T Tank Test Data Chart
Additional Info

1. Net Volume Change at Conclusion of Precision Test +1.00461PH gph

Signature of Tester: [Signature]

Date: 2/26/90

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.

Tank Owner/Operator _____

Date _____