55, 57

SITE ASSESSMENT FOR TANK CLOSURE

FACILITY ID NUMBER 0-000825

OWNER: FLOYD & SONS INC.

THRIFTY CAR RENTAL

3730 SPENARD ROAD

ANCHORAGE, ALASKA 99517

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ANCHORAGE, ALASKA 99517

2900 Boniface Pkwy • Suite 740 • Anchorage, AK • (907) 338-2055 Ext. 740 • FAX (907) 338-3111

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INTRODUCTION:

Western Environmental Consultants (WEC) was hired by Floyd & Sons Inc. to perform a site assessment for closure upon the removal of one 4,000 gal. gasoline tank located at, Thrifty Car Rental, 3730 Spenard Road, Anchorage, Alaska, T13N, R4W, SW 1/4 Sec.25, S.M. (See Attachment A., Vicinity Map)

The actual tank removal, field screening, and sample collection for laboratory analysis took place on August 21, 1992.

W.M.Massengale and Bonnie Morad, 2900 Boniface Pkwy, Su. 740, Anchorage, Alaska, 99504, were WEC's site investigators for this project which was conducted in accordance with WEC's Alaska Department of Environmental Conservation (ADEC) approved QAPP.

TANK OWNERS:

The facility is owned by Floyd & Sons Inc., Anchorage, Alaska and was listed as having ID # 0-000825. Clair Floyd was the owner's representative for this project and may be reached at, Thrifty Car Rental, 3730 Spenard Road, Anchorage, Alaska 99517, phone number (907) 276-2844.

SITE HISTORY:

The underground gasoline fuel storage tank was located in the parking lot on the east side of the Thrifty Car Rental building. The tank was located approximately 48 ft. east of and 10 ft. south of the building's southeast corner. The tank was installed in January of 1984 and was listed as apx. 4,000 gal. in size and of steel construction. No information was available concerning the tank's installer. The tank was used by Thrifty's personnel for the storage of gasoline fuel and for fuel removed from rental cars prior to shipment to the lower 48. There was a single vent and a single gravity fill pipe for the tank. The fill was directly above the south end of the tank and the vent was located alongside the fence near the property's southeast corner. The long dimension of the tank was oriented in an north-south direction. One fuel product line exited the tank from a fitting located on the north end of the tank. This product line lead to a dispenser located over the southwest corner of the tank excavation. (See Attachment C., Field Notes and Site Drawing)

In October of 1989 Thrifty Car Rental was informed by their consultant, Shannon & Wilson, that their "Site Inspection..." conducted to evaluate the site for "Gasoline Contamination From An Underground Storage Tank" (UST) had detected a probable release from the UST.

Thrifty Car Rental performed a Corrective Action which consisted of the excavation of contaminated soil found in the vicinity of the dispenser piping. This piping was also removed and replaced with new cathodically protected steel piping.

Three water monitoring wells on site and one to the east of the

site where subsequently installed. Recent water sampling of these wells by WEC indicated high levels of volatile organics in the ground water.

In order to verify the source and limit any future potential releases of hydrocarbon fuels to the environment, Thrifty Car Rental removed the 4,000 gal. gasoline tank.

SITE HYDROLOGY:

The approximate ground elevation of the site is 90 ft. to 93 ft. above sea level.

Recent groundwater sampling by WEC determined the top of ground water to be approximately 11.5 ft. below ground surface (bgs), at the site. No ground water was present during the tank excavation and no attempt was made to sample the groundwater because, monitoring well #2, located approximately 3 ft. north of the excavation, had been sampled the month prior to the tank removal.

SITE GEOLOGY:

The Spenard area is believed to be underlain by soft sedimentary rocks. The observed surficial deposits were primarily sands-SW with minor amounts of interbedded gravely sand. It is believed that the groundwater at the site is a perched aquifer overlying the Bootlegger Clay/Silt Formation located 22.5 ft. bgs. (see Shannon & Wilson report of 11/14/89.

At the facility the top 1.5 ft. consisted of approximately 1.5 inches of asphalt and import gravel fill. Below this layer began the native soils which were composed of sand-SW.

Fill in the tank pit was native soil below the top of the tank and pea gravel above the tank and around the piping.

SITE INSPECTION:

Site inspections were performed on the site prior to tank excavation and during tank removal. The inspection during removal was conducted on August 21, 1992. The tank was removed later in that same day.

No obvious leaks or contamination were observed in the area or at the fill or vent's exposed piping. (See Attachment B., Site Pictures)

TANK AND PIPING REMOVAL:

One tank was removed from the facility. It was apx. a 4000 gal. tank with a diameter of 6 ft. and a length of 17 ft.

There was approximately 3 ft. of fill covering the tank. The tank was oriented with its long dimension in a north-south direction. The fill was located on the south end of the tank at

ground level and had an overspill bucket attached.

The excavation was apx. 23 ft. long and 12.5 ft. wide and 10 ft. deep when completed. (See Attachment B, Site Pictures and Attachment C, Site Drawing)

One wrapped steel fuel line apx. 1.5 inches in diameter, was attached to the tank with wrapped threaded pipe fittings located on top of the north end of the tank. This line went to a dispenser located at the southwest corner of the tank excavation. The product piping was cathodically protected and had a 50 lb. sacrificial anode attached to the piping at the north end where it joined the tank.

The tank was in good condition and the piping in excellent condition; both showed no signs of having leaked. A hydrocarbon odor was detected in the bottom of the excavation. (See Attachment B., Site Pictures)

SOIL AND GROUNDWATER OBSERVATIONS:

During tank excavation and removal no obvious signs of leaking such as soil discoloration were observed. However, their was a slight hydrocarbon odor from the excavated soil.

A hydrocarbon odor was detected in the bottom of the excavation after the tank was removed and some discoloration was visible at the north end of the excavation after the tank had been removed.

No groundwater was encountered during the tank removal.

INVENTORY CONTROL AND REPAIR RECORDS:

Inventory control and tank repair records were requested by WEC from the tank owner. WEC was informed that none were available.

FIELD SCREENING:

Twelve samples were collected per WEC's QAPP at the site for field screening during excavation for tank removal. A GASTECH model 1314 calibrated to hexane was used to obtain ppm TLV readings from the field screening samples. Readings on the field screening samples generally were from 15-200 ppm for soils removed from the tank excavation above the tank. A sample was taken from the soil with the highest field screening reading and sent to the laboratory for analysis. This laboratory sample is labeled STKP-1. Readings taken on soil samples from below the tank were generally in the 18->500 ppm range. The area under the tank with the highest readings was located at the north end of the tank and this area was subsequently sampled for laboratory analysis and labeled sample #TC-2 NW Cor. (See Attachment C., Field Notes & Site Sketch)

SAMPLES COLLECTED FOR LABORATORY ANALYSIS:

Four samples were collected per WEC's QAPP for laboratory analysis. Two of the samples, numbers TC-3 & TC-2 were from the bottom of the tank excavation all within 2 ft. below the tank's bottom at approximately 10 ft. bgs. One of these was from underneath the center of the tank and the other sample was from the north end of the tank excavation. The third sample, number TC-1D, was taken from under the dispenser approximately 1.5 ft. below ground surface (bgs). Sample STKP-1, the forth soil sample, was taken in the area of highest field screening readings, in the stockpiled overburden. The various sample depths and locations are depicted in Attachment C, "Field Notes & Site Sketch".

SAMPLE TRANSPORT:

All samples for laboratory analysis were sealed, placed on ice in an insulated cooler, sealed, and transported under chain-of-custody per WEC's QAPP. A copy of the chain-of-custody document is in Attachment D, "Chain-of-Custody Document".

SAMPLE ANALYSIS:

All samples were analyzed using EPA methods 5030/8015/8020. Sample analysis was performed by North Creek Analytical Laboratory (NCAL) located in Bothell, Washington. NCAL has approved SOPs on file with ADEC.

The results are presented in the "TABLE A ANALYTICAL RESULTS" located on page 7 and the laboratory transmittal is in Attachment E., "Laboratory Results".

TABLE A
ANALYTICAL RESULTS

ANALYTICAL METHOD	8015 Mod	8020	
METHOD DETECTION LIMIT	1 ppm VPH	0.05-0.10 TOTAL BTEX	Benzene
SOIL SAMPLES			
TC-1D	1.2 ppm	0.081 ppm	ND
TC-2 NW Cor (in vadose zone)	940 ppm	236.30 ppm	1.3
STKP-1 Back in excavation	29 ppm	2.68 ppm	ND
TC-3C	28 ppm	3.80 ppm	ND

ND= None Detected at methods detection limits

VPH= Volatile Petroleum Hydrocarbons

ppm= parts per million

BTEX= benzene, toluene, ethyl benzene, xylene

SITE SKETCH:

A site sketch is provided in Attachment C, "Field Notes & Site Sketch" and as-built drawings may be found in Attachment A. They show the location and configuration of the tank and piping, sample locations and the tank site's proximity to buildings. The facility and property boundaries are presented in Attachment A along with other pertinent site information.

CLIMATOLOGICAL CONDITIONS:

Weather during the tank removal was cool and partly cloudy with intermittent rain and little apparent wind.

TANK EXCAVATION BACKFILL:

Overburden from the tank excavation was placed back into the excavation and compacted. A 6 mill plastic liner was then installed and new uncontaminated import fill placed in the excavation on top of the liner and compacted. The site was then capped with base and asphalt which should minimize the downward migration of any contaminate to the vadose zone, through the agent of precipitation percolating through the sandy soil.

COMMENTS:

The presence of an unauthorized release was detected during analysis of the soil samples by the laboratory. ADEC should be notified of the release and advised that the tank removal was a corrective action and precaution, to mitigate any potentially harmful effects to human health or the environment.

The minor soil contamination found in the excavated tank overburden, may have been the result of product leaking from the old dispenser piping prior to its replacement. The higher levels of contamination found in the vadose zone under the tank are of undetermined origin. The tank was in good condition and showed no signs of having leaked. The high levels of BTEX relative to the low levels of VPH found above the vadose zone may indicate BTEX contaminated groundwater migration from an off site source.

This site assessment was conducted and this report was prepared in accordance with WEC's ADEC approved QAPP and is for the benefit of Floyd and Sons and is not for public distribution except were required by law.

W.M.Massengale
Environmental Manager
Certified Hazardous Materials Manager

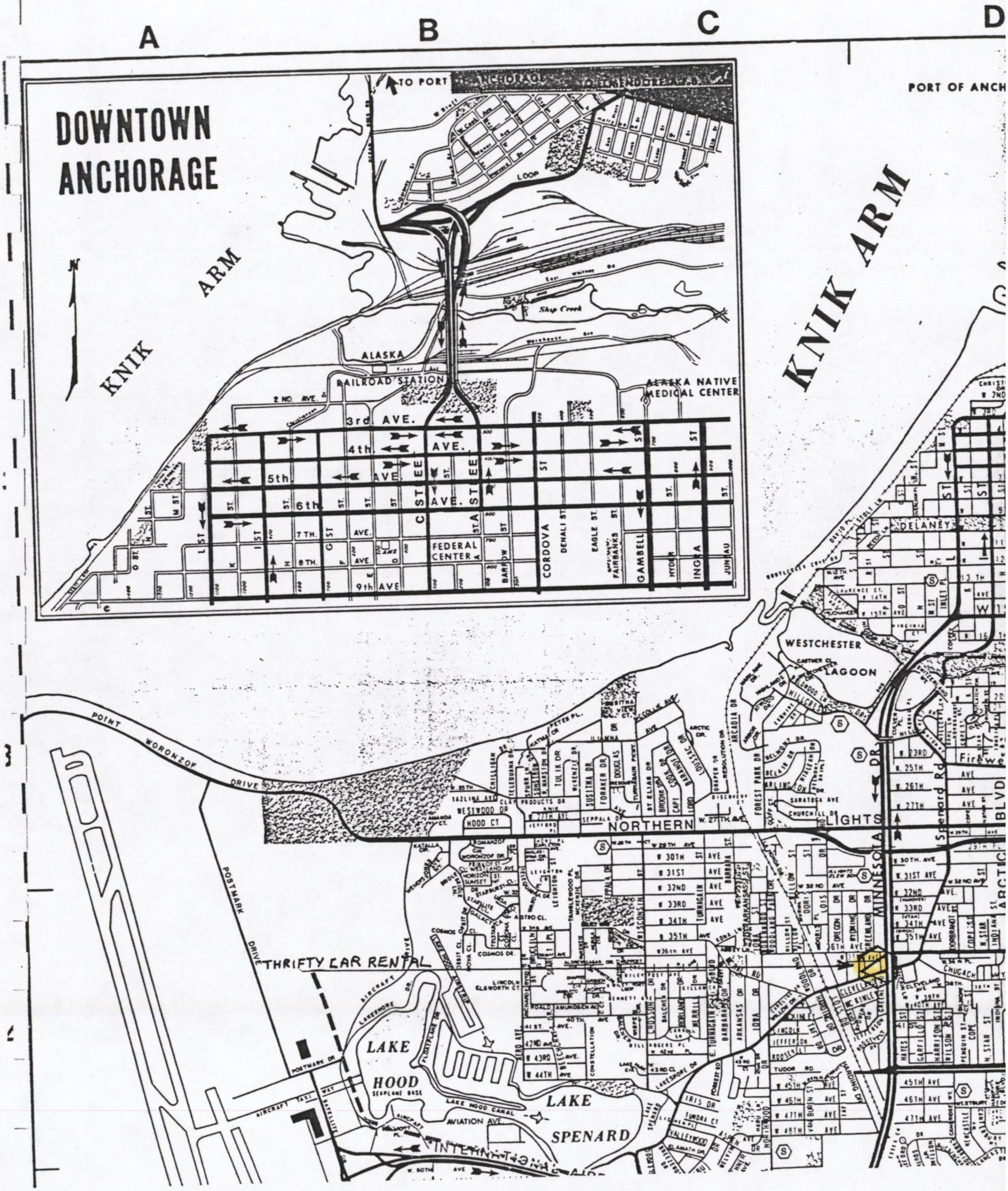
10/18/92
Date

Bonnie Neher Morad, Environmental Scientist

10/18/92
Date

ATTACHMENT A

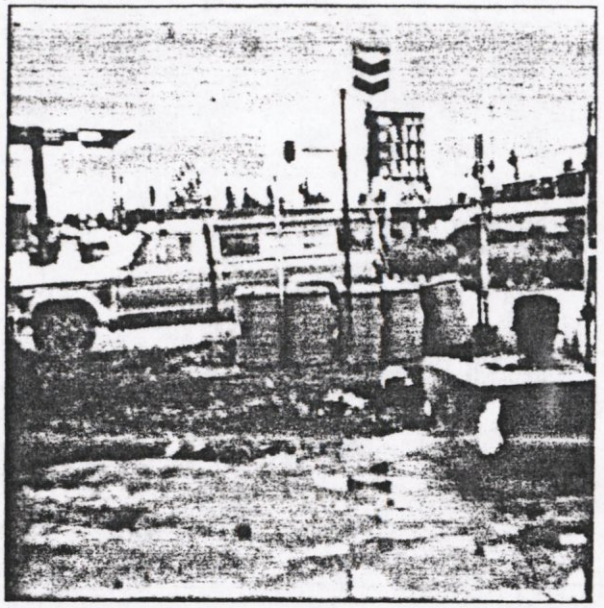
VICINITY MAP


A
B
C
D
DOWNTOWN
ANCHORAGE
KNIK ARM
TO PORT
ANCHORAGE
LOOP
Ship Creek
ALASKA
RAILROAD STATION
ALASKA NATIVE
MEDICAL CENTER
2ND AVE.
3rd AVE.
4th AVE.
5th AVE.
6th AVE.
7TH.
8TH.
9th AVE
C ST.
E ST.
FEDERAL
CENTER
BARROW
CORDOVA
DENALI ST
EAGLE ST.
FAIRBANKS
GAMBELL
HYDER
INGRA
JUNEAU
L ST
I ST
G ST.
PORT OF ANCH
KNIK ARM
WESTCHESTER
LAGOON
DELANEY
POINT WORONZOF DRIVE
POSTMARK DRIVE
NORTHERN
LIGHTS
MINNESOTA DR
Spenard Rd
ARCTIC BLVD
THRIFTY CAR RENTAL
LAKE
HOOD
SEAPLANE BASE
LAKE
SPENARD
LAKE HOOD CANAL
AVIATION AVE.
INTERNATIONAL AIRPORT
CHUGACH
TUDOR RD
W 30TH AVE
W 31ST AVE
W 32ND AVE
W 33RD AVE
W 34TH AVE
W 35TH AVE
45TH AVE
46TH AVE
47TH AVE

ATTACHMENT B

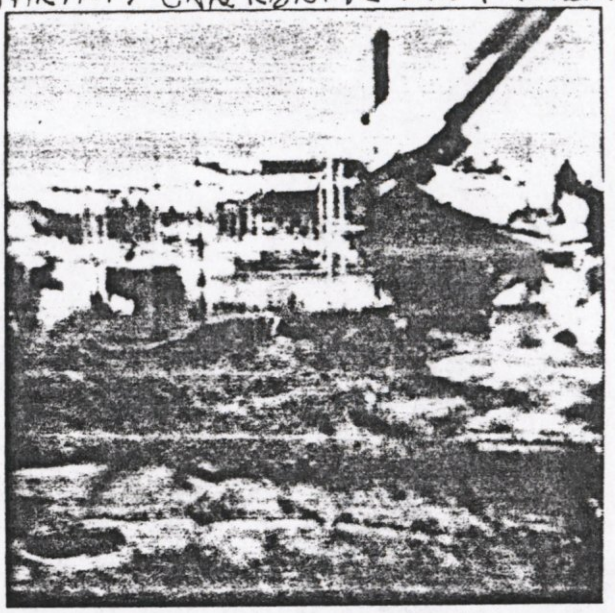
SITE PICTURES

THRIFTY CAR RENTAL TANK REMOVAL



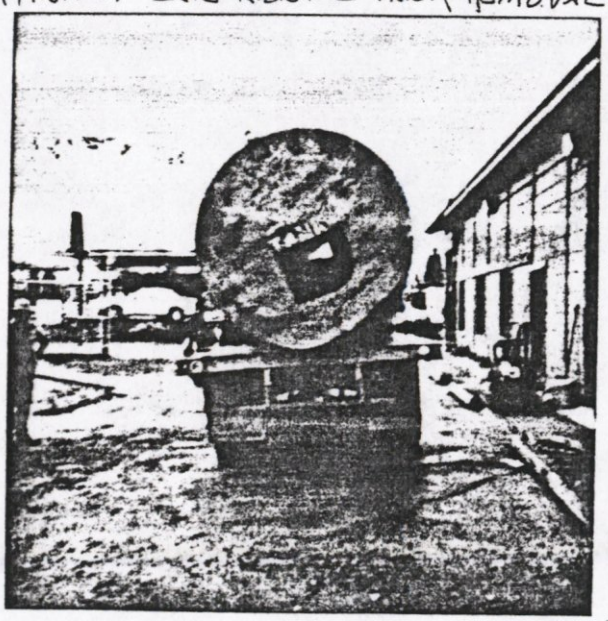
VIEW EAST - LARGE C.C. BLOCK IS THE DISPENSER BASE OPEN AREA IS TANK EXCAVATION

THRIFTY CAR RENTAL TANK REMOVAL



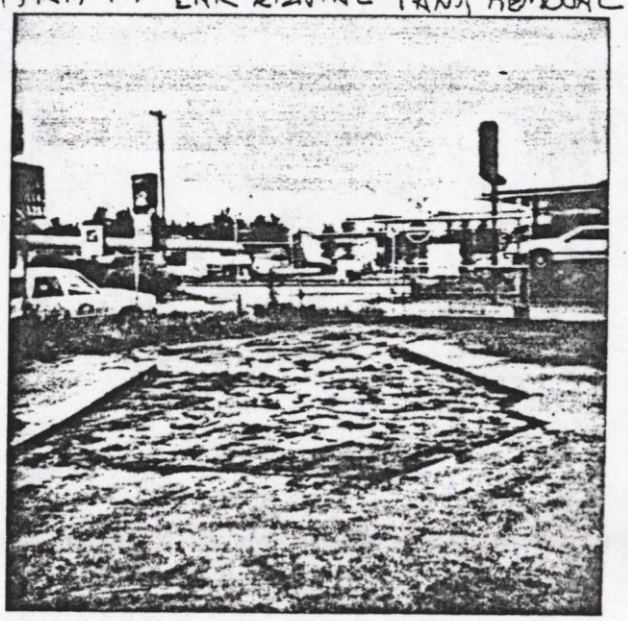
TANK EXCAVATION VIEW LOOKING SOUTH

THRIFTY CAR RENTAL TANK REMOVAL



4000 gal. APX 17' X 6' DIA. WITH HOLES CUT BOTH ENDS LOADED FOR TRANSPORT TO AK METAL RECYC.

THRIFTY CAR RENTAL TANK REMOVAL



VIEW LOOKING SE AT PLASTIC LINED & BACKFILLED EXCAVATION

ATTACHMENT C

FIELD NOTES AND SITE SKETCH

Thrifty CAR RENTAL

8-21-92 4,000 gal. Tank Removal

Cloudy partly sunny PM

Aug 8-21-92

M. Massengale
D. Morad

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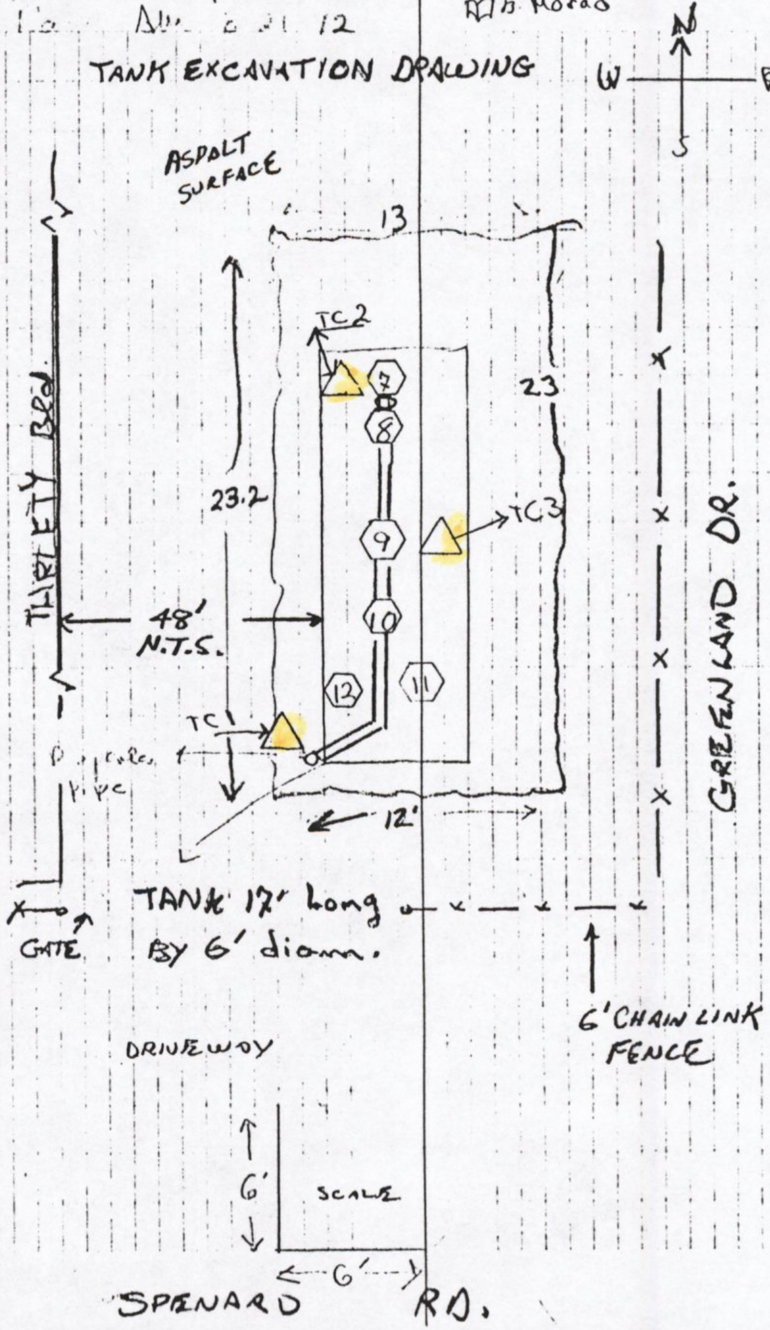
Field Screen SAMPLE		Time Sampled	DEPTH	Time TLV Read	TLV Reading
1	OVERBURDEN	850	~3'	0905	15 ppm
2	↓	851	~3'	0906	20 ppm
3	↓	852	~3'	0907	60 ppm
4	↓	1100		1110	70 ppm
5	↓	1101		1113	35 ppm
6	↓	1102		1115	200 ppm
TC1	△	1150	1'	DISPENSER	
7	⬡	1515	10'	1537	>500 ppm
8	⬡	1516	10'	1540	>500 ppm
9	⬡	1516	10'	1548	265 ppm
10	⬡	1517	10'	1549	75 ppm
11	⬡	1516	10'	1555	60 ppm
12	⬡	1519	3'	1600	18 ppm
STKP-1	△	1100	STKP-1	—	200 ppm
TC2	△	1520	10'	NORTH END TANK	>500 ppm
TC3	△	1516	10'	TANK CENTER	>200 ppm

⬡ = SCREENING SAMPLES

△ = SOIL SAMPLES FROM HIGHEST FIELD SCREENING AREAS SENT TO LABORATORY FOR ANALYSIS 8015/8020

TANK EXCAVATION DRAWING



THRIFTY CAR RENTAL
4,000 GAL. GASOLINE TK REMOVAL
M. MASSENGALE

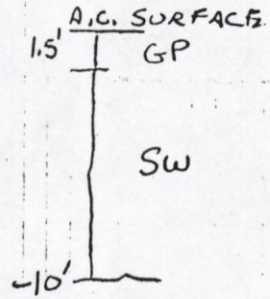
1. OWNER = FLOYD & SONS INC
   3730 SPENARD RD.
   ANCHORAGE, ALASKA 99517
2. FACILITY #
3. SLIGHT HYDROCARBON ODOR IN OVERBURDEN
4. PIPING IN EXCELLENT SHAPE & CATHODICALY PROTECTED
5. TANK IN GOOD SHAPE NO APPARENT HOLES
6. STRONG HYDROCARBON ODOR UNDER NORTH END OF TANK
7. No ground water present
8. 3'-4' of Cover over tank
9. Bottom of Tank apx. 9' DEEP
10. DEPTH TO GROUND WATER 11.5' bgs.
11. Pea Gravel around piping - native sand backfill around tank
12. 4,000 gal Gasoline tank removed by Sea Coast Const. excavating contractor
13. No tank inventory records exist.
14. AGE of TANK
15. Installed by
16. Modifications
16.a. by

Soil 8-21-92

First 18" dark brown sandy gravel. (most likely import fill) gravelly sand & sand. below 18" gravelly sand & sand. some layers of gravelly sand but mostly sand. SI

Slight hydrocarbon oder Northwest corner of excavation.

SOIL LOG



Pea gravel on top of tank

Some silt or gravely sand beds

M. MASSENGALE
B. MORAD

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ATTACHMENT D

CHAIN-OF-CUSTODY DOCUMENT

NORTH CREEK ANALYTICAL.

18939 120th Avenue N.E., Suite 101 • Bothell, WA 98011-2569
Phone (206) 481-9200 • FAX (206) 485-2992

CHAIN OF CUSTODY REPORT

CLIENT: Thrifty Car Rental

ADDRESS: 3930 Spenard Rd
Anch, AK
WEC 2900 BONIFACE #740
ANCH., AK. 99504

PHONE: 907 274-9708 FAX: 907-

REPORT TO: Western Environmental Consultants (Mark Mossengale)

BILLING TO:

P.O. NUMBER:

NCA QUOTE #:

SAME DAY (2-8 HR.) RUSH	(+150%)
NEXT DAY RUSH	(+100%)
2 DAY RUSH	(+80%)
3 DAY RUSH	(+60%)
5 DAY RUSH	(+40%)
10 DAY STANDARD	(LIST PRICE) X

PROJECT NAME:

PROJECT NUMBER:

SAMPLED BY: Bonnie Nelson Morad

SAMPLE IDENTIFICATION: NUMBER OR DESCRIPTION	SAMPLING DATE / TIME	MATRIX (W,S,O)	# OF CONT.	8015/8020	ANALYSIS REQUESTED	COMMENTS & PRESERVATIVES USED	LABORATORY NUMBER
1 TC-1D	8-21-92/1150	S	1	X			208248
2 TC-2 NW Cor	8-21-92/1520	S	1	X			208249
3 STKP-1	8-21-92/1100	S	1	X			208250
4 TC-3C	8-21-92/1516	S	1	X			208251
5							
6							
7							
8							
9						TOTAL # OF CONTAINERS	
10						RECEIVED?	

RELINQUISHED BY: Bonnie Nelson Morad DATE: 8-21-92
FIRM: ~~WEC~~ EV TIME: 1755

RECEIVED BY: Marc Mossengale DATE: 8/21/92
FIRM: WESTERN ENV. CONSULTANTS TIME: 17:55

RELINQUISHED BY: Marc Mossengale DATE: 8/23/92
FIRM: Western Env. Consultants TIME: 12:45

RECEIVED BY: B Kelly DATE:
FIRM: TIME:

SAMPLE RECEIPT INFORMATION: CONTAINER CONDITION?: GOOD VIOLATED COOL (4° C)? YES NO

CUSTODY SEALS? GOOD VIOLATED NOT USED HAZARDOUS SAMPLES?: NO YES; DESCRIBE ON BACK

PAGE OF

ATTACHMENT E

LABORATORY RESULTS

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101 • Bothell, WA 98011-2569
Phone (206) 481-9200 • FAX (206) 485-2992

Western Environmental	Client Project ID:	Thrifty Car Rental	Sampled:	Aug 21, 1992
2900 Bonface, #740	Matrix Descript:	Soil	Received:	Aug 25, 1992
Anchorage, AK. 99504	Analysis Method:	EPA 5030/8015/8020	Analyzed:	Sep 3, 1992
Attention: Marc Massengale	First Sample #:	208-1248	Reported:	Sep 9, 1992

TOTAL PETROLEUM HYDROCARBONS with BTEX DISTINCTION (ALASKA TPH-G/BTEX)

Sample Number	Sample Description	Volatile Hydrocarbons mg/kg (ppm)	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Ethyl Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)	Surrogate Recovery %
208-1248	TC-1D	1.2	N.D.	0.081	N.D.	N.D.	90
208-1249	TC-2 NW Cor	940	1.3	53	22	160	113
208-1250	STKP-1	29	N.D.	0.26	0.22	2.2	93
208-1251	TC-3C	28	N.D.	0.10	N.D.	2.8	89
BLK090392	Method Blank	N.D.	N.D.	N.D.	N.D.	N.D.	93
Detection Limits:		**1.0**	**0.050**	**0.10**	**0.10**	**0.10**	

Volatile Hydrocarbons are quantitated as gasoline range organics (nC6 - nC10). Surrogate recovery reported is for Bromofluorobenzene.
Analytes reported as N.D. were not present above the stated limit of detection.

NORTH CREEK ANALYTICAL inc

Scot Cocanour
Laboratory Director

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101 • Bothell, WA 98011-2569
Phone (206) 481-9200 • FAX (206) 485-2992

Western Environmental	Client Project ID:	Thrifty Car Rental		
2900 Bonface, #740	Matrix:	Soil		
Anchorage, AK. 99504	Analysis for:	Total Solids	Received:	Aug 25, 1992
Attention: Marc Massengale	First Sample #:	208-1248	Reported:	Sep 9, 1992

LABORATORY ANALYSIS FOR: Total Solids

Sample Number	Sample Description	Sample Result %
208-1248	TC-1D	92
208-1249	TC-2 NW Cor	93
208-1250	STKP-1	95
208-1251	TC-3C	87

North Creek Analytical routinely provides analytical results for soils, sediments or sludges on a WET WEIGHT "as received" basis.
To attain dry weight equivalents for regulatory compliance, divide the soil result by the decimal fraction of percent solids.
The results in this report apply only to the samples analyzed, as indicated on the custody document.
This analytical report is to be reproduced only in its entirety.

NORTH CREEK ANALYTICAL inc

Scot Cocanour
Laboratory Director

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101 • Bothell, WA 98011-2569
Phone (206) 481-9200 • FAX (206) 485-2992

Western Environmental	Client Project ID: Thrifty Car Rental	Analyst:	R. Lister
2900 Bonface, #740	EPA Method: 5030/8020		K. Wilke
Anchorage, AK. 99504	Sample Matrix: Soil		
Attention: Marc Massengale	Units: mg/kg (ppm)	Analyzed:	Sep 3, 1992
	QC Sample #: 209-0222	Reported:	Sep 9, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	0.50	0.50	0.50	0.50
Conc. Matrix Spike:	0.47	0.50	0.48	0.52
Matrix Spike % Recovery:	94	100	96	104
Conc. Matrix Spike Dup.:	0.46	0.48	0.46	0.51
Matrix Spike Duplicate % Recovery:	92	96	92	102
Upper Control Limit %:	92	95	110	110
Lower Control Limit %:	53	61	73	67
Relative % Difference:	2.2	4.1	4.3	1.9
Maximum RPD:	15	14	10	19

NORTH CREEK ANALYTICAL inc

Scot Cocanour
Laboratory Director

% Recovery: $\frac{\text{Conc. of M.S. - Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$

Relative % Difference: $\frac{\text{Conc. of M.S. - Conc. of M.S.D.}}{\text{(Conc. of M.S. + Conc. of M.S.D.) / 2}} \times 100$